This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google books

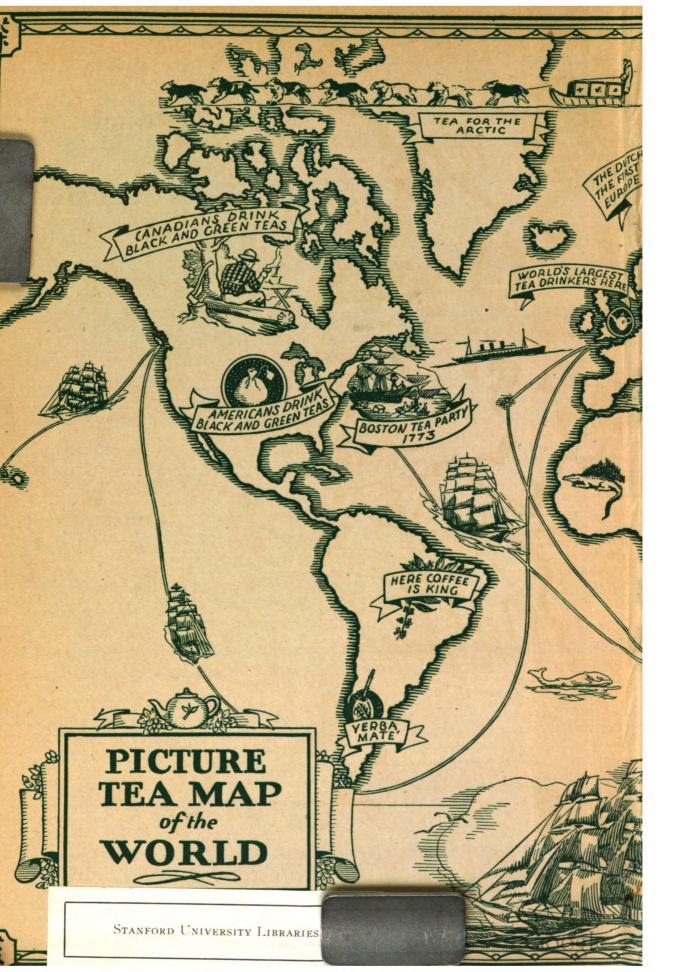
http://books.google.com

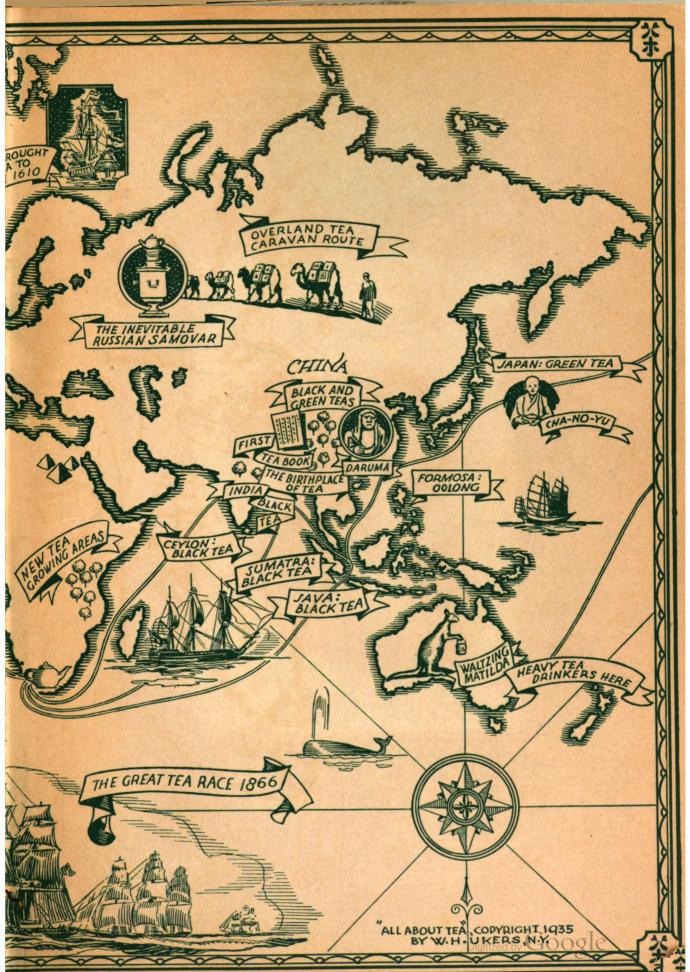


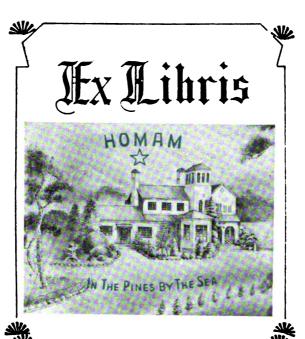
ALL ABOUT TEA

WILLIAM H. UKERS



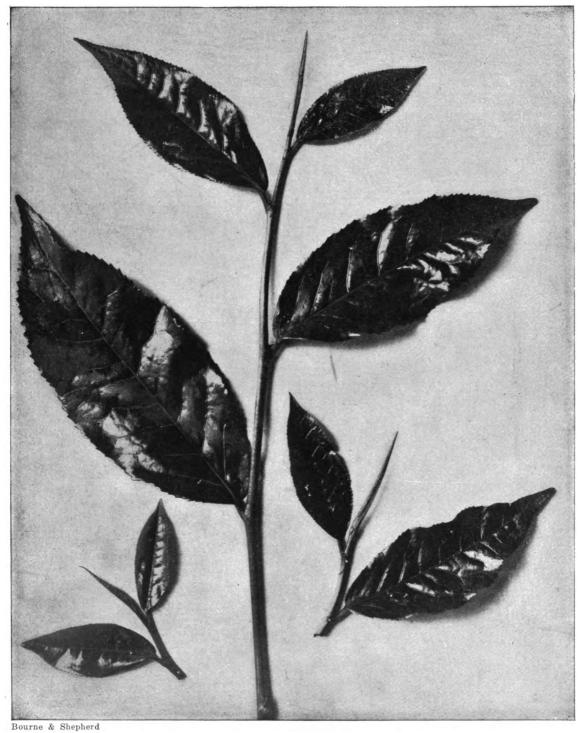






D. J. and E. Al. Mackenzie Takamatsu-Shizuoka

ALL ABOUT TEA



TEA SHOOTS, NATURAL SIZE, SHOWING TWO EXAMPLES OF TWO LEAVES AND A BUD, AS PLUCKED

The specimen is Thea sinensis (L) Sims, var. Assamica

ALL ABOUT TEA

BY WILLIAM H. UKERS, M.A.

Vol. II

NEW YORK
THE TEA AND COFFEE TRADE JOURNAL COMPANY
1935

OTHER BOOKS BY THE SAME AUTHOR

All About Coffee, Coffee Merchandising, Coffee in a Nutshell, What Everyone Should Know About Tea, Tea in a Nutshell, and the Little Journey Series of: Trips to Japan and Formosa, Ceylon, British India, Java and Sumatra, China, and Brazil

33877 U347 V. 2

COPYRIGHT, 1935

by

WILLIAM H. UKERS

Copyright under International Copyright Union
All rights reserved under Inter-American Copyright Union

All rights reserved by the author including the right to reproduce this book, or any portion thereof, in any form

PRINTED IN THE UNITED STATES OF AMERICA BY KINGSPORT PRESS, INC.

SCHEME OF CONTENTS

Volume II

A TEA THESAURUS	PAGES
A TEA THESAURUS	vi
BOOK IV—COMMERCIAL ASPECTS	
Chapter I—Trading in Producing Countries	1–35
II—Marketing in Consuming Countries	36–55
III—Wholesale Tea Merchandising	56-81
IV—RETAIL TEA MERCHANDISING	82-93
V—History of the Tea Trade in China	94–107
VI—Dutch Tea Trade History	08–120
VII—History of the British in Tea	21–134
VIII—TEA TRADE IN THE BRITISH INDIES	35–153
IX—Noted Firms in the British Isles	54–197
X—British Tea Trade Associations	98–207
XI—Tea Shares and Tea Share Trading	0 8–209
XII—TEA TRADE HISTORY OF JAPAN	10–229
XIII—THE FORMOSA TEA TRADE	30–234
XIV—Tea Trade in Other Lands	35–245
XV—American Tea Trade History	46–293
XVI—History of Tea Advertising	94–331
XVII—Production and Consumption	32–356
BOOK V-SOCIAL ASPECTS	
XVIII—EARLY HISTORY OF TEA-DRINKING	58–359
XIX—GLORIFICATION OF TEA IN JAPAN	60–378
XX—Droll Tales from the Tea Gardens	79–387
XXI—Historic London Tea Gardens	88–396
XXII—EARLY MANNERS AND CUSTOMS	97 _4 07
XXIII—Present-Day Manners and Customs4	08-435
XXIV—Evolution of Tea-Making Appliances4	36-448
XXV—Preparation of the Beverage4	49–458
BOOK VI—ARTISTIC ASPECTS	
XXVI—Tea and the Fine Arts40	60-481
XXVII—TEA IN LITERATURE	
Appendix	
A CHRONOLOGY OF TEA	01–509
A Dictionary of Tea	10–515
A TEA BIBLIOGRAPHY5	16538
Index53	39–568

A TEA THESAURUS

PRESENTING A CONVENIENTLY ARRANGED LIST OF ENCOMIUMS AND DESCRIPTIVE PHRASES APPLICABLE TO THE PLANT, THE LEAF, AND THE BEVERAGE

The Plant

Ambrosial plant.—Beneficent, life-giving plant.

—Beatific flower.—Best of herbs.—Divine herb.

—Divine herb of China's envied bowers.—
Fairer than roses.—Famous plant.—Fascinating plant.—Flowery tea.—Fragrant shrub.—
Friendly plant.—Gift of God.—Gift of the gods.—Gift of Heaven.—Heaven-sent herb.—
Herb for dainty palates.—Kindly plant.—
Magnificent herb.—One of the best, safest, and pleasantest herbs.—One of the greatest blessings of Providence to Man.—Pearl of the shrubs.—Plant with the camellia-like flowers.

—Precious herb.—Pride of the Elysian bowers.

—Queen of plants.—Queen of the camellias.

—Shrinking maid.—Supreme gift of Heaven.—
Wonder of China.

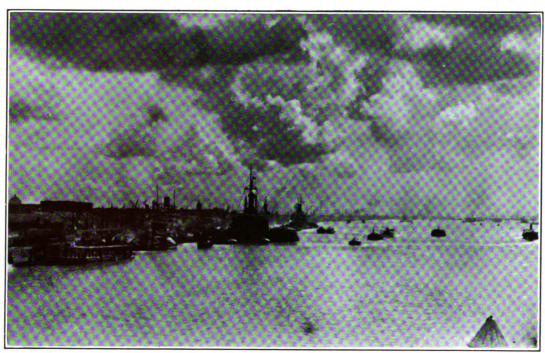
The Leaf

Benignant leaves.—Golden leaves.—Latest product of resplendent Lanka [Ceylon].—Leaves like Tartars' boots, the buffalo's breast, floating clouds, ripples on the water.—Long-cherished treasure.—Precious treasure of life.—Toasted leaves.—Treasure of the world.—Verdant Hyson.

The Beverage

Aid to fancy.—Accepted drink for long periods in the woods.-Almost incomparable.-Arcanum for all illnesses.-Aroma of the mystic East.-Art of life.-Beloved beverage.-Best juice.—Beverage of sobriety.—Beverage that cheers but does not inebriate.—Bland inspirer.—Blessing of a studious man.—Body's best physician.—Boon of the Orient.—Breezy fragrance.—Celestial boon.—Celestial dew.— Celestial tea.—Chinese nymph of tears.—Clean as the core of a rock.—Common beverage of China.—Cordial of nations.—Crystal stream. —Cup of golden brew.—Cup of humanity.— Cup of no regrets.—Cup that cheers but not inebriates [originally written by Cowper, in "The Task," as, "the cups that cheer but not inebriate."].--Cup that refreshes and invigorates.—Cup with vapors crowned.—Delicious brew.—Delicious liquor.—Divine elixir.—Divine liquor.—Divine remedy.—Draught of pure delight.-Drink beloved of the gods.-Drink of ceremony.—Drink of health.—Drink of Jove.— Drink of life.-Drink of optimism and comfort.—Drink of souls.—Drink of the open.— Drink of the world.—Elegant and popular beverage.-Essence of the East.-Ethereal tea.-Ever-satisfying.—Exotic panacea.—Fashionable beverage.-Favorite beverage of the intellectual.—Favorite temperance drink.—Fountain that can cure the ills of passion.—Fragrant cup.—Fragrant gift that does not intoxicate, but thrills.—Fragrant quintessence.—Fragrant tea.-Freedom's teacup.-Friendly drink.-Froth of the liquid jade.—Genial liquor.—Gentle brew.-Glorious golden amber Oolong.-Glow of amber from the tree.—Golden elixir. -Golden nectar.-Golden tea.-Goodly vision. -Great Anglo-Saxon beverage.-Great corroborator of human strength.-Great yellow mandarin.—Greatest friend to the man of letters. —Harmonizer and satisfier.—Healthful beverage.—Heaven's delight.—Infallible means of longevity.-Keeps the palace of the soul serene.—Life-long beverage friend.—Like dark-red wine and sweet dew.—Liquid jade.—Little lord of China.—Lure that lurks in the teapot. -Luscious nepenthe of the soul that grieves. -Luxury of life.-Magical drink.-Masterpiece of every meal.-Most delectable beverage.-Most gracious of all leaf beverages.--Most socially correct beverage for all occasions.— Muse's friend.-Muse's nectar.-National beverage of England.-Nectar divine.-Nectar of the gods.—Nectar unsurpassed.—Nepenthe.— Never-failing refreshment.—One of the chief joys of life.—One of the real pleasures of life. -Panacea from out the purple East.-Phoebean mixture.—Precious liquor.—Precious treasure of life.-Protean charm.-Rare and costly beverage.—Refined stimulant.—Sacred remedy. -Siren wiles of orange Formosa.-Smoking cordial.—Sober and wholesome beverage.—Social beverage.—Social connecting medium.— Soothing draft.—Sober, sage, and venerable liquid.—Soul's delight.—Sovereign drink of pleasure and of health.—Spring of eloquence. -Statesman's counsellor.—Steaming amber drink.—Steaming cup.—Steamy treasure.— Super beverage of the race.—Sure pledge of health.-Symbol of hospitality.-Tea Nirvana. —That excellent and by all physitians approved China drink.—Tongue-running, smilesmoothing, heart-opening, wink-tipping cordial. -Warm nectar.-Welcome cup.-Wonderful beverage.

BOOK IV COMMERCIAL ASPECTS



THE BANKS OF THE HOOGLY RIVAL THE PORT OF LONDON IN THEIR SHOW OF SHIPPING

Calcutta, 82 miles from the sea on the Hoogly River, is the second largest city in the British Empire. It is the shipping port for most of India's teas, particularly those from the districts of Darjeeling, Terai, Dooars, Assam, Cachar, and Sylhet.



A CLOSE-UP VIEW AT LOW TIDE OF SHIPPING ON THE HOOGLY

This dangerous river forms a meeting place for the commerce of the Eastern and Western Worlds.

CALCUTTA, CITY OF PALACES AND WORLD'S LEADING TEA EMPORIUM viii

CHAPTER I

TRADING IN PRODUCING COUNTRIES

Describing the Channels Through Which Tea Passes in the Principal Marketing Centers of the World's Tea Producing Countries—Tea Trading in India—The Calcutta Auctions—Marketing Tea in Ceylon—The Colombo Auctions—Tea in The Netherlands Indies—Trade Associations of Java and Sumatra—Trade Practice in China—Principal Chinese Tea Ports—Buying and Selling Tea in Japan—Shipping Ports—Tea Trading in Formosa

N MOVING tea from the estates or gardens to the consuming countries, the shipments pass through much the same trade channels as other products of the East. Generally speaking, tea goes from the planter to an agent or an exporter stationed in the producing country. The system varies, but this is the general method.

The most important tea shipping centers in the producing countries are—Calcutta, Chittagong, Tuticorin, and Calicut in India; Colombo in Ceylon; Batavia in Java; Medan in Sumatra; Shimizu, Yokohama, and Kobe in Japan; Shanghai, Foochow, Hankow, and Canton in China; and Taihoku in Formosa. In Calcutta and Colombo, regular tea auctions are held, although most of the India and Ceylon teas are sent to the London auctions. In the case of the other producing countries, some of their teas go to the auctions held in London and Amsterdam, the rest is sold direct to importers in various consuming countries.

I—TEA TRADING IN INDIA

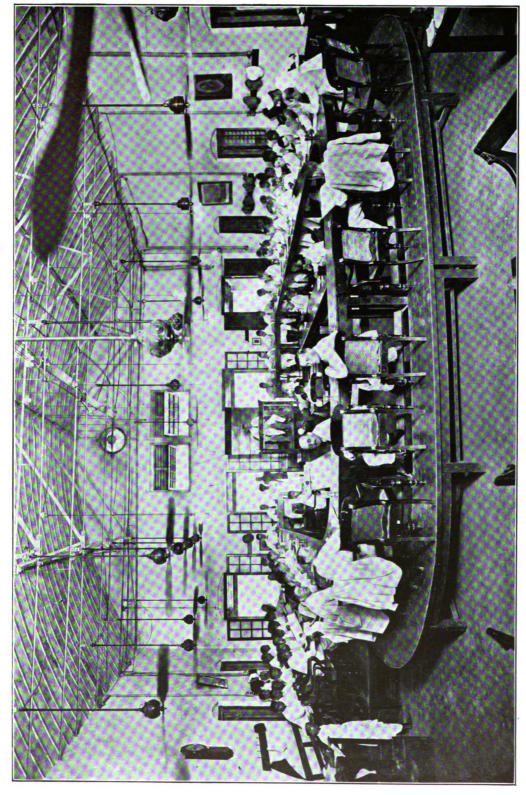
Calcutta is by far the most important market and shipping center for tea in India. Some South Indian tea is shipped through Colombo, and some is shipped direct to consuming countries from Calicut or Tuticorin. A certain amount of Northeastern Indian crop is shipped from Chittagong. All tea sent to that port is intended for the London auction room and

is shipped as soon as a steamer is available.

Tea estates in India generally are owned by limited companies with headquarters in London, Calcutta, Liverpool, Glasgow, or other financial center. There are, also, estates privately owned by the planter or by Indian companies. The latter, though increasing, are in the minority. The estate-owning companies have agents and/or secretaries in Calcutta or London.

After the tea is manufactured and packed at the garden, the estate manager sends it to the garden agent in Calcutta, who, if the company is controlled from London, acts on instructions received as to its disposal. The tea then goes to one of the two warehouses managed by the Calcutta Port Commissioners; one of these, the Hide Road Warehouse, is for tea arriving by rail, and the other, the new Kidderpore Warehouse, is for tea arriving by The former has 283,312 square feet of floor space, and the latter 245,000. Each has a capacity of about 100,000 The Port Commissioners are appointed by the Bengal Chamber of Commerce, and their employees are either recruited from abroad or locally. The warehouse charges are paid to the Calcutta Port Commissioners.

The agent may handle the invoice of tea in either of two ways; he may turn it over to a broker for sale in Calcutta, or he may ship it to the agent in London, who in turn will give it to a London selling broker for sale in the London auction. Assuming he



THE CALCUTTA TEA AUCTION AT THE SALE ROOM OF THE TEA BROKERS' ASSOCIATION IN MISSION ROW



THE MAMMOTH KIDDERPORE TEA-RECEIVING AND FORWARDING WAREHOUSE, CALCUTTA

follows the first-named method, the agents, as sellers, notify the broker who is to have the selling of the break or invoice that it is on its way from the estate. There are four tea brokers in Calcutta: Messrs. J. Thomas & Co., Carritt Moran and Co., W. S. Cresswell & Co., and A. W. Figgis & Co. The brokers who are to sell the tea give instructions to the warehouse to have the tea made ready for inspection. When the invoice is ready for inspection, the chests are laid out in rows. A hole is bored into every chest and a few ounces of tea taken from each for samples.

If the samples show the break to be uniform, the holes are sealed up by means of expanding caps, and the samples grouped. Small samples are sent to every approved buyer a few days before the auction. If any variation is noted, the break is separated and sold as a "star" lot or the tea may be bulked and new samples taken. This is done in the warehouse. The tea then is repacked to await instructions from the buyer as to its disposal.

Calcutta Warehouses

The more famous of the Calcutta tea warehouses is the Kidderpore Warehouse,

situated on the banks of the Hoogly River some two miles below the city. It is a long narrow brick building, 650 x 118 feet. Inside, row upon row of tea chests are piled, with narrow alleys between. Large spaces are set apart for each broker for sampling purposes, and many of the chests have holes bored in either the top or bottom for sampling.

The Calcutta Auctions

The tea auctions, or sales, are held on Tuesdays during the season. More than 40,000 packages have been dealt with in a single day. Prices have ranged from Rs. 0/1/6 to Rs. 5/-/- a pound. The principal months are from July to December, although there is some trading during June, January, and February. The auctions are held under the auspices of the Calcutta Tea Traders Association in the salesroom at No. 8 Mission Row, owned by the Tea Brokers' Association. The four brokers take turns in the sale. Each issues his catalogue about four days before the date of the sale. These are sent out to purchasing firms, together with samples of the teas to be auctioned. The sales are conducted by the Calcutta Tea Traders Association.



A TYPICAL TEA TASTING ROOM IN CALCUTTA

In the foreground, sale teas are being sorted and arranged according to quality against the wooden blocks. The buyer is tasting tea while his assistant shows him the dry leaf. Tea tasting frequently lasts all day, and as many as 500 to 700 cups are tasted.

The tea sales begin at ten o'clock in the morning and generally continue until be-tween four and five o'clock in the afternoon. In the heavy season, however, when

the largest quantities are coming down from the estates, they last until seven or eight o'clock in the evening.

During the latter part of the season of

1925-26 the size of sales was regulated to 30,000 chests per week, with a view to equalizing the size, and spreading more evenly the amounts offered during the busy months. Another practice that has helped to save time at the sales is the printing in a separate catalogue of lots of less than 500 lbs. net, to be offered after all other lots are sold. These lots are too small to interest the larger buyers.

Should the prices offered in the room or after the sale not be up to the sellers' ideas of the value of their tea, they can decline to sell, and either hold the tea in Calcutta to offer later or ship to the London auction in hopes of doing better there.

The unit of sale at the Calcutta auctions is by the pound, the terms are delivery exwarehouse, and the unit of shipment is the chest. The weight per chest varies from 80 to 120 lbs., with Dust and Fannings approaching the maximum and Souchong, because of the size of the leaf, the minimum.

Bids on tea at the sales advance not less than one pie per pound on tea under eight annas, and not less than ¼ anna on tea at and above eight annas. At each auction there usually are four auctioneers, who practically sell out the teas in the catalogues. The auctioneers operate at top speed; so fast, in fact, that buyers must be keenly alert.

Buying Tea in Calcutta

The buyer must be very exact. He must decide, absolutely, on the fraction which he can afford to pay. Even after having done this, he cannot be sure but that much of his work will go for naught, because, with fifty buyers at the auction, it is only too likely that an opponent may bid exactly the price he has fixed—and he dare not give more. The buyer goes to the auction, buys his best, and is thankful when he hears his purchases have shown, all around, half a cent.

Having made his purchases, a buyer's next work is to see that his samples are sent out by the first available mail. This means that large samples of each purchase must be drawn and prepared for mailing. As home mail is Thursday, this leaves but two days in which to work.

There are several charges which must be paid before the tea is exported. Among these are: charges for inspection, sampling, and printing, at 3 annas per chest; for use of the Port Commissioners' Warehouse, at 3 annas 6 pies for ninety pounds; rent, 9 pies for ninety pounds a week or fraction thereof; brokerage of one per cent; and the variable rate of the Government Tea Cess levy, which is used in advertising India Tea. Although these charges are made at the time of shipment, they are always borne by the gardens, being deducted from the buyer's invoice.

Calcutta Tea Traders Association

The Calcutta Tea Traders' Association is made up of buyers, sellers, and brokers. All tea transactions at Calcutta are under the rules and regulations of this Association, the object of which is to promote alike the common interests of sellers and buyers of tea in the Calcutta market.

The business of the Association is managed by a General Committee consisting of nine members. The election of members to serve on the Committee is by voting cards, each class of members voting for its own representatives at the annual election held in the month of December each year. The annual subscription is Rs. 100, and Rs. 10 is the entrance fee.

The Association's rules and regulations fix the brokerage rates at one per cent on sales and one per cent on purchases, whether by auction or private sale. Reports and valuations of tea are charged at Rs. 2 per sample, unless at least 25 per cent of the crop is sold in Calcutta by the broker reporting on teas, when no charge is made.

Brokers are not permitted to receive invoices direct. All teas for sale in Calcutta must come through recognized agents, whose names and addresses, if required, must be reported to the Committee. Where tea bearing no recognized garden mark is offered for sale, the broker must call upon the seller to furnish full particulars of the tea and its origin before accepting it for sale.

Brokers are bound under forfeit of Rs. 5000 to abide by the rules of the Association, and must furnish two sureties for Rs. 2500. They are not permitted to be either directly or indirectly interested in any purchases or shipments of tea, and merchants or agents are bound not to be interested as brokers in any purchases, sales, or shipments.

INDIA TEA TRADE TABLE NO. 1
The Number of Packages of Tea Sold and the Average Price per Pound Realized at the
Calcutta Auctions During a Period of Ten Years

SEASON	ASSAM		SSAM CACHAR		SYLHET DA		DARJ	DARJEELING		Dooars		TERAI		*TIPPERA		ALL OTHER PLACES		TOTAL	
	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Prices	Pack- ages	Price	
		Rs.As.P.		As. P.		As. P.		Rs.As.P.		As. P.		As. P.		As. P.		As. P.		As. P	
1923-24	237,189	15 10	95,759	13 10	97,291	13 11	50,492	1-2-2	255,262		37,253				10,167		783,413		
1924-25	259,473	1 - 0 - 8	77,607	14 10	89,928	14 9	45,547		267,207		29,176						778,541		
1925-26	229,626	14 9	81,248	11 6	100,237	11 10	45,730		224,548		30,806				10,771		722,966		
1926-27	273,327	12 9	99,452	11 6	95,765	11 5	48,578	1-0-8	276,586	11 9	39,739	10 9	5,405	9 7	11,870	10 9	850,722	12	
	269,913		69,233	13 7	93,030	13 4	49,425	1-3-0	269,281	14 8	45,040	13 5	7,890		14,143		817,955	14 1	
1928-29	279,259	12 4	72,553	10 1	95,780	9 10	40,874	14 8	261,196	10 11	43,650	9 11	8,962	9 2	14,420	10 2	816,964	11	
1929-30	305,239	10 10	59,925	8 5	100,504	8 2	47,664	14 11	273,923	9 6	52,864	8 6	12,596	7 4	10,744	8 0	863,459	9 1	
	256,117		59,104		85,701	7 7	38,306	14 9	240,579	9 1	50,525	8 0	11,836	7 0	12,532	8 4	754,700	9	
	251,855		72,352		116,482	4 9	28,866	11 5	206,378	5 11	48,976	5 2	11,841	4 6	9,617	6 11	746,367	6	
	250,797		70,233		100,915	4 3	27,659	9 8	243,175	4 8	56,213	4 4	11,607	3 11	12,244	5 8	772,843	5	

The above figures do not include second-hand and damaged Tea and Dust. *Prior to season 1926-27, included under Sylhet.

In addition to the Tea Traders Association, there is a Tea Brokers' Association, composed of the four Calcutta tea brokers, to look after their interests.

Trade Volume and Freight Rates

India Tea Trade Table Number One shows the number of packages sold and the average prices realized for teas at the Calcutta auctions during a ten-year period. It is of interest to note that Darjeeling teas held first place over the entire period, as far as average price is concerned.

Southern India has no primary tea market and auction of its own, like those at Calcutta and Colombo; but the teas from its various districts are shipped from Southern Indian ports to the Colombo or the London auctions, or direct to buyers in consuming countries. The shipments from Southern India over a six-year period from 1927 to 1932, inclusive, are shown in India Tea Trade Table Number Two.

Tea shipments from Calcutta take about

five weeks to reach London and seven weeks to New York, if shipped direct. The ocean steamers charge by measurement, not weight; hence, a chest containing 100 lbs. is carried for the same price as one of the same dimensions containing ninety-five pounds. The ocean freight rate on tea from Calcutta to London is about £2.0.0 net per ton of fifty cubic feet; to New York, about £2.15.0.

The Tca Buyer in Calcutta

Among the qualifications essential in a successful tea buyer in India, he must be a good judge of tea and know the types suitable for the various markets of the world, together with the changing market conditions. He must have a good knowledge of finance, shipping, and exchange. He must have decision of character, form his own opinions, and keep his clients well advised of the possible trend of the market. He must be willing to devote himself strenuously to work, and to sacrifice all

INDIA TEA TRADE TABLE NO. 2 Shipments of India Tea from Southern India Over Six Years

	1927	1928	1929	1930	1931	1932
To United Kingdom To Australia To America To Colombo To Sundry Ports	53,957 3,922,879	43,992,019 599 64,255 3,776,240 814,021	47,164,651 16,992 99,755 4,109,209 893,638	41,446,098 10,206 279,927 4,846,876 854,302	45,077,023 7,339 185,794 2,928,373 1,024,656	49,946,978 11,092 175,024 3,243,313 1,137,159
Total Pounds	47,614,044	48,647,134	52,284,245	47,437,409	49,223,185	54,513,566





OLD-TIME BULLOCK TRANSPORT, CALCUTTA

outside interests during the busy season. He must have good health, for without it the heavy work involved would be impossible.

Most buyers start with an apprenticeship to a London tea firm for several years after leaving school, often without pay. Then they go to India as assistant buyers, and in due course—provided they turn out well—they become senior buyers.

The men most sought after are those with good, general educations—especially along business lines—and dispositions which suggest that they can be easily trained.

Men usually come to India under a fiveyear contract, with subsequent agreements covering three-year periods. The salaries, as a rule, are confidential; but an able man can earn as much as a man in any other business. Often, in addition to his salary, he receives a commission on the profit. He is seldom furnished with living quarters.

There is no general form of contract for tea buyers. Each firm has its own form of agreement, and it is the same for a tea buyer as for any other assistant in their employ.

During the busy season, from June to December, the average tea buyer is at his office by 9 A.M.—often earlier—and seldom gets away before 7:30 P.M. In this connection it must be remembered that the temperature is excessively hot, and the humidity at nearly 100 per cent, which makes these long hours all the more trying. The daily routine involves a great deal of standing and much tasting, possibly 2000 teas a week. Then, there is the public auction on Tuesdays, lasting from 10 A.M. until 7 P.M. and often later. On Thursday

there is a busy mail day, samples of purchases to be dispatched, invoices to be signed, and drafts negotiated. Cables are a most important item; many come in and go out every day to different parts of the world, with quotations possibly based within ½ cent per pound.

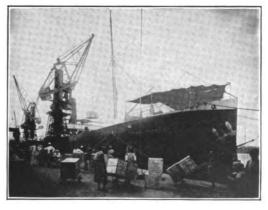
There is practically no time for recreation except on Sundays, when, weather permitting, golf, tennis, riding, etc., are enjoyed.

Leaves of absence vary with the length of service; a youngster on first coming out probably will have to wait for five years before obtaining leave. Afterwards, he will get it every three or four years. The usual leave period is six months, but when there are no sales during March, April, and May, some buyers visit various countries on business, and work-in their leave periods this way. Most men have their passages paid, and receive full pay while on leave.

It generally is recognized that twenty years of service in the East is sufficient for a man to give, and after this period many buyers return home and take up appointments there. Yet many remain in harness as long as thirty years.

II—MARKETING IN CEYLON

Colombo, the chief city of Ceylon, is situated on the west coast of the island, six days by steamer from Calcutta, twenty-one to twenty-three days by mail boat from London, and twenty-one days from Melbourne. The railways of Ceylon and Southern India are connected with a short ferry service between Ahanershkodi and Talaimannar, across the Straits of Mommar. A network of good roads connects



LOADING TEA ABOARD STEAMSHIP, CALCUTTA



Phate Ltd. GENERAL VIEW OF COLOMBO HARBOR WITH LANDING JETTY AND CUSTOMS HOUSE, CENTER

8

Colombo with the principal towns of Ceylon, and the railway system extends to

nearly all the planting districts.

The port of Colombo is popularly known as the Clapham Junction of the East. Ocean liners and freighters, trading to India, Australia, the Straits Settlements, and the Far East, call at Colombo for passengers, freight, or fuel. This permits tea to be shipped direct, not only to England and to Europe, but also to Australia, New Zealand, Africa, North and South America, Russia, and Siberia. There are special facilities for transshipment of cargo. This may be direct from vessel to vessel under the supervision of customs officials, or the material may be brought ashore and deposited in a transshipment warehouse until it is re-shipped. There usually is a steady traffic between Colombo and South Indian ports, such as Tuticorin.

After the manufacturing process has been completed on the estate and suitable quantities accumulated, the tea is packed into chests and dispatched to Colombo, either for shipment direct to London for disposal or for sale on the Colombo market. Tea sold locally usually is destined for the Colonies and America, while an appreciable quantity also is re-shipped from Great Britain to those markets.

Shipments usually are effected in bulk in the original estate packages, but some Colombo purchases are blended and packed to buyers' requirements. Weekly tea auctions are held in Colombo under the aegis of the Ceylon Chamber of Commerce and the Colombo Tea Traders' Association.

Great Britain is by far the largest consumer of Ceylon tea, and takes about 61 per cent of the total shipments. Australia and the United States come next, with approximately 9 per cent and 7 per cent, respectively. New Zealand and South Africa are also important destinations, while Egypt, Iraq, and Asia Minor are markets of considerable promise.

Colombo Harbor

The harbor of Colombo is virtually land-locked, being bounded on the south and east by land, and on the north and west by breakwaters. It has a sheltered water area of 643 acres. Loading and discharging are done by lighters. The quays and jetties have a total length of 10,604 feet, and are equipped with up-to-date electric cranes,

steam cranes, etc. There are 583,633 square feet of warehouse accommodation. The port is in charge of a Port Commission.

As in the case of India and Java, most of the tea estates in Ceylon are owned by local or sterling companies, whose agents are responsible for working the properties and disposing of the produce. After the tea is manufactured and packed at the estate, the manager sends his tea by rail to the agent at Colombo. The shipment may then take one of four courses—(1) it may be sent to England to be put up at the London auction; (2) it may be put up at the Colombo auction; (3) in case it already has been sold forward, it is exported direct to the consuming country; (4) it may be sold privately in Colombo.

Forward selling—that is, selling on type f.a.q.—is a late development in Ceylon, and is done to a much less extent than in Java.

The Colombo Sales

About one-half of the teas produced in Ceylon are sold at auction in Colombo. There are six regular selling brokers—Somerville & Co., Ltd.; E. John & Co.; R. Gordon & Co.; Forbes & Walker; Bartleet & Co.; and Keell & Waldock. Each of these prints a catalogue for every auction. The agent sends particulars of the teas he has for sale to one of the brokers, who includes them in his catalogue. The broker then sends samples of the tea and his catalogue to the local export houses. This must be done not later than 10 a.m. the Friday previous to the sale.

The procedure followed from this point is much the same as in the Calcutta auctions. The sales are held weekly, on Tuesdays, at the Chamber of Commerce sales rooms. Lots of tea are spoken of as "breaks." A large break consists of 1000 lbs. and upwards; a lesser quantity being regarded as a small break. The minimum which can be catalogued is fixed at 300 pounds.

The breaks are listed in the catalogue like this:

At Messrs. John Jones & Co.'s Stores On Estate Account

The phrase, "On Estate Account," means



WEEKLY COLOMBO TEA SALE AT THE CHAMBER OF COMMERCE

that the invoice is the property of the original producer; i.e., the company or private owner. Invoices are numbered from one upwards, from the commencement of the company's or estate's financial year. The first number [36] is the lot number. The second [322] refers to the broker's sample box. "B & H" stands for "bulked and hooped." The last number [825] shows the poundage. The tea may be packed in four ways—(1) "native packages" made of native wood, and manufactured in Ceylon; (2) "momi" packages from Japan; (3) "patent" chests of three-ply wood, such as Venesta, Luralda, Bobbins, Acme, and others; (4) "metal" packages constructed of light metal on a wooden frame.

The usual agency charge for selling tea is 1 per cent, but a further charge is made for carting teas to the stores, sampling, storage, and insurance—generally between one-half cent and one cent per pound. This charge also covers cost of management, office expenses, etc., of the managing agents; the agency fees charged for that work being quite nominal, and not enough to pay the Ceylonese clerks. Estate agents have to employ expert explanters, who can command high remuneration, and generally are directors of the

agency company, or partnerships are given to them in the agency firms. There are quite a number of local agency companies, although London companies probably control about twice the acreage of the local concerns.

Although, apparently, a great deal more tea is offered in the Colombo auctions than is sold, this does not mean that the whole of the offerings do not find a ready market in Colombo. Agency firms generally fix "limits" with their selling brokers, and if their teas are not sold, the selling broker, with the bidders' consent, may register their bid, which means that the offer is firm up to 1 P.M. on the day following the auction. Conversely, the firm whose bid is made, has the option of claiming the tea at any advance of price which the selling broker may secure, and thus is relieved of making any further bids to secure it. Practically all the tea thus taken out of the auctions is sold privately within the next day or so.

Special Contract Forms

There is a small quantity of green tea made in Ceylon which finds its way mostly to America and Russia. It seldom is put up at auction, but is sold on forward contracts. A special form of contract is provided which covers the buying and selling

of green tea.

There also is a special form of contract for forward sales of black teas. The Ceylon Chamber of Commerce appoints each year a number of tea experts. From their ranks the arbitrators are selected by the parties concerned, in case of dispute.

An All-year Market

In Ceylon, tea is produced freely all the year round. In India, operations halt for about three months each spring. This break is a great boon, for it enables the jaded tea buyer to get a complete change, which is really, for health's sake, most necessary. His unfortunate contemporary in Ceylon gets no break, and has to work steadily throughout the year. He has to wade through his fifteen hundred to two thousand samples every week, except for a few days' respite at Christmas, the Wednesday after Easter, and one Wednesday in September known locally as "The Trade Holiday."

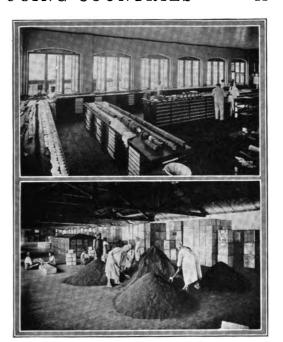
There are many buyers in Calcutta who go to England every year; but in Colombo the customary vacation is six months in three years. Occasionally, however, men have to wait longer without a vacation; for life in the tropics is more uncertain than in other places, and it is not an uncommon occurrence for a man who has made all his arrangements for going home to have to cancel them, owing to the illness or death of a colleague. That generally means another year before he can

leave his work.

The Colombo tea expert also must have



BULLOCK TRANSPORT, COLOMBO



In a Colombo Tea Exporter's Warehouse

Upper—Tea tasting.

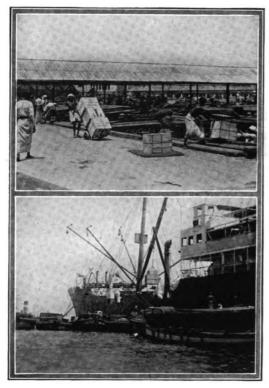
Lower—Bulking tea.

a knowledge of the scientific side of the manufacture of tea in order to be able to report on samples sent in by the estates for advice. In the tasting of tea, a weight of tea equal to a six-penny piece is dropped into a small pot, and about an eighth of a pint of boiling water is poured thereon. The lid is placed on top of the pot, and after standing from five to six minutes all the liquid is poured out into a small china bowl. The infused leaves are tapped out of the pot onto the inverted lid. The taster judges the tea by the taste of the liquor; by the scent and appearance of the infused leaf; and by the appearance of the dry leaf of the sample.

As in Calcutta, the buyer must see that his samples go out on the first mail after the sale. Mail day is usually every other Tuesday and Thursday, which gives him but two days to get the samples off—and the purchases may be stored miles apart.

Tea Duties and Tea Cess

That Colombo never has become an important tea blending center is due, primarily to the fact that there is a duty of 25 Ceylon cents [approximately 8 U. S. cents or 4d] per pound on tea imported into Ceylon. There has been periodic agi-



Loading Scenes, Colombo Harbor Upper—By lighters to the steamer. Lower—Down the hatchway.

tation in favor of permitting tea to be imported and blended in bond. According to its protagonists, this scheme would make Colombo a great blending and distributing center for India, Java, and possibly China teas, in addition to the Ceylon product.

Under the existing arrangement, however, an appreciable quantity of tea from South India is sold at the weekly auctions in Colombo; the sales being made on samples drawn from the bulk, which remains in bond in the transshipment warehouses. The actual tea imports into Ceylon are negligible.

There is an export duty of Rs. 2.37 per 100 lbs. on tea. This rate has been in effect since April, 1932.

In addition to the export duty, there was a cess, or tax, of 10 Ceylon cents per 100 lbs. on all tea exported. This was imposed at the instigation of the tea interests for the support of the Tea Research Institute. The ordinance [Ordinance No. 12 of 1925, known as "the Tea Research Ordinance, 1925"] became effective on November 12, 1925.

In 1930, the Ceylon Association in London, the Ceylon Estates Proprietary Association, the Planters' Association of Ceylon, and the Low-Country Products Association unanimously agreed to an increase of the cess to 14 cents per 100 lbs. during the years 1931–1933, as the rate of 10 cents was found insufficient for the Tea Research, owing to the heavy item of repaying a capital loan from the Government. The rate was continued through 1934.

In 1932 a cess of ½ cent per lb. was imposed to provide funds for advertising under the auspices of the newly formed Ceylon Tea Propaganda Board. Since 1933 there has been 14 cents per 100 lbs. additional cess for the tea restriction scheme. Thus, the total duty payable on tea exports is Rs. 3.15.

Harbor Dues and Warehouse Rent

The harbor dues on boxes or chests of tea is based on the net weight of the contents of each package. The rate on packages of fifty pounds or under is 3 Ceylon cents each; on packages from fifty pounds to 100 pounds, 6 cents each; and on every additional twenty pounds or part thereof, 1 cent. On payment of the above, the tea is allowed to remain at the wharf for three clear days, exclusive of Sundays and Customs holidays—unless the vessel taking the cargo has been granted special permission to work on such days. After the expiration of the three days, a similar rent is charged for each succeeding day or part of a day, including Sundays, Customs holidays, and the day of shipment.

Tea for export lodged in a bonded warehouse is liable, for each week or part week, to a rental charge equal to the export dues.

Freight Rates

The pre-war average freight per ton on tea to Great Britain was about 35 shillings. It jumped to 245s in 1916, and to a maximum of 300s in 1917. Early in 1919 it was 130s, rising to 175s late the same year. In the middle of 1920, it stood at 175s, then fell off to 65s at the middle of 1921, and to 60s at the end of that year. From April 1923 to June 1, 1925, it remained at 52s 6d., and was increased thereafter to 57s 9d., less 10 per cent conference rebate.

The rate to Australia is 71s. 3d., to the

United States [New York, Boston or Philadelphia] 67s. 6d., to Marseilles, Antwerp, Amsterdam, Rotterdam, Hamburg, Bremen, and Italian ports 57s. 9d.; to Durban 62s.; and to Cape Town 72s. 10d.

Quantity and Prices at Auction

The quantities of tea offered and the average prices at the Colombo auctions during a ten-year period are shown in the accompanying table.

CEYLON TEA TRADE TABLE

Year	Local Auctions Lbs.	Average Price Rs. Cts.	Year	Local Auctions Lbs.	Average Price Rs. Cts.
1923 1924	82,956,852 95,613,729	1.02	1928 1929	117,940,469 132,805,644	0.85 0.81
1925 1926	100,958,076 105,277,310	0.96	1930 1931	119,773,827	0.75 0.57
1927	113,271,778	0.94	1932	111,560,761	0.42

Trade Associations

The Colombo Tea Traders' Association has forty-two members, consisting of buyers and sellers of tea in the Colombo market, agents of tea gardens, and all buyers not in the employment of any firm, but representing separate interests, and tea brokers. The Association was formed under the auspices of the Ceylon Chamber of Commerce to protect the interests of



A MODERN TEA TASTING ROOM, COLOMBO

the tea trade. It supervises the tea auctions.

The Colombo Brokers' Association is composed of the six previously-mentioned produce and share brokers. Its object is to protect the interests of its members.

The Ceylon Chamber of Commerce has about 100 members. Its objects are to promote, foster, and protect the commerce of Ceylon by collecting and classifying all information bearing on its wants and interests, and obtaining the redress of acknowledged grievances, and the removal of pernicious restrictions; to decide differences on matters of local custom and usage, and to form a court of reconciliation and of arbitration to parties willing to abide by its decisions; to communicate with the public authorities, with similar associations in other places, and with individuals on matters of trade; and, finally, by recording its proceedings and decisions to form a code of practice by which the transactions of business may be simplified and facilitated. The chairman or vicechairman of the Ceylon Chamber of Commerce is ex-officio chairman of the Colombo Tea Traders' Association.

The Tea Buyer in Colombo

The qualifications of a successful tea buyer in Colombo are various. He must have an intimate knowledge of his customers' individual tastes, a general knowledge of the requirements of the various markets to which he ships, and of conditions in all the tea producing countries. He must understand tea manufacture and how various methods produce various kinds of tea. Physically, he must be in good health in order to stand the climate, and, above all, must be possessed of a keen palate.

A man begins his preparation for a position as a tea buyer by entering, say, a London tea office. He spends about a year learning the routine of the office, and then is transferred to a tea buyer's room. He acquires a knowledge of warehouse procedure by drawing samples and weighing batches for the buyer, to whom he becomes an assistant. As such he learns to differentiate the various grades of leaf; smells every tea he sells; commences to taste batches with his buyer; weighs up blends; sends out samples; looks after reserves; keeps stock; and assists wherever

he can make himself useful. At the same time he acquires knowledge of the tea business. He attends tea auctions and takes prices. Also, he arranges the portion of the sale tasted by his buyers into its various grades or districts, for tasting batches. His responsibility increases gradually. Progress, after the initial stage, largely depends upon a man's ability and the rapidity with which he acquires a palate. The average learning period is from three to five years.

Upon arrival in Ceylon, the neophyte is made a junior buyer. He tastes batches and learns values in a new currency. He goes to tea sales and buys small breaks. Gradually, as he learns, his responsibility increases.

Secondary and public school men are especially sought after; usually those with a good fund of enthusiasm, a strong constitution, a personality likely to impress clients with sincerity, and with the ability to give effect to such sincerity.

A junior buyer at first would probably receive a salary of from Rs. 400 to Rs. 500 a month, together with annual increments of Rs. 600 to Rs. 1000 for the period of his first engagement of from three to five years. Through the years, his salary would increase to between Rs. 1500 to Rs. 2000 per month, depending upon the size of the business, and the responsibility involved. Some buyers, in addition to their salaries, receive commissions on their sales, to which there is no limit. Only occasionally, if his firm has a bungalow or flat attached, is he offered living quarters as part of his salary.

There is no general contract form for tea buyers. A man, in becoming a buyer,



A TEA BUYER'S BUNGALOW, COLOMBO

either signs the standard form of agreemen of his individual firm, or merely enters upon a gentlemanly agreement.

The daily routine for the junior buyer is about as follows: He visits his mills at 7 a.m., and arranges the day's program. He arrives at the office at from 8:30 to 9 a.m., and usually remains there until between 4:30 and 5 p.m. His time of leaving the office naturally varies. On mail days and tea sale days, he is often busy until 6 p.m. or even later. As a general rule, he experiences no difficulty in getting away early,—4:30 to 5—as it is the policy of most firms to encourage sport among their junior members. Outdoor recreation extends from 4:30 or 5 p.m. to 6 or 6:30 p.m. Dinner usually is served at 8 or 8:30 p.m., and 10 or 11 p.m. is bedtime.

The senior buyer occasionally visits the mills in a more or less supervisory capacity. He always is at his office from 9 to 9:30 a.m. to from 4 to 5 p.m., yet on sales days and the days immediately following he stays much later. He usually devotes his mornings to tea tasting and his afternoons to correspondence.

The principal recreations consist of practically all outdoor sports, such as soccer, rugby, hockey, cricket, tennis, golf, yachting, swimming, rowing, polo and badminton, and the usual indoor pastimes, dancing, billiards, bridge, etc.

In Ceylon, leaves of absence generally are granted at the end of the first five years of service, at the end of the next succeeding four years, and every three years thereafter. They usually are for six months, and are pre-arranged, though sometimes they are subject to alteration as a result of unforeseen circumstances. Generally a first-class passage home and return, with half- or full-pay during the furlough period, are provided by the company.

The length of service varies greatly, though most buyers serve from fifteen to thirty years, retiring at forty-five to fifty.

III—THE DUTCH EAST INDIES

Batavia, the chief city of the Netherlands Indies and tea market for Insulinde, is situated on the northwestern corner of the island of Java, six miles inland from its harbor, Tandjong Priok. Beyond Batavia rises Batavia Residency and the



LOADING TEA ABOARD AN OCEAN LINER, TANDJONG PRIOK, BATAVIA

Preanger Regencies, in which most of the Java tea is grown.

In Java, tea is packed in wooden, lead or aluminum lined, chests, which hold about one hundred pounds. Although some of these chests are made on the estates, patent chests of three-ply wood are becoming increasingly popular. After packing, the tea is sent by motor truck or wagon to the nearest railroad station, whence it is sent by rail to Batavia.

The harbor of Tandjong Priok consists

of an outer port, closed in by long piers. It has a water surface of about 350 acres and three inner ports. Each of these inner ports is some 1200 yards long, but the widths vary; the first being 200 yards wide, the second 165 yards, and the third 235 yards. The inner ports all have quays equipped with modern electric traveling cranes. Adjoining the quays are the warehouses of the Port Authority and of private shipping companies. A good road and a double track railway connect Batavia with the port. Tea is transported to the Batavia railroad station, and thence by railroad. The prevailing freight on tea to Amsterdam is fl. 37/50 per cubic meter; to London fl. 38/50; each less 10 per cent.

The tea buying at Batavia is almost en-

tirely in the hands of British firms, some seven or eight of which are established or represented. Selling, on the contrary, is chiefly run by the Dutch, although not entirely so; three British houses and one German control large groups of estates. To a smaller degree, a few Chinese and Arabs offer tea.

The tea estates in Java are largely owned by companies with headquarters in Amsterdam or London. Some of these companies have agents in Batavia, and some do not. The instructions to the estate manager as to the disposition of the tea always come from the directors of the company, either direct or, if they have agents in Batavia, through such agents. Instructions frequently are based on the general policy of the directors, which may be to sell everything in Amsterdam, London, or Batavia; or to dispose of it according to the ruling market prices in the different tea markets. If there are Batavia agents, these agents charge the company all actual cost for handling the tea and a commission consisting of a certain percentage on the gross amount received on tea sold through them.

After being manufactured on an estate in Java, the tea is dispatched to one of

three places—(1) to London to be put up at auction; (2) to Amsterdam for public sale; or (3) to Batavia for sale by private contract or treaty, being subsequently exported to the consuming country. It is with the last named that we are most concerned here.

There is no auction in Batavia. Tea is sold privately to firms established in Batavia and representing various interests in tea-consuming countries. There are brokers, buying and selling, who receive ½ per cent each from buyer and seller. The warehouses of the Port Authority have no facilities for blending and bulking. The charges for handling tea are as follows:

At Batavia	At Tandjong Priok
Delivery to buyers 17½ cts. per ¢	20 cts. per ¢
Storage 6 " " ¢ Fire Insurance½% per month	6 " " ¢ 1/2% per month
Statistic Export Duty	14%

Buying Forward

The large majority of sales are made on the basis of forward deliveries. These may be the full crop of all grades of an estate for a year or more; or may be for certain grades only for varying periods, like one month, or three, or six; or perhaps covering the dry weather, when fine teas are produced; or the wet season, when the inferior teas are made. It all depends on the buyer's requirements. The Dutch producers are, on the whole, willing sellers for all positions. Thus, in actual practice, much tea is sold before it leaves the estate, and is then either sent to the buyer's stores in Batavia or direct to the port, as the buyer may direct.

Forward contracts are based on f.a.q. standard; i.e., a fair average quality of mark and season. Buying tea this way is no easy matter, and difficulties are met which are not encountered when spot sales are made on samples. A buyer contracting in December, for example, for the production of an estate during June to September of the following year, must have a very shrewd knowledge of what quality of tea he can expect from any particular garden.

The seller, too, must be very careful not to allow his standard to fall. Since practically all teas sold in Batavia on forward contracts are sold on "marks," should the seller allow the mark to deteriorate, he would lose a valuable asset. Garden marks become known to buyers all over the world. When buyers in consuming countries are dissatisfied with a lot of tea under a certain mark, they instruct their agents in Batavia not to buy of that mark again. Thus, although the quality of tea shipped from the garden may improve, it takes years to repair the damage done by three or four bad invoices.

Occasionally it happens that a tea buyer feels that a delivery falls below his expectation of f.a.q. The seller, in such cases, usually refers the matter to the Tea Expert Bureau or to his broker, and satisfactory settlements are frequently effected in this way. If, however, the seller is advised that the tea should be considered f.a.q., the matter is taken before an arbitration court for hearing and determination.

Quantity

The quantity of tea sold yearly in Batavia may be said to average about fifty million pounds. The chief outlets are England, Australia, and the United States. The quality varies with the time of the year, but Java teas may be roughly divided into two categories—the fine, or dry weather, teas from June to October; and the inferior, or wet weather, teas from November to May. Usually, large offerings are made in the early months of the year and smaller ones from July on.

Sumatra

The island of Sumatra seems to offer the greatest promise of any tea-growing country. It is a practical certainty that the tea acreage could be trebled in ten to fifteen years. Medan, situated on the East Coast, is to Sumatra what Batavia is to Java. It is the principal commercial center, and is connected by rail and a good motor highway with the port of Belawan Deli, twelve miles distant. The enormous strides which the development of the East Coast of Sumatra has taken led to the construction of a harbor at the mouth of the Belawan River on the island of the same name. The approach to the harbor and the river itself are continuously kept open by dredging.



LOADING TEA AT BELAWAN DELI, SUMATRA

The port of Belawan has some 820 yards of wharf at the old coastal establishment, while the new one has a wharf of 201 yards, accessible to ships with a draft up to twenty-eight feet, and two coaling wharves, each thirty-three yards long. Besides these, there is a separate basin, the so-called "coconut leaf harbor," for native sailing smacks. The latest improvement is the construction of a 1000-yard quay with sheds. This accommodates ocean steamers with draughts up to forty feet at low tide.

All the tea planted on the East Coast is owned by a few big English, Dutch, and German companies. The procedure as to exporting is much the same as in Java.

Shipments to Java, Singapore, and Penang are for re-shipment to Australia, Europe, and the United States. No tea is held for use on the Island of Sumatra. It takes, on the average, seven weeks for tea from Batavia to reach the United States, thirty-three days for it to reach London, and thirty-three to thirty-four days to reach Amsterdam. Tea from Sumatra usually takes a few days less.

Associations

A unique organization, closely associated with the Java tea trade, is the Tea Expert Bureau at Batavia. Although it is essentially a planters' association, it nevertheless exercises a far-reaching and important influence on the Batavia market. Its object is to improve Java teas by testing samples of all consignments before they are forwarded from the estates, and to afford the growers expert advice on market requirements. Mr. T. W. Jones is the

tea expert in charge of the work. He succeeded Mr. H. J. O. Braund. The secretarial and administrative work of the Bureau is done by the general importing and exporting firm of Geo. Wehry & Co., in whose extensive establishment at Batavia the Bureau is located.

The tea buyers have a special trade organization of their own, known as the Batavia Tea Buyers' Association. Its objects are the promotion of the common interests of buyers of tea in the Batavia market. The members comprise representatives of eight firms. All buyers of tea in Batavia are eligible.

In addition to the association organizations distinctly within the tea trade at Batavia, there is the general commercial body known as the *Handelsvereeniging te Batavia*, or Batavia Commercial Association, which acts as the representative of all trades and industries, but leaves details for settlement by such special trade organizations as the Tea Buyers' Association, the Rubber Association, and others. All Batavia business houses are represented in the *Handelsvereeniging*.

In Sumatra, those interested in wholesale business have formed themselves into an Association known as *Handelsvereenig*ing te Medan, or Medan Commercial Association, like the corresponding organization in Batavia.



TESTING SAMPLES AT THE TEA EXPERT BUREAU



A TEA BUYER'S HOME, MEDAN, SUMATRA

Java and Sumatra Tea Buyers

The qualifications of a successful tea buyer in Java and Sumatra are general commercial attainments, an extensive knowledge of tea, and connection with foreign clients. He prepares for it by working as an assistant. The men especially sought as tea buyers are well educated; especially from a commercial angle. They are variously paid. Some are members of firms, and so share in the profits. Others receive a salary and a commission. There is no specified contract form for tea buyers.

Java and Sumatra tea buyers generally are in their offices from 9 a.m. to 4 or 4:30 p.m. Their principal recreations are tennis, golf, football, bridge, and club life. They are granted a six or eight months' leave every three years, or more frequently if combined with a business mission. While on leave they usually receive full pay and actual traveling expenses. Some of the buyers are in Java for a while, then elsewhere—perhaps Colombo, Calcutta, or Australia.

IV—MARKETING TEA IN CHINA

One of the chief differences between China, India, and Ceylon as tea producers, is that in the last two named tea is grown on large estates owned by big producing companies and managed by Europeans. In China, tea is produced by native farmers on small plots of land. These farmers have other crops to gather, and are notorious for paying but little attention to careful plucking.

The usual procedure in marketing China tea is for native tea brokers, or collectors, to go about from farm to farm buying each man's little stock and bringing it to the nearest market of the tea district; generally a large village or town on a waterway. In March, the native tea buyers go into these towns, establish headquarters, and make their financial connections. They usually are from the Chinese tea hongs in such centers as Hankow, Shanghai, or Foochow. Many are financed by brokers in Shanghai and Foochow. This applies mostly to Kiukiang and green tea. Hankow teamen usually finance themselves, and so are not tied to any broker, but offer samples to all brokers, and a commission is paid to the seller.

The word "hong" means a row, or series. Chinese warehouses were so called because they consisted of a succession of rooms. The term now is used to apply to all kinds of mercantile houses. The profits of these tea hongs were enormous, but with the entrance of India, Ceylon, and Java into the world's tea markets these profits have been drastically reduced.

Tea is offered to the foreign exporter through native tea brokers. Samples of the various crops are presented in small tins, on the outside of which is given the chop mark in Chinese. The foreign tea taster, or ch'a-sze, tests the samples for color, leaf, and liquor. The Chinese brokers receive 1 per cent on tea sales.

In cup testing, a quantity of tea the weight of a sixpence is measured out and placed in a cup into which boiling water is poured. The tea is allowed to stand for about five minutes; the time being regulated by a sand-glass or five-minute alarm clock. Then the infusion is poured off. If the taster is interested, he calls for a half-chest, and if this is up to sample the entire shipment is ordered into the godown for inspection. Occasionally, the buyer finds the bulk consignment not up to sample, whereupon he either rejects it or bargains with the broker for a reduction in price.



Examining and Valuing Tea, China



CHINESE RIVER TEA TRANSPORT-NATIVE JUNK

China is traversed in all directions by roads, which almost invariably are in bad repair. In the interior and southern provinces, they are rarely more than five feet broad, and wheeled traffic is seldom possible. Beasts of burden are scarce, and manpower is employed where canals or waterways are not available. There are a certain number of main trade roads and courier roads which keep approximately to a straight line. In the plains, they average from twenty to twenty-five feet wide.

There are only about 7500 miles of railway in all China, and further extensions have been held up during the factional wars of recent years.

China depends in a great measure on rivers and canals for the transportation of freight. The chief water routes are five in number: the West River; the Min River; the Han River; the Yangtze River; and the Grand Canal.

The Yangtze-kiang is the chief waterway of China. Flowing through the center of the country, after a course of 3200 miles, it empties into the Yellow Sea in about 31° N. It is dotted along its navigable portions with many rich and populous cities, such as Chinkiang, Nanking, Kiukiang, Hankow, Wuchang, Hanyang, Ichang, Kweichow, Chunking, and Luchow. Yangtze basin is a fertile country, containing 700,000 square miles and populated by 200,000,000 people. The river is navigable by large steamers for 1000 miles of its lower course; by specially built steamers for 300 miles further; and by junks for 200 miles more. The Yangtze is all-important in the economic life of China.

Next in importance is the Yun-ho, or, as it is generally known, the Grand Canal.

Beginning at Hangchow, it runs northwest to Tientsin, where it unites with the Peiho River, and thus may be said to extend to Tungchow, near Peiping. It meets the Yangtze at Chinkiang. About half way between Hangchow and Chinkiang is Soochow.

Taxes and Duties

Heavy export duties and internal taxes have done much in the past half century to handicap Chinese tea. The export duty, originally fixed by the Treaty of Nanking in 1842 and again by the Treaty of Tientsin in 1858, was $2\frac{1}{2}$ taels per picul [1 picul=133½ pounds], which was to represent the rate of 5 per cent ad valorem. Tea, however, never reached so high a figure as 50 taels per picul and, later, the diminishing value of tea resulted in the export duty representing 10 per cent ad valorem. In 1902, the duty was reduced to one and one-fourth taels; and in 1914, to 1 tael [1 tael=70 cents U.S.A.].

In 1918, when a crisis in the tea market was obvious, several native organizations demanded a suspension of the export tax. In answer thereto, the tax was ordered suspended for two years from October 10, 1919. At the close of 1921 the situation was still bad, and the suspension period was extended for another year; and again in 1923 until 1925. In 1927, it was permanently abolished.

The Chinese grower is under the burden of paying a series of inland taxes, known as "likin." These often amount to a considerable sum. Every movement of tea, not only from one province to another, but often inside the same province, is subject to this impost. The exact amount of these levies is not established, and depends in great part on the instructions from local



AMERICAN GODOWN, SHANGHAI

authorities. That this taxation is unreasonably large can be seen from the fact that one picul of tea is seldom taxed less than 1 tael in likin charges, and cases are frequent where the shipment of one picul of tea from the farm to Hankow costs $2\frac{1}{2}$ taels or more. At present, the likin levies are absolutely out of the control of the Central Government, and there does not seem any possibility of their immediate abolition.

The members of the Trans-Pacific Freight Bureau at Shanghai recently brought to the attention of the China Tea Association, Shanghai, the inferior character of the packing of tea shipments, and urged that steps be taken to improve the packing, in order to insure the arrival of the tea at its destination in a better condition than appears possible with the present type of containers and methods of packing. As an inducement for native tea men to adopt plywood containers, it was suggested that the present freight rate of G\$6 a ton of forty cubic feet, be increased for shipments not so packed, by G\$2 a ton.

The "Squeeze"

For many years, tea trading in China has been attended by a peculiar system called "the squeeze." Tea, passing from one hand to another, must bear the burden of the costs which enter into the transaction. This includes even the head go-between man, or compradore, whose right seems fixed to secure from the seller a private commission on everything purchased for the firm or firms by whom he is employed. Far from looking at the matter as a form of graft, the Chinese believe it is dishonest not to pay the "squeeze" to the person whose right it is to collect it. The Customs house often is called the "Squeeze House," and this term never offends the respectable Government institution, known to the world as The Chinese Maritime Customs.

Export Markets

The principal markets for the exportation of China tea are the treaty ports of Hankow, Shanghai, Foochow, and, in a lesser degree, Canton. Up to the time of the transfer of the Russian trade from the Kiakhta route to the Trans-Siberian Railway, Tientsin also was an export market for tea consigned to Russia. Amoy, once

so prominent, is now almost out of the picture. The principal markets for brick tea are Kalgan, Paotow, and Kweihua, near the Mongolian border, and Ta-chien-lu and Sungpan in the western part of the province of Szechwan, near the border of Tibet.

In 1931 the National Government promulgated regulations for the inspection of tea with exportation permitted only upon the presentation of a certificate issued by the Bureau of Commercial Commodities.

The Hankow Tea Market

Hankow, the great inland tea port of China, is situated on the northern side of the Yangtze-kiang, at its junction with the Han River, about 600 miles west of Shanghai. Immediately opposite, on the south-ern bank of the Yangtze, is Wuchang, the capital of the province of Hupeh. There is a daily communication by regular lines of steamers with Shanghai, and smaller steamers run up the river to Ichang. Ocean-going vessels come up the Yangtze for six or seven months of the year. The bulk of the cargo shipped from Hankow to foreign countries is transhipped Shanghai. At Hankow steamers load at hulks, or midstream. Tea is sent direct from shipper's godown to hulk, and thence is loaded on the cargo boat.

Because of its central position in relation to the three richest tea provinces— Hupeh, Hunan, and Kiangsi—and its water connections with the provinces of Szechwan, Anhwei, Shensi, and Kiangsu. Hankow was for some sixty years China's greatest tea market. This was due, in part, to the fact that most of the large Russian tea merchants had their factories But with the disappearance of Russia as a large purchaser, the importance of Hankow as a center for foreign, buyers began to decline. In 1918, the World War put a stop to the regular export of teas from Hankow, and many of the old tea hongs were closed. With the resumption of normal trade relations, the large foreign tea firms decided that Shanghai was a more central point for buying. The opening of branches in Hankow simply meant an increase in overhead. The number of tea experts coming to Hankow is decreasing year by year. The dif-ference between Hankow and Shanghai prices on locally produced tea is only a



Underwood & Underwood

UNLOADING TEA AT LOW WATER, HANKOW

matter of two or three taels per picul, which covers river freight to Shanghai and the difference in exchange. But in buying in Shanghai, an extra commission is payable to the Chinese tea hong at that point, and there is also double coolie hire and wharf storage. The costs of sampling, warehousing, etc., are agreed upon individually, but they average about one and one-half taels per picul.

There is a certain amount of leaf tea, known as "Overland Leaf Tea," sent from Hankow up the Han River to Fan-cheng, and thence overland to Siberia and Mongolia.

In 1925, the Soviet Government came into the Hankow market as a huge buyer of teas, but in late years has practically disappeared as a buyer, and it is doubtful if Hankow's former standing as a tea mart ever can be revived. The old Russian tea firms with factories in Hankow have been closed or seriously crippled by the loss of their distributing agencies throughout Russia. There were three Russian factories for making brick tea; namely, those of Molchanoff, Pechatnoff and Co.; S. W. Litvinoff & Co.; and the Asiatic Trading Co. [now British]; and one Chinese factory—that of the firm Sin-Shan.

The foreign tea exporters in Hankow previous to the outbreak of the factional revolution were: Robert Anderson & Co.,

Ltd.; Asiatic Trading Co.; Alex. Campbell & Co.; Dodwell & Co.; Harrisons, King & Irwin, Ltd.; Jardine Matheson & Co.; Siemssen & Krohn; Theodor & Rawlins; and Wisner & Co.

As a class, Chinese tea merchants are very conservative. They firmly cling to the hope that some day the Russian merchants will come back to Hankow as large buyers of tea. The Chinese merchants have a tea guild in Hankow, but foreign exporters find it impossible to persuade them to take concerted action in improving their business; for instance, they have been urged to improve the quality of the boxes in which local teas are packed, but so far without result. Many Chinese tea men are depending more and more upon the strapping and matting done by the foreign exporter, rather than upon making a substantial package themselves.

Problem of Exchange

In case a foreign buyer purchases a line of teas, he must pay the Chinese merchant in local Hankow taels. At the same time he negotiates his bill, drawing either in gold U. S. dollars or sterling on London.

Exchange constitutes the most difficult problem of foreign trade and banking in China. Broadly speaking, there are two classes of exchange—domestic and foreign. Foreign commercial houses and foreign banks undertake to handle foreign exchange, but the handling of domestic exchange is left to the Chinese compradore and his staff entirely, except in the case of drawing or remitting between Hankow, Shanghai, and Tientsin. When one considers the hundreds of taels of different weights and varying degrees of fineness, the numerous kind of dollars, as well as the great variety of small coins, all of them circulating practically independent one of the other and having no fixed ratio, it is not to be wondered at that the foreign business man is willing to turn over the handling of domestic exchange to his compradore.

Domestic exchange must be taken into consideration in all commercial transactions which have to do with commodities that are bought in places outside of Hankow. The local practice is to keep current accounts with one or more foreign banks, and occasionally with a Chinese bank, in taels and dollars. In case the commodity



NATIVE LIGHTERS CARRYING TEA TO THE LOADING STEAMER, SHANGHAI

is paid for in the currency of the place where the goods originate, it is settled for in a tael currency which may differ in scale and fineness from the account kept in the bank. On the other hand, payment may be demanded in dollars, quotations for which can be obtained from the banks. Quotations for the Yuan and the Mexican dollars are almost always identical. At certain seasons of the year it sometimes happens that heavy demands for dollars send quotations up to as high as 5 per cent above mint par.

While the tael never is coined, and represents only a certain weight and fineness of silver in different communities, actual silver bullion is cast into ingots called sycee, or shoes [the shape of a sycee silver bar is supposed to resemble a Chinese woman's shoe]. These ingots usually are cast of commercial bar silver from 996 to 999 fine, and are about fifty taels [one tael equals one Chinese ounce] in weight, upon which are written their exact value in the tael of the community whose name they take, in addition to the "chop" [or signature] of the assayer. His "chop" makes the assayer and his family responsible for the weight and fineness designated on the sycee, and it is accepted at its face value, as is the \$20 gold piece stamped [or "chopped"] by the United States Mint.

Probably the most difficult problem connected with trading in China is the handling of foreign exchange. Skill in exchange comes only through actual experience. The relation of gold to silver is based on the comparative values of the two metals in the world's largest markets. These values are given in the exchange quotations which are issued daily by one of the large

foreign banks in Shanghai. It is the daily custom for the Hongkong and Shanghai Banking Corporation to give out its rates to the exchange brokers, after the receipt of a telegram from its Shanghai branch. These rates are published on a slip, copies of which are sent around to the banks, merchants, etc., in Hankow. The quotations are the expression of the ratio between any given currency in Hankow and any given currency abroad. They are expressed in foreign currency equivalents of one tael, Hankow currency, with the exception of yen quotations, which are given as so many Hankow taels for each 100 yen.

The great tea market of foreign Hankow extends over a period of four months at the most, but usually around six weeks. The tea season opens about May 15, and lasts till the middle of October. The most important trading is from the end of May to the beginning of July. It is then that the Chinese brokers in silk-array are borne in their private rickshaws from the native city, and are set down in the compounds of the big hongs to offer their wares. Then the tea testers come into their own, and are indeed supreme.

A rather curious anomaly of the former Russian tea market at Hankow was that this inland port, close to many of the greatest tea districts in China, was an importer as well as an exporter of tea. When the brick-tea factories were running, a large amount of tea dust was imported from Ceylon, Java, and India to be mixed with the locally-grown tea leaf and fannings. Chinese tea dust, in so far as it was obtainable, cost the manufacturers 5 to 10 taels per picul; but the dust from Ceylon.

Java, and India cost from 40 to 70 taels per picul.

Foochow

Foochow is the capital of Fukien Province and, with Amoy and Santuao, the market center for its teas. It is located about 455 miles south of Shanghai on the north side of the Min River, thirty-four miles from the sea. Foreign vessels, owing to the shallow water of the river, anchor at Pagoda Island, fifteen miles away.

At one time the Russians and the English had several brick-tea factories in Foochow, and for a time the brick tea export trade thrived; then it shifted to Hankow and Kiukiang. This was due, in part, to the fact that the Foochow leaf does not make good brick tea. Some of the factories have been purchased and are being worked by Chinese firms.

The Chinese tea merchants of Foochow are organized into a number of groups. The group specializing in foreign export is known as the Kong-I-Tang. It is mostly made up of Cantonese. The three principal groups dealing in tea for Chinese consumption are the Peking group, the Tientsin group, and the Kwangchow group. The first named consists of natives of Chihli and Shantung Provinces, sending teas to Peiping and thence to Northern China and Mongolia. The Tientsin group exports to Tientsin. The Kwangchow group handles exclusively the supply of Fukien tea for the southern provinces.

In addition to the Chinese tea merchants engaged in the domestic tea trade at Foochow, there are eight or nine foreign firms or branches actively interested in the export tea trade.

There usually are three pluckings of Fukien teas. The first is about the beginning of May for Pekoes and during May for Congous and Souchongs. This comes on the market by the end of June. The second plucking comes on the market the middle of September; and the third, by the end of October.

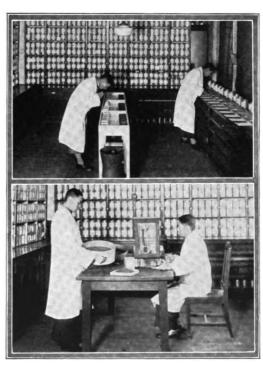
Canton

Eighty miles inland from Hong Kong, at the apex of the delta of the Pearl River, lies the city of Canton. It is a large and populous commercial city, the headquarters of the Provincial Government of Kwangtung and Kwangsi. It is connected with Hong Kong by an excellent steamer service

Halfway up from Hong Kong, the boat passes through a narrow point in the estuary called Bocca Tigris [Tiger's Mouth]. A little further on is Whampoa, the port for Canton. It was here that the tea ships anchored while loading for their voyages to the New York and London markets.

For some one hundred and fifty-three years previous to 1842, Canton was the only Chinese port where foreign merchants were permitted to trade. During this period the city prospered mightily. It was not until the conclusion of the Nanking Treaty in August, 1842, that four additional ports—Shanghai, Ningpo, Foochow, and Amoy—were thrown open to foreign trade.

During the middle of the nineteenth century, Kwantung Province, where Canton is located, furnished over 50 per cent of all China tea exports. The trade was in the hands of the English, who exported only black tea. For a long time, all Kwantung tea was shipped from Canton; then the



IN THE TEA TESTING DIVISION OF THE SHANGHAI BUREAU OF INSPECTION [See page 25]

Upper—Qualitative examination and tasting.

Lower.—Testing for dust.



THE BUND AT SHANGHAI, "THE PARIS OF THE FAR EAST," FROM ACROSS THE WOOSUNG RIVER,

quality of the tea fell, and other provinces came to the front. By 1900, Canton ceased to be of any importance as an export market. At the present time, small quantities of Kongfu, Orange Pekoe, Souchong, and Pouchong tea are sent to Australia, South America, and the United States. Some Hyson and Young Hyson also are exported.

Shanghai

Shanghai, the commercial metropolis of the China coast, is situated on the Whangpoo River, thirteen miles inland from the junction of that river with the Yangtze. It is 11,000 miles from London, and 5000 miles from San Francisco. All European and American steamship lines trading to the East make it a port of call, and it is the largest tea export market in China.

The Shanghai tea export season opens annually on the first day of June, and extends theoretically until June of the following year. However, the better grades of tea usually are contracted for and shipped abroad by October or November, if not earlier; business in the remainder of the year being only of a desultory and sporadic nature.

There are three separate municipalities in Shanghai—the Chinese City, the French Settlement, and the International Settlement. The principal street is The Bund, which runs along the waterfront. Here are located the finest business buildings of the city. The Bund and jetties line it on the water side. On both sides of the Whangpoo River, below the city, are factories and warehouses.

As an export market for China tea, Shanghai never was important until the crisis of 1918-1922 crippled Hankow and Kiukiang. It always has had an influence on the trade, because of its importance as a transshipping port and exchange market. First, the shippers of green teas concentrated their stocks from Anhwei and Chekiang Provinces in Shanghai for shipment to America. Then the Russian tea firms from Hankow and Kiukiang began to transship their black and brick tea there, whence it was shipped on vessels of the Soviet Mercantile Marine to Vladivostock. Owing to its central situation and excellent shipping facilities and to the fact that most of the large tea firms have their main offices there, Shanghai now is becoming increasingly important.

The Shanghai trade in purely native teas from all parts of China is large. All the local native tea merchants are united in a special tea guild. Not a single transaction can be closed without the control of this organization. As the majority of transactions effected in Shanghai involve



EXTENDING FROM THE SHANGHAI CLUB AT THE LEFT TO THE PUBLIC GARDENS AT THE RIGHT

green tea from Anhwei Province, most of the Chinese merchants come from there. The Chinese tea brokers receive a commission of one per cent.

According to a general rule established during the last few years, all tea transactions, both for abroad and for the interior, are covered by written contracts. Formerly, these contracts provided a term of one week for the weighing and delivery of the tea, and four days only were allowed for remittance of the money; but owing to the fact that the majority of the stocks were in other ports or in the interior, these terms were often insufficient and sometimes led to misunderstandings. With this in mind, the conditions were altered, and now all contracts signed in Shanghai allow three weeks for weighing and delivery of the tea and an additional week for the remittance of the money.

The Chinese tea merchants have many local associations, the principal ones being: The China Tea Association, located at Shanghai; The Shanghai Tea Merchants Guild; The Hankow Tea Merchants Guild; and The Foochow Tea Merchants Guild.

China is making an effort to hold its remaining export trade by standardizing tea for exportation. In July 1931, the Ministry of Industry promulgated regulations for the inspection of teas intended for export. These regulations provide that all future shipments of tea must be inspected prior to exportation, with exportation permitted only upon presentation of a certificate issued by the Bureau of Inspection and Testing of Commercial Commodities.

Overland Trade Routes

Most of the tea shipped overland from China, is destined for Russia, Mongolia, Tibet, and, to a lesser extent, for Siam and Burma. For a long time tea was sent into Russia through the Hankow-Tientsin-Kalgan-Kiakhta route. The tea was sent from Hankow to Tientsin by sea. From there it was shipped on junks up the Pei-ho River to Tungchow, whence it went overland by camel caravan to Kalgan and Kiakhta. Sometimes the caravans were made up in Tientsin. The Russian firms had offices and warehouses there. Customs levies were collected and caravan permits issued.

Considerable amounts of tea sometimes were concentrated in Kalgan before being sent west. Many small native tea merchants from Kiakhta, who did not maintain offices in Hankow, came to Kalgan to purchase. Even now a few Chinese tea merchants from Mongolia come to Kalgan to buy the 60-catty chests of Fukien black tea supplied by Tientsin merchants. It also is a market for the brick and leaf tea

which comes in over the Peking-Suiyuan Railway, destined for Urga and Mongolia.

Now, however, the bulk of the tea exported to Russia goes by sea to Odessa or to Vladivostock and thence over the Trans-Siberian Railway. The freight by rail is paid on weight [roughly nine cents gold per pound] from Vladivostock to Moscow. Therefore, teas for shipment to Russia are mostly packed in patent chests. Bags were tried, but it was found that the tea deteriorated. Thousands of chests also are said to be finding their way to Bokhara and the Caucasus by overland routes through Kansu and Sinkiang.

Brick tea is exported in large quantities to Russia, Mongolia, Tibet, and Chinese Turkestan. From Kalgan, Paotow, and Kweihua the bricks are distributed by camel trains all over the Central Asian plateau in exchange for wool, furs, and skins.

The provinces of Szechwan and Yunnan both export brick tea to Tibet. The centers of the tea trade in Yunnan are the cities of Szemao, Iping, and Iwu. More than 10,000 piculs of tea pass through Szemao, some 30 per cent of it being exported overland to Tonkin, and about 70 per cent going through Szechwan to Tibet. In the fall, many Tibetans come to Szemao to buy brick tea. This is sent by caravan. A great deal of black tea exported to Siam and Burma finds its way thence to Tibet. The tea season in Yunnan opens in March.

The two great trade-marts for Tibet are Tachienlu, in the western part of Szechwan, and Sungpan, in the extreme northwest corner of the same province. The official route to Lhassa passes through Tachienlu, and this town is the market for Southern and Central Tibet, including Lhassa, Chaindo, and Derge. Sungpan is the market for Amdo and Kokonor. Here, tea always is bartered for furs, wool, musk, medicines, and other Tibetan commodities.

Qualifications of a China Tea Buyer

The qualifications of a successful tea buyer in China combine the knowledge of when teas are poor and expensive, and when they are good and cheap; and decision of character enough to leave it alone in the former case, and buy extensively in the latter.

The tea buyers generally prepare for their positions in the offices of brokers in either London or New York.

V—TEA TRADING IN JAPAN

The tea area of Japan has been stationary for more than a decade. There has been, in fact, a slight decrease in the area of fields devoted entirely to the tea plant, but this has been made up by the estimated area of the tea plants growing here and there among the other crops. However,



A MONGOLIAN WITH HIS TEA CARAVAN IN THE STREETS OF PEIPING



TEA PICKERS AT WORK IN THE GARDENS OVERLOOKING SHIZUOKA

there has been considerable increase in the crop harvested, owing to the adoption of improved methods of cultivation. Rising costs have made it difficult to meet the competition of other tea producing regions, which, after the war, resumed their export activities on a large scale.

As in China, tea in Japan is raised on small farms owned by individuals. The farmer sometimes completes the manufacturing of the tea except for re-firing, which is done at some central tea market, such as Shizuoka. But because of the expense involved, many farmers now are abandoning, altogether, the manufacturing of tea. Instead, the fresh-picked leaf is sold to collectors, who resell it to factories, where it is manufactured by machine.

The buying season in Japan commences as soon as the first crop appears on the market, which usually is the end of April. At this time the fancy early teas arrive from the early districts, but the goods are sold in a complimentary way at rather high prices. The actual business, however, starts about the fifth of May, if the season is normal. In case of any damage caused by frost, the season starts much later. By the end of November, the stock upcountry is largely disposed of, because the home consumption trade commences,

or revives, about the latter part of September, and continues until the end of November.

Almost all the business is done on Cha Machi [Tea Street], the Anzai, and Kitabancho—all connected, and covering an area of about eight blocks in the city of Shizuoka.

System of Distribution

The first link in the chain of the distribution of tea from the Japanese producer to the consumer is the country broker. He travels about, buying and collecting the leaf, and selling it to the local commission merchants in his district. The commission merchant receives the consignment from the brokers, and sells it to jobbers; his commission being 2 per cent in Shizuoka, and 5 per cent in Tokyo. The jobber, known in Shizuoka as "suri-uriya," refines the raw leaf, and sells it either to the wholesaler for Japanese consumption or to the re-firer. The wholesaler, in turn, sells it to retailers, who pass it on to the consumer in Japan.

If the tea is designed for export, the refirer becomes a link in the chain. He is a merchant who owns a re-firing factory, and may buy his tea from the commission



TEA EXPERIMENTAL STATION AT SHIZUOKA

merchant, the jobber, the broker, or the producer. It is refined in his factory, and sold to the exporters—foreign or Japanese.

The exporter does not, as a rule, own a re-firing factory. He buys the finished tea, packs it, and exports it. Tea is bought from samples which may be re-fired or not. In the latter case, the re-firer presents the trial sample, or *limihon*, which represents the actual stock of raw leaf. If the sale is effected, the re-firer proceeds to re-fire the leaf to conform with the sample. He delivers the tea within fifteen to twenty days.

The unit of weight on which prices are quoted is one pound for export, 100 lbs. for re-fired tea sold other than for export, and one kamme [½6 picul] for araha, or raw leaf. The terms in the export trade are f.o.b. steamer at the port of export, or c.i.f. destination, in accordance with the order. A banker's letter of credit usually accompanies an order from abroad or a draft at thirty, sixty, or ninety days sight.

In the Shizuoka District, a discount of 2 per cent is allowed for cash. This is known as "bubiki." In other districts there are no discounts.

Tea Testing

The usual testing room in Japan is closed on three sides. A counter is placed along the open north side. Outside this north window is the usual light brattice, or wooden shield, common to tea testing rooms in producing countries, and designed to admit light only from above. The equipment for testing usually consists of a black tray, a scale, a five-minute sand-glass, a spoon, a scoop of wire net, cups, a

kettle, etc. The procedure for cup-testing is the usual one. After brewing, the leaves are left in the cup for ten minutes before they are removed by the wire scoop.

There are five points considered in testing—style, color, liquor, taste, and flavor. Each of these counts twenty points, making a hundred point total. For example, a tea may test—Style, 15 points; Color, 18 points; Liquor, 16 points; Taste, 19 points; Flavor, 12 points; Total, 80 points.

In some districts, the division of points differs, according to the relative importance required for different sorts of tea. For instance, the standards for Gyokuro tea are—Style, 20 points; Color, 25 points; Liquor, 15 points; Taste, 25 points; Flavor, 15 points; Total, 100 points.

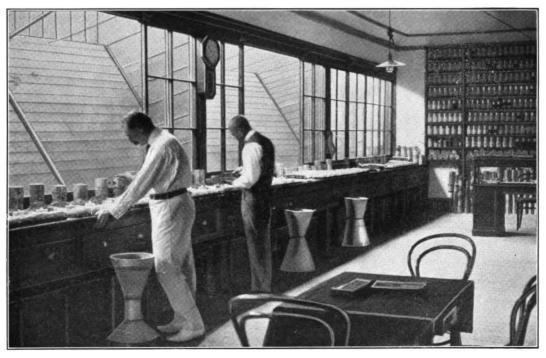
Japan Tea Standards

In Japan, every tea man, be he farmer, manufacturer, merchant, broker, or dealer, must join his local tea association. These local associations elect delegates who form the Joint Tea Association. These, in turn, appoint representatives who make up the Japan Central Tea Association.

The above associations have established three standards for tea. These, roughly, are the standard for export, which is the same as the United States Government standard; the manufacturers' standard for raw-leaf tea; and the producers' standard, which is established by various Joint Tea Associations. The manufacturers' standard is a physical standard employed for the regulation of raw-leaf before the final, or finishing, processes are applied in the large hongs. The standards are established in March from teas of the previous season. The establishing committee is limited to nine men appointed by the President of the



THE CHA MACHI (TEA STREET), SHIZUOKA



TEA INSPECTION ROOM IN A FOREIGN TEA EXPORTER'S OFFICES IN SHIZUOKA

Japan Central Tea Association. Of these nine, two are Joint Associations delegates, two are direct exporters, two are tea merchants, two are producers, and one is an inspector.

Tea, except dust and stems, must come up to the standard in point of liquor, flavor, and taste. Dust and stems are compared only as to flavor. Toasted tea is compared only as to flavor and taste, and black and brick tea are exempt altogether.

Tea Inspection

Tea inspection in Japan is threefold—(1) at the factories, (2) at the primary markets, and (3) at the port of export. The tea associations in the principal producing districts appoint inspectors who repeatedly inspect the factories, to prevent illegal manufacturing methods. The Joint Tea Associations, or Tea Guilds, inspect the tea at the markets. This is done by testing a certain number of packages in the ratio of one package in lots of ten packages or under, two packages in lots of fifty, three packages in lots of 100 or under, and one package for each 100 on lots above 100 packages. The Joint Tea Associations have established inspection offices in

most of the important markets. The Japan Central Tea Association directs the inspection of tea for export, although the work sometimes may be delegated to the Joint Tea Associations.

Shizuoka Export Trade

In Shizuoka, the chief market for exporting tea in Japan, there are twelve Japanese and foreign firms actively engaged in this trade. The buying season begins about May first, and lasts until about November. A few foreign buyers remain in Japan throughout the year, but the majority return to the United States in winter.

There are about sixty re-firers, of whom one-half re-fire for the home consumption, and the other half for the export trade. They play an important part in the export trade. The raw-leaf merchants are gathered on Cha-machi, Dodayucho, Yuzuno-kicho, Anzai-cho, and the re-firers and exporters on Anzai-cho, Kitabancho, and Shinmeicho.

Shizuoka, the chief city of Shizuoka Prefecture, and the center of the Japanese tea industry, is about one hundred miles southwest of Yokohama.



LIGHTERING TEA CHESTS OUT TO THE STEAMERS THAT LIE IN THE ROADS AT SHIMIZU

At one time, the tea business was done entirely in the foreign settlements of Yokohama and Kobe, where all of the firms engaged in the export trade had their own firing and packing establishments, and all did business in practically the same manner. The raw teas from the country districts were sent to either Yokohama or Kobe, consigned to various Japanese dealers or brokers, who, in turn, offered them to the buyers for the American market. The same samples were shown to practically all the buyers, and each made his own valuations. The teas were sold to the highest bidders in lots ranging from twenty to thirty piculs [a picul equals 1331/2 pounds] up to three or four hundred piculs



TEA TRADING, KITABANCHO, SHIZUOKA

in a lot. Each firm fired and packed its own teas, which necessitated large premises for storage and extensive firing, sifting, and packing plants and the employment of large staffs. The firing, sifting, and packing processes, which originally were all performed by hand labor, gradually were done more and more by machinery, to reduce the cost, until hand-firing became a thing of the past, and machinery was universally employed.

Some twenty-five years ago, a number of small Japanese firing plants were established in Shizuoka and the neighborhood, in the center of the tea-producing districts from which the supplies of raw-leaf for the Yokohama market were drawn, and native-fired teas began to be offered on the Yokohama market in addition to the raw-leaf. These at first found little favor among buyers who had their own firing facilities in Yokohama and Kobe. However, they soon attracted American buyers, who found it possible to operate without maintaining large establishments, and several established headquarters in Shizuoka for a few months each season to buy the ready prepared, native-fired teas. These buyers, however, being entirely dependent for their supplies on the fired teas offered for sale by the different native re-firing companies, naturally have not quite the same facilities for matching samples and maintaining similarity in their grades year

after year as have those who have the entire control of the manufacture from the raw-leaf to the finished article.

In the course of time, first one and then another of the old-established houses in the ports of Yokohama and Kobe moved their firing plants to Shizuoka, which now has become the center of the entire Japanese tea industry. The advantage of this location is that the cost of local freight and boxes for shipping the raw tea to Yokohama and Kobe has been eliminated, and, at the same time, the teas can be obtained in fresher condition, and need not be bought in large lots of several hundred piculs. This makes it impossible for country dealers to include a proportion of more or less undesirable leaf, as they could in a big mix, without its being readily detected. The buyers have more control of the quality of the raw-leaf they use; although a greater number of smaller purchases go to make up the quantity bought.

Thus, there are two distinct classes of buyers for the American market. First, those who possess their own firing and packing establishments, and continue to buy the raw-leaf and do their own refiring, sifting, blending, and packing; second, those who buy their teas ready fired and packed for shipment from the various Japanese re-firers. There are but few of the first class remaining.

Shipping Ports

About eight miles from Shizuoka is the port of Shimizu on Suruga Bay. From here is shipped about 90 per cent of the



TEA TRANSPORT AT SHIZUOKA

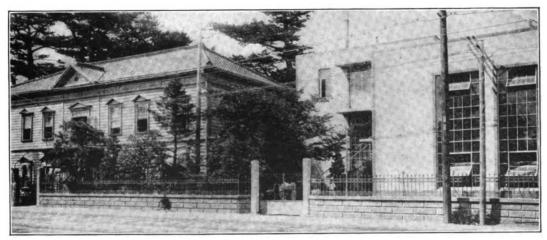
total exports of Japan tea. Tea is brought from Shizuoka by carts, by railroad, electric tramway, or automobile; loaded into lighters; and taken out to the steamers. Three stevedoring companies furnish ample warehousing and loading facilities.

Second in importance to Shimizu as a tea port is Yokohama, located on Tokyo Bay, conveniently near the tea districts roundabout Tokyo. Kobe is the third tea port, while Yokkaichi, which formerly ranked second, now exports little tea.

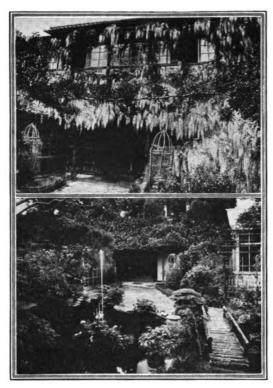
There is no duty on tea for export, but there is an import duty and a local guild tax of about one-half a cent a pound—used largely for advertising. The principal charges in connection with the export of tea are:

- Cartage from Shizuoka to Shimizu per 1 half chest via horse cart, 11 sen; automobile, 15 sen; railway, 3 sen; and tramway, 3 sen.
- (2) Lighterage at Shimizu from the wharf to the steamer, including loading charges, from 5 to 8 sep per 1 half chest
- from 5 to 8 sen per 1 half chest.

 (3) Fire insurance, Yen 2.40 per Yen 1000 per year.



OFFICES AND LABORATORIES OF THE SHIZUOKA-KEN TEA ASSOCIATION



HOME OF AN AMERICAN TEA BUYER IN SHIZUOKA

- (4) Monthly storage charge at Shimizu warehouse—average of 5 sen per 1 half chest.
- (5) Ocean freight to Pacific ports is \$4.00 per ton; to New York via Panama, \$9.00 per ton; to Montreal via Panama, \$11.00 per ton.
- (6) Overland to Chicago and eastern points, 1½ cents per pound; in carload lots 2 cents per pound. [One ton equals forty cubic feet]

Associations

The various tea associations in Japan have been mentioned previously in this chapter. The central body, The Japan Central Tea Association, carries on, as part of its regular activity, work which has to do with the expansion of foreign markets. The associations concerned more particularly with problems of manufacture and marketing are The Shizuoka-ken Tea Refirers' Guild, and The Tea Manufacturers' Guild.

The Tea Buyer in Japan

The qualifications of a successful tea buyer in Japan are: knowledge of his merchandise; ability to make decisions, and faith in his own judgment; sympathetic

understanding of Japanese characteristics; ability to cultivate the good-will of tea department buyers; and an unbounded patience. A man prepares for this job by working up from office and sample-boy to assistant or salesman at home; then, by spending a few years in Japan in secondary positions—always learning. The highest salary ever paid a tea buyer was \$4500 and expenses. During the buying season the buyers work both during the day and evening. They have almost no recreations. After the season they must travel to sell their goods and secure business for the following year. No leaves are granted. If a man once becomes a Japan tea buyer, there is little chance for changing his career.

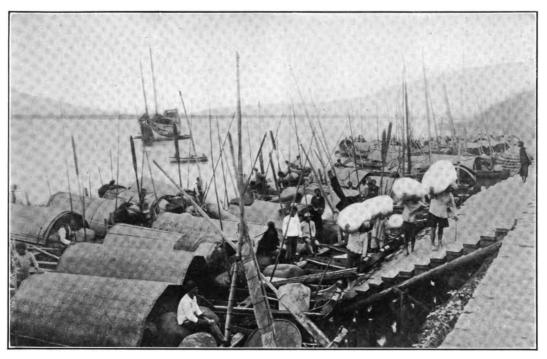
VI—MARKETING IN FORMOSA

As in Japan, tea is grown in Formosa principally in small private gardens, owned by small farmers. These are mostly Chinese, although recently a big Japanese concern has entered into the situation on a large scale; taking over some 100,000 acres of land suitable for tea, and operating eight estates and a number of newlybuilt and modernly equipped tea factories.

After the average Chinese small farmer in Formosa has partially manufactured his tea, he sells it to the refiner direct or through a broker. The refiner and the broker are both Chinese. Sometimes the tea goes through the "cha-san," a sort of warehousing, for some of the initial processes. Quite a quantity of raw leaf is packed and sent down the Tamsui River in junks to the Daitotei market. There it is sold to native re-firers or to foreign firms who do the firing, and this product is known as "house-fired tea." Crude tea



LOOKING ALONG THE BUND AT DAITOTEI



FORMOSA TEA FLEET BRINGING TEA FROM THE COUNTRY DISTRICTS TO THE MARKET AT DAITOTEI

sent down the river this way is packed in bags containing about sixty pounds each.

Samples of the tea are sent to the resident brokers in Taihoku, who present them to the various exporters. The sample seldom represents the bulk of the entire crop, but is simply a sample firing, illustrating what is expected to be produced from the raw-leaf in the country re-firer's place. After much bargaining, a price is agreed upon, and the tea is fired and shipped to Taihoku in half-chests containing twenty or thirty catties or in boxes holding seven and one-half to fifteen catties. If the tea is not up to sample, further negotiations are necessary to fix a proper price.

The Joint Sales Market

The Joint Sales Market, having the legal status of a kumiai [association or guild], operates under the auspices of the Government General [Japanese]. Its official title is Taiwan Cha Kyodo Hambaisho, or Taiwan Tea Joint Sales Market, and its headquarters are in the City of Taihoku, while branch offices have been established according to local needs.

Those who are eligible for membership

in the Market are corporations, guilds, or partnerships established under the encouragement plan of the Government General.

The consignments of tea to the Joint Sales Market are sold through bids, the consignors usually specifying prices at which they should be sold. However, sometimes they are sold at bottom prices. The quantity of the tea handled is about one-fifteenth of the entire exports of Oolong and Pouchong tea.

All members of the Sales Market are under requirement to send their tea to the Market, but some of them sell the greater portion of their output to tea brokers. Certain members are owners of tea factories established under subsidies from the Government, of whom ninety-five are operating "B" grade factories, and four "A" grade.

The quantity of tea handled is increasing yearly. As an inducement, the Sales Market is extending to the farmers a financial aid of not more than 50 per cent of the cost of tea consigned to it; the loan to be deducted from the proceeds of the tea sold.

There are seven kinds of tea made in Formosa. The best known is Oolong. The season is divided into five crops, Spring,



STREET SCENES IN TAIHOKU, FORMOSA

Summer, Second Summer, Fall, and Winter. Tea is purchased at yen per picul.

The first gradings for Oolongs shipped to the United States were "ordinary, superior, and finest." These gradually were changed to "fair, good, superior, fine, finest, and choice." Lately, "fair" has been changed to "standard"; referring to the United States Government standard. The present gradings are somewhat as follow:

1. Standard; 2. Fair; 3. Good—classified as fully good, good to superior, on superior; 4. Superior—classified as fully superior, superior to fine, on fine; 5. Fine—classified as fully fine, fine to finest; 6. Finest to choice; 7. Choice; and 8. Choicest [fancy].

Besides these, the intermediary grading of "Good Cargo" [same as good] sometimes is added.

Taihoku

The city of Taihoku—formerly Taipeh—stands near the northernmost edge of Formosa in latitude 25° 4′ N. and longitude 121° 28′ E. It is on a broad plain which sweeps up from the right bank of the Tamsui River. The city formerly was composed of three sections—Jonai, or Inner City, Mankwa, and Daitotei; but in 1920 the town was organized as a munici-

pality, including the surrounding districts. It now has an area of 6.7 square miles, with a population of 173,000 of which 48,000 are Japanese.

Mankwa lies on the bank of the river, and once was a flourishing port; but the river has become shallower and shallower during the last half century, and no longer is convenient for the anchoring of ships. The result has been the abrupt decay of its trade, and the shifting of its prosperity to Daitotei.

Daitotei lies north of Jonai, and was opened only about seventy years ago. It is approximately ten miles from the mouth of the Tamsui River. Here is the tea center of Formosa. The greater part of the district is covered with brick houses, arcades, etc., where the Chinese women and girls sit and sort tea. There are many teafiring factories and godowns. Most of the foreign buyers have their homes along the

Tamsui

bund, which borders the Tamsui River.

Tamsui, or Hobe, is a Chinese town on the northwest coast of Formosa. Prior to 1895, when the Japanese took the city, it was one of the most important shipping points in the island, but now is unimportant. It is fourteen miles from Taihoku by rail, 220 miles from Amoy, and 161 miles from Foochow.

Keelung

Keelung, or Kiirun, is the northernmost port of the island. It lies 986 miles from Kobe, 1245 miles from Yokohama, and 18 miles from Taihoku. It is from this port that all of the Formosa tea is shipped. The tea is brought by railroad and tram from Taihoku, and placed in warehouses owned by the Government General, but leased to stevedores and forwarding agents. Extensive harbor improvements have been made, which include a pier with modern machinery. Loading is done by lighter.

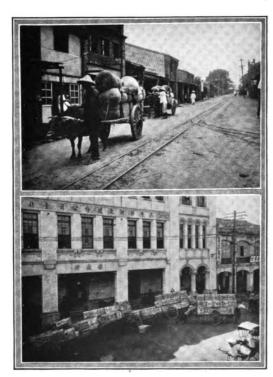
An important feature of the Formosa tea industry is the tea inspection system by the Taiwan Government General. The object of this inspection is to prevent exportation of inferior tea to foreign countries. In order to prepare the standard for tea inspection, the Tea Inspection Office collects samples from both Oolong and Pouchong tea firms. After the standard is prepared, it is distributed among the tea

firms. Under the present working agreement between the tea manufacturers and the buyers, the latter agree to pay for the cost of the tea after successful inspection. In case the tea is rejected, the manufacturers pay.

The regulations of the Government General of Taiwan put particular stress upon the methods of packing tea for export. "Imperfect packing" comes under three classifications. The first relates to "Poor Box Material," and the second specifies that the lead used for packing Oolong teas shall not be less than 23/4 ounces in weight per square foot; while lead for Pouchong teas must not be less than two ounces per square foot. Neither leads may have holes in them. The third rule in the regulations admonishes against the use of poor outer coverings for chests intended for export.

Trade Associations

Besides the local producers' guilds, or kumiai, which unite the interests of the tea farmers, there are two associations which unite the interests of the tea merchants of Formosa. One of these is the North Formosa Foreign Board of Trade, of Taihoku,



TEA TRANSPORT IN TAIHOKU

to which all foreign mercantile concerns are eligible as members. It is controlled by a committee of five, who are elected by the membership. The other association is known as the Taihoku Tea Merchants Association, and consists of Oolong and Pouchong firms, hongs, packers, and brokers. The majority of the members are Formosan Chinese, holding Japanese registry; but one American, three British, two Japanese, and a number of Chinese merchants and exporters are included in the membership.

This Association is actively engaged in preventing the manufacture of inferior tea, and, with this end in view, its officials are on regular patrol in tea districts at Daitotei during tea season, with assistance of police.

The Tea Buyer in Formosa

To become a successful buyer of tea in Formosa, one must have a thorough knowledge of Formosa Oolongs—both as regards buying in Formosa and the types wanted—and a personal character in which his constituents can place entire confidence. One prepares for this work by adopting the tea business as his profession, and learning it in one or the other of the large distributing markets. The candidates most sought after are those of good character, and with good health to withstand the climate of Formosa.

There are no general rules as to salaries. The buyer is paid by private arrangement between himself and the firm employing him. During the tea season, at least, there is little time for recreation; but, in the later months of the year, there may be walking over the hills, cycling, tennis, and, for a few, an occasional game of golf on a course fifteen miles from Taihoku. Rules for leaves of absence vary with the different firms, and it is a private arrangement between them and their respective staffs. Full pay usually is granted during leave, together with transportation to and from home. The length of service which a tea buyer generally enjoys, cannot be definitely stated. There are a few buyers who have been in the Formosa Oolong business for about thirty years. On the other hand, there are several who have remained only a few years. In some cases, health has broken down. In others, the firms ceased to have buyers in Formosa, or family responsibilities have called the buyers home.



THE POOL AND THE PORT OF LONDON FROM THE AIR

The Port of London includes the whole of the tidal portion of the River Thames, nearly 70 miles in extent, but particularly the Upper Pool, directly above and below Tower Bridge, and the Lower Pool, which extends to the commencement of Limehouse Reach. To the left below the Bridge may be seen London Docks, through which most of the tea enters the Port.

CHAPTER II

MARKETING IN CONSUMING COUNTRIES

APPROXIMATE TIME REQUIRED FOR TRANSPORTING TEA TO THE PRINCIPAL MARKETS—THE EASTERN AND WESTERN ROUTES TO AMERICA—HOW TEAS ARE HANDLED AND SOLD AT LONDON, AMSTERDAM, NEW YORK, BOSTON, AND ELSEWHERE—THE TEA LAW OF THE UNITED STATES AND HOW TEAS ARE EXAMINED FOR PURITY, QUALITY, AND FITNESS FOR CONSUMPTION, ACCORDING TO UNITED STATES GOVERNMENT STANDARDS—TRADE PRACTICES IN OTHER COUNTRIES—THE RUSSIAN MARKET, PAST AND PRESENT

ROM the primary markets in the producing countries teas are transported to London, Amsterdam, New York, and other resale markets by innumerable steamships and—rarely, now—sailing vessels. The latter have given way almost wholly to the speedier and more capacious steam and motor ships. Because of the world-wide consumption of tea, the seas are dotted unendingly with ships bearing the leaf to every civilized country of the globe.

A large part of the tea exported is shipped to London, the world's greatest home-consumption and resale market, which handles about 60 per cent of the total exports. Of the European markets, Amsterdam ranks next in importance, but with a total of only about 4 per cent; while New York, on the American side of the world, handles 5 per cent. The other 31 per cent is distributed, more or less directly, to various consuming countries, among which Australia and New Zealand are prominent, due to their high per capita consumption and their proximity to the producing countries.

The time required for transporting tea to some of the principal resale and consumer markets varies somewhat widely, according to the type of boat that carries it, but is approximately as shown in the table on the next page.

Where a range of two or more days is indicated for transportation to a given port, the difference is occasioned by the variation in the time it takes fast boats and slower ones to make the voyage, as, for example, to London, which some boats from

Calcutta reach in 32 days, while others require 36 days.

Generally speaking, the time is the same to Amsterdam as to London. Both of these ports have lines of mail steamers, from the East which reach them direct in the same number of days. Teas consigned to Amsterdam usually are brought there by direct mail steamer, and do not come via London.

How Teas Reach New York

Practically all the India, Ceylon, Java, and Sumatra teas that reach the New York market are transported via the Suez Canal route. It would be possible to ship them to New York across the Pacific to transshipping ports on the west coast of America, and thence either via the Panama canal or overland by rail; but this is not economically feasible, for the reason that the ocean freight is about the same to New York via Suez as it is to the American, West Coast via the Pacific, and tea burdened with the extra cost of transshipment from the West Coast to New York would enter the New York market at a competitive disadvantage equal to the cost of such transshipment.

Teas from China, Japan, and Formosa, on the other hand, may be brought to New York via either the Suez or the Panama canals and, formerly, some of these teas, after crossing the Pacific to the American West Coast, were transshipped to New York by rail, just as they are transported to St. Paul, Chicago, and other central continental points to-day; but very little

Days From	Calcutta	Colombo	Medan	Batavia	Shanghai	Yokohama	Keelung	
Destination:								
London	32-36	23	27	33	42	52 52-53	48	
Amsterdam	33-37	23-24	27-28	33-34	42-43		48-49	
New York		40–48			44 50–55 70	37 48 77	45-55 65-75 70-80	
San Francisco	34	35	33	31	20	15	17	
Vancouver	44	40	43	43	18	11	22	
Sydney	43	26	38	15	29	36	40	
Melbourne	38	21	43	20	31	38	42	
Auckland	45	37	35	32	33	40	44	
Wellington	45	37	35	32	34	41	45	

TRANSPORTATION TIME TO THE PRINCIPAL TEA MARKETS

* Via Pacific and transcontinental railway across the United States.

tea has come to New York by rail in recent years, due to lower freight rates via Panama.

I—THE LONDON MARKET

London is the world's greatest tea market, and for many years has been the pulse of the trade. Prices all over the world hinge largely on the London auctions. A rise in London is reflected in all foreign markets, and equally, an easier London market means easier conditions elsewhere.

It is in London that a great majority of the important tea producing companies



DISCHARGING TEA FROM SHIP TO BARGE, HAY'S WHARF, LONDON

have their headquarters. From London go the instructions as to opening new estates, extending existing ones, where to ship the tea, etc. Generally speaking, it is London that carries the reserve tea stocks of the world. About 550,000,000 lbs. of tea pass through the London market annually, including home consumption and reëxports.

The Port of London is administered by the Port of London Authority, which has 38 lineal miles of deep-water quays fully equipped with all manner of mechanical conveyors, cranes, and trucks. The London Docks, through which most of the tea enters the port, are the sixth largest of these. They were opened in 1805 and now have a land and water area of 100 acres.

Inspection for Purity

When tea reaches London it is discharged at the deep-water docks and brought up by rail or lighters to any one of the following public bonded warehouses: Port of London Authority [two warehouses —Cutler Street and Commercial Road], Monastery, Brook's, Red Lion, Smith's, Colonial, Monument, Chamberlain's, Hay's, Cooper's Row, St. Olave's, New Crane, Nicholson's, Butler's, Metropolitan, Buchanan's, Oliver's, Central, Orient, Mint, South Devon, Gun, Brewers, and the London and Continental.



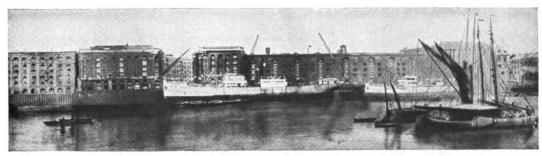
Pickfords & Hay's

TEAS BEING LANDED FROM BARGES INTO HAY'S WHARF BONDED WAREHOUSE, LONDON

In the United Kingdom there is a duty of 2d. per lb. on Empire grown tea and 4d. on foreign growths. In order to insure that only tea that is pure and fit for human food shall pass into consumption, all consignments are examined upon landing by Government tea inspectors and analysts, under the provisions of the Sale of Food and Drugs Act, 1875. Rejected tea is allowed entrance only for use in the manufacture of caffeine. Such tea first has to be denatured under the supervision of Customs and Excise officers to prevent its possible use for human consumption, and samples of the denatured tea and the denaturants used are submitted to the laboratory for examination to insure that the process has been effectively carried out. The denaturants usually allowed under the regulations issued by the Commissioners of Customs and Excise are lime and asafætida.

Warehousing, Weighing, and Inspecting

When the tea arrives at the bonded warehouse it is weighed by employees of the warehouse company and inspected by brokers acting for the merchants who own it to see that each package is free from damage. From the time it is weighed, "shipped weights" cease to be considered



WATERSIDE WAREHOUSES, BETWEEN LONDON AND TOWER BRIDGES, UPPER POOL OF LONDON



WEIGHING TEA IN A LONDON BONDED WAREHOUSE

and "London weights and tares" are used. In taring breaks of twenty packages or less, three are turned out and the tare averaged; in breaks of twenty-one to sixty, five are tared; and in breaks of more than sixty, seven are tared. A one-pound draft is allowed on all packages of twenty-nine pounds gross or more; none is allowed under that weight. Partly damaged packages of Indian and Ceylon teas are sold on their merits at public auction, subject to their passing the Customs analyst.

AVERAGE WEIGHTS USED IN UNOF-FICIAL ESTIMATES OF IMPORTS, STOCKS, AND DELIVERIES AT LONDON

Indian			ound	each
66		70	"	"
• • • • • • • • • •		21		
Ceylon	chests	106	"	"
	. half- "	70	"	"
"	boxes	20	"	"
Java		110	"	"
Congou		106	"	"
"	half- "	64	"	"
	hores	20	"	"
Souchong		90	"	"
"		50	"	44
		17	46	"
	boxes	21	"	"
Scented Caper			"	"
" Orange Pel	coe	20	"	44
Oolong		60		44
"		44	••	
	, boxes	19	"	"
Flowery Pekoe	chests	60	"	"
"	half_ ''	44	"	"
Hyson	"	58	"	"
	hoxes	17	"	"
Young Hyson	half-chests	65	66	"
" " " " " " " " " " " " " " " " " " "	boxes	25	"	"
Imperial	half abouts	60	"	"
imperial	. nan-chests		"	"
~		34	"	"
Gunpowder		66	.,	"
	boxes	37	••	• • •
Japan and "Sorts".	packages	60	• •	"

In the case of imported teas that have been factory bulked, an average tare is taken if variation is not excessive; but it is compulsory to have them separately tared if for any cause they have to be bulked again. The empty package is tared to the half-pound in all cases where the gross weight is above twenty-eight pounds. Should the empty package weigh the exact even pound, it is entered as such. If it weighs the even half-pound or over it is entered as the next pound above. If it weighs under the half-pound it is entered as the pound below. In order to obtain the full benefit of this rule, the weight of the empty packages, including all nails, etc., should be a few ounces under the halfpound and the gross weight a few ounces over the pound.

The average weight per chest used in estimating the unofficial returns of imports, deliveries, and stocks of all the different kinds of tea, which appear in the circulars of the Tea Brokers' Association of London, are shown in the accompanying list.

The rent on tea in bonded warehouses is paid by the seller until Prompt Day, which is three months from the date of sale, and after that it is paid by the buyer. The rates per package are as follows:

Up	to	50	lbs.	gross					 			3/8d.	per	week
51	"	100	"	- "					 			%d.	- "	"
101	"	150	"	"					 		. 1	l ¼d.	"	"
Ov	707	150	66	66		•	·				1	1/6	66	66

Since January, 1930, these rates have been subject to a $7\frac{1}{2}$ per cent reduction.

Inspecting and Sampling

After the teas have been weighed and tared, the merchant notifies his selling



Boring and Drawing Inspection Samples



BULKING TEA, COMMERCIAL ROAD WAREHOUSE, PORT OF LONDON AUTHORITY

broker in case he decides to sell immediately. If he thinks it policy to hold the tea in bond for a higher market, he may, of course, do so; but if he wants to sell, he instructs the broker to "print" the teas for sale in auction. This is the general custom, although the tea may be sold by private contract, as in the case of forward sales.

The selling broker sends an inspector to the warehouse. The tea chests or packages are numbered and marked with the rotation numbers of the ship and year of import. Sometimes, a portion of the top of the package is removed, and the lead lining is cut to permit of a sample being taken. However, inspection now is usually done by boring. In this case, a small hole is bored in each package, later to be plugged by a bung tin, which fits tightly in the hole. A handful of tea is taken from each package by means of a boring iron and these samples placed on separate trays. These are taken by the werehousemen to the inspector who sits in a light part of the warehouse. He examines the samples one by one, noting any variation in size. color, or general appearance, as well as smelling the samples to detect any taint or damage. If no variation is found, the break is passed; if there is variation, the tea must be bulked and reconditioned for The bulking procedure is a means of establishing uniformity of quality. When the operation has been performed unsatisfactorily abroad and has to be done over again in London, all the chests are opened and the tea poured out and well mixed before being put back into the chests.

After the inspector has made his report, the selling broker lists the tea in his printed catalogue and sends it to all wholesale buyers a week before the sale. The warehouse is notified, and the warehouse-keeper sees that representative packages of each parcel are put on show. The whole-sale buyers send their samplers to the warehouses to draw samples of all the teas on show. The samplers take samples from the chests set aside for this purpose, but are required to leave "returns," or packets of tea of equal weight and quality, in the chests.

When the samples reach the prospective buyer's office, they are put in small tin boxes to avoid their becoming "papery." Each tin has a number corresponding to the number stamped opposite the tea represented in the broker's catalogue.

Buyers pay selling brokers a deposit of £1 per package, or such other deposit as is stated in the catalogue, at the time of sale if demanded by the auctioneer or on the Saturday following the day of sale, provided the weight notes have been delivered to the buyer by 5 p.m. on the previous Thursday. The remainder of the



TEA SAMPLING, CUTTER ST. WAREHOUSE, LONDON



SAMPLE TEAS FOR PUBLIC SALE ON SHOW

purchase money is due on or before the Prompt Day—three months from date of sale—on delivery of the warrants. The delivery of the warrants or other documents of title to the tea by the selling broker to the buyer, on payment of the purchase money, is deemed to be delivery of the tea to the buyer. Interest at the rate of £5 per cent per annum is allowed on amounts paid by way of deposit and on the remainder of the purchase money from the day of payment to the Prompt Day.

The tea is paid for by buyers at the landed weight and tare.

Any dispute that arises concerning any parcel sold is referred to two arbitrators, who must be members of either the Indian Tea Association [London], the Ceylon Association in London, the Tea Buyers' Association of London, or of the Tea Brokers' Association of London, or of the Tea Brokers' Association of London. One arbitrator is chosen by each disputant, and such arbitrators appoint an umpire, if necessary. The arbitration fee is two guineas to each arbitrator and two to the umpire, including attendance at the warehouse if necessary.

The charges connected with importing tea into London and the various operations which are carried on in the warehouses are shown in the accompanying table.

Buying Brokers

Buying brokers are the immediate purchasers of most of the tea auctioned. They number about a dozen and are members of the Tea Buying Brokers' Association of London. Their regular commission is ½ per cent. The raisons d'etre for the buy-

LONDON CHARGES ON TEA, APPLYING TO ALL PARCELS BY SHIPS RE-PORTING ON AND AFTER APRIL 1, 1924

CONSOLIDATED RATE, including landing, wharfage,	Packages								
housing, separating into breaks, weighing, furnishing		Not Exceeding 50 Lbs.		Lbs. to Lbs.	101 Lbs. to 150 Lbs.		Exceeding 150 Lbs.		
public sale, sampling, nailing down, placing in de- livery pile and delivery by land, and two weeks' rent from date of breaking bulk of vessel	38.	10d.	38.	4d.	28.	10d.	2s.	6d.	
CONSOLIDATED RATE, including inspection other than by boring		0d. 8d.	38. 38.	6d. 2d.	3s. 2s.	0d. 8d.	2s. 2s.		
	Per Package		Per Package		Per Package		Per Package		
Taring. BULKING AND Taring RE-Showing [Minimum—2 packages per break]		0d. 4d. 4d.	1s. 2s. 2s.			0d. 8d. 8d.		6d. 4d. 4d.	
INSPECTION OF DAMAGES EXCEEDING 5 PER CENT OF MARK OR INVOICE: Unpiling, laying down, lidding, papering, coopering, recasing and repiling	2s. 0s.	0d. 0%d.	2s. 0s.	0d. 0¾d.		0d. 1½d.	2s. 0s.	0d. 1 1/2d	

ing broker are four. First, he selects suitable teas for his client and submits samples and valuations to him. Second, he enables the smaller dealer to obtain the tea he wants by executing part orders for a parcel of tea and taking over the rest. Third, he enables purchasers to conceal their identity. Fourth, he buys cheaper in the sale than is possible for an outside buyer.

It often happens that buying brokers, in anticipation of orders from clients in the near future, buy tea for which they do not possess orders. These are placed on a "bought over" list, and all teas not resold by the buying broker in the auction room are normally placed by him on the list. These lists are issued daily, and from them dealers, blenders, and other distributors select the teas they require.

Tea Tasting

When a sufficient number of teas have been boxed in the buyer's office, the work of the expert taster commences. A large Indian sale held in the busy season will comprise as many as 50,000 packages, represented by about 1200 to 1400 different teas. It has been mentioned that each parcel or lot has its corresponding sample, which means that for one of these large sales as many as 1200 different samples have to be examined, tasted, and valued. The majority of wholesale houses have more than one buyer for Indian teas. During each week in the season, the number of samples to be examined minutely and critically is so large that it is almost impossible for one man to give proper attention to the offerings in the time available between the sales. The method adopted, as a rule, is for one to taste all the Pekoe Southongs, Pekoes, and Orange Pekoes; while a second buyer is responsible for the Dusts, Fannings, Broken Pekoes, and Broken Orange Pekoes, although the arrangement of the grades varies in different salesrooms.

It sometimes happens that a buyer is anxious to secure only tea "for price"; that is to say, the lowest quoted at the time. He therefore proceeds to pick out—judging by the appearance of the leaf and the marks—the inferior Pekoe Souchongs, and without troubling to taste or otherwise examine them, values merely "on the nose." This expression means that the buyer judges the value of the teas under review

by simply smelling them. Orders are then, without loss of time, placed with the brokers.

The procedure, however, is quite different when the aim of the taster is to select a variety of teas which eventually are to be offered to the grocers in Great Britain. The teas to be tasted and valued are first of all sorted out into grades; e.g., the Dusts, poorest Pekoe Souchongs, Broken Pekoes, Pekoes, Orange Pekoes, and Broken Orange Pekoes are separated into different piles, while the Darjeelings are reserved for a special liquoring. So that the taster may have a basis upon which to value, "standards" are used. These are teas either in stock or parcels recently sold, which are taken to form a guide as to the quality and value of the offerings under consideration.

It will be remembered that each lot to be judged is represented by a small sample in a numbered tin. From each box a small quantity is taken—the weight of a sixpenny piece—which is placed in a pot especially made for tasting purposes. When twenty or thirty teas have been "weighed in" the batch is ready for watering. Water which has just reached the boiling point is used invariably, and under no circumstances is it brought to a point of ebullition a second time. The teas are allowed to stand five or, more usually, six minutes; time being calculated with a sandglass or a tea taster's clock, after which the pots are turned over into small cups. This allows the tea to run out, while the lids on the pots prevent the leaf entering the liquor. Each pot then is drained, care being taken that the liquor only, and not the leaf, passes into its respective cup. The "infused," or scalded, leaf now is placed on the top of the inverted lid, which in turn rests on the pot; by this means it can be examined while the liquor is tasted. A batch, as a rule, is tasted from left to right—the inferior teas first.

As each parcel is valued, the limit to which the buyer is prepared to go is placed in cipher in the catalogue by an assistant, so the buyer will easily recognize the teas he has selected and the prices he has decided to pay.

The London Tea Auctions

The London tea auctions or sales are held at the London Sale Rooms, 30, Mincing Lane. When the season is in full swing



MINCING LANE ON A MID-SUMMER'S DAY

Arrow indicates building where the tea sales
are held.

the Indian sales take place twice a week—Mondays and Wednesdays. Ceylons are offered on Tuesday, and Javas and Sumatras on Thursday. Some China sales are held on Thursday, but China teas are sold mostly by private treaty. The auctions begin at 11 A.M. and continue until 1:30 P.M., and are resumed at 2:15 P.M., or 2:30 P.M., in accordance with arrangements made with buyers in the room.

Tea does not lend itself in the same way as some commodities to transactions by contracts based on standard types. There are innumerable grades of tea, and their valuation is largely a question of individual judgment, in which appearance of the leaf and flavor mainly count. So individual inspection and tasting of each "break," or consignment, is essential.

The London tea sales are attended by buyers from all the Continental countries and the British Isles. When the auctions begin, both the selling brokers and the buying brokers have formed their ideas of what the tea is worth, and these ideas vary. Naturally, the function of the selling broker is to secure the highest possible price and that of the buying broker to ob-

tain the lowest price. Sometimes instructions are given by the producer to hold the tea for the valuation he has put on it, and in case such a price should not be bid the tea is withdrawn. As a rule, the instructions are to sell the tea "at best." These points are settled between the agents for the producers and the brokers.

The Tea Brokers' Association arranges the order in which the brokers sell. The first selling broker disposes of his catalogued lots, and then the next one mounts the rostrum. The sale follows the procedure usual in auctions. Teas are sold at so much per pound and the bids advance by farthings. If several bidders shout bids at the same price, the lot is knocked down to the first bidder; otherwise the highest bidder gets the tea unless the reserve price is not reached. In the latter case, the tea is withdrawn.

The auctions are conducted generally at a fair speed, some 200 to 250 lots often being knocked down in an hour. Sometimes, as many as 90,000 packages, representing 3000 separate lots, are sold in a single week. Each item is not separately announced, but as soon as one has passed under the selling broker's hammer, bidding



ENTRANCE TO THE LONDON COMMERCIAL SALE ROOMS



A TEA AUCTION AT THE LONDON SALE ROOMS IN MINCING LANE

for the next begins immediately. In practice, bidding is done exclusively by brokers, but the wholesale buyers, who are their principals, usually are in the room and indicate by signs whether or not they are prepared to pay an advance on limits given or whether, rather than run the price, they will divide the parcel with another buyer.

At the conclusion of the auction, the buyer applies at the offices of the selling brokers and obtains orders to enable him to sample the various lots he has purchased. These orders are presented at the bended warehouses where the particular teas are stored, and in exchange for a certain weight of returns the same number of pounds from bulk are given. It is, of course, impossible for the individual who is responsible at the warehouse to taste the various returns, consequently they are judged only by the appearance and nose of the leaf. However, complaints of inferior returns are remarkably few.

The Clearing House

The Tea Clearing House, established in 1888 and located at 16, Philpot Lane, is

the central city office for public bonded tea warehouses in the Port of London. It serves as an intermediary between the wharfingers and the trade. It is a private company. London tea merchants who are members pay an annual subscription for facilities afforded by it. These consist in the lodgment and transmission of warrants, sampling, delivery, carding, cording, and other orders to the various docks and



Delivering Teas out of Bond to Buyers' Conveyances

warehouses, and in providing facilities for the return of warrants and other documents to the trade. Thus, it is not a terminal market, but merely a centralization point for matters connected with the warehouses.

In addition to the above functions, the Clearing House issues a series of thirteen denominations of stamps, from $\frac{1}{2}d$. to 2s. 6d., by which minor charges at the warehouses are paid. It is the general headquarters for the preparation of statistical statements and for information relating to the storage, etc., of tea, "due dates" of ships, etc.

Selling Forward

In September 1924, the committee of the Indian Tea Association [London] obtained assent from practically all members to a proposal that producers should not make forward sales for the 1925 crop. The Indian Tea Association of Calcutta cooperated, as did the Ceylon growers. The agreement was renewed for the 1926 and 1927 crops of Northern India, but was not renewed in 1928.

Two reasons were given for the opposition to selling forward. The first was that contracts entered into at a high price might not be honored by the purchaser when the price had fallen, and the producer might thus be left with large quantities of unsalable tea. The second reason was that when the price of tea rose, purchasers were tempted to throw upon the market supplies of teas they had obtained at lower prices by means of forward contracts. Also, forward selling reduced competition at the auctions. Producers, therefore, preferred to obtain current prices and refrain from running these risks. However, in 1928, two or three of the largest buyers brought about a reversal of the policy of not selling forward, and, since then, it has been optional with the producers either to sell forward by private contract or to submit teas at auctions in the usual way.

Tea Prices at London

The London market rules the tea prices of the world. The Calcutta and Colombo markets usually are two pence less than London; this being the equivalent of the freight and charges per pound between Calcutta or Colombo and London. The relative prices of the different teas—Cey-

lon, Northern India, Southern India, Java, and Sumatra—fluctuate, naturally, from week to week; but the yearly averages usually show their ranking in regard to price as: Ceylon, first; Northern India, second; Southern India, third; Sumatra, fourth; and Java, fifth.

Among the Northern India teas, the ranking is: Darjeeling, first; Assam, second; Dooars, third; and Cachar and Sylhet, fourth.

II—THE NETHERLANDS MARKETS

Amsterdam is the second tea market of Europe. Approximately 30,000,000 lbs. are handled annually, including teas for home-consumption in Holland and those exported to other parts of Europe, and to North America. A considerably smaller amount of tea is imported annually through Rotterdam.

Historically, Amsterdam was the earliest European tea market. Hither the armed ships of the Dutch East India Company brought cargoes of tea for distribution to Continental Europe and England. To-day, Amsterdam is the principal receiving market for tea consignments from Java and Sumatra of the Netherlands East Indies, but the importance of the market was well established even before the appearance of Java and Sumatra teas. The port is situated on the south side of the Y or Ij, an arm of the former Zuyder Zee, which is now an inland lake, renamed Ijsselmeer, and through the port flows the canalized River Amstel which empties into the Y. The formation of a sandbar, where the Y entered the Zuyder Zee, long since cut off commerce from that direction, but ships of the deepest draft now pass to and from the North Sea through a ship canal. Three islands built out into the river carry a railway across the city front and form a long series of quays. One of these is occupied by the huge storage warehouses of the Pakhuismeesteren van de Thee, or "Tea Warehouse Masters," a private firm, which originated from the Dutch East India Company in 1818. Through these warehouses are handled practically all of the teas sold on the Amsterdam market.

Tea entering Holland is subject to an import duty of fl. 75 per 100 kilograms [1 florin = 40.2 cents U.S.A.; 1 kilogram = 2.2046 lbs.]. The duty had been stationary at fl. 25 per 100 kilograms over a



THE ZONDAG, PRINCIPAL WAREHOUSE OF THE PAKHUISMEESTEREN VAN DE THEE, AMSTERDAM

period of sixty-two years, from 1862 until it was raised to fl. 75 in 1924. This heavy impost, amounting to, say, 13½ Dutch cents per pound, has opposed a serious obstacle to the normal growth of tea consumption in Holland. In 1927, the Vereeniging van Thee Importeurs petitioned the Minister of Commerce for a reduction in the tea duty, and campaigned for its abolition in 1929, when the British tea duty was repealed; but in neither case were they successful.

The Amsterdam Auction

The Dutch tea market derives its chief importance from the Amsterdam auctions. Shipments intended for these sales are received by the Pakhuismeesteren at their bonded warehouse for account of the im-These importers are merchants porters. and banking houses, directors of or agents for Dutch East Indian tea-growers. The tea is stored, inspected, sorted, weighed, tared, divided into lots, sampled for the auctions, and finally delivered on documents known as "warrants." Originally, these were made out in the name of the holder of the tea; but, due to complications arising from bankruptcy proceedings, this was changed in 1845, and it since has been customary to issue warrants "to bearer." If the tea is only stored, and not inspected, a "housing certificate" is issued. A housing certificate does not, however, offer the guaranty of quality provided by a warrant.

Inspection is performed by cutting a small hole in each chest with an electric drill and then sampling by boring with a long, hollow iron rod which is thrust completely through the leaf mass to get an average sample. The tea thus extracted is examined as to nose and appearance of leaf.

A consignment lot from a Java tea estate or a Batavia merchant often includes different kinds, which usually are marked with the same number on each of the packages. Each kind and each chop is handled and sampled separately. The chests are examined and weighed, the tare is determined, and the net weight ascertained. Chests that are not entirely sound—those showing any spots on the outside—are opened, carefully examined, and samples taken that will accurately represent the quality of the whole. If the quality of the same kind of tea and the same lot differs in the various chests, the fact is mentioned at the sale. If this difference is of real importance the tea is turned out of the packages and the entire lot bulked. This operation is performed with care to avoid

unnecessary leaf breakage.

Weighing and taring is done on patent automatic scales of fine accuracy; adjustment of the average tares being of the greatest importance. The weights and tares are duly set forth in a printed mon-sterlyst, or "sample list," which also serves as catalogue and index for declarations at the Customs Office. This is published and distributed two and one-half weeks before each sale.

The Pakhuismeesteren charge the importers fl. 2.45 per 100 kilos, net, with a discount of 5 per cent for each sale that exceeds 14,000 chests, for handling the tea. This includes landing, warehousing, weighing for the Customs, inspecting, sampling, publishing catalogues, and issuing warrants. In addition, the importer pays the Pakhuismeesteren a weekly rental charge of fl. 0.25 per warrant of twelve chests from the time the tea enters the warehouse until two months after the date of sale. From and after Prompt Day, which is three months after the date of sale, the buyer pays a monthly charge of fl. $0.12\frac{1}{2}$ for rent and fire insurance as long as the tea remains in store. Although Prompt Day is a limit of three months, it is the custom to pay for the tea within a fortnight after the date of sale, taking a discount of 11/4 per cent. Upon delivery, an extra charge of fl. 0.20 is made, which includes fire insurance up to Prompt Day.

The East Indian grower offers his tea for sale through his agent, the importer. The importers act exclusively on behalf of the producer and in the producer's name not their own. For this they receive a commission varying from 1 to 21/2 per cent; but directors of tea companies, selling their own teas, often charge nothing.

On the other hand are the brokers for the purchasers, who act exclusively on behalf of the buyer. They may, or may not, do the actual bidding. If, as often happens, the buyer desires to conceal his identity until his purchases have been made, he will let the broker do the bidding. Otherwise, the buyer bids on the lots he wants. In either event the broker effects the actual contract, after the tea has been knocked down, and receives a commission of 3/4 per cent, which is paid by the seller.

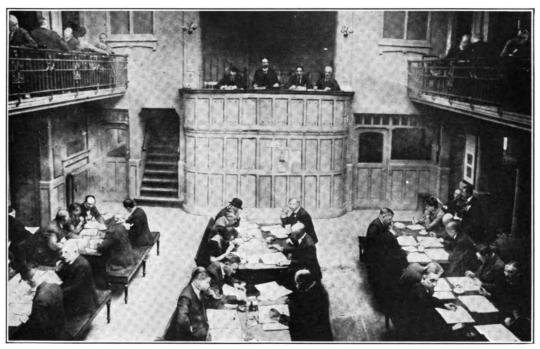
The auctions are held in the sales room of the Brakke Grond, or "Waste Land."

building, Nes 15, under the auspices of the Vereeniging van Thee Importeurs, or "Tea Importers' Association," of which all the importers are members. The Pakhuismeesteren cooperate closely with the Vereeniging in arranging these sales, which are conducted by an official auctioneer.

Twenty-three auctions are held annually at intervals of two weeks, except during the summer vacation. As soon as one auction is over, the list is issued for the succeeding one; and two weeks before the sale, samples are issued to the brokers. The samples are distributed by the brokers to their clients, and, although buying at the auctions is restricted to Netherlands merchants, the samples sometimes go all over Europe and to the Levant. Brokers make up the descriptions and the estimates for the auctions by tasting and valuing the samples. This tasting and valuing requires the services of an expert. larger merchants and packing concerns have their own tasters and valuers who formulate estimates of the value of the lots to be placed on sale.

The auctions start at ten o'clock A.M., and continue all day, often ending at four o'clock, or even later when there is a large sale or slow bidding. The bids are made by whole Dutch cents per half-kilogram "entrepot," or in the storehouse of the Pakhuismeesteren. Each lot consists of not more than sixty chests of the same mark and sort. The buyer of the first sublot of a number, has the privilege of buying as many more sublots of the same number at the same price as he may desire. The sublots of a number comprising sixty chests usually are divided into about thirty-six and twenty-four chests each. When a purchase is knocked down the buyer mentions the name of his broker, and the broker effects the contract.

Directly after the auction the broker supplies the importer with the name of the actual purchaser, who must pay the amount due within fourteen days. Thereupon, the purchaser receives the warrants for the tea "lying in entrepot." Foreign buyers buy through commission houses established in Holland. It is a peculiarity of the Amsterdam auctions that they interest foreign buyers almost equally with purchasers for home-consumption; about half of the tea imported is consumed in Holland, and the other half is exported. This is in sharp contrast with the London



SALESROOM OF THE VEREENIGING VAN THEE IMPORTEURS, DURING ONE OF THE AMSTERDAM AUCTIONS

market where approximately 90 per cent of the buying is for home use, and not more than 10 per cent goes abroad. English and Irish buying is conspicuous at the Amsterdam sales; the Irish being specially encouraged by lower delivered cost from Amsterdam than from London.

The buyers at these sales are the larger tea packing firms or wholesalers who split their purchases into smaller lots for resale to smaller concerns. Most of the teas pass into the hands of packers and blenders who prepare them for sale to the retail trade. Four-fifths of the teas taken for domestic consumption in Holland are bought by packers, dealers, and multiple shop concerns having personal representation at the sales or buying through brokers. China and British India teas, making up the other fifth, are bought by private contract on the Eastern and London markets. There are a score of tea-importing firms in Amsterdam, and there are eight Amsterdam and five Rotterdam tea brokers, who are admitted to buy in the sales.

The arrangements for handling tea through the Dutch Customs and bonded warehouse are designed to facilitate business—especially reëxport. They are much in advance of the cumbersome and costly methods followed in the London market. The internal distribution also is made cheap and easy by the ubiquitous canal transportation of Holland. This is unequalled by railway carriage in any country.

While London, by reason of the English domestic trade will unquestionably retain a premier position among the world's tea markets, it seems not unlikely that its practical and businesslike Dutch neighbor will tend to acquire an increasing portion of the reëxport trade unless more economical and improved methods are adopted for marketing in Great Britain.

Imports Through Rotterdam

Rotterdam is a much smaller rival of the tea market at Amsterdam. There is no auction; tea imports being sold by direct tender. There are five tea brokers and one tea importing firm in the market. As at Amsterdam, the importer acts for the growers, and the brokers represent a number of tea packing and wholesaling firms.

Trade Associations

There are two important associations connected with the tea trade of the Netherlands, the Vereeniging van Thee Im-



IN THIS TESTING ROOM THE DRAWERS FOR FILING SAMPLES ARE A SPECIAL FEATURE



NOTE THE ELECTRIC STOVE WITH ENGLISH TEA KETTLES THAT WHISTLE WHEN THE WATER BOILS.

MODERN TEA TESTING AND SAMPLE ROOM IN A NEW YORK

SKYSCRAPER

porteurs and the Vereeniging voor de Thee Cultuur in Nederlandsch Indie. merchants of Amsterdam are combined in the Vereeniging van Thee Importeurs. The secretary is Dr. F. W. A. de Kock van Leeuwen. The Vereeniging voor de Thee Cultuur is a tea growers' association having as its object the promotion of the interests of all branches of the Dutch tea industry. Mr. F. H. de Kock van Leeuwen is secretary of this association. The address of both associations is N. Z. Voorburgwal, 120-126, Amsterdam C. A Bureau voor de Theepropaganda is a part of the secretariat of the Vereenging voor de Thee Cultuur, and of this bureau Mr. A. E. Reynst is manager. Thus far, the publicity work has been limited to Holland, but the activities are being broadened somewhat and, later, may assume international scope.

III—THE UNITED STATES

Tea of a specified standard for beverage use enters the United States duty free. Its by-products—tea waste, tea siftings, and tea sweepings—pay a duty of one cent a pound and are admitted under bond to guarantee that they are to be used solely for the manufacture of caffeine or other chemical products. The tea importations include blacks from India, Ceylon, the Netherlands Indies, Formosa, Japan, and China; greens from Japan, China, India, and Ceylon; Oolongs from Formosa and Southern China; and small quantities of scented teas from Southern Chinese ports.

There are no tea auctions in the United States; the importer buying in the producing country or at London or Amsterdam either at auction or by direct negotiation. From 60 to 70 per cent of the wholesale tea business of the United States now is done on import orders.

The New York Market

New York, the principal port of entry for tea into the United States, is the second tea market of the world in point of volume. There is no special district where tea is landed in the port of New York, which includes only Manhattan and Brooklyn in so far as tea is concerned. There are some sixty-odd warehouses for the storage of tea. The principal public storage plants where teas are unloaded are the warehouses of the Bush Terminal Co., in

Brooklyn, and of Theodore Crowell, Gough & Semke and the Fidelity Warehouse Co., in Manhattan. Among the others, are a number maintained by large packing concerns exclusively for the storage of their own teas.

Under the Customs regulations, warehouses for the storage of tea are designated by the Collector of Customs, and the proprietor is required to give a bond. Teas not stored in such designated warehouses are placed in general order store or in public storage pending examination and release on proper permit. Upon filing the required bond, an importer's own premises may be designated as a warehouse for the storage of tea pending examination. such instance, the Collector assigns a storekeeper for the supervision of the premises at the importer's expense. Stored tea awaiting examination in any warehouse must be separated from other merchandise. The regulations permit the repacking of tea for export in bonded warehouses under certain provisions. All expenses of storage, cartage, and labor are paid by the importer.

The New York importer usually receives what are known as "forward mail samples" one to three weeks ahead of the arrival of the tea. Most of the India, Ceylon, Netherlands Indies, and Japan teas are imported by net weight and, consequently, do not have to be weighed and tared for the customs. Teas bought on China weights, however, must be weighed and tared. This is done by a regular firm of weighers, who charge 6 cents a package for weighing and 50 cents for taring. If a lot includes from one to nine packages, two packages are tared; if from ten to ninety-nine, three of them are tared; and if a hundred or more, five are tared.

The weights of the different packages and chests are the same as on the London market. Upon the arrival of a shipment of tea, the importer sends to the warehouse for large samples. From these, smaller samples are given to tea brokers, who in turn show them to jobbers and prospective wholesale and chain-store buyers. The regular brokerage fee is 2 per cent, but this sometimes is reduced to 1 per cent on large deals, by mutual agreement.

The New York importers have standard types of tea in numbered tins, with corresponding types in the offices of their buyers or agents in the producing countries. The types for Japan, Formosa, and China usually are changed once a year. The types for India, Ceylon, and the Netherlands Indies are changed more frequently.

The principal charges against tea after its arrival include: Custom entry, cartage, storage, labor, cooperage, insurance, interest, sampling, weighing, taring, bro-

kerage, and commission.

Other principal importing markets of the United States are, in the order of volume: the port of Boston, on the Eastern seaboard; the Puget Sound city of Seattle; the Pacific coast seaport of San Francisco; and Honolulu, the seaport of the Territory of Hawaii, in the mid-Pacific.

The Tea Law of the United States

Under the Tea Law of 1897, amended in 1908 and 1920, all teas entering the United States are placed in bonded warehouses. The importer or consignee gives a bond to the Collector of the Port that the tea will not be removed from the warehouse until released after examination for purity, quality, and fitness for consumption according to government standards. The tea law, enforced for many years under the Treasury Department, now is administered by the United States Department of Agriculture.

Tea has been officially defined by the Secretary of Agriculture as "the tender



Boring sample hole with special auger.

leaves, leaf buds, and tender internodes of different varieties of *Thea sinensis* L., prepared and cured by recognized methods of manufacture. It conforms in variety and place of production to the name it bears; contains not less than 4 per cent nor more than 7 per cent of ash; and meets the provisions of the Act of Congress approved March 2, 1897, as amended, regulating the importation and inspection of tea."

When tea is entered at one of the five ports where tea examiners are stationed, samplers attached to the tea examining office draw samples of each line in every invoice. Sampling is done by boring with an ordinary brace and a special two-pronged bit. After the hole is bored, the chest is shaken down and a bamboo or wire "rake" is pushed into the opening. The sample is drawn out with care not to break the leaf.

The samples thus drawn are compared with the standards by a Government examiner to see that they are not inferior to the standards of purity, quality, and fitness for consumption. If the importer or consignee disagrees with the findings of the examiner, the question is submitted to the United States Board of Tea Appeals, composed of three employees of the Department of Agriculture designated by the

1 Service and Regulatory Announcement No. 2, Supplement No. 1, United States Department of Agriculture Food, Drug, and Insecticide Administration, Washington. Issued February, 1928.



Extracting the sample with wire rake.

U. S. TEA SAMPLER AT WORK IN A HOBOKEN WAREHOUSE



The 1935 United States Board of Tea Experts Selecting Standards of Admissibility

Left to right—Messes. Robert A. Lewis, Boston; Edward Bransten, San Francisco; Walter Hellyer, Chicago; John W. Vaux, chairman, Seattle; J. H. Swenarton, New York; A. P. Irwin, Philadelphia; and Charles F. Hutchinson, chief examiner, New York.

Secretary of Agriculture and located in New York. The members of the Appeal Board do not examine the teas themselves, but sit as a Board to see that the examination is properly done by expert witnesses from the trade. Teas finally rejected by the board must be removed from the country within six months or pay the penalty of destruction by Customs authorities.

Tea packages and their contents are treated as units, and no separation of tea from its covering is allowed for either exportation or destruction, except under the following conditions, specified in Regulation 9, U. S. Dept. of Agriculture, Misc. Circ. No. 9, August, 1923:

1. In cases of importations of tea containing an excessive quantity of dust, the tea can be sifted and admitted to entry if found up to the standard, provided the dust is exported or destroyed under Government supervision.

2. If, by reason of damage, a tea otherwise equal in quality to the standard has been rejected, the damaged portion may be removed and exported, or destroyed under Custom's supervision, and the sound remainder resubmitted for examination and admitted to entry if found up to the standard.

Should tea enter the country at a port where there is no examiner, samples are

drawn by the Customs officer and duplicate samples drawn by the importer are forwarded to the nearest tea-examining office with a chop list in triplicate.

At present tea examiners are stationed in five principal importing ports or districts of the United States and its possessions. During the fiscal year ending June 30, 1934, about 85,000,000 lbs. passed through the United States ports of entry.

The Government Tea Standards

The Government standards are established by seven members of a Board of Tea Experts appointed annually by the Secretary of Agriculture. The law requires that the Board be appointed before the fifteenth of February each year. It meets as soon thereafter as possible, selects a chairman, and decides upon the tea standards, which it submits to the Secretary of Agriculture and he puts them into effect, officially, as of May 1st each year.

Only standards of the lowest grade of purity and quality which are fit for consumption are established under the Act, thus doing away with any attempt at price fixing. The provision in the law for establishing physical standards affords a definite measuring stick against which all teas entering the United States must be placed, and makes possible a uniform and definite administration of the tea law.

After the standards have been fixed, quantities of the teas selected are distributed among the tea examiners and supplied through them to the trade at actual The law provides that samples of teas entering the United States be compared to the Government standards according to the usages and customs of the tea trade, including the testing of an infusion in boiling water and, if necessary, a chemical analysis. By this provision tea buyers in the countries of production, or foreign tea shippers, are enabled to compare their teas with the United States Government standards before they are shipped; and, if the tests are carefully and conscientiously made, neither the exporter nor the importer assumes much risk of rejections.

The Read Test

Under the tea law, all extraneous substances are impurities, and their presence may be detected in any way found efficient. The methods that have been adopted are simple and inexpensive. Among them is the Read test for detecting artificially colored or faced teas. test was invented by the late Dr. E. Alberta Read, microanalyst of the United States Department of Agriculture. It is made by sifting two ounces of tea in a sieve having sixty meshes to the inch and provided with a cover. The dust is sifted onto a semi-glazed white paper, 8 x 10 inches in size, and is weighed to get the amount of one grain. After being weighed, it is well distributed over the test paper, which is placed preferably on a glass or marble surface and then is crushed by repeatedly pushing over it a flat steel spatula about five inches long. Particles of the coloring matter or other impurities, if any, are spread or streaked on the paper so as to become more apparent. After this has been done, the dust is brushed off and the paper is examined by means of a simple lens magnifying 7½ diameters. For distinguishing these particles and streaks, a bright light is essential.

If the tea under examination is found to contain more impurities than the stand-

ard, a pound sample is sent to the nearest food and drug inspection station of the Department of Agriculture for analysis. If it is found to contain more impurities than the standard the tea is rejected.

Appeal From Rejection

If an importer desires to appeal from a rejection by the tea examiner at any port, he must within thirty days file with the Collector a written application for review on a form provided for the purpose. The Collector, thereupon, forwards the application together with sealed samples of the rejected tea to the United States Board of Tea Appeals in New York City. Board obtains the services of two, and, when necessary, three trade experts especially qualified to examine the particular kind of tea under detention. The experts examine and test the samples of the rejected tea together with Government standard samples in the presence of the Board. If the report of the first two trade experts agrees with the report of the Port Examiner, the decision of the examiner is confirmed. If, on the other hand, the first two experts and the examiner do not agree, the services of a third are secured. The Board then considers the reports of the experts and advises the Customs authorities and the importer as to the disposition which should be made of the consignment in question.

Trade experts are not advised as to the identity of the samples. The teas in question and the Government standards are drawn together "in blind." Two trade expert witnesses are instructed to grade the teas from left to right. For instance, if there are four teas under examination and after they are graded the private marks carried on the bottoms of the cups show that the Government standard is the third cup from the left, then the teas represented by the two cups on the right of the Government standard are rejected. This is repeated at different times with two trade expert witnesses. The third witness is not called unless there is a disagreement between the first two.

No changes have been made in the tea law since 1897 except those of May 16, 1908, and May 31, 1920, which transferred its administration from the Secretary of the Treasury to the Secretary of Agriculture. It has been held, however, that tea also is subject to the Food and Drug Act of June 30, 1906.

With the Government and the trade of the United States using the same test and the same physical standards, and with the preliminary test for impurities so simple that it can be used by buyers in the producing countries, little unsound tea reaches American ports, and few or practically no teas now have to be rejected for impurities. Any tea entering the United States is necessarily fit for consumption, and is of high enough quality to guarantee a real cup of tea.

IV—OTHER COUNTRIES

There are no tea auctions in any of the principal tea importing countries aside from England and Holland. In the other countries, as in the United States, the teas are marketed either through brokers, importers, or commission houses. Where they have not been sold direct from the producing country, from London, or from Amsterdam, they may have been purchased in certain of the larger markets for resale such as New York, Sydney, Melbourne, Montreal, Vancouver, Dublin, Belfast, Algiers, Auckland, Wellington, Cape Town, Alexandria, or Hamburg.

The only exception to the above is Russia, where the usual competitive handling of tea by individual enterprises has been succeeded by a governmental tea buying agency which functions in communistic fashion.

The Russian Market

The Russian demand before and during the early years of the World War was the mainstay of the tea industry. At that time, Russia's annual consumption was close to 190,000,000 pounds. After the Revolution of 1917, the Russian tea market collapsed, and it is only since 1921 that Russia has re-appeared as a buyer.

In 1925, the Union of Soviet Socialist Republics reorganized tea buying as a government monopoly through the Chaieupravlenie, or Tea Trust, with headquarters at Moscow, and the Centrosoyus, or All-Russia Central Union of Consumers' Societies, which was established at Moscow in 1898. The latter in 1919 established an independent company in London under the

name of Centrosoyus [England], Ltd., but, in May, 1927, England ended commercial relations for a time. In recent years, however, the Soviet Government has bought tea from the English Coöperative Societies and from various planting interests in the East.

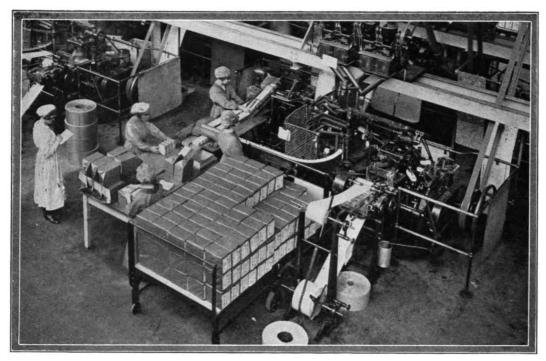
In 1925, the Chaieupravlenie and Centrosoyus were given exclusive rights for supplying tea, coffee, and cocoa within the soviet republics, and all of the existing tea wholesaling and packeting establishments, as well as the principal retail shops, formerly conducted by mercantile concerns were turned over to the Chaieupravlenie. Unlike the other State cooperatives, which purchased through representative Russian firms, such as Arcos, Ltd., London, the Chaieupravlenie was authorized to purchase its requirements direct, either in the producing countries, as in China, or at the tea auctions of London and Amsterdam. The importations during the first year's operation of the government monopolies were 23,000,000 pounds, almost doubling the importations of the preceding year. Centrosoyus did one-fifth of the business.

The Chaieupravlenie at first purchased some teas in China through concerns with Russian capital, but its principal purchases were effected through the regular channels of the London market by the London branch of the Tea Trust. The Centrosoyus also bought tea on the London market.

Experience soon demonstrated that the dual marketing organization was too expensive, and the *Chaieupravlenie* ceased to exist. Since the beginning of 1927 the entire tea business of U.S.S.R. has been concentrated in the hands of *Centrosoyus*.

The principal ports of entry for tea in Russia are—Vladivostock, on the Sea of Japan, where it forms the eastern terminus of the Trans-Siberian railway; Batoum and Odessa, on the Black Sea; and Leningrad, on the Baltic.

Formerly, the Russian market absorbed great quantities of brick tea manufactured by Russian merchants at Hankow, China, but during the World War only leaf tea was used in the Czar's army, and this somewhat unsettled the position of brick tea, so that the indications are that the new Russian market will absorb a much greater proportion of leaf teas. It is not likely, however, that they will wholly displace brick teas.



One of the Automatic Packeting Machines with Overhead Electric Weighers

There are individual machines for each size of packet, from a penny to a half pound. Automatic weighing machines dole out tea in the exact quantities required.



PACKETING ROOM, SHOWING TWELVE AUTOMATIC UNITS FED FROM MEZZANINE HOPPERS
Wide hoppers at the sides of the galleries lead down to the packeting machines in each room.
CONVEYORIZED PACKING IN THE FACTORY OF A LONDON WHOLESALER
56

CHAPTER III

WHOLESALE TEA MERCHANDISING

CHANNELS THROUGH WHICH TEAS ARE DISTRIBUTED—WHOLESALING IN GREAT BRITAIN AND UNITED STATES—BLENDING TO SUIT THE WATER—BLENDING FOR QUALITY AND FLAVOR—THE MECHANICS OF BLENDING—SPECIMEN BLENDS FOR THE UNITED STATES, ENGLAND, HOLLAND, SCANDINAVIA, RUSSIA, FRANCE, AUSTRALIA, AND NEW ZEALAND—HOW TEAS ARE PACKETED IN ENGLAND, UNITED STATES, AND CANADA—WHOLESALING IN OTHER COUNTRIES—TEA CONTAINERS—INDIVIDUAL TEA BAGS

MOST important link in the chain of tea distribution is the wholesaler, who, in England, purchases his tea through a buying broker and sells it, either in the original packages or else blended and packeted, to country wholesalers, wholesale-retailers, and retailers. In America, the wholesaling of tea is in the hands of tea importers, jobbers, and wholesale dealers.

In England, wholesale distributors include blenders, packet-tea houses, multiple shop retailers, coöperative societies, wholesale dealers, and exporters. In many cases the same firm is engaged simultaneously in several different branches of the tea trade.

How the Wholesaler Operates

London, as the jobbing center for the greatest tea consuming market in the world, dominates the wholesale markets, and is, to a large extent, the model for all. The leading tea firms of London cater to the retail dealer in three ways—they supply him with their own proprietary brands of packet teas; with tea distributed in bulk for blending and packing by the retailers; and with packeted tea carrying the retailer's name and brand.

In the tea department of a wholesale establishment, it is usual to select standards of one or more grades of each kind of tea which the tea buyer considers most suitable for the trade he expects to reach. He has large samples in tins to use for

comparison in all his purchases. These samples may be changed or supplemented from time to time, but always with the object of giving better satisfaction. Some buyers claim they can judge values without making a comparison, but good buyers usually compare every prospective purchase with a standard of known value.

Mistakes in tea buying are costly. When a tea is found unsuited to the purpose for which it is selected the best thing to do is to take a quick loss and stop the carrying charges. Furthermore, salesmen become apathetic about "stickers" that appear in a stock list indefinitely, and the tea is likely to deteriorate.

Nowadays, the majority of teas are sold to the retailer ready packeted. One of the disadvantages of bulk teas is that the wholesaler is compelled to carry a large assortment of all kinds and grades likely to be called for by his trade, and on almost every sale he makes he must compete with identical offerings from other houses which are frequently claimed to be of superior quality. Unfortunately, not all retail buyers are sufficiently good judges of tea to tell from a small, salesman's sample the relative merits of teas, and too often the opposition "gets away with it."

However, if the wholesaler is developing his business through advertising, as well as through salesmen, he usually goes in for packeted goods, and sells all his bulk goods under the same brands. When these brands have been established and the teas are giving satisfaction, competitors have a much more difficult time getting business away from him.

Wholesaling in Great Britain

The tea blenders of Great Britain comprise a number of blending and packeting firms having wide distribution to wholesalers and retailers at home and abroad. They specialize not only in packing their own proprietary brands, but also in preparing and packing the private brands of other concerns, both wholesale and retail. Some blenders are multiple shop firms who do not supply other firms, but sell only to their own retail trade. One big blender and packer is a joint cooperative wholesale society that is the largest buyer of tea on the British market, and others are independent wholesalers and retailers, who purchase teas in original chests and then do their own blending and packing.

The larger distributors have their own buyers who attend the auctions, but do not bid unless their buying broker is out of the room or engaged. In any event, the sale is put through in the buying brokers' name and one-half per cent commission is paid to him.

Some of the big blending and packeting firms go so far as to own and operate their own extensive tea plantations situated variously in India, Ceylon, and East Africa.

There is a Tea Buyers' Association in London having for its object the safeguarding of the interests of the wholesale buyers and to deal with matters of moment in the buying market. The membership numbers about one hundred and ten.

It is estimated that in London alone there are some fifty blenders or packeters having a nationwide distribution. In addition, there possibly are 100 others throughout the country distributing on greater or lesser scale to provincial districts. mates as to the number of wholesale grocers handling tea place 300 to 500 primary dealers in the jobbing centers, and 4000 to 5000 secondary wholesalers in small towns and villages. The number of multiple shop organizations handling tea is approximately 500 and they operate say 15,000 shops. In addition, there are the cooperative societies which do their own blending, and sell a large amount of tea in their 5000 stores scattered throughout the country. The Co-Operative Wholesale Society is the parent body. It grows most of its

own foodstuffs, manufactures everything in the food line that is possible to manufacture in England, and runs its own factories, confectionery works, ships, trains, and warehouses. Its headquarters are on Balloon Street, in Manchester, and its ramifications, in the form of district cooperative societies—handling the retail grocery side of the business—extend in many directions. To gain a better idea of the magnitude of the undertaking, it might be mentioned that its banking business runs close to a billion pounds sterling annually; that it is the largest buyer of tea on the British market, having a turnover of 90,000,000 pounds a year; and that it virtually owns towns and villages where it happens to have factories.

Wholesaling in the United States

There are 3700 wholesale tea distributors in the United States, including wholesale grocers and wholesale tea and coffee specialty houses. There also are 325 chain store organizations selling tea.

In the United States, the tea jobber and the tea broker occupy places between the wholesale distributor and the importer. There are, however, comparatively few of them, and the tendency is for the wholesaler to buy direct from the importer. From 60 to 70 per cent of the tea brought into the United States comes in on direct orders by wholesalers.

Of the wholesale distributors only about 1200 handle tea in any considerable volume. Comparatively few distribute tea exclusively; the rule being to handle it as a department among other wholesale activities. Both bulk and package teas are sold. In deference to popular taste in the matter of table beverages most of the tea and coffee specialty firms direct their best sales efforts to coffee and, until recently, have not devoted nearly the same attention to tea. This, of course, is not true of a few large tea packers, whose products constitute a large percentage of the tea sold.

In the United States many of the wholesale distributors have their teas packed for them by concerns specializing in this work. The wholesaler has the tea shipped to the packing establishment, where it is put up in containers of various sizes and types. Then it is shipped back to the wholesaler, who in turn distributes it among his retail customers. Some of the larger wholesalers, however, have complete packing plants of their own, equipped with all the necessary machinery for blending and packing.

Tea Blending at Wholesale

Up to forty years ago, all teas sold by wholesalers and retailers were sold unmixed, just as they came from the tea gardens of the East. This method of handling was easy for the wholesaler, but the results were unsatisfactory. One reason for this was the difficulty of matching succeeding shipments of tea. Another reason was that all wholesalers were competing in the sale of the same teas, so re-orders were by no means assured to the firm making an introductory sale.

To-day, it is the general practice of the wholesale trade to sell blends of mixed tea, prepared after formulas that are varied to offset seasonal and other differences, in order to assure their uniformity. By establishing a demand for such blends the difficulties common to the bulk tea trade are eliminated.

In England, it is estimated that 80 per cent of all teas now are blended and packeted as against 20 per cent sold in bulk. The proportion varies throughout the principal tea consuming countries, but with packeted teas everywhere in the lead. For this reason the tendency in many of the districts where teas are grown is more and more to specialize on outstanding characteristics that will bring them into demand for blending purposes, rather than for all around cup qualities.

THE TEA EXPERT.—The tea expert in a blending concern must have a natural aptitude for his work in addition to such indispensable gifts as a delicately discriminating nose and palate, sound business sense, and thorough knowledge of the markets. Long experience is required before he becomes proficient. He must be acquainted with the different properties of all teas grown; or, at least, of those that come to his market. Furthermore, he needs to know the variations in characteristics of current crops; for in most teas no two crops are equal in trade values, and he must select and combine the various growths in a manner best calculated to suit the water of each district and the taste of the consum-The man who does this successfully at the least cost becomes the most successful blender.

The tea expert, or tea taster, commands a good salary. In recent years, women have entered this field and have done very well in it.

Long study of the tea requirements of Great Britain has taught the blending expert certain fundamental differences in taste to which he pays close heed in making up his blends. For example, tea drinkers in London and in the counties south of the Thames are said to be content with poorer grades of tea than the collier and the workingman of the manufacturing districts, who require a good-class tea for their homes. Scotland asks for a flavory tea of superior quality, and in Ireland finer teas are consumed than in comparable parts of either Scotland or England.

In the United States, there likewise are certain well-defined preferences for the tea expert to take into account. China green tea is consumed chiefly in the Middle States, and is used as a mixture or blend throughout all the other sections. Oolongs are consumed principally in New York, Pennsylvania, and the Eastern States. Fermented teas, and particularly the so-called Orange Pekoe blends of India, Cevlon, Java, and Sumatra teas, are used to greater or lesser extent throughout the entire Japan green teas are taken country. mostly by the Northern States along the Canadian border from New England as far west as Minnesota; by Iowa, Missouri, and Kansas in the Middle West; and by California on the Pacific Coast.

BLENDING TO SUIT THE WATER.—A successful tea blender must possess more than a delicate taste. In Mincing Lane it is axiomatic that he must know the chemical constituents of water in every part of the British Isles. The tea drink being an infusion of leaves in water, the kind of water matters just as much as the kind of tea; and as the water of no two districts is the same, the degree of softness or hardness must be known before a tea can be blended to suit it. Many of the large packers ship water in from different cities to be used in testing the blends intended for their use. Some tea buvers have maps on which they have charted for ready reference the kind of water used in almost every part of Great Britain. The map is corrected constantly to show any changes of conditions. When teas are required by retailers in different parts of the country, the chart is consulted, and teas are blended



TEA BLENDERS IN THE TASTING ROOM OF A LONDON WHOLESALE ESTABLISHMENT

to suit local conditions where the tea is to be sold. Stronger blends are sent to some districts, and weaker blends to others, so that the chemical constituents of the waters acting on the leaves yield brewed teas that are almost the same in both places.

A blend usually has three divisions: pungent or brisk teas; thick, rich, malty teas; and full, flavory teas. Districts where water is soft require small, grainy, thick, full teas; while brisk, full, flavory teas are best suited to districts where the water is hard.

The teas most favored for soft water are: high grown Ceylons, rich Dooars, Darjeelings, Kangras, Nilgiris, and Kintucks.

Teas of more pronounced flavor are used for medium water, such as Keemuns, most Ceylons, Darjeelings, Cachars, Sylhets, Assams, Javas, and Sumatras.

The teas best suited for hard water are thick, strong, rasping growths; such as Oonfas, Ichangs, Saryunes, Padraes, thick Soumoos, Moyunes, burnt Ceylons, some season growths from Sylhet and the Dooars, and the brisk, pungent Assams. The brisk teas used generally are from Assam, where their slower growth in a slightly cooler climate produces a harder leaf and a distinctive, brisk, pungent liquor.

Blenders have learned that a fine flavory tea must never be used with a rough tea and, where scented teas are used for flavoring, the other teas should be thick and strong; otherwise the infusion is likely to be thin. As few as two kinds of tea may be used in a blend, or as many as twenty. As a rule it is considered better policy to use a goodly number, so that one or more of the concomitants may be omitted or replaced without the change being noticeable.

A medium priced tea that comes out strong and thick in all waters may be made up of a flavory Ceylon and a rich Dooars, with the addition of a little Scented Orange Pekoe or Oolong—not more than one pound in sixteen or eighteen should be sufficient. A medium priced tea better suited to very hard water is made by substituting a brisk, pungent Assam in place of the flavory Ceylon, for the reason that moderate flavor makes little impression on hard water.

A fine to finest blend for medium water may include a thick Ceylon Broken Pekoe and flavory Assam Pekoe, to which scented tea may be added in small proportion. If a very pungent Assam Pekoe is used, however, no scented tea is necessary. For soft water, a favorite blend has for its principal

ingredients a fine Ceylon Broken Pekoe and a rich Dooars Pekoe flavored with the finest Formosa Oolong.

An all-round blending combination of green, Oolong, and black teas, in which none of the component teas predominates, is made up of 45 per cent of Summer Formosa, 30 per cent Moyune or Young Hyson, 15 per cent Early Basket-fired Japan, and 10 per cent flavory Ceylon, Assam, Darjeeling, Java, or Sumatra Pekoe—as preferred. If teas of the right character are used in this combination, and the bulk is allowed to stand for a few weeks to permit the different flavors to intermingle properly, it makes a palatable drink, and no one kind of tea stands out above the others.

Blending teas to suit the waters of particular localities has been nowhere practiced to such an extent as in Great Britain, and her colonies. However, the idea has been gaining ground in the United States and other large tea-consuming countries, where, indeed, the most efficient buyers always have practiced it.

BLENDING FOR QUALITY.—While there always is a demand for various high class teas in unblended form, jobbers have found that certain simple combinations with other teas make them sell better; for in-

stance, the blending of medium grade Ceylon and India in about equal parts makes a better selling tea than either one of them alone. Also, the addition of a little Oolong in any blend of British grown tea has been found a distinct advantage, giving fragrance and flavor. This is particularly true in the high grades.

Any Formosa tea that is too light and thin is improved by the introduction of Ceylon, and Congous of medium grade are blended with Ceylon, India, Java, or Sumatra to advantage.

A low grade, cheap, mixed, or "barrel," tea, as it sometimes is called, is obtained by blending standard Formosa, Congou, and low grade Gunpowder or Hyson.

Some blenders will have nothing to do with China teas, which are often poorly made, claiming that their trade can detect a proportion as low as 10 per cent. This view overlooks, however, the practical value of such China teas as plain Moning, for example, to use with strong Ceylons and Indias. This tea will keep for a year and will absorb and retain the flavor that Ceylon used alone is apt to lose.

Composition of Packet Brands.—The composition of the best-known packet brands on the English and American markets, for obvious reasons, is kept more or



A LONDON TEA TASTING ROOM IN THE MODERN MANNER



CUPPING AND EXAMINING TEAS IN THE TEA BUYING OFFICES OF AN AMERICAN CHAIN STORE CONCERN

less secret. Generally speaking, however, it may be said that a blend designed for widespread popular appeal usually combines selected teas of (1) Ceylon and India; (2) Ceylon, India and/or Java, China, and Formosa in varying proportions. For example, a popular priced English packet tea contains a nicely balanced blend of good medium India and Ceylon growths. A well-known Canadian packet tea contains a large portion of high grown Ceylon and some better class Java growths.

In the United States, one of the best known packet teas, having a national distribution, consists of a blend of India and Java Orange Pekoe leaf. Another American packet tea of wide distribution is made up of good medium India and Ceylon growths with a trace of China. Japans and Formosas usually are self-drinking teas although Formosa blacks are being increasingly used in blends. Mixed teas, greens and blacks, constitute from 10 to 12 per cent of the total consumption.

During recent years, so much of the demand for tea in the United States has been for "Orange Pekoe," that the scope of blending has been narrowed to supply blends of this leaf grade. Ceylons and Indias are most in demand.

The Mechanics of Blending

In tea blending, as practiced in London, samples are first selected from the blender's stock of samples, often running into the thousands, and a number of teas, perhaps twenty or so, are picked as suitable components. All of these teas are carefully tested in the usual manner, and certain of them are chosen to make up the blend. From these, according to a formula varied according to the instructions of the blender, a miniature blend is produced. The proportions used are carefully noted and, if the miniature blend proves satisfactory, the details are sent to the warehouse, where the blend is prepared in bulk.

In the United States, many wholesalers, whose output does not warrant the maintenance of a tea buyer and blender, depend upon either the importer or broker to suggest blends, and to keep them up to a standard. In some cases, the importer not only blends the tea for the wholesaler, but also has it packed for him.

Each blender has his own particular way of mixing. There are adherents to the oldfashioned but reliable method of blending different teas on the floor, while others prefer to use a tea-mixing machine, and do

the work mechanically. In either case, it is found important to avoid over-mixing the blend, as this is apt to displace the bloom of the leaf and cover it with dust, resulting in a dull gray appearance. A small cutting or milling machine is quite necessary for cutting down to smaller size large leaf Pekoe Souchong or Pekoe.

Each tea put into a blend should possess a different character. Therefore, in establishing a blend, it is necessary to select characters with care, and then conform to the standard of each, so as not to change the blend; the idea being to always keep it the same. Likewise, it is well to bear in mind that Brokens and large leaf do not mix, as the small leaf always falls to the bottom. However, small leaf or Brokens can be used by themselves for a broken blend, using the same formulas as for the larger leaf.

Japans, in the opinion of some blenders, do not give as good a drink as China greens, but Pan-fired Japan and China Young Hyson can be mixed together to

correct this.

Java, Sylhet, and Congou teas are often used as fillers to impart style in low priced blends. Good quality, small leaf Congou also is useful in this way.

Blends for the United States

A thorough knowledge of tea tasting is indispensable in making up a blend; formulas alone are not all that is required. On the other hand, it is difficult to supply specific formulas, because so much depends upon the character of the business, the territory to be served, crop variations, market conditions, price changes, etc. However, with these reservations in mind, the following specimen blends may be found useful by the trade in the United States.

FERMENTED TEA BLENDS.—These may be made from Indias, Ceylons, Javas, and China blacks. Javas, Indias, or Ceylons may be used interchangeably. For a low priced [60 cents retail] blend, two parts Java Pekoe and one part North China Congou may be used. Another blend at the same price would be equal parts of Sylhet Pekoe, Cachar Pekoe, and Congou.

Another low priced [70 cents retail] blend is made up of two parts Ceylon Pekoe, and one part India [Cachar, Sylhet, Dooars, or Terail Pekoe. A differ-

ent blend at the same price may be made up of equal parts of Ceylon, Java, and Cachar or Sylhet Pekoe.

A medium priced [80 cents retail] blend may consist of one part Broken Orange Pekoe, one part Orange Pekoe, and one part Assam Pekoe. Another is two parts Java Orange Pekoe, and one part North China Congou.

A choice [\$1.00 retail] blend may be composed of nine parts Ceylon Orange Pekoe and one part Darjeeling Pekoe. Another combination is one part Broken Orange Pekoe, one part Orange Pekoe, and

one part Darjeeling Pekoe.

MIXED TEA BLENDS.—Mixed tea blends may be made up of black and green teas, black and Oolong teas, Oolong and green teas, or black, green and Oolong teas. Formerly, much Young Hyson tea was used, but the supply is so restricted and the price so high that Japans or Gunpowders are used instead.

A low priced [60 cent retail] blend may be three parts Formosa and one part Gunpowder or Japan, or equal parts of low priced Gunpowder, Congou, and Oolong.

A seventy cent retail blend may be made up of three parts Formosa, two parts Ceylon Broken Orange Pekoe, and two parts Pan-fired Japan. Another low priced blend may be composed of five parts Formosa, three parts Gunpowder, one part Basket-fired Japan, and one part Java Broken Pekoe or Pekoe. However, some blenders think that Japans and Gunpowders are not suitable for use in the same blend.

A medium priced [80 cents retail] blend may consist of five parts superior Formosa, three parts second Young Hyson, one part good Basket-fired Japan, and one part Ceylon Pekoe; or equal parts of Young

Hyson, Congou, and Oolong.

A choice [\$1.00 retail] blend may be five parts fine Formosa, three parts first Young Hyson, one part first-crop Basket-fired Japan, and one part fancy Ceylon Pekoe. Other medium and high priced blends may be made of the same, but higher grade, constituents as those used in a low-priced blend and in the same proportions. In the opinion of some blenders, at least 50 per cent of black tea is necessary in a mixed blend, to give it sufficient body

JAPAN GREEN TEA BLENDS are made up of high or low grade Japans, with the ad-

dition of occasional Young Hysons, if any are available.

Orange Pekoe Blends.—A low priced [60 cent retail] Orange Pekoe blend may be composed of equal parts of Ceylon [if price permits], Assam, Cachar, and Java Orange Pekoes. As Ceylon Orange Pekoe usually is higher in price than India or Java, it is not often feasible to use it in a low priced tea. A medium priced [80 cent retail] Orange Pekoe blend may be made up of equal parts of Ceylon and Java or India Orange Pekoes. A choice [\$1.00 retail] Orange Pekoe blend may contain equal parts of Ceylon and Darjeeling Orange Pekoes.

Blends for Other Countries

ENGLAND.—An English blender may make up a low priced blend of equal parts Moning Oopack, Ceylon Pekoe Souchong, Assam Pekoe Souchong, and Scented Caper. A medium priced blend consists of equal parts of Moning, Oonfa, Kaisow, Darjeeling Pekoe, Assam Souchong, and Ceylon Golden Pekoe. A superior blend might consist of six parts Broken Assam, six parts Broken Ceylon, two parts Darjeeling Pekoe, one part Ningchow Moning, and one part Chingwo Kaisow.

A very tarry and expensive Lapsang Souchong blended with a Soomoo, costing much less, generally will produce an excellent Souchong blend. Ceylons, too, readily merge with cheaper Travancores, and a blend of this description would appeal to those with a preference for blends having a pronounced Ceylon taste.

A prominent London tea packing firm is using good, colory Indians as the basis of its blends, with flavory Ceylons added; and in some instances, a proportion of pure Javas. This firm uses about eight different teas in each "mix," as it is easier to follow on when the blend has all been sold. Their high priced blends, to retail at 2s. 8d. or 3 shillings, usually are composed of good quality Assams, Ceylons, and sometimes a proportion of flavory Darjeeling. Pure, self-drinking Ceylons have been found quite popular by this concern.

Holland.—Although the Dutch per capita consumption is fair, the percentage of high priced teas used is very small. The low priced teas consist chiefly of Javas and common China teas, such as common Mon-

ings and broken leaf Panyongs. In medium teas, better grades of Javas are used, mixed with India and Ceylon; the better the blend, the more British-grown teas are used. Various packers also use a fine Panyong in their better blends, with a little tarry Souchong. In the north of Holland, a dash of China Flowery Pekoe goes very well. Green teas are never used, but two or three of the blenders use a small amount of Formosa Oolong in their blends.

Scandinavia.—The principal teas used for blending by Scandinavian packers are medium and high quality Ceylon Orange Pekoe and Pekoe. They also use small quantities of Ceylon Broken Orange Pekoe, Darjeeling and Assam Orange Pekoe, and Pekoe; while some packers utilize small quantities of Java. Of the China blacks, Monings, Keemuns, and Panyongs are used, and an insignificant amount of Souchong. Green teas are not used at all.

Russia.—A specimen Russian blend consists of three parts common Lapsang Souchong, one part common Moning, and one part Kaisow. A higher priced blend is three parts Lapsang Souchong, one part Kaisow, one part Ningchow Moning, and one part China Orange Pekoe.

For those who prefer a thin, flavory liquoring tea, a blend is made of the "caravan" type, and generally is composed of about 60 per cent China Keemun, 30 per cent China Chingwo or Darjeeling, 5 per cent Oolong, and perhaps 5 per cent China Flowery Pekoe. In this case the Keemun provides a background of moderate strength, while the Darjeeling and Chingwo give the flavor, and the Oolong the pungency. The Flowery Pekoe—a tea wholly composed of white tips—is only used for appearance; having practically no effect on the liquor. This blend is a favorite drink of the Russians, and usually is served in glasses with a slice of lemon added. Teas consumed in Central Europe and Scandinavia are almost entirely of the whole-leaf grade; the demand there being generally for thin, flavory kinds rather than for those with strong and thick liquors.

France.—A black tea blend of ordinary quality, in which only China teas are used, is made up of fifteen parts good Lapsang, three parts Kaisow, and two parts Moning. A somewhat coarse blend, with the aroma of both its components, consists of four

parts Lapsang, and one part Ceylon Pekoe.

A medium priced French blend composed only of China teas, which are quite popular, is four parts superior Lapsang, and one part Ningchow Moning. A combined Chinese and Indian blend would be four parts Lapsang and one part plain, or lowgrown Darjeeling. This has good strength.

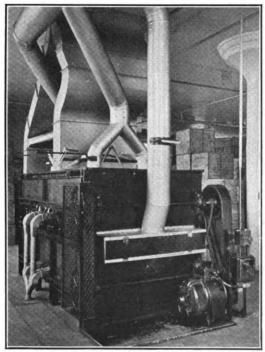
A superior French mixture, containing China teas only, is fourteen parts Flowery Souchong, three parts extra Ningchow, and three parts white tipped Flowery Pekoe. A combined Chinese and Indian blend would be three parts Lapsang Souchong, one part extra Ningchow, and one part

good Assam Pekoe.

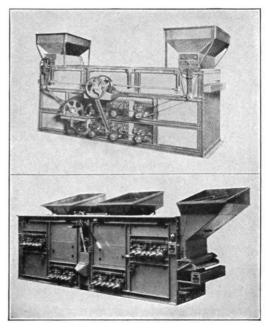
AUSTRALIA AND New ZEALAND.—In these island dominions, with high per capita consumptions, no green teas are used. The best blends are practically pure Ceylon, with perhaps a small percentage of India, but not sufficient to interfere with their true Ceylon character. In Australia, where price competition between packers is keen, quite a little Java tea is introduced into blends.

Cutting and Mixing Machines

There are a number of different types of machines for cutting, or breaking, large-



AMERICAN CUTTING AND SIFTING MACHINE

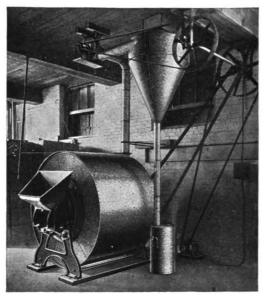


BRITISH 16-ROLLER CUTTING AND SIFTING MACHINES

leaf tea into sizes suitable for blending with finer leaf. Their essential part consists of one or more feeding and cutting rollers with flutes and circumferential grooves which afford recesses for tea of the exact size desired. Rollers for different cuts may be placed in the machines interchangeably; the usual sizes, in fractions of an inch, are ½, ¾, ½, ½, ½, ¾, ½, and ¾. The resistance plates, against which the cutting rollers revolve, are arranged to be easily adjustable by an adjustment screw for any desired clearance; while at the same time they will swing back freely in case a nail or piece of stick comes through, and instantly drop back into normal position again.

Cutting machines range in size from a small hand machine for counter use to automatic hand or power driven machines for the factory that will cut from 1150 to 2500 pounds of leaf per hour. Some are equipped with a nail-passing gear for the removal of any nails that may have gotten into the tea by accident during the unpacking and emptying process. Others are supplied with an electro-magnet having sufficient power to pick up any metallic object in the tea before it gets to the rollers.

A combined sifting and cutting machine is used by blenders who handle tea in large quantities. This machine has a large sieve



AMERICAN TEA MIXER WITH AIR SUCTION DEVICE

vibrated by crankshafts to remove dust before it passes into the cutting part of the machine. Like the more compact machines which only cut the tea, they are built in both hand and power sizes, and may be provided with nail removing attachments.

There are several types of mixing, blending, or bulking, machines—mostly of the revolving drum type—ranging from hand-operated to power-driven automatic. The hand machines vary in type from the sample-tea mixer for counter or bench, with a capacity of two or three pounds, to machines that handle from fifty pounds to half a ton. The power-driven mixers are regularly built in capacities from fifty pounds up to 1500, while special machines

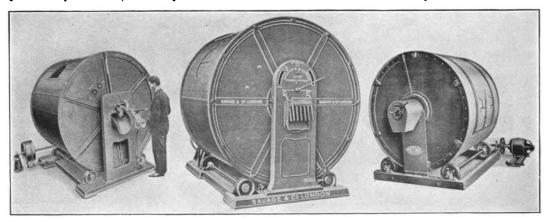
in some of the big blending establishments hold 3000 and even 4000 pounds at a charge.

Some mixing machines revolve the drum by a central shaft having outward bearings and discharge from the circumference, while others have trunnions and friction wheels to support and revolve the drum, dispensing with the shaft in favor of a central discharge from one end of the drum. The cylinder is built of boiler-riveted steel plates, smooth on the inside, and having sufficient rigidity to withstand the torsion when driven under full load. The drum is revolved slowly by a reduction gear, while some form of internal plate arrangement, driven by another gear, applies a worming action to assure thorough mixing. A sturdy cast iron frame, securely bolted to the floor timbers, gives the necessary support.

Packeting Tea in England

Keen competition has brought about a development of machinery and efficiency of method for packeting tea that is unsurpassed in any other industry. A typical example of tea packeting in England is embraced in the following description of the operations of an extensive plant in one of the suburbs of London.

Tea from the producing countries arrives at the London docks, whence it is unloaded into the bonded warehouse to await inspection for purity by Customs authorities. Its next journey is to the tea factory, where the chests are taken to the top floor by a continuously working elevator. There any large-leaf teas are passed through a cutting machine, and these and all the newly arrived teas are

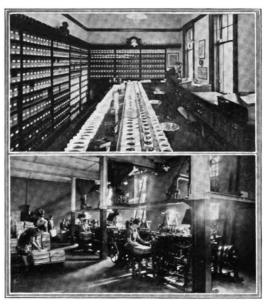


THREE BRITISH TEA BLENDING MACHINES

dumped into a number of receiving hoppers. From these hoppers the teas pass through huge mixing machines on the floor below. English mixing machines of this type have capacities up to two tons. From the mixing machines the tea is filled into sacks holding one hundredweight each. These sacks are wheeled along galleries to the tea-packeting room. Wide hoppers at the sides of the galleries lead down to the packeting machines, of which there are twelve in each packing room. The hoppers hold 1500 pounds of blended tea each, and whenever one of them is empty a red light appears.

Individual machines have been built for each size of packet required, and since these vary from a penny to a half-pound, there is a great variety; but for each the principle is the same. The eye cannot follow the operations of the machines, which weigh, pack, and seal seventy packets of tea a minute. The main features of these machines are two disks, or tables, set close together on the same level, and rotating in the same direction. One is fed by the paper for the bags, which are formed and closed at one end, while the other receives the bags upright in twelve receptacles. The disks rotate intermittently; that is, with a momentary pause in rotation for the successive performances which transform a portion of the paper cut from the rolls into a closed packet containing the allotted amount of tea. These closed, packets, or bags, are lined with waterproof paper. One side of the wrapper strip is gummed, cut off to the correct size, and folded round eight formers on the first disk as it rotates. As each of these formers passes on its circulator track, mechanical devices press the gummed side of the wrapper strip upon the other; then close one of its ends. When the bag is thus finished, it is pushed on to the second disk, which is provided with the twelve receptacles, each of which holds twelve bags, now upright. As each bag comes off the first disk a rocking device reverses the bags from the horizontal to the vertical position.

Automatic weighing machines dole out the tea from the large hopper above in the exact quantities required, and pour it into the bags. A vibrating machine beneath the second disk settles the tea in the bag; at the same time a pusher slowly descends and consolidates the tea, which is then ejected and automatically counted. The



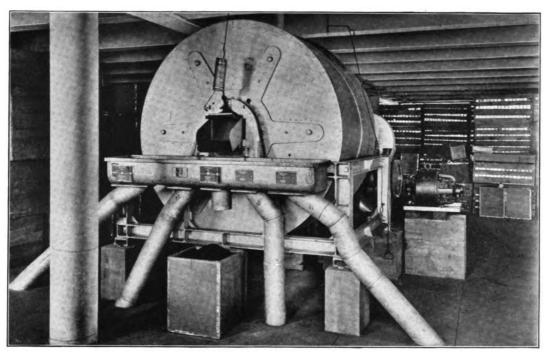
In a Scottish Tea Packeting Plant

Typer—Tea sampling room. Lower—Automatic weighing and packeting machines.

weighers used with the packeting machines are in sets of four. They deliver the tea with the greatest possible accuracy.

The time from entrance of the strip of paper to the packeting machine till the bag is ready for its quota of tea is eight seconds. On the other hand, the tea must be delivered into the packets at the rate of four lots in two seconds. Less time is thus allotted to weighing than to formation of the packets, and for this reason the weighing devices are quadrupled. Of these, two are always weighing, while the other two discharge into packets simultaneously, so that the two processes—formation and filling of the packets—are performed at the rate of seventy to the minute. packet weighed has to be completed and held in readiness for each cycle of the packeting machine; so it is obvious that the weighing machine must be capable of a larger output than actually is required.

The process of weighing consists of a division or splitting up of a full-bore gravity feed into pre-determined streams, beginning with a large flow and finishing with a mere dribble, each of which is in rotation fed on to one of a series of beams, attaining its full weight on the last. The scale pan consists of a receptacle with its bottom closed by a double-hinged lid which opens mechanically, but is controlled electrically by the contact apparatus on the packeting



A "JUMBO" REVOLVING TEA-MIXING MACHINE IN A BOSTON FACTORY

machine. A dust-tight housing, with two glass doors, incloses each weighing machine.

The packets run on to an endless band, with one end sealed, the other half closed, and one flap upright. At the point where the endless band turns on its roller, the packets fall into horizontal position in a groove on another endless band running at right angles. As each packet falls, the flap closes of its own accord. The second endless band takes the packet to the labeling machine, which stands on the right-hand side of the packeting device.

On leaving the labeling machine, the packets are made up into packages, each containing six pounds of tea. These are stacked on "stillages," or little trucks with wheels. When filled, the stillages are taken by an electric factory truck to the store or the loading dock.

Tea Packing in America

UNITED STATES.—American tea packing equipment is similar to that of England, only most of the machines are made in America. The packing process in the United States is more elaborate and expensive than in England, because the tea must be better protected for longer trans-

portation journeys, as well as for slower turnover on the retailer's shelves.

A typical American plant, devoted exclusively to the packing of tea, and said to be the largest tea packing establishment in the United States, is located in Hoboken, just across the North River from New York City. It is housed in a modern twelve-story factory building, with the offices on the top floor, and having its departments so placed as to take advantage of a gravity system of handling whereby the tea is literally "poured" through from the sifting and cutting room on the tenth floor to the shipping room on the ground level.

The general offices of the company are on the top floor. On the eleventh floor, the one immediately below the offices, there is a completely equipped plant for the manufacture of the tin containers in which a large part of the company's products are packed; both tins and paper cartons being used.

A part of the tenth floor is given over to the testing room, arranged to take advantage of a north light. The walls are painted green and there is a counter along the north side, which is otherwise given over to windows. Adjustable screens of light bamboo, also painted green, regulate the amount of light. On the counter are hand scales for weighing the tea to be tested, together with rows of cups and pots; while on the wall above hangs a small clock.

The English method of testing is used; i.e., the tea is weighed and placed in a pot, boiling water is poured over it, and at the end of six minutes the clock rings a bell. The brew then is drawn off into a cup, and the infused leaves are dumped out onto the inverted cover of the pot.

The factory processes begin on the tenth floor, to which the original chests are elevated and emptied out. The tea is dumped from the chests into wooden buckets, which are taken by hand to one of the Savage sifters and cutters, located on this floor, and emptied into the hopper.

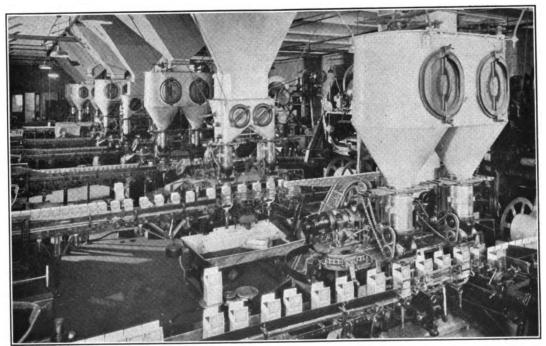
After sifting and cutting, the tea is carried on conveyor bands to two large electrically-driven Burns mixers. The mixing machines are of the end-opening type and will hold 1500 pounds each. The oppositely-inclined shelves inside the slowly turning cylinders mix a few hundred pounds or three-quarters of a ton in twenty minutes and discharge it from the center, whenever the gates are swung in. During the mixing process all fluff and dust are automatically removed by a suction fan

into a funnel-shaped container at one side of the machine. An air duct from the top of the dust container to the outside of the building carries off dust that is too fine for the collector to retain.

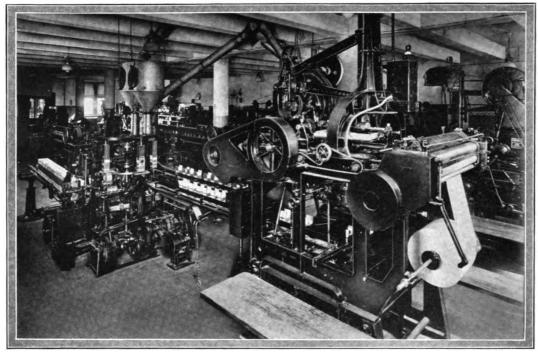
When the blend is completed it is dumped into cars having sliding-door bottoms and running over a track leading to various chute openings for spouting the tea into the hoppers of the packaging machines on the ninth floor. There are fourteen of these openings, and immediately beneath them are fourteen large hoppers in two rows. One row feeds machines that pack tea in paper packages and the other row feeds machines that pack it in tins.

On the paper package side of the room the tea is packed in half-pound, quarterpound, and ten cent sizes; the paper containers being made by machines at one end of the room, whence they pass on conveyor bands to another machine, which inserts the lead lining.

After leaving the lining machine, still on the conveyor, the assembled containers pass on to the weighing and filling machines, where the exact amount of tea required is automatically released into them, and they are shaken down by jiggers. The tea drops from the hoppers into electric



AUTOMATIC WEIGHERS IN A HOBOKEN TEA PACKAGING PLANT



MACHINES FOR WEIGHING AND SEALING CARTONS IN A NEW YORK ESTABLISHMENT

scales of fine accuracy, and then is deposited in the packages.

The packages pass on by conveyor through a sealing machine, where the packages are sealed air-tight, to a girl operator at a fifth machine, which puts on an outside waxed paper cover and end seals. After this the packages are conveyed to girls who pack them in paper cartons or wooden boxes, whence they are taken by elevator to the shipping room on the ground floor.

On the opposite side of the room the tea is packed in one-pound and quarter-pound tin containers. These are automatically filled by another set of machines. The tins come down a chute from the twelfth floor and liners are inserted by hand. They are filled by automatic weighers in much the same manner as the paper containers. The operation is, however, partly mechanical and partly manual. When the scale tilts, the tea is poured through a small spout into the tin held by an operative at the mouth of the spout. As each tin is filled, the operator places it on a conveyor that carries it to a device for tamping down the contents. Another operator slips on the container cover, and the tin proceeds to the labeling and drying machine.

After labeling, the tins are packed into wooden boxes or paper cartons, each containing twenty-five quarter-pound or fifty one-pound tins. The covers are nailed on the boxes or the cartons are sealed, and the packages go to the ground floor shipping room. A private three-track railroad spur runs between the loading platforms; the platforms being flush with the car floors.

Canada.—The principal ports at which teas enter Canada are Halifax, St. John, Montreal, Toronto, and Vancouver. Teas are imported by wholesale distributors, who sell them to retailers either in the original chests or blended and packeted. It is estimated that 50 per cent are sold in bulk, and 50 per cent in packets. Most of the straight teas sold are Ceylons; while Indians figure largely in the blends. Tea blenders of the Dominion have no hard and fast formulas for their blends, but are guided largely by the quality of each season's crops.

There are only three cities where blending is carried on extensively; they are Montreal, Toronto, and Vancouver. Some blending is done in Quebec, Ottawa, Winnipeg, and a few other centers, but jobbers in the smaller places usually purchase their blends in England. All teas entering

Canada are subject to careful test for adulteration by the official government tester before being released for consumption.

The Toronto establishment of a leading Canadian blending and packing concern occupies a four-story building having 67,000 square feet of floor space. All movement of the tea, after the plantation chests are hoisted to the top floor and opened into hoppers, is accomplished by gravity. There is no further handling.

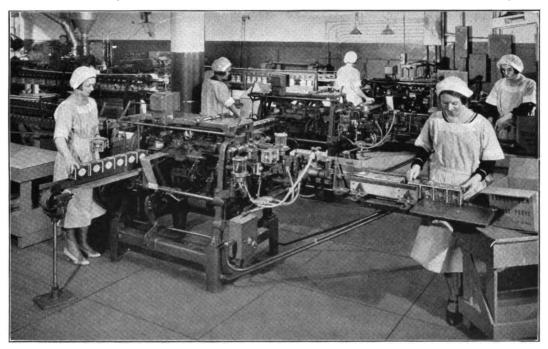
Most of the machinery is of English make. The first operation in the preparation of tea for packing is performed by a Savage combined hopper, cutter, and sifting machine located on the top floor. There are three intake apertures, and all of these feed one outlet at the bottom, whence the tea empties into the mixers on the floor below. One intake on top of the hopper leads to the cutting rollers, into which the coarse or wiry leaves are fed for reduction to a uniform size. From the rollers the tea drops into oscillating trays having fine sieve bottoms, and from the sieves the tea drops directly into the mixers below. The dust drops down a separate chute and is accumulated in a large container at the side of the mixers. Still another intake on the left side of the hopper leads to the sifter only, thereby eliminating the cutting process for teas that are satisfactory in size, but requiring only to have the dust removed. A third intake on the front of the hopper feeds directly into the mixers beneath. This intake is used for teas that are free from dust and satisfactory in size and style.

Two Dell mixers are used. These are large steel drums twelve feet in diameter and seven feet in width, suspended on and revolved by two powerful shafts, and geared to revolve slowly. One of the mixers has a capacity of two tons of tea and the other, one and one-half tons.

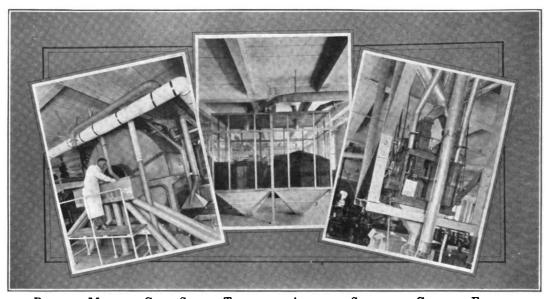
From the mixer the tea drops by gravity into large glass tanks, where it is stored and then fed down through automatic electric scales to the packing machines.

Driver duplex automatic electric scales are used, and are suspended from the ceiling on brackets. The duplex is really two scales, which alternate in their action, feeding the machines at the rate of 120 packages per minute in half-pound quantities.

Day automatic packing machines receive the tea from the automatic weighers. Into one part of these machines sheet aluminum is fed. These sheets are automatically folded into packages with one end open, and are carried to a position under the feed pipe from the scales, where they re-



MACHINES FOR WRAPPING CARTONS IN MOISTURE-PROOF CELLOPHANE



BLENDING MACHINE, GLASS STORAGE TANKS, AND AUTOMATIC SCALE, IN A CANADIAN FACTORY

From the two-ton mixer (left), the blended tea flows into glass storage tanks (center), and thence to the duplex alternating scale (right). These are on three different floors and the carrying is done by gravity.

ceive the correct amount of tea. The open end then is folded down and the package carried to the automatic labeler—part of the same machine—where the label is applied. After labeling, the package is placed on a moving traveler and carried to the packers, who place the finished article directly into cases. The packing machines produce an average of thirty-two finished packets per minute.

An automatic labeler is an integral part of the Day packing machine, but this Toronto concern also uses several Jaegenberg labelers, which were imported from Germany in 1913. The packets are fed into a traveler at one side of this machine, and are carried to a position opposite a revolving octagonal drum, where mechanical fingers draw each label from the drum, after which it is automatically folded around the package. During the operation an automatic dating device marks the date of packing on each label. These machines turn out 1500 packages per hour.

A Morgan gravity conveyor, Canadian made, carries full cases from the packing machines to the automatic nailer. The gravity conveyor is of steel throughout and has for its main essential a series of hollow tubes one and one-half inches in diameter, and set one and one-half inches apart on a slightly descending incline. The tubes

are suspended on multiple roller bearings, to eliminate friction as much as possible.

Cases taken from the gravity conveyor are placed under a Morgan nailing machine, made in the United States, and are securely fastened with sixteen nails driven in two motions of the machine. An oscillating tray, attached above the machine, supplies eight feed pipes with nails in correct position for driving. A foot-control pedal releases a heavy iron bar, which simultaneously drives the eight nails—seven across the end of the case, and one at the side.

Wholesaling in Various Countries

Australia.—A few of the largest Australian wholesale distributors have their own buyers in the producing countries, while others buy through brokers. A large proportion of the tea, however, is brought in by a few importing firms, who sell only to wholesalers on a commission basis.

Advertised brands of packeted teas have, to a great extent, displaced a wide variety of bulk teas formerly sold in the country; the percentage of proprietary brands is approximately 70 per cent, as against 30 per cent of bulk teas. Extensive newspaper advertising of packet tea, begun by one wholesale firm, has extended to several

others, until an Australian retailer now requires perhaps half a dozen different kinds of advertised packets. In addition to advertising, the wholesale packers compete for the business of the retailer by sending their vans to his door once a week with various sized packets and grades. From these he can select one, two, or three pounds of each grade, in half-pound, or pound packets. Competition is very keen, and it is a question whether the system of distribution is not too expensive, but at least the retailer is given a wide range of choice at a minimum of inconvenience. Multiple shops are factors in the wholesale tea trade of Australia, the same as in England, or the States; but on a lesser scale, since the largest has only eighty shops and the next under thirty.

Melbourne and Sydney are the blending and packeting centers of the Australian wholesale trade, but all blending is not done by wholesalers; some retail grocers do their own blending, and prefer to develop a trade under their own name or brand. Others have their tea packed under their own brands. However, the greater percentage of the teas sold are the proprietary brands of wholesale distribu-

tors.

New Zealand.—Tea constitutes an important part of the wholesale food-supply trade of the islands. With few exceptions tea is imported by leading firms with departments which specialize in this line. These firms have offices in Auckland, Wellington, and Dunedin, as well as agents in Christchurch—the four principal trading centers of the Dominion.

Tea is imported in lots purchased through merchant firms in Colombo or Calcutta.

Approximately 55 per cent of the teas

are sold in proprietary packets.

NORTHERN IRELAND.—This portion of the Emerald Isle is combined with England and Scotland as a part of the United Kingdom of Great Britain and Northern Ireland, insofar as statistics are concerned. The principal wholesale centers supplying tea to Northern Ireland are London and Liverpool. Wholesale tea merchants in Belfast purchase their requirements mostly through English depots. Practically no tea is imported direct from the countries of production. Retail dealers supply their needs through either local or English wholesale merchants. Tea sold by the pound usually is packed in one, two, four, and eight-ounce, and one-pound sealed packets, with the approximate selling price of eight pence to two shillings a pound.

IRISH FREE STATE.—Most of the teas are distributed to retailers by British wholesalers having their main centers in London, but some business is done through Irish wholesalers, who at least do a part of their

buying at the Amsterdam sales.

NETHERLANDS.—In the Netherlands, there is a considerable number of packers and blenders—past-masters of their craft. Their equipment ranges from modern automatic machinery of the most efficient type to hand implements, such as a scoop for mixing and a hand mold for packing. The most important blending and packing establishment in the Netherlands is located Its teas are packed in at Rotterdam. parchment paper by machines, each of which can handle about sixty packages per minute. This firm sells its tea in packages to retail grocers throughout Holland.

The approximate proportions of packet and bulk teas sold in the Netherlands are 80 per cent packet, and 20 per cent bulk. In the country, nearly all the tea is sold in packets. In Amsterdam some bulk teas are sold, but they are taken mostly by hotels, institutions, and the army.

GERMANY.—Tea is brought into Germany by importers located chiefly at Hamburg and Bremen. Their traveling salesmen call on the wholesale trade in the principal German cities. The chief sources of supply. are the London and Amsterdam auctions

and direct from Shanghai.

As compared with England and Holland, there is not a great deal of tea consumed in Germany, but there are blending and packing establishments at Frankfurt, Karlsruhe, Munich, and other wholesale centers that do considerable business. Teas are packed in 50, 100, and 250 gram packets; in quarter-pound and half-pound tins; and in small bags of ten and twenty grams. The packets and tins of both German and English brands are favorites in the cities, while small bags of cheap quality teas sell best in country districts.

The interests of the German tea trade, generally, are represented by an association known as the Verband des Deutschen Techandels, having its headquarters at Neuer Wandrahm 5, Hamburg.

France.—Practically all of the teas used in France enter through the port of Mar-



seille. The principal importing and blending firms—French and English—have their establishments at Paris and Marseille. They specialize in packing and distributing India, Ceylon, and Indo-China teas, but a smaller percentage of China and Dutch East India teas also are used. Ceylon teas are labeled with their grade marks, such as "Orange Pekoe," "Pekoe-Souchong," or "Southong," but French packers put out their India teas under typical Indian marks, such as "Tigre," etc.

In addition to the importers and packers, there are both wholesale and retail foodstuff establishments, some with branches, who sell under their own trade-marks. A few of these do their own importing, but most of them buy from importers in Paris

or Marseille.

The packers and wholesalers sell through traveling salesmen. The most popular form of packing is in half-chests containing small packets wrapped in tin foil.

Russia.—The tea trade of soviet Russia is nationalized as a government monopoly in the hands of Centrosoyus, the Central Association of Consumers' Societies, which distributes almost everything in the way of food supplies. Numbers of well-equipped blending and packing establishments, formerly owned and operated by private firms, now are run by this governmental bureau, but lack of credit has limited the purchasing of tea to a degree that has made it impossible to supply more than a fraction of the normal Russian demand, which in the pre-war decade was 102 million pounds annually as against 1933 imports estimated at 42,564,000 pounds.

One of the blending and packing establishments operated by Centrosoyus at Moscow is typical of the Russian tea fac-It occupies a large, four-story building, and is equipped with a mixing machine of the largest size. From the mixer the tea is spouted to electric weighing machines on each of the long tables in the packing room. Here a large force of operatives pack it by hand in air-tight, sealed paper packets.

Most of the teas now on the Russian market are blends. They are distributed in different sized packets, resembling those of the old tea firms, and in blends suited to the tastes of the consumers. The price is printed on the label, also the weight, which now is indicated in grams instead of Russian pounds.

The teas are retailed by local consumers' cooperatives at prices fixed by Centrosoyus, but private dealers take advantage of the insufficiency of such offerings to do a little tea business of their own, and they often charge twice the price fixed by Centrosoyus.

Sweden.—As in the other Scandinavian countries where more coffee is drunk than tea, the demand for packeted teas in Sweden runs more to variety than to large quantities. There are numerous blends offered on the wholesale market in every size from a tiny two-ounce paper packet up to half-pound and pound tins, wrapped in waxed paper. One of the principal wholesale blending and packing concerns is established at Goteborg. It sells tea either in the original chests, containing three, five, or ten kilos net, or in a variety of packets under its own brands. On account of having so many different types and sizes of containers, it is not economical for this firm to use automatic machinery to pack their teas, so it employs about fifty girls to do this part of the work. It sells to wholesale dealers and to retailers, mostly in Sweden.

Swedish packers do their utmost to encourage the sale of all tea in packages, believing that the best way to increase tea consumption is to sell packet tea of known excellence. The grocers do not, as a rule, know their teas as Ceylon B.O.P., India O.P., China Souchong, etc., but only as Ceylon, India, or China tea. There are some who sell bulk tea by the pound, but in such cases the grocer's order to the packer is for "a tea that costs so-and-so much."

Norway.—By far the largest quantity of tea marketed in Norway is sold in bulk at retail grocery shops. However, the more prosperous classes purchase tea imported in tin boxes or lead-foil packets containing from one-fourth to one kilogram. The principal countries supplying Norway with tea are Great Britain, Germany, British East India, Denmark, and the Netherlands.

DENMARK.—The use of tea in Denmark is comparatively limited, but some foreign houses sell their brands in this market. The larger Danish wholesale distributors import tea in chests from original sources, and repack and brand it locally. The foreign brands are sold by local representatives of the packing firms, while the tea

packed in Denmark is distributed direct to the retailers by the packers. Teas are imported from Great Britain, British India, China, Netherlands, and Germany, in the order named.

Portugal.—Teas are imported into Portugal either by direct shipment or via London, Marseille, Hamburg, etc., in original packages—chests and half-chests—and sold by local agents representing London houses chiefly. Marseille and Hamburg houses also do some business. Prices usually are based c.i.f. Lisbon, net weights, including cost of Portuguese consular invoice.

Spain.—Practically all the tea imported is from English firms, such as Lipton's, Horniman's, Ridgeway's, and Lyons'. Traveling salesmen from these houses call upon and sell to the leading grocery importers.

BELGIUM.—There is a small consumption of tea as compared to England or Holland. The retail trade obtains its supplies from one or two Belgian importers, and also buys from London and Amsterdam distributors.

SWITZERLAND.—Tea is not a popular beverage, its use being limited mostly to foreigners, who visit the country in large numbers. It is imported by wholesale grocers, who distribute it to retail stores, the largest of which belong to chains or multiple systems.

Austria.—Tea is brought in by wholesale importers, who distribute it to retail provision shops and delicatessen stores. The normal sources of supply are German and Russian.

Hungary.—Since the loss of the seaport Fiume, on the Adriatic coast, wholesale merchants of Budapest have become the chief tea importers of Hungary, although the larger provision houses throughout the import significant quantities. country The principal bases of supply are Hamburg, Bremen, London, and Trieste. teas sold are mostly the packet products of German and English packers, although there are many Hungarian firms who import the best teas and pack in their own wrappers. Foreigners are the principal consumers. The native population, particularly in the rural districts, regard tea as a medicine and use it as a remedy for coughs and colds.

ITALY.—The use of tea as a meal time or social beverage is confined to the foreign population and great numbers of tourists.

It is regarded as a medicine, and so used by the natives. Great Britain is the chief source of supply. The leaf is imported in original chests, packets, and tins. The local packeting for the retail trade is usually done at Genoa or Milan.

POLAND.—The principal importation is through the port of Danzig, mainly from London, but to a minor extent from the Netherlands. Some teas are blended when they arrive, and some are blended after arrival. The imported blends usually are those of well-known English concerns, whose small packets are familiar wherever English teas are sold. When the blending is done by domestic concerns the tea is sold in paper covered tin-foil wrappings, having bands around them both ways. The packet sizes are 50, 100, 200, 250, 400, 500 grams, and one kilo. At one time, under Russian rule, the sale of loose tea was forbidden. All of it had to be repacked, and the bands, which were issued by the Government, showed that the duty had been paid. Some teas are sold in small, decorated tin boxes that are put up by both foreign and domestic packers. Duty is paid on entry, and there are no further formalities. Tea may be sold loose, or in packets.

ESTHONIA.—Tea is handled and marketed by the grocery and provision stores, and is consumed by the city populations exclusively.

LITHUANIA.—Tea usually is imported in bulk by wholesale distributors, who pack it in small packages for sale to the retail trade. It comes principally from Germany. There is a marked saving in excise by importing in bulk. The excise on tea in original packages is two-and-one-half times that on loose tea.

LATVIA.—The principal tea imports are from England, Danzig, Germany, Holland, United States, and Lithuania.

FINLAND.—Wholesalers import bulk teas which they distribute under their special brands. There also is some trade in packet teas under foreign trade-marks.

CZECHOSLOVAKIA.—Wholesale grocers import in chests and repack in small containers for distribution to the retail grocery shops. A large part of the bulk and packet teas consumed in Czechoslovakia come from England.

GREECE.—Only a small amount of tea is consumed. It is imported from England, Egypt, France, and Holland; either through

special agents, or by distributors—usually grocers.

Bulgaria.—Unlike other southern Europeans, the Bulgarians are tea drinkers, if only to a limited extent. This is doubtless due to their proximity to Russia, which, under normal conditions, is a tea drinking country. As a rule, tea is imported in bulk, and packing, if any, is done locally.

RUMANIA.—The consumption of tea is small. The principal source of supply is Germany, followed by Great Britain, France, Holland, and Italy. English brands are the most popular among foreign residents. Tea is shipped to Rumanian importers who sell it to merchants.

Syria.—A small amount of tea is consumed by the higher classes. The wandering tribes are completely unacquainted with it. Low grade tea is imported in bulk, and the better grades are imported in tins. It is usual for tea exporters to appoint an exclusive agent in Beirut for the whole Syrian territory. The agents distribute to local grocers and druggists.

Turkey.—Tea is imported in 50 and 100 pound chests, with a growing preference for the fifty pound size, as these are more suited to purchase by small dealers. Approximately 95 per cent of the native population buys tea loose by the pound; the other five per cent purchase it in packets or tins—mostly English brands. Loose tea is commonly mixed with brusa leaves having the exterior appearance of tea leaves, but lacking their flavor and aroma. The loose tea usually is exposed to the air in open chests, thereby losing much of its flavor.

PALESTINE.—Tea is imported by whole-sale grocers, who distribute it to retail grocery shops. The Moslems, who form 75 per cent of the population, do not drink tea to any extent.

IRAN [Persia].—Tea enjoys considerable favor as a beverage and is imported from both Calcutta and Colombo by wholesale and retail provision merchants. The customs regulations require that tea must enter Persia through one of the following ports of entry-Bushire, Lingah, Bandar Abbas, Chahbehar, Jask, Mohammerah, Ahwaz, Abadan, Astara, Pahlevi, Meshedissar, Bandar-Gaz, Julfa, Khoi, Shahtakhti, Kasr-i-shrin, Khoda-Afarin, Bajgiran, Balan, Lutfabad, Duzdab. After teas have entered any of the designated ports of entry they can be freely transferred to

ports or places not included in the list. IRAQ.—There are no tea packers in Iraq. Tea is sold in bulk by the kilo [2½ pounds] or by the oke [2.80 pounds], and wrapped in ordinary wrapping paper as sold. A small quantity of tea also is sold in tins. These tins are the standard sizes put up by English tea packers. The bulk teas are mostly from Calcutta and Colombo.

CHINA.—Tea is retailed in small specialty shops. Various grades are ranged in large air-tight canisters, and the prices range from \$1 a pound, Chinese money, to \$50 a pound and up. The tea shops also stock canisters of dried Jasmine, lemon, geranium, rose, and other blossoms, which are added to the tea in quantities to suit individual customers.

Tiber.—A large amount of tea in bricks arrives overland from the adjoining Province of Szechwan in Western China, and chiefly distributed throughout Tibet from Tachienlu, a Chinese town on the Tibetan frontier. In Tibet, the tea trade is chiefly in the hands of wealthy Tibetan traders and lamasaries. In the case of the lamasaries, stewards are specially appointed to manage the trade interests of the institution. On the Szechwan border, Chinese merchants also have a share of The lamasaries and Tibetan the trade. traders of large capital, maintain heavy stocks, so that, when supplies are temporarily cut off through political disturbances, there is sufficient in store to last a few months or years. Some wealthy Tibetans invest their money in tea, as a suitable form in which to keep their surplus wealth. Tea naturally increases in value the further it is taken from Tachienlu. A package weighing eighteen catties, which costs say two taels in Tachienlu, fetches four in Kantze and six in Lhasa.

STRAITS SETTLEMENTS.—Tea is imported by wholesalers and distributed to consumers by retail shops. Tea is sold from bulk containers to the native population, while tea in packages of from one-fourth to one pound is in demand by European residents.

FRENCH INDO-CHINA.—As with all people of the Far East, the people of French Indo-China, which includes Tonkin, Annam, and Cochin-China, drink little else but tea. Most of the teas sold are produced in Annam, but China teas are imported liberally by Chinese tea merchants, who sell them to the urban population.

Morocco.—Tea drinking is an inveterate habit with the Moors, who drink green tea exclusively. Shanghai is the principal base of supplies. Black tea is drunk only by the European population. Most of the important shippers have agents in the city of Morocco.

ALGIERS.—With 800,000 European population, Algeria is a good market for tea. It is sold by grocers, pharmacists, and herbalists,

EGYPT.—Tea is imported by general commission merchants, who in turn sell to wholesalers and retailers scattered throughout the country. The importers have direct connections in the producing countries. There also is an extensive business in the best known British trade-marked brands, which are consumed largely by foreigners.

TUNISIA.—Considerable quantities of tea are consumed by both the native and foreign population. The principal producing firms supplying Tunisian dealers are Canadian, London, and Marseille bulk and packet tea concerns. The law compels that the weight appear upon the outer wrapper expressed in French weights.

NATAL.—Most of the tea imported is in 56-pound containers, and in packets of less than ten pounds. Retailers sell in bulk or in packets of one pound, one-half pound, one-quarter pound, two ounces and one ounce.

Union of South Africa.—Tea, as a rule, is imported in bulk. There are a number of firms in South Africa who specialize in repacking tea in small packages; usually one pound, one-half pound, and one-quarter pound sizes for sale under trade-marks. Retail grocers also adopt the same procedure to some extent, purchasing tea in bulk and repacking it in special bags, suitably labeled. The lower grade teas, however, are sold in bulk by practically all grocers, and South African wholesalers import considerable quantities for this purpose.

Jamaica.—All the tea consumed is imported by wholesalers in Kingston and distributed to retail grocers.

ECUADOR.—A small quantity of tea is sold, principally for use by foreign residents.

Peru.—Tea is imported by dealers in foodstuffs through representatives of foreign exporters. The importers resell to small retail grocery dealers. A certain amount of tea is handled by Chinese

wholesalers and retailers, established in Peru.

CHILE.—The Chileans are the foremost tea drinkers of South America. Upon its arrival in fifty, eighty, and ninety pound original packages, it is blended by wholesale distributors and repacked in packets of one-pound, half-pound, one-fifth pound, one-twelfth pound and one-fiftieth pound. The tea-room trade also buys packages of one-kilogram [2½ pounds], and the smallest size of the original packages—those containing fifty pounds.

COLOMBIA.—Coffee is one of the principal products and the favorite beverage of the country. However, the professional and leisure classes in half-a-dozen widely separated towns and cities drink tea at social functions. It is bought by direct importers.

Brazil.—Tea is bought by direct importers, who sell to the retail grocers. It is used mostly by foreigners, as Brazilians prefer coffee or yerba maté.

PARAGUAY.—A large percentage of the tea imported comes from England. Tea is handled directly by importers, who sell it both at wholesale and retail.

URUGUAY.—Tea is consumed by but relatively few people in Montevideo, the national capital, and in the larger cities of the interior. It is brought into the country by a number of foodstuff importers and specialty grocers, who have worked up a good trade in foreign food commodities. The better grades of tea are imported in various sized packets, ready for sale. The cheaper qualities are sold out of bulk containers.

ARGENTINA.—Only a small amount of tea is consumed, and foreigners are almost the only users.

NICARAGUA.—Tea is used only by foreigners. The United States is the chief source of supply, although a small quantity comes from England.

SALVADOR.—The total of tea used is negligible, Salvador being a coffee producing country. The tea importers are Chinese merchants and large grocery dealers, who retail it to those who want it and can afford to buy it.

Costa Rica.—Little tea is used. It costs approximately \$1.75 a pound, retail, for such teas as Lipton's and Ridgeway's, as against twenty-five cents a pound for coffee. Such teas as are consumed come



VARIOUS TYPES OF TEA CONTAINERS USED IN EUROPE AND AMERICA

1. Vacuum jar. 2. Tumbler, cardboard cover. 3. Cellophane bag. 4. All glass, cellulose wrapped. 5. Tumbler, metal cap. 6. Vacuum jar, screw top, cellulose wrapped. 7. Lithographed tin, friction cover. 8. Fancy tin, hinged cover. 9. Tin, friction cover, printed label. 10. Lithographed tin, slip cover. 11. Lithographed tin, threaded cover. 12. Fibre sides, tin top and bottoom, friction cover. 13. Lithographed tin, slip cover. 14. Canister with self-measuring device. 15. Tin with tight wrapped printed label. 16. Lithographed tin. 17. Stock tin, hinged lid. 18. Folding carton. 19. Paper cornucopia. 20. Cardboard box. 21. Carton. 22. Carton, transparent window. 23. Carton, cellulose wrapped. 24. Fancy paper bag. 25. Paper bag, cellulose window. 26. Lead foil. 27. Printed paper wrapper. 28. Aluminum foil. 29. Fancy paper bag, cellulose wrapped.

from England, United States, Germany, and China.

GUATEMALA.—Little tea is used. The only consumers are Americans, English, and Chinese.

Mexico.—The leading tea packers of the United States and England, as a general rule, appoint agents in Mexico City to solicit orders from the trade. In many instances the agents keep stocks on hand to fill local orders and, where orders come from districts remote from the city, shipments are made direct from the packer. There also are several jobbers who stock tea for sale to the local trade. Others, such as grocery stores, restaurants maintaining tea-rooms, etc., import from the United States and England.

Tea Containers

Paper containers of one sort or another are much in use by European packeters, who are located close to their retail markets, where the turnover is rapid. Tin containers are used to some extent, but not as much as in the United States, where tea often travels long distances to reach the retailer, and where the turnover is slower, owing to the general use of coffee.

The practice of packing in lead, once the universal wrapping for tea, has been practically abandoned; for, besides being costly, the lead discolors badly and gives the appearance of old stock.

Cardboard cartons are widely used because they lend themselves to economic handling with automatic machines. The cartons usually are lined with lead, aluminum, or tin foil and wrapped with parchment paper. Some packers are using containers having fiber sides with tin top and bottom.

There is considerable difference of opinion in the United States as to what constitutes the most efficient container for package tea. Foil or cardboard packages that do very well on wagon routes and in chain stores, where there is a quick turnover, are not necessarily effective in retail stores where tea remains longer on the shelves, or for shipment to great distances. For the latter uses the slip-top tin container has many adherents.

American tea packers devote much more attention to creating showy containers for their package teas than packers in England and other countries; both color and design are freely invoked, to give striking individuality to the packet teas of many well known American blenders. This applies to the paper packages as well as to cartons, composite, and tin containers.

Individual Tea Bags

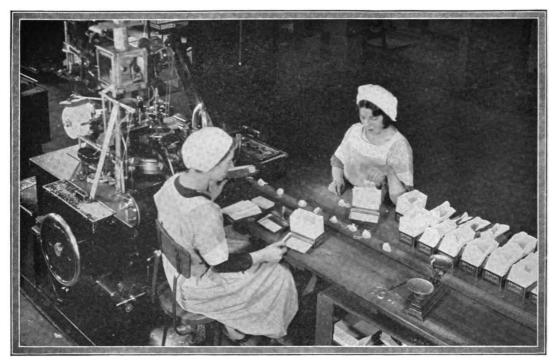
In the United States, where much tea is brewed in little gauze bags, there are at least a dozen concerns that make and pack tea bags for the trade, obtaining the tea from wholesale distributors. A score or more of prominent tea packers also have installed tea-bag-making and packing machines. There are three makes of these machines, the most popular of which costs twelve thousand dollars.

The different makes of tea bags on the American market are grouped under four distinct types. The first, known as the "tea ball," or pouch type, is an unsewed



A New York Plant Where Individual Tea Bags are Packed for the Trade

Showing a battery of machines which make, fill, and close the tea bags; attach tags; count and examine—all automatically and with remarkable accuracy.



A "PNEUMATIC" TEA-BALL MACHINE IN ACTION IN A NEW YORK FACTORY

Five of these units are used. They form the bag, fill and tie it, and attach tag in one continuous operation.

piece of circular gauze that is gathered at the top and tied with a thread. The second is the "tea bag" type. It is made by stitching the gauze on two sides, so as to form an oblong bag, and then gathering the open end after it has been filled. A popular bag of this type is gathered at the top by means of an aluminum band, this being a patented feature. The third type is circular in shape. The fourth type is pillow-shaped, and is made from an oblong piece of gauze, folded and sewed on three sides without being gathered. Each of the four types is regularly equipped with a string having a small tag attached, which indicates the kind of tea, brand, and the name of the distributor. The string serves as a means for removing the bag from the liquor when the infusion has reached the desired strength.

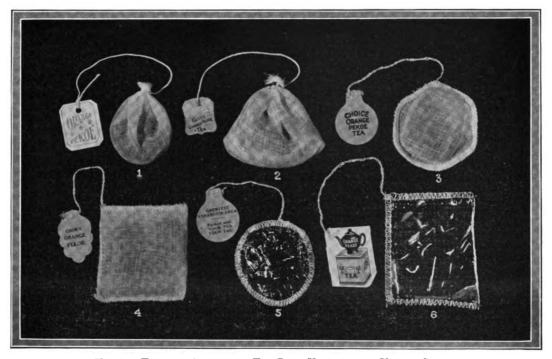
The fifth and sixth types of individual tea containers utilize perforated Cellophane in place of muslin. These are made in both the square and circular shapes.

The additional cost of tea in bags varies through a considerable range, due to the different amounts of tea placed in the bags by various packers, and to the different sized bags used. Tea bags are divided into two general classes—those for individual cups, and those for pot service; the latter again varying from two to four cup sizes.

The cup-size usually runs 200 to the pound, but some packers use 225 and even 250. Pot sizes vary from 100 to 120 and 150 bags to the pound. The tea in the 200, or cup-size bag, weighs about one-twelfth of an ounce; and for the 150, or pot-size, about one-tenth of an ounce; or, to state it differently, from five to ten pounds of tea per thousand bags. This results in an added cost of from two to three times the bulk value of the tea, depending on the grade of tea and the quantity per bag.

Bags for iced tea service have been introduced recently and are proving popular. These contain from one to four ounces of tea. The ounce-size is intended to produce a gallon of liquor, and the larger sizes proportionate quantities.

The packing of the bags by machines has been so perfected that, in some instances, it is fully automatic; the machines handling the bulk tea, string, and gauze, and delivering the finished bags in one continuous operation. A machine of this type receives the tea from an overhead hopper via a rotating tube, rifled on its inner sur-



VARIOUS TYPES OF INDIVIDUAL TEA BAGS USED IN THE UNITED STATES

Four of these exhibits are made of gauze; two of Cellophane. 1. Pouch type. 2. Tea bag type.

3. Round type. 4. Square packet. 5. Circular Cellophane. 6. Square Cellophane

face like a gun barrel. This rotating tube preserves an even flow of tea into an automatic scale that tilts when the required weight has been filled into it, and deposits the tea on a measured piece of gauze.

The gauze is automatically cut to the correct dimensions by a knife; the machine being adjustable to cut any size desired. By means of the adjustable features of the machine there is no difficulty in producing the number of tea balls wanted from each pound of tea.

In action, the tube through which the tea is fed plunges the tea and the gauze through an opening, forming the pouch. The top of the pouch is grasped in a scissors-like device, and is carried along to a point where the top is trimmed off evenly; to another point where the neck of the pouch is tied; and then to a third point, where the identifying tag is fed from a magazine, the string threaded through a hole in the tag and tightly knotted. After this a knife trims the bag top, and the filled bags are carried to girl operators who pack them in display shipping containers. The machine delivers 18,000 filled tea bags in an eight-hour day.

In the early days almost any kind of gauze was used in the manufacture of individual tea bags, but exhaustive experiments by the cotton factors have produced a bleached absorbent gauze that gives the best results. More than eight million yards of this material are used annually by the tea bag trade in the United States.



CHAPTER IV

RETAIL TEA MERCHANDISING

TRADE CHANNELS THROUGH WHICH TEAS REACH THE CONSUMER AT RETAIL—THE PART PLAYED BY INDEPENDENT DEALERS—GROCERIES AND GENERAL STORES—DRUG STORES AND CHEMISTS' SHOPS—COMMISSARIES—TEA BUYING BY ASSOCIATED RAILWAY EMPLOYEES ON "PRIVILEGE TICKETS"—COÖPERATIVE SOCIETIES—MULTIPLE SHOPS, OR "CHAINS"—MAIL-ORDER HOUSES—PRESENT-GIVING COMPANIES—HOME SERVICE MERCHANTS—PACKAGE VERSUS BULK TEAS—BLENDING AND PACKING

HE final link in the chain of tea distribution is its sale by retail dealers, through seven general channels of trade—independent retailers, commissary stores, coöperative stores, multiple shops or chain stores, mail-order houses, coupon or present-giving shops, and wagon-route distributors.

According to methods of merchandising, the seven general groups may be arranged into three distinct classes. The first, where the customer comes to the store to buy, includes the independent grocer and general store, druggist or chemist, the delicatessen, some tea rooms and restaurants, commissary stores, cooperative stores, chain stores, and present-giving shops. In the second class are the mail-order houses, which solicit orders and deliver tea by parcel post and sometimes by freight or express. The third class covers the wagon-route distributors, whose sales and deliverymen go from house to house taking orders and making deliveries. As an inducement to become regular customers the patrons of the wagonroute distributors usually are offered socalled "premiums," or "presents," consisting of useful articles for the home.

Independent Retailers

GROCERS AND GENERAL STORES.—The preponderant factors in retail tea distribution are the independent retail grocers and small general stores selling groceries, of which there are 325,000 in the United States and 80,000 in the United Kingdom.

Originally sold only in the coffee houses and apothecary shops, tea found its way into the grocery shops early in the eighteenth century. At that time, it was a luxury, selling at 16 to 24 shillings a pound, but tea, as well as coffee and chocolate, won its way into the homes of the well-to-do as a fashionable beverage, and numbers of grocery tradesmen in London and other centers of fashionable life found that its sale not only added éclat to their establishments, but returned a most attractive profit, as well.

Not all grocers handled tea at first. In London, those who did were called "tea grocers," to distinguish them from those who did not; but, as tea came into more general use, it became universally a grocers' staple, and has remained so ever since.

The typical grocery of a few generations ago was an ill-lighted, messy place, with dingy, fly-specked windows, an oil and dirt saturated floor, and depressing fixtures, where provisions were weighed over the counter out of open bulk containers. Gradually this was changed by the advent of the ready-weighed and ready-to-sell packet and the competition of spotless chain stores, until the modern grocery is neat and attractive—the antithesis of its former state.

The grocery of to-day invites patronage by attractive displays of colorful packages grouped alluringly on well designed shelving, counters, and in windows. The proprietor who is wise is pretty certain to choose his teas and coffees carefully, and to display them prominently; relying on them as sure-fire trade builders.

Vast changes that were brought about in the retail grocery and tea business by the advent of the multiple shop system led to the formation of the first grocers' association, in the early 'nineties. Others followed quickly. Where mutual suspicion and distrust previously had been the rule amongst grocers, the threat of obliteration caused them to unite; thus substituting a feeling of stability and interdependence. Now, practically every town has its grocers' association, the members being commercially educated, and possessing some scientific knowledge of the commodities dispensed.

Big general stores, or department stores as they are called in the United States, in many cases maintain grocery departments which sell teas and coffees the same as the retail groceries, except that they usually make their appeal through small savings in price. Some of these stores have completely equipped tea blending and packing plants, which compare favorably with those of the wholesale packers, only on a smaller scale.

Drug Stores, or Chemists' Shops.—
Tea and coffee find an appreciative market through the avenue of a certain proportion of the retail chemists' shops, or drug stores, as they are known in the United States. Originally, fine teas and coffees were considered part of the main line of the apothecary or herbalist, for, while they were recognized as table beverages, the fact that they possessed medicinal qualities as well placed them in the handling of the purveyor of medicines. To-day they are handled, if at all, as a side line, but, in some cases, by no means an unimportant one.

The druggist or chemist suffers some handicaps in selling these goods, not being equipped for their delivery as are many grocers, but usually does it as a leader to get people into his shop. Therefore he commonly lays great stress on price and makes this quite reasonable for an excellent quality.

Delicatessen Shops, Tea Rooms, etc.—A great number of delicatessen shops in the thickly populated cities of Europe and America offer prepared foods, such as cooked meats, salads, etc., and handle more or less complete lines of groceries, including teas and coffees. Dairy, meat, and

fruit and vegetable shops also sell teas and coffees.

Some restaurants and tea rooms, with established reputations for the quality of their table beverages, make it a point to offer for sale packets of their own special brands of tea and coffee.

Commissary Stores

The exigencies of the labor situation in many large industrial, mining, and lumber companies have brought into being large numbers of commissary, or "company," stores for supplying goods to employees at the lowest possible cost. They are found principally in the United States, where they range from small grocery stocks to completely equipped department stores.

The industrial commissary is at once an opportunity and a stumbling block to the wholesaler. Due to their ownership by large corporations, the accounts of these stores represent credits of a character unusual in the retail provision field, while their turnover is both rapid and regular. On the other hand, having a strong financial position they can buy closely, and sell at bare cost.

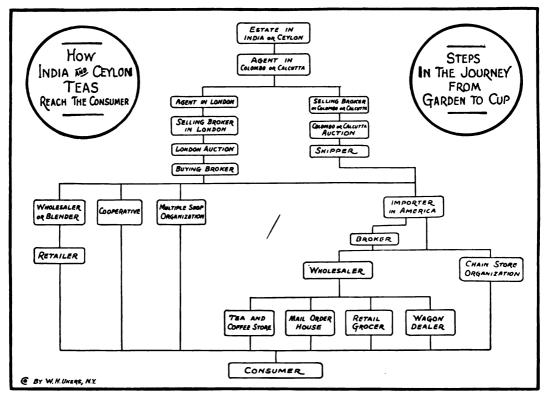
A wholesaler cannot permit his advertised brands of tea or coffee to be sold under these conditions with fairness to near-by retailers, so he often is faced with a choice between the independent retailer accounts or that of the industrial concern. Some wholesalers solve the problem satisfactorily by selling only bulk tea and coffee to the commissary, and then selling their advertised package goods to the regular dealers.

Unless their location is quite remote from other places to trade, few industrial commissaries are able to command more than a good percentage of the employee business. For various reasons having to do with ethics and with wider selection of goods, a portion of the trade always goes by preference to regular dealers.

The commissary stores in the United States are distributed among approximately twenty-five industries, and are between six and seven thousand in number.

Tea Buying by Railroad Employees

Most English railroad companies have what is known as their Railroad Employees' Privilege Ticket Association. The



majority of railroad employees are "privilege ticket" holders. The ticket costs them three pence a year. It is in the form of a tiny red-covered folder bearing the holder's name and number, and is signed by the general secretary of the association.

Men holding annual tickets are entitled to discounts on tea and kindred purchases made through the Association. The London, Midland & Scottish Railway Co., for example, obtains its tea and coffee supplies from the company which packs "Nulha" tea. This company puts out its tea in artistic red packings; the best quality plainly price-labeled 3/—[75 cents] a pound packet. A cheaper grade is supplied at 2/6d. a pound.

The tea is distributed through the general secretary of the Privilege Ticket Association to the railroad employees at every metropolitan and suburban railroad station of any importance. The secretary may have anywhere from 10,000 to 40,000 employees buying their weekly supplies through the Association at one time. Platform porters, booking-office clerks, guards, engineers, stokers, all obtain their tea in this way. It does not please the retail grocer, but it pleases the railroader's wife,

since she can save a couple of shillings on the weekly tea bill. Incidentally, it means a big business for the merchants who distribute the supplies.

Coöperative Societies

The coöperative society, like the industrial commissary, is a means toward lowered living costs for its patrons, mostly working people, who are careful shoppers and want sound teas of fair quality. Instead of direct price cutting, as in the case of the industrial commissary, the most successful coöperative societies charge current retail prices and pay back a percentage of their profits in small dividends to customershareholders, based on the purchases of each.

Coöperative retail enterprise has reached huge proportions in Great Britain, and now includes approximately 6½ million shopping members. The buying for this trade has been organized as a joint coöperative wholesale society, which also has reached huge proportions. The coöperative retail societies of England are banded together in the English Coöperative Wholesale Society. Founded on a small scale, its sales

now run into the hundred-millions and the profits are distributed to the retail cooperatives in the same manner that the retail coöperatives disburse dividends to their individual members.

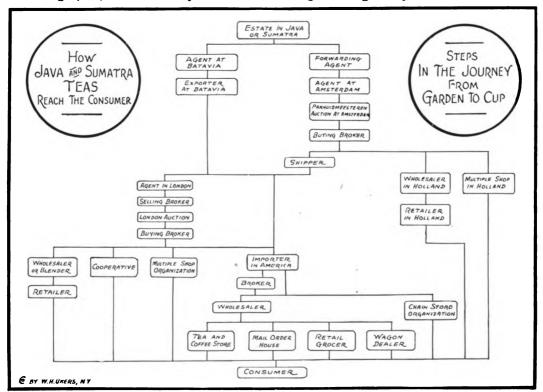
The Scottish coöperative stores also have a wholesale society, not relatively less important than the English. Like its English prototype, the Scottish Coöperative Wholesale Society returns its profits as dividends to its retail members; but a portion of the profits also are paid to its employees as dividends on their wages.

For many purposes, including the purchase, blending, packing, and distribution of more than 120,000,000 lbs. of tea annually, the English and the Scottish cooperative wholesale societies are in partnership under the name of the English & Scottish Joint Cooperative Wholesale Society, Ltd., with headquarters in London. The Joint Wholesale Society now handles about onesixth of the entire tea trade of Great Britain, and in Leman Street, London, maintains a warehouse which ranks with the largest and best equipped of its kind. It has about 135,000 square feet of floor space and a total output of packeted tea exceeding 1,000,000 lbs. weekly.

There are about 1300 retail coöperative societies, with a membership of over six million, represented in the English and Scottish joint coöperative wholesale societies, and each has its own branches with a total of 5000 shops scattered throughout England and Scotland. These shops purchase their teas ready for sale from the Joint Coöperative Wholesale Society.

The cooperative societies have greatly increased the number of their retail shops of late years. There are in the London district alone more than 250 splendidly equipped cooperative groceries, and outside the metropolitan district practically every town has its cooperative store, the grocery trade of which accounts for 75 per cent of its total sales, and every independent grocer is in daily competition with it; yet, strangely enough, the independent grocer contrives to hold his customers, some of whom are shopping members of the neighboring cooperative.

The truth is that the cooperatives are at a disadvantage as to price changes. They make their purchases from quarter to quarter and, because of the magnitude of the enterprise, their prices remain unchanged during each period of three months.





A BRITISH COÖPERATIVE SHOP INTERIOR

This constitutes the vulnerable spot for the independent grocer who buys from week to week, and changes his prices accordingly. The housewife, even though a registered shopper at the coöperative shop, is quick to notice lower-priced goods at the grocers, and she is more than likely to buy where she will get the lowest price.

For the convenience of patrons some of the larger coöperatives have installed restaurants and tea rooms, where the service of their special brands of tea are featured with other refreshments.

Mainly the cooperative societies' members are held by the dividend inducement, which varies in the different societies from 1s. to 1s. 10d. per pound sterling of purchases. The dividend can be drawn immediately or placed on deposit; in the latter case interest is allowed.

Thus far the cooperative idea has failed to develop extensively on the western side of the Atlantic; the American working man being too prosperous, or, perhaps, too busy, to organize the purchase of supplies. It is true that several cooperative store societies on the Rochdale plan have been formed at various times, but they failed for want of proper management and support. The Mormons at Salt Lake City, Utah, however, maintain a huge coöperative mercantile store as a cog in their extensive economic and commercial system. establishment handles low priced department store lines, including groceries, is well managed, and notably successful.

Multiple Shops, or "Chain Stores"

The multiple shop, or "chain store" as it is known in the United States, is an evolution in merchandising developed in response to popular demand for economy. The chain store organization functions both as wholesaler and retailer, and in the dual capacity serves both the producer and consumer economically. It buys in larger quantities than most wholesalers, and claims to pass the low cost on to the consuming public.

In America, "chains" have been developed in three principal lines of retailing and each of the three sells tea; they are groceries, drug stores, and tea and coffee

specialty shops.

The chain groceries represent a radical departure from some of the more expensive attributes of the old, independent retail grocery. Quite generally they feature the "cash and carry" plan of selling, thus eliminating the costly canvassing for orders, delivery, and the carrying of accounts common to the older system.

The labor of handling and weighing out teas and other goods has been very largely reduced by the growing use of the labeled and ready-weighed package. Less than a score of items are weighed over chain grocery counters nowadays, and even these few items are available in ready-packed form with the weight plainly marked for those who will pay a little more.

The technique of display has been combined with a spotless neatness. In some of the organizations, display supervisors go about regularly from one store to another supervising the shelving of stock, and trimming of windows. Other chains send out pictures, or diagrams, of standard displays for all stores, and the necessary cards, posters, and ornamental or mechanical features for their execution.



TEA DISPLAY IN A LYONS TEA SHOP ENTRANCE





Typical English Multiple Shops

Upper—Maypole Dairy. Lower—A Home & Colonial Store.

Both bulk and package teas are handled in the average chain grocery. The package teas of leading proprietary brand packers are regularly carried in stock, as well as the "own" brand of the grocery chain. Easily legible price cards appear in front of each brand and each sized packet, to assist the purchaser in making a selection.

A few of the big drug store chains make tea and coffee a leader line, selling large quantities. One of these chains operates 450 stores, and tea is a featured item. Having educated their customers to use certain brands, it is not difficult to keep up sales by means of well directed promotional work. In addition to drug store chains, there are, in the United States, large drug companies like the United [Rexall], having independent drug stores as agencies. These feature tea and coffee from time to time, using much the same methods as chain stores in keeping their brands before the public.

Multiple tea and coffee specialty shop organizations in England, America, continental Europe, and the Antipodes successfully apply the principle of unit buying to the business of intensive tea and coffee retailing. There are large numbers of such organizations that center their attention on tea, coffee, and cocoa; but handle grocery

lines as well. One concern, for instance, has shops scattered throughout Great Britain, which exist chiefly for the distribution of tea, coffee, cocoa, and other grocery lines. Whenever a drop in tea occurs in Mincing Lane, the windows of these stores immediately are plastered with bold announcements of the fact. The new prices are displayed, and tea, coffee, or cocoa—whichever is affected—is shown exclusively in the windows. Often these tea, coffee, and cocoa displays are changed daily. The packet teas are put up in brightly colored covers, and the various brands are built up in all manner of shapes to secure artistic and attractive effects.

This company has its own factories for preparing and packing many of its products, including teas, and these are dispatched daily by goods van, motor lorry, or horse-drawn vehicles to the different shops.

There are in the neighborhood of 500 multiple shop organizations in Britain operating upward of 15,000 shops. The largest has 1000 retail branches, and still is growing. In the United States, there are 860 grocery chains operating more than 64,000 retail chain stores. The largest has 15,700 retail establishments, and claims to sell more than one-sixth of all the teas consumed in the United States. The methods followed by the American chains are much the same as in Britain; the principal difference lying in the greater amount of territory covered, and the consequent differences in administrative arrangements.

The multiple shop idea has invaded the Netherlands, and retail food store chains have an important part in the retail distribution of tea. One of the principal



A LYONS TEA SHOP





Typical American Chain Store Interiors

Upper—A First National Store.

Lower—An A & P Store.

concerns has 160 shops scattered about the cities of Holland. This firm specializes in broken teas, packing its own proprietary brands; also cocoa, chocolate, jams, vermicelli, cereals, etc.

In Germany, there are several multiple shop organizations having from 100 to 1000 branches for the retail distribution of general groceries, including coffee, tea, and chocolate. In the branch shops all goods are sold at fixed prices.

In addition to the grocery "chains" in Germany, there are at least two multiple shop organizations specializing in coffee, tea, and cocoa. One of them caters to the more discriminating and better class of trade, not only in the grades of tea offered for sale, but in more attractive packing and store fixtures. Practically all of the others endeavor to serve the needs of the masses.

Considerable tea is sold through multiple shops in Australia, but their number is not great, owing to the limited population, as compared with England, or America. The largest operator is estimated to have eighty shops, with the next largest under thirty. The former has gone into the selling of tea in a very thorough manner, and has a

unit trade far ahead of the ordinary single shop grocer.

The chain type of management has spread through Canada. During 1929, no fewer than 1000 new chain-store units were established, as against 700 in 1928, making a total of 3700 in operation on January 1, 1930. Of the total number 1670 were stores in grocery chains.

France has 106 grocery chains varying in size from fifteen to 1000 units, and having a total of about 18,500 stores. There is one large chain with 956 branches, dealing only in coffee, but none devoted exclusively to the sale of tea.

Five and ten-cent self-service groceries have recently made their appearance in the larger cities of Eastern United States; the idea having originated in Boston, Mass. Practically every grocery product is sold, including tea and coffee. No article costs more than five or ten cents. Baskets are supplied at the door, and after the customer has selected what he desires, he pays for it on the way out.

Mail-Order Houses

There are two different types of mailorder houses selling tea direct by mail to consumers; the first specializes exclusively in tea and coffee, either or both, while the other includes the big, general mail-order houses that handle many grocery and general merchandise items.

Of the first class there are a number of concerns in both America and Europe. These firms are able to concentrate their entire selling efforts on their special brands, and to push them with the class of trade they desire to reach.

The big, general mail-order houses, of which there are several specializing in rural trade throughout the United States and Canada, offer catalogue selections of teas to suit a variety of purses and tastes, but do not feature them above other grocery items.

Speaking generally, mail-order houses in all tea consuming countries secure the best results in agricultural districts and rural communities. They solicit trade by advertisements in newspapers and periodicals that circulate chiefly among those engaged in planting industries, following this by sending circulars and catalogues to prospective patrons.

New impetus was given the mail-order

business in America when the parcel post system was adopted by the United States Government in 1912; and since then this plan of selling has become an important feature of retail merchandising.

In England, the Imperial Cash on Delivery Association, composed of retailers, encourages its members to develop the mail-order system under the slogan, "Tea direct from ship to teapot." A long overdue facility was started by the British Post Office by the adoption of inland C.O.D. service in March, 1926. The Postal Department handled more than 1,000,000 C.O.D. parcels in the first year of the service.

Present-Giving Companies

The present-giving idea in connection with tea selling originated in England, and later extended to the Continent, North America, and Australia. It involves the "gift" of a book, cup and saucer, or some other article, with every pound of tea purchased; or else a coupon entitling the purchaser, in return for a number of tickets, to a more valuable article representing the premium on say twelve or twenty pounds of tea. The plan never found acceptance by the grocery trade, but is carried on in special tea shops that display in their windows all sorts of showy domestic articles given with purchases.

Present-giving shops very largely passed out with the close of the nineteenth century, although a few remain in Holland, England, and Australia. In America, they have been almost entirely superseded by the tea home service, or door-to-door distributors.

Home Service Merchants

The home service merchants of the United States, where this form of selling has reached its greatest volume, place great dependence upon the lure of premiums, or "specified merchandise," as some prefer to call the useful articles given with stated amounts of goods sold. These include silverware, aluminum-ware, glassware, dry goods, etc., in addition to chinaware, and other useful articles.

Practically all leading home service concerns now favor the advance premium plan, whereby the premium is delivered complete to the customer when she begins



AMERICAN HOME SERVICE MERCHANDISING

Upper—Home service delivery. Lower—Premium display.

her trade. The premium she selects is charged to her account, and sums based on the amount and kind of products purchased are credited against the charge until it is wiped out or reduced to a small amount, at which time she is entitled to another premium.

The volume purchased at each delivery determines the amount of premiums advanced. Orders are taken by the deliveryman, and he usually is held responsible for the customer fulfilling the agreement.

In many cases, the articles offered as premiums also are offered for sale outright. The catalogues usually state cash prices for the articles, as well as the premium basis on which they are obtainable.

In recent years, the home service merchants in America have developed more general lines, selling all kinds of household commodities, in addition to tea and coffee.

The latest edition of *Ukers' Tea and Coffee Buyers' Guide* lists almost 500 home service concerns. These range from small distributors operating a single store or warehouse, and serving perhaps 100 or more families, to the largest, which maintains two big manufacturing plants, eighty-one branch warehouses, about 1400



THE JEWEL TEA COMPANY IDEA

Upper—Home delivery car.

Lower—Jewel self-service store.

delivery cars, and has more than 900,000 patrons.

House-to-house canvassing is not confined to the United States, although here it has attained by far its greatest development in point of volume. One of the largest tea packing concerns in London sends its vans all over England delivering to retail customers, although its packeted teas are almost universally stocked by grocers throughout the country. Likewise, there are large house-to-house canvassing firms in Australia. One such concern numbers its customers at more than 50,000.

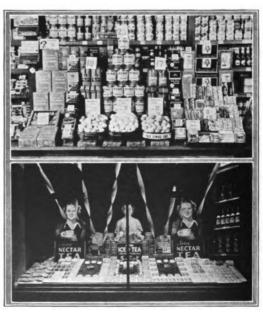
Tea Retailing as a Business

Tea retailing is a big subject and it requires years of intimate contact with the business to become familiar with its many angles. However, the man who intends to take up retail tea merchandising learns all he can about the teas to be had in the principal markets, their general characteristics, and seasonal variations. He finds out how and why teas are blended, and ascertains the best method of brewing. Then he tests each grade and kind in local use on his own table, if he does not have testing facilities at the store.

In addition to knowing the salient facts about the teas entering his home market, the retailer studies the requirements of his particular locality. Certain growths sell best in certain sections. The water characteristics also vary in different parts of the country, and this has a bearing on the kinds of tea used.

There are two basic plans of tea merchandising on one of which a retailer builds a successful business. He either buys teas that are blended by the wholesaler and ready for sale to his customers or else purchases the necessary assortment of original chests as they come from the producing countries and blends his own. Both plans have advantages and drawbacks. Only a few independent retail grocers make up their own blends to-day, although it is quite common for certain English and a few American grocers, small grocery chains, and home-service firms to have their private blends made up and packeted under their "own" brands by some of the large packing concerns. On the other hand big chain or multiple shop organizations, home-service concerns, and associated cooperative stores do their own blending and

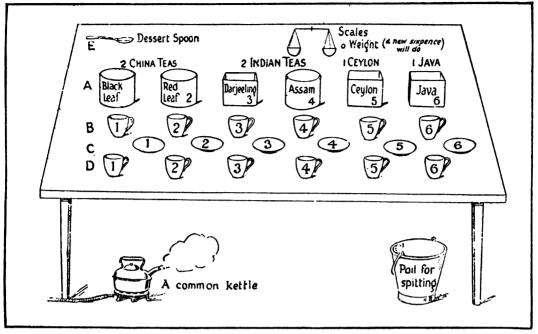
A secondary difference in methods of tea merchandising is that some retailers sell tea in bulk out of large chests or canisters, while others sell a part or all of their teas ready weighed and packaged in sizes suited to the demands of their trade.



CHAIN STORE TEA AND COFFEE DISPLAYS

Upper—First National counter display.

Lower—An A & P window display.



A SUGGESTED RETAILER'S OUTFIT FOR TASTING TEAS

In this simple but practical lesson by Mr. C. L. T. Beeching, the teas are first put into the cups of row D and infused six minutes. Then they are strained into the cups in row B. These are next moved into the front row and the leaves remaining in the first front row of cups are turned into the saucers which are then placed on top of their respective cups in order behind the cups containing the liquors. All is now ready to study A, the dry leaf, B, the infused leaf, and C, the liquor, and to make sight, taste, and smell comparisons.

Package Versus Bulk Teas

The question as to whether it is most advantageous to handle bulk or package tea is an individual problem to be decided by each dealer, according to the requirements of his business. There is no reason why he should not deal in both.

From the viewpoint of the retailer, it is undoubtedly much the easiest way to handle recognized, advertised brands of package teas. The quality of these usually is known to the consumer, and the price is satisfactory to him. The bother of weighing and wrapping is eliminated, and the argument of cleanliness appeals to people. Moreover, the margin of profit compares favorably with the profits on other lines.

On the other hand, if the retailer is a tea man, knows tea, and is interested in it, he can handle bulk teas in such a manner as to give better quality at the same price and, at the same time, make tea one of the most profitable articles he handles. By a study of the tastes of his customers, combined with a little salesmanship, he should be able to convince his trade that he can furnish tea to suit their tastes.

Blending and Packing by Retailers

Previous to the last quarter of the nineteenth century, almost any grocer and tea dealer who was considered a master of his trade, prepared his own special blends for discriminating customers, and would have felt himself highly affronted if advised to buy blended teas from a wholesaler. would not have occurred to him that the wholesale distributor could or should know anything about such matters. Even today there still are grocers who buy in original packages and please their trade better than the wholesale blenders do. However, the retailer without a fairly large turnover can hardly afford to do his own blending, because he has to carry on hand too large a stock of original teas to follow closely the turns of the market.

Teas of all kinds must be watched carefully in order to buy when the price is right. Therefore the buyer of "originals" must have the capital as well as the turnover necessary to take advantage of the market. The situation is complicated further by the advisability of using as many component teas as reasonably possible in



LONDON TEA BLENDING COMPETITION UNDER THE AUSPICES OF THE INSTITUTE OF CERTIFICATED GROCERS

blends—say anywhere from half a dozen to twenty—in order to be able to drop out or replace any unobtainable or seasonably undesirable component without its being noticed.

An English grocer of great practical experience in the matter has stated his opinion that a man who buys less than sixchest lots, and those rather frequently, will do better nowadays to submit samples of his "own" brands to blenders in whom he has confidence, asking that they be matched; and then buy where this may be done to best advantage.

The best advice for those who are starting in the tea business, and who are in doubt whether to blend or buy blends is, on the start at least, to buy them.

The practical grocer who makes up his own blends is acquainted with tea characteristics insofar as they apply to the teas with which he has to deal and with blending and packing methods. It will not be necessary to go into these descriptions here further than to add that the retail packer and blender goes into the selection, blending, and packing of teas in much the same way that the wholesaler does, only on a smaller scale—except in the case of multiple shop concerns, etc.—and if he uses

machinery at all it is greatly simplified and of much smaller capacity. Tea-machinery manufacturers turn out small cutters, sifters, stalk removers, mixers, etc., expressly for this class of work; at the same time, some dealers believe they get the best results by hand methods, using a scoop and a clear space on the floor for their mixing operations.

Now that tea is sold so extensively in packages, most first-class dealers are tempted at some time or other to put out packets under their own label. This idea makes a strong appeal to the progressive dealer, who usually envisions such a demand for his product that other retailers will be induced to handle it.

Some old-established merchants, possessing the confidence of the trade and an expert knowledge of tea, can and do put out teas under their own private brands with a fair measure of success; but, as a rule, those who go in for this sort of thing give it up after the first one or two orders and return to the established trade mark brands.

The packing and introduction of a brand of package tea really is a business by itself and worthy of the entire time and attention of the proprietor. When a distributor at-

tempts to establish a brand as a side issue to his regular business he is at a great disadvantage as compared with the packer who is concentrating all his energy and ability on the one purpose.

Dealers who do their own blending find. as a rule, that they do better by storing their teas in the original bulk packages or in shelf canisters, rather than by packeting a large supply in advance of requirements. Teas of all kinds, and particularly Ceylon teas, deteriorate more rapidly in small packages than in bulk. Such teas usually are ordered in small quantities at frequent intervals, and are blended to suit current requirements. It has been found, however, that a mixture is somewhat improved if allowed at least a week in the packets or in a tight bin before being used. Take, for instance, a flavory Orange Pekoe that is sold in half-pound lead packets. It is at its best after it has been packeted a week or two, but after it has been on the shelf for six months it loses its greatest attraction-flavor.

One of the reasons that chain and economy stores can sell low-priced goods to customers accustomed to better grades, is that they make a point of selling their tea

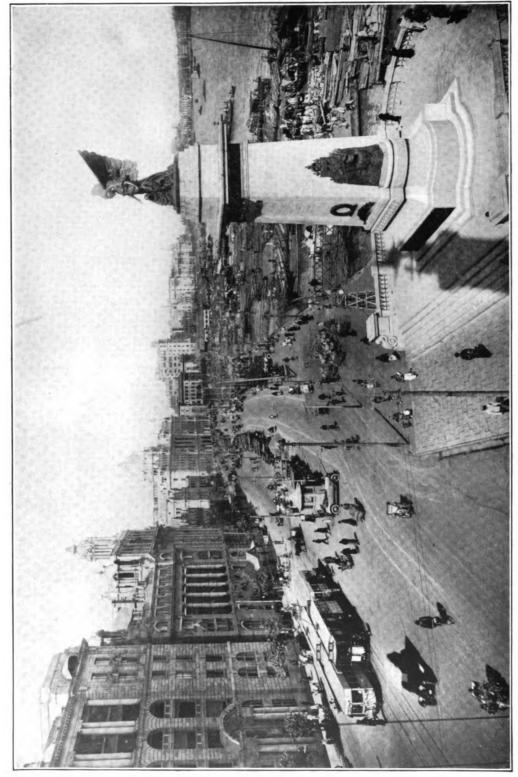
when it is bright and fresh. The same thing is true of coffee.

Blending Competitions

Tea blending annually becomes an outand-out sporting event at the Grocers' and Allied Trades Exhibition in London, when masters, managers, and assistants from retail grocery establishments throughout Great Britain contest for supremacy and the custody of the Grand Challenge Blending Cup offered by *The Grocer and Oil* Trade Review. In addition to the cup, the Exhibition authorities give £10 as first prize; £5 for second prize; £2, third prize; and a diploma for fourth.

This is one of fifty competitions that lend great interest to the exhibition, and cover a variety of grocers' activities; such as, weighing and wrapping tea, cheese, bacon, etc., for speed and neatness, trimming windows, dressing counters, and several special tea blending events. The Grand Challenge is, however, the "classic" among the competitions, and, needless to say, the winner derives no slight advertising prestige from his title as cup winner.





THE FAR-FAMED BUND AT SHANGHAI, PRESENT-DAY CHINA'S LARGEST TEA-TRADE CITY

CHAPTER V

HISTORY OF THE TEA TRADE IN CHINA

EARLY TRAFFIC IN TEA AS A MEDICINE—ITS SALE FOR BEVERAGE PURPOSES BEGINS—BRICK TEA FOR TIBET—THE PICTURESQUE CARAVAN TRADE—RUSSIANS ENGAGE IN BRICK TEA PRODUCTION ON A LARGE SCALE AT HANKOW, FOOCHOW, AND KIUKIANG—THE SEABOARD TRADE—PERIOD OF BRITISH DOMINANCE—THE RUSSIANS OBTAIN CONTROL—COHONG DAYS AT CANTON—THE FOREIGN FACTORIES—PIONEER TRADERS—HOWQUA, THE CHINESE CRŒSUS—PROMINENT LATTER DAY TEA FIRMS

TEA trade history began when the leaves of the tea tree were first sold locally as medicinal simples in certain parts of the province of Szechwan, Western China, probably as far back as the fourth century. The exact date is not known for the reason that no records have been found in early Chinese literature dealing with trade history. The tea business took on commercial importance and grew rapidly after tea came into common use as a refreshment beverage. It first became an article of export toward the end of the fifth century, when Turkish traders appeared on the Mongolian border to barter for Chinese produce.

Early Chinese Tea Trade

With the discovery of the tea manufacturing process, which occurred early in the T'ang dynasty, A.D. 620-904, the transportation of tea became possible and the trade soon followed the fame of the new drink down the Yangtze River, China's great transportation artery, to the seaboard provinces.

Early in the progress of tea down the river, or about A.D. 780, Lu Yu, the foremost authority on tea and its use, was induced by the merchants of Hupeh Province to write his famous tea book, Ch'a Ching. This was the first concerted effort to promote the tea business through publicity.

In the same year, A.D. 780, the trade had assumed sufficient importance to attract governmental attention as a source of

revenue, and the first tax on tea was levied. This was soon abolished, but again put in operation in 793.

During the Sung dynasty, A.D. 960-1127, the Government permitted an export trade along the northern border, and this developed into the later caravan trade across the great Mongolian Desert.

Early Days of Tibetan Brick Tea

At the same time that an export trade was starting along the Mongolian border, Szechwan and Yunnan Provinces in Southwestern China were promoting a tea trade with Tibet that developed along its own peculiar lines.

A rough tea was made into bricks and bales, which were carried by coolies, mules, and yaks over incredibly difficult paths into Tibet. An extensive trade in this crude product was soon established and has continued unchanged down to the present.

Two great market towns, Ta-chien-lu and Sungpan, on the rugged western border of the province of Szechwan, mark the centers where these Tibetan teas arrive and are dispatched into Tibet. Teas for the two markets are produced in entirely separate districts and differ widely in character.

The Russian Caravan Trade

Although the first news of the tea drink of China was brought to Russia as early as 1567 by two Cossacks, Ivan Petroff and Boornash Yalysheff, and a small gift of



Russian Camel Train at Peiping

Upper—Inside the gates.

Lower—Outside the walls.

tea was brought by a Chinese embassy to the Czar Alexis at Moscow in 1618, it was not until the signing of the Nerchinsk Treaty between China and Russia in 1689 that small quantities began to reach Russia by the overland route via Mongolia and Siberia.

All of the first teas received in Russia were brought by government caravans, but in 1735 the Empress Elizabeth established a regular private caravan trade between Russia and China. The quantities of tea imported in this way were not great at first, because tea was so costly-fifteen rubles a pound in 1735—that only court nobles and officials could afford to buy it. Also, the caravans, although sent regularly, were unable to carry large amounts of tea. It has been estimated that during the first part of the eighteenth century not exceeding 10,000 poods [about 361,130 lbs.] a year entered Russia; but a century later the annual imports had climbed to 100,000 poods [3,611,300 lbs.], almost entirely chest

The caravan trade, which has passed into history, presents one of the most vividly

picturesque chapters in the annals of the tea trade, but few of us to-day appreciate its difficulties, or the length of time it took to get a shipment of tea from China to Russia in this way. Ordinary caravans numbered some 200 to 300 camels, each loaded with four chests of about 16 poods each, or about 600 pounds. The pace averaged approximately two and a half miles an hour, and the average day's journey about twenty-five miles. The entire 11,000-mile trip took sixteen months. After the tea had been brought by water to say Tientsin, horses and mules were used for the first leg of the journey over the mountains to Kalgan, 200 miles northeast of Peiping. At Kalgan the tea was loaded on camels for the 800 gruelling miles across the Gobi Desert. This was the most adventurous part of the journey, but it formed a short cut to Kiakhta and the balance of the route to Russia via Irkutsk, Nij-Udinsk, Tomsk, and Oomsk to Cheliabinsk.

The caravan trade from China to Russia via Mongolia reached its maximum during the years 1860–1880. In the latter year, a portion of the Siberian Railway was opened to traffic and the caravan trade began to decline. It disappeared entirely after the completion of the last link in the route from Vladivostock to Russia in 1900, when teas that formerly required sixteen months for the caravan journey made the trip by rail in seven weeks.

The Russian Brick Tea Trade

About 1850, the Russians began buying tea at Hankow, the great commercial center of the interior of China, located on the north bank of the Yangtze River at its junction with the Han and approximately 600 miles from the sea coast.

Hankow then was the central market for China's best black tea districts, and here the Russians came to buy Congou; but later they bought the brick tea which the Chinese had long been engaged in making for the Mongolian trade.

In 1861, the port of Hankow was thrown open to foreign trade and the Russians built the first of their brick tea factories there. They pressed tea bricks after the Chinese fashion by a number of men tugging at a huge lever press or twisting the screw of a device much like a wine press. Later, steam was introduced, and in 1878 the hydraulic press came into use.



LOW WATER ON THE YANGTZE KIANG AND THE BUND AT HANKOW

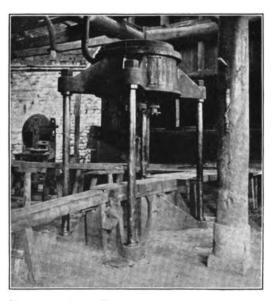
At first, odd lots of tea dust were used for making Russian bricks, but as the trade progressed better quality was required and machinery was installed to mill tea into dust. Ultimately, the quality of some of the brick teas for home use in Russia was so improved that they sold for as much, if not more, than the Congou, or uncompressed leaf.

In later years, considerable quantities of India, Ceylon, and Java tea dust were imported to augment the available supplies of raw material for the manufacture of brick tea.

In the 'seventies, Russian firms started the manufacture of brick tea at Foochow, one of the three seaports of Fukien Province, and the one which played the most important part in the tea trade of the 'seventies and 'eighties. Three British firms also established brick tea factories, and by 1875 the output of brick tea from Foochow was 6,200,000 pounds. In 1879, this had increased to 13,700,000 pounds. The trade continued with various ups and downs after that until 1891, when the Russian merchants transferred their tea buying to Hankow and Kiukiang.

In the decade from 1891 to 1901, the manufacture of brick tea was developed

considerably by the Russians in Kiukiang, and it was in 1897 that they began the importation of tea dust from Ceylon for the purpose of mixing it with the materials used in the manufacture of black brick tea. Beginning in 1891, tablet teas also were manufactured by the Russian fac-



HYDRAULIC BRICK TEA PRESS, IN A NATIVE FACTORY



RUSSIAN BRICK TEA Front and rear views.

tories at Kiukiang, but the trade never reached an important volume. Its maximum was 872,933 lbs., in 1895, but now the manufacture has ceased entirely.

Both the Kiukiang and Hankow markets received paralyzing blows in 1918, when Russia stopped buying tea. The great factories have lain idle most of the time since, and many Chinese as well as Russian firms met financial disaster.

The following were well-known names among the Russian tea firms in Hankow in the pre-revolutionary period, before the Sovietizing of Russian business removed them from the market: A. Goobkin; A. Kooznetzoff & Co.; V. Vyssotzky & Co.; Tea Trading Co.; K. & S. Popoff Bros.; Vogan & Co.; D. J. Nakvasin & Co.; Molchanoff, Pechatnoff & Co., Ltd.; and S. W. Litvinoff & Co., Ltd. Several of these firms had modern factories for the manufacture of brick and tablet teas.

Among the Chinese tea firms that survive at Hankow, mention should be made of Shin Shang Company, owners of a factory that manufactures brick tea for Mongolia and Siberia; also Chung Shing Chang, Shun An Chia, Shing Lung Tai, Yuan Lung, Wen Hu Lung, Hung Chang Lung, Si Tai Chang, Shing Sheng Chang, and Kung Chiang Hsiang.

In addition to the Chinese and Russian firms at Hankow various British, American, German, and French concerns have had offices there at different times, either as buyers, or brokers.

Growth of the Seaboard Trade

The history of China's earliest seaboard tea-export trade is obscure. It had to do with the transportation of small amounts of the prepared leaf by sailing junks to Japan, after Chinese civilization and Buddhism spread to that country about the year A.D. 593.

The Dutch were the first Europeans to export tea from China's seaboard. They brought some tea from the Portuguese settlement at Macao to Batavia, their island base in Java, in 1606-07. At that time they tried to establish direct trade with the Chinese at Canton, on the Pearl River above Macao, but were blocked by the Portuguese. Later, they tried to capture Macao, but were unsuccessful. However, they gained a base off the coast of China by occupying Formosa, which they held until driven out in 1662. They occupied Amoy and Foochow for a short time in 1663 and 1664, and after that they were permitted limited trading privileges at Canton in common with other foreign buyers. A Dutch factory was established at Canton in 1762, from which an important tea trade was developed.

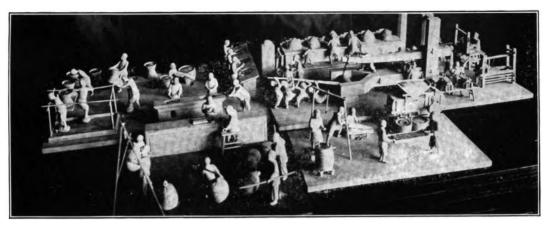
The United States first entered the China trade in 1784, when the "Empress of China" arrived at Canton with a cargo of ginseng, and carried back a cargo of tea and other China products. There were temporary interruptions to the American tea trade with China, but the Americans attained a position at Canton second only to the British and, in 1844, the United States and China entered into a treaty which was signed at Wanghia on July 3 of that year. There was a steady growth of the tea trade with America up to the 'eighties, but from then on British-grown teas from India and Ceylon began to usurp the place held by China teas in the United States, and since 1886 the trade has stead-

ily declined.

The Russians sent two ships to Canton in 1806 with a view to establishing them-



RUSSIAN BRICK TEA Front and rear views.



Wooden Model of a Native Brick Tea Factory in the District of Yanglowtung

Bags of tea being brought in for rolling by the feet; basket firing, panning, sifting, and, finally, the
bricks being made in a crude wooden hand press worked by four men and a supervisor.

selves at that port, but the officials at Peiping preferred to hold the Russians to their previously established overland trade in the north of China, and prohibited trade at Canton to any nation not already established there.

The first attempt of the French to establish themselves at Canton was made by private enterprise in 1728. This was renewed in 1802 and again in 1829. At various dates other nations came to Canton to share in the China trade. The Swedish East India Company was chartered in 1731. They established themselves in one of the factories leased from the hong merchants, as did also the Danish and Imperial [Austrian] companies.

The British made several attempts to establish a trade with China before they finally succeeded. A fleet sent by the English East India Company tried to reach Canton in 1627, but was prevented by the Portuguese, who stopped the English ships at Macao. In 1635, the English company made a treaty with the Portuguese admitting them to trade at Macao, and in the same year the Viceroy of Canton granted them permission to trade there. In 1664, the English East India Company established a house at Macao, and in 1684 they began the erection of a factory on the waterside at Canton.

Period of British Dominance

The English East India Company imported its China teas at first from Java, then from Madras and Surat in India, and,

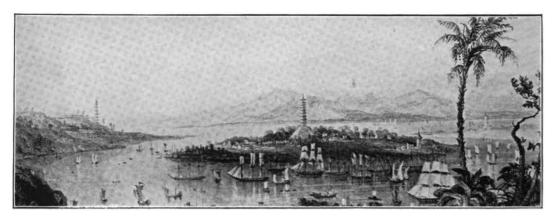
finally, direct from China, where, in 1689, the first direct importation was purchased at the port of Amoy. Throughout its earlier years teas bought by agents of the company at Chinese ports were shipped to Madras, where the cargoes of the homeward-bound Indiamen were assembled.

From the end of the seventeenth century England steadily increased her exports of tea from China—both for home consumption and for reëxport to other countries—being in practical control of this highly profitable trade for approximately 200 years. The peak year was 1886, when China's total exports were about 300,000,000 pounds. After this, British buyers began to transfer their activities to India and Ceylon teas, gradually abandoning the China market to Russian merchants, who had been their principal competitors.

Russians Obtain Control

Russia's predominance began in 1894, when the Russian exports first exceeded those of Great Britain, and was maintained until the collapse of Russian buying in 1918.

Most of the China teas for the Russian market went overland by the caravan route at first, and later via the Siberian railway; but, in addition to the overland export, Russia started in the 'sixties to ship tea by sea via the Suez Canal to Odessa, her port of entry on the Black Sea. These shipments, however, were small and unimportant up to the end of the 'eighties, when conditions began to change, and the Rus-



THE WHAMPOA ANCHORAGE AT CANTON, CHINA, ABOUT 1840
Several East Indiamen are to be observed in the foreground. From a steel engraving in Thomas Allom's China, Its Scenery, Architecture and Social Habits at the Metropolitan Museum, New York.

sian exports from the seaboard grew as Great Britain gradually surrendered her Chinese markets to well-established and rapidly growing Russian firms who were in complete control by the end of the 'nineties.

Russia continued her predominance in the China tea trade until 1918, when political events subsequent to the Revolution caused an almost complete collapse of Russian buying, with a consequent demoralization of the Chinese export tea trade. This was further aggravated by the tide of factional wars in China, which engulfed Hankow in 1926, driving the few remaining foreign tea firms to Shanghai and making that city the outstanding center of the export tea trade.

The Co-hongs of Canton

When the early European adventurers first came to China, the Chinese regarded them with alarm and ill-concealed contempt; and so, scorning as "outer barbarians" the Europeans who came to trade, the Emperor, in 1702, appointed a personal representative who came to be known as the "hoppo," or emperor's merchant. This official was the sole broker through whom foreigners must buy their teas, silks, and porcelains, and sell the few foreign products for which a demand then existed. Canton was set apart as the only Chinese city where foreign trade was permitted, and there the hoppo, who ranked with the first officers of the province, established himself in becoming state.

The foreign traders were not satisfied with the appointment of the Emperor's

merchant, because he could not supply them readily with cargo, so two years later, in 1704, this official admitted a number of Chinese merchants to share his monopoly. and assist him in handling the increasing business, by conducting the actual trading operations with the foreign firms, and by becoming fiadors, or guarantors, of the government taxes, duties, and imposts on the incoming and outgoing cargoes. For this privilege they paid the hoppo 5000 taels [£1667] for each ship. These men, never more than thirteen in number, were commonly called the "hong merchants," because of their hongs, or warehouses, which adjoined the factories of the foreign-After the appearance of the hong merchants in the foreign trade, the duties of the hoppo became virtually those of collector of customs, and so remained until the office of hoppo was abolished in 1904, when its functions were transferred to the viceroy.

By 1720, the business of the hong merchants had grown to such an important volume that they organized themselves into a guild, or co-hong, with the object of regulating prices, and from that date, except for brief intervals, they conducted all of the business with the foreign firms, and were held responsible for the conduct of the latter until the co-hong system was finally abolished by the Treaty of Nanking, after the Opium War, in 1842.

As soon as a ship arrived at Whampoa anchorage, ten miles below Canton on the Pearl River, beyond which no foreign ship was permitted to approach the city, a fiador from among the hong merchants

had to be engaged before any business could be transacted or unloading begun. The hong merchants shortly became the only medium of communication with the Government, themselves being the exactors of the duties and composers of grievances, and when complaints were made, the judges of the equity of their own acts. H. B. Morse summed up the situation when he said: "From first to last the foreign trade was milked, and the co-hong was the milker."

The hong merchants had their separate warehouses close to the factories, where they received the teas and silks from the interior, re-packed them if necessary, weighed them, matted and marked them, and paid the duties and fees to the hoppo before they went to the ships at Whampoa.

The most important hong merchants were Howqua, Conseequa, Mowqua, Pwanhequa, Pwansuylan, Chungqua, Kingqua, and Goqua. Howqua was the senior hong merchant during the later years of the system, and died enormously wealthy.

Foreign Factories at Canton

The foreign factories, which formerly occupied a location on the water front in

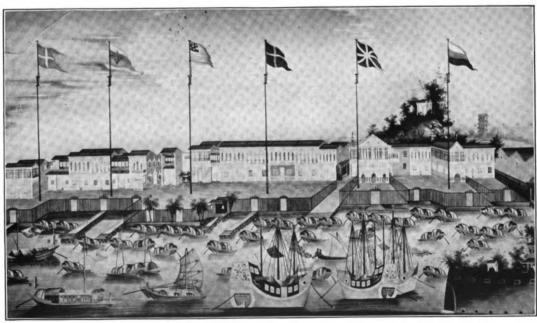
1 H. B. Morse, The Trade and Administration of China, Cambridge, 1921.

Canton, are thus described by William C. Hunter, who was associated with their activities from 1825 to 1844:

Beginning at the west, stood the Danish factory; adjoining it were Chinese shops in its whole length forming New China Street, which intervened, separating it from the Spanish. Next, the French, and by its side, in its whole length, that of the hong merchant Chungqua. Old China Street here came in, and against it was the American, then the Imperial [Austrian], by its side the Paou-shun, next in order the Swedish, the old English, and the Chow-Chow [mixed]. Now came a small narrow lane, the renowned Hog Lane, most appropriately named. The high walls of the new English factory bordered the lane, having as its next neighbor eastward the Dutch, and next to this stood the Creek factory. The latter took its name from a small creek, which, running down along the walls of the city, here emptied into the river. Originally this creek formed the ditch of the west side of the city. The entire number of buildings, therefore, was thirteen. Immediately in their rear, and running east and west, was a long, narrow, but important street, named Thirteen Factory Street.²

The English and Dutch companies, holding the exclusive rights from their own countries to trade in the Far East, were the famous English and Dutch East India Companies, chartered in 1600, and 1602,

2 William C. Hunter, The Fan Kwae at Canton Before Treaty Days, 1825-1844, London, 1882.



THE CANTON FACTORIES BEFORE 1821

This faithful picture of the foreign trading posts in Canton is from a Chinese painting on glass, now in the Peabody Museum, Salem, Mass.

respectively. These licensed other firms of their nationality to trade at Canton.

The United States, English, Dutch, and Spanish flags were hoisted daily before the factories of those nationalities. The Spanish flag was for the Philippine Company. The French, Swedish, Danish, and Austrian East India Companies were active for a time but their participation in direct commerce with Canton practically ceased after more or less ambitious starts which proved unsuccessful.

On Thirteen Factory Street, and directly facing Old China Street, stood the "Consoo House," or Council Hall of the foreign factories. The hong merchants owned it, the same as they did the warehouses occupied by their tenants from overseas, and it was

maintained at their expense.

Within the grounds and within the walls of their factories, all white men were virtual prisoners while they remained at Canton. Counting rooms, godowns, and tea-tasting rooms occupied the lower floors, along with the massively built treasury vaults, and the rooms of the compradors, assistants, and the coolies. On the second floor were dining and lounge rooms, and on the third were the white men's sleeping rooms. The total area which the buildings covered was approximately fifteen acres, a large portion of which was devoted to the open "square," or Respondentia Walk, as it was known, between the buildings and the river.

It is fitting that we preserve this description of the famous old Canton factories, as they existed before treaty days, because no vestige of them, or of the life that once filled them, now remains. In fact, Hunter records that as long ago as 1860, when he paid a return visit to the scene of his early employment, the place was literally unrecognizable.

Pioneer Foreign Traders

Among the important pioneer foreign firms trading at Canton in 1825, were: Magniac & Co., predecessors of Jardine, Matheson & Co.; Thomas Dent & Co.; Ilbery, Fearon & Co.; Whiteman & Co.; and Robertson, Cullen & Co. These firms were licensed by the English East India Company, whose exclusive right it was to control British trade in the East. After 1833, the trade was open to all.

The importance of the Canton factory



AN EIGHTEENTH CENTURY CHINESE GODOWN

firms and of the trade carried on by them can be appreciated only when it is realized that in the one item of tea, which was their principal article of export, they were supplying the entire civilized world, outside of China and Japan. China teas were the only ones available, and these only at Canton. Japan's ports were closed to foreign commerce until many years later.

Howqua, the Chinese Cræsus

Outstanding among the hong merchants of Canton was Wu Haou-kwan, known to foreigners as "Howqua," or "Houqua," one of the wealthiest men of his time and the best friend of the foreign traders.

Howqua was an Amoy man of humble parentage, born in 1769. A natural gift for business and a faculty for dealing with foreigners won for him admission to the co-hong while still in his twenties.

Sydney and Marjorie Greenbie have given an excellent pen picture of this Chi-



THE HOME OF CONSEEQUA, CHINESE HONG
MERCHANT

nese Crœsus in their delightful historical work, Gold of Ophir. They relate that everywhere about him Howqua found sharp practices and strained relations between the Chinese and European merchants, but he easily qualified as the man who could adjust and control these difficulties.

As early as 1825, Howqua was recognized as the senior hong merchant and knew the bitterness as well as the advantages of that position. His wealth grew day by day, but his responsibilities increased in equal ratio. He would gladly have given over his responsibility, but the Government would not permit him to resign

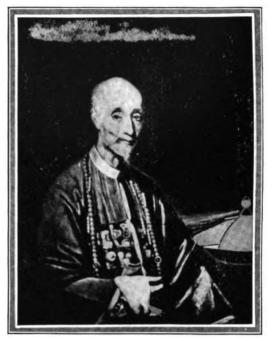
Not the least of Howqua's burdens was his responsibility as the senior hong merchant for the personal and social activities of the foreigners, as well as for their business dealings. One especially trying rule was that against bringing white women to Canton. Rule or no rule, it occasionally happened that a foreign trader would smuggle in his wife to go about dressed in men's clothing for a short time until the situation became known to the Canton officials. But in the end Howqua would be compelled to act.

All of the hong merchants, and especially Howqua, because of his great wealth, were constantly being mulcted by government officials; nevertheless, Howqua's home was one of the most gorgeous show places in Canton, and by 1834 his wealth was estimated at \$26,000,000. At this time he decided to devote his entire attention to the activities of Messrs. Russell & Co., an American firm.

Throughout his relations with Russell & Co., as well as other American firms with whom he previously had extensive dealings, written agreements were unknown. It was characteristic of Howqua that when one of his supervisors embezzled \$50,000 of Russell & Co.'s funds, he made immediate and complete restitution.

End of the Co-hong System

Howqua was heavily involved, as were many American and British traders, in the ilicit opium trade which brought on hostilities between the Chinese and British in 1840-42, ending in the Treaty of Nanking. This marked the end of the co-hong system and opened Chinese ports to foreign commerce. During early Chinese successes



Howqua, the Chinese Crossus

in the Opium War, the British factories were burned; so when the British finally won they retaliated by demanding \$6,-000,000 ransom for the city of Canton, and the Chinese Government compelled the hong merchants to meet the payment. Howqua, as the senior and wealthiest, had to pay a sum equal to \$1,100,000 as his personal contribution.³

During, and after the war, Howqua was a very sick man, and the excitement brought on by the demand on his treasury, to help pay the ransom of Canton, added to millions previously extorted for alleged flood relief and other claims, brought about his end.

Prominent China Tea Merchants

Notable among the cities that have served as important centers of China's export tea trade under various shifts down to the present time have been Canton, Amoy, Foochow, Ningpo, Hangchow, Hankow, Kiukiang, and Shanghai.

China's seaboard export tea trade during the eighteenth and first half of the nineteenth centuries was conducted through the Canton market, whence, in the beginning, the teas from Kwantung Province

³ Sydney and Marjorie Greenbie, Gold of Ophir, New York, Copyright by Doubleday, Page & Co., 1925.

[in which Canton is located] were exported. Gradually, however, the foreign traders at Canton began to purchase some of the fine teas for which the provinces of Hunan, Hupeh, Fukien, Kiangsi, and Anhwei are noted, and thus the tea trade was extended to Amoy, Foochow, Ningpo, Shanghai, and, finally, to Hankow and Kiukiang.

At the close of the British-Chinese war in 1842, four ports in addition to Canton were thrown open to foreign trade. The additional ports, commonly referred to as "treaty ports," were Shanghai, Ningpo, Foochow, and Amoy. Hankow was opened in 1858, Kiukiang in 1861, and Hangchow in 1896.

China's export tea trade now centers principally at Shanghai, the eighth commercial seaport of the world, and the most imposing and modern trading center east of Suez.

Two firms in the tea trade of Shanghai were established in China more than ninety years ago. They are Jardine, Matheson & Co., Ltd., [British] and Siemssen & Krohn [German]. Jardine, Matheson & Co. have been prominent in tea ever since, but Siemssen & Krohn have been out of the tea trade for twenty-five or thirty years. The business of Dodwell & Co., Ltd., dates back more than seventy years.

The inception of Jardine, Matheson & Co., Ltd., the oldest firm in the China tea trade, was in the early days of the nine-teenth century. The founder was Dr. William Jardine, who came East in 1802 and was employed as an officer in the service of the East India Company. Associated with him from the earliest days were Messrs. James Matheson [afterwards Sir James Matheson] and Hollingworth Magniac.

Dr. Jardine was a southern Scot, whose forbears for many generations resided in Dumfriesshire—he himself was born in Lochmaben in 1784. Mr. James Matheson hailed from the west coast of Rosshire, where his family had long been established and owned property. Mr. Magniac was the descendant of a Swiss merchant, who settled in Macao towards the close of the eighteenth century, obtaining employment there from an old established firm named Beale & Read, in which concern he became a partner; the firm's name then being changed to Beale & Magniac, and later to Magniac & Co.

In the early days of this business connection, Dr. Jardine made trading voyages between India and China. Mr. James Matheson remained in India to attend to the disposal of produce brought from the Far East by his friend, Dr. Jardine; while in Canton and Macao Mr. Magniac acted as agent for the sale of goods imported from India and the Straits.

As time passed, the business carried on by these gentlemen increased so considerably that in 1827 Dr. Jardine and Mr. Matheson found it necessary to take up residence permanently in Macao; moving up to Canton in the season, as was the custom in those early days, and there conducting their business through the medium of the licensed house of Magniac & Co., in which both became interested.

In 1834, the trading monoply of the East India Company having come to an end, the firm of Magniac & Co. was dissolved and the business thereafter was carried on by Dr. Jardine and Messrs. Matheson and Magniac under the style of Jardine, Matheson & Co. They dispatched the first free vessel from Canton to London, March 24, 1834, and Hunter refers to her as, "the first free ship with free tea."

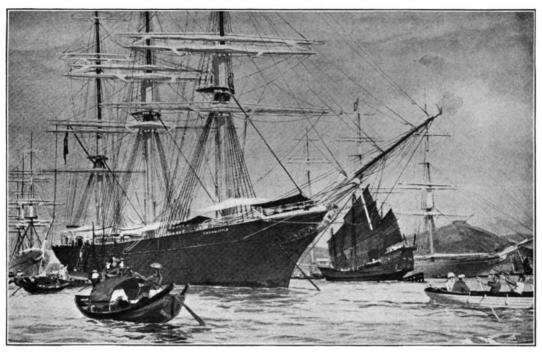
The firm established its headquarters in Hong Kong in 1842, shortly after the island became a British possession. A Japanese branch was opened at Yokohama in 1859, followed by subsidiaries at Tokyo, Shimonoseki, Shizuoka, and Kobe; also at Dairen and Taipeh in Formosa. Tea was taken up at Shanghai, Foochow, and Amoy about 1870. Other Chinese branches have since been opened in Peiping, Canton, Chinkiang, Chungking, Swatow, Tientsin,

4 William C. Hunter, The Fan Kwae at Canton Before Treaty Days, 1825-1844, London, 1882.





Dr. William Jardine Sir James Matheson Founders of Jardine, Matheson & Co., Ltd.



TEA CLIPPERS LOADING AT FOOCHOW

From the painting by William McDowell. By permission of the publisher and owner of the copyright, Brown, Son & Ferguson, Ltd., Glasgow.

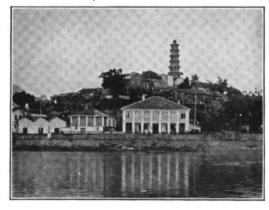
Hankow, Nanking, Kiukiang, Newchwang, Ichang, Tsingtao, and Wuhu. The New York branch was opened in 1881. The London agents are Matheson & Co., Ltd.

In 1838, Dr. Jardine finally left the East after an unbroken spell of twenty years, and was succeeded in the management of the company by Mr. James Matheson [afterwards Sir James], who left China in 1842. Following him came his nephew, Mr. Alexander Matheson, who had received his early business training in India. Subsequently the heads of the firm were Messrs. Andrew, David, Joseph, and Sir Robert Jardine [Bart], all nephews of the founder, Dr. William Jardine; also Messrs. William Keswick, John Bell-Irving, James J. Keswick, James J. Bell-Irving, C. W. Dickson, W. J. Gresson, Henry Keswick, David Landale, C. H. Ross, John Johnstone, D. G. M. Bernard, and B. D. F. Beith, the present managing director.

The German firm of Siemssen & Krohn was founded at Foochow in 1888 by Messrs. G. T. Siemssen and Werner Krohn, succeeding to the business of Siemssen & Co., established by an earlier generation of the Siemssen family, which had been connected with the China tea trade from about

1840. The firm of Siemssen & Krohn was active in the tea trade of Foochow up to some time around 1900, when the tea department was discontinued. Mr. Werner Krohn died in 1897, and Mr. G. T. Siemssen in 1915.

The British firm of Dodwell & Co., Ltd., was founded in 1891 under the name of Dodwell, Carlill & Co. by the late Mr. George Benjamin Dodwell and associates. The head offices originally were at Hong Kong, and branches were established at



THE PAGODA ANCHORAGE AT FOOCHOW

Shanghai, Hankow, Canton, and Foochow. The firm succeeded Adamson, Bell & Co., also of China, founded in 1858. Mr. Dodwell had been in charge of the shipping department of Adamson, Bell & Co., having gone to China as a junior in 1872. When the firm collapsed in 1891, he and others of the staff established the business of Dodwell, Carlill & Co. The business was changed into a limited liability company and the head offices moved to London in 1899. In addition to its China branches, the firm has establishments at Yokohama and Kobe, Japan; and at London, Colombo, New York, San Francisco, Seattle, and other cities. The original China tea buyers for Dodwell & Co. were Messrs. A. J. H. Carlill and H. A. J. Macray. The present buyer at Shanghai is Mr. R. G. Macdonald; and at Foochow, Mr. J. G. P. Wilson. Mr. George B. Dodwell returned to London to become managing director, and continued in that capacity until 1923, when he retired and was succeeded by his nephew, Mr. Stanley H. Dodwell. Mr. George B. Dodwell, the founder, died in 1925.

The British firm of Harrisons, King & Irwin, Ltd., Shanghai, was founded in 1878 by the late Mr. W. W. King; and when his son, Mr. W. S. King, joined him in 1892, the firm became W. W. King & Son. In 1904, it was known as King, Son & Ramsey; and in 1908, as Westphal, King & Ramsey. In 1918, it became Harrisons, King & Irwin, Ltd., with a branch office at Hankow in charge of Mr. H. Winstanley; and another at Foochow under the management of Mr. A. S. Allson.

Mr. W. S. King, the present managing director at Shanghai, is a leader in the China tea trade, being chairman of the





Mr. George B. Dodwell Mr. A. J. H. Carlill Two of the Original Dodwell & Co. Partners





Mr. W. W. King

Mr. W. S. King

THE FOUNDER AND PRESENT MANAGING DIRECTOR OF HARRISONS, KING & IRWIN, LTD.

China Tea Association, which includes all of the principal foreign tea firms. The son of a chazee, or tea merchant, Mr. King was born at Hankow in 1869. His father went to China in 1863 from the offices of Moffatt and Heath, London, to join the firm of Shaw, Ripley & Co. Mr. W. S. King was educated at Dulwich College, England, and apprenticed to the same firm which trained his father.

Others prominent among the foreign teamerchants of Shanghai are: Robert Anderson & Co., Ltd.; Alexander Campbell & Co., Ltd.; Compagnie Franco Africaine, Ltd.; E. H. Gilson; Gibb, Livingston & Co.; Theodor & Rawlins; and Wisner & Co.

Mr. Chun Uck Chao, a Chinese tea merchant of broad experience and excellent judgment, is the dean of the native tea trade at Shanghai, being the chairman of the Shanghai Tea Merchants Guild, a position which he occupies with distinction. He established the Chung Shun Chong Tea Hong in 1906, and aside from tea, which is his chief interest, he is a director in a number of large business and banking enterprises.

Among the Chinese merchants, one of the oldest firms is the China Tea Company, founded by the late Tong Awei, and now managed by his two sons, Messrs. James Y. Tong and Tong Sufkan. The China Tea Company was established with the object of climinating foreign middlemen in the distribution of China tea to Europe and America. Mr. James Y. Tong has become well known to the American and English tea trade through his periodic visits. Although the company was organized in 1916, it did not get into its stride until after the World War.







Mr. Tong Awei Mr. Tong Sufkan Some Well-Known Chinese Tea Merchants



Mr. James Y. Tong

Foochow, possessing as it does convenient port facilities for tea export, is the shipping center for the province of Fukien, except for inconsiderable amounts of tea exported direct from Amoy.

Bathgate & Co., an old established English tea and silk exporting firm at Foochow,



Mr. John C. Oswald

organized in was 1879 by Messrs. John Bathgate and Tobias Pim, both deceased, to take over the business of Olyphant & Co., who failed in that

Messrs. Bathgate and Pim were employees of the old firm. After the failure they success-

and enlarged the business. The late Mr. John C. Oswald, who became a member of the firm in 1886, commenced his career in the tea trade in 1873 with the London importing firm of E. & A. Deacon, going out to Foochow in 1886 and joining Bathgate & Co. Mr. Oswald died in 1930. His son, Mr. J. L. Oswald, is the present sole owner.

In 1926, Brewster & Company, Inc., an American firm of import and export merchants, organized a tea department at Foochow with Mr. Otto Heinsohn as tea buyer. Mr. Heinsohn previously had been with Friedr. Wilh. Lange, a prominent tea firm in Hamburg. Brewster & Company have connections in Germany, England, Holland, Italy, and the United States.

Other prominent tea exporting firms at Foochow are—Robert Anderson & Co.; Dodwell & Co., Ltd.; Gibb, Livingston & Co.; M. W. Greig & Co.; Harrisons, King & Irwin, Ltd. [Shanghai]; Jardine, Matheson & Co., Ltd.; and Theodor & Rawlins.

Canton, in the days of the clipper ships, was the center for that trade. It never has been an important tea growing center, although a low grade of black tea is cultivated near Tsing Yuen on the North River. This product is exported to Hong Kong, the Straits Settlements, Netherlands Indies, Australia, and the South Seas. The tea trade between Canton and the United States has practically disappeared, except for a few odd thousand pounds shipped annually for consumption by Chinese communities in this country.

The tea exporters at Shameen, Canton, are: Messrs. Deacon & Co., Ltd., established about 1890; Herbert Dent & Co., established 1870, represented by Deacon & Co., Ltd., its local agent; Dodwell & Co., Ltd., established in 1891; Hannibal & Co., Ltd., established about 1910; Jardine, Matheson & Co., Ltd., established about 1834; and numerous Chinese tea firms shipping to the Straits Settlements.



TEA TASTING AT CANTON

CHAPTER VI

DUTCH TEA TRADE HISTORY

How the Dutch East India Company Became the First Carrier of Tea to Europe

—Java Tea Becomes an Article of Commerce—Prominent Java Tea Firms—

Sumatra Teas Enter the Market—Outstanding Companies in the Sumatra Trade

—The Dutch Trade at Amsterdam—The Pakhuismeesteren van de Thee—Amsterdam Tea Associations—Dutch Importing Trade—Tea Brokerage Firms—The

Wholesale Trade—Packeting Trade—Multiple Tea Shops

COMPANY of Dutch merchants fitted out and armed a fleet of four ships that sailed from the island of Texel April 21, 1595, bound to the Indies for spices and oriental produce. They reached Bantam, Java, in 1596 and used that harbor as the base for trading opera-

tions in the Spice Islands. Everywhere they found the natives willing to trade with them, and they returned home with valuable cargoes in August, 1597, amid the booming of cannon and much popular enthusiasm.

Without waiting for the return of the first fleet, other companies were formed and other fleets dispatched in pursuit of the profits awaiting those who risked and won. By 1602, some sixty-odd Dutch ships had made the round-trip voyage to India. However, with so many companies in the

many companies in the field the arrivals of the ships at the home ports were not well timed, and markets were sometimes glutted, accompanied by falling prices. This depreciation proved ruinous to some of the companies, and was severely felt by all; therefore, upon the initiative of the States General the surviving companies were induced to unite their funds into one general commer-

cial body, and on March 20, 1602, a new corporation, known as The Dutch East India Company, was formed at The Hague.

The new company, capitalized at approximately 6,500,000 florins, was much more than a trading venture, for it was em-

powered by charter to discharge the functions of government in the remote Indies, assist in the war against Spain and Portugal, and regulate trade. The actual centralized control was vested in seventeen directors, who came to be known as "The Lords Seventeen."

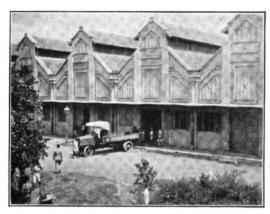
The company at once began operations [1602], sending out fourteen ships in the first fleet, and, as Dutch merchants had reached China the year previous [1601], the produce of that country began to be added to the return cargoes to Holland.

The first tea was transported from Macao, China, to Java in 1606-07, and in 1610, Dutch ships carried the first tea from Java to Europe.

Tea first became a regular article of European commerce when, in 1637, The Lords Seventeen of the Dutch company wrote to the Governor General at Batavia, "as tea begins to come into use with some



The D. E. I. Company's Ship "Thee-Boom"



A TEA GODOWN IN BATAVIA

of the people, we expect some jars of Chinese, as well as Japanese tea with each ship." This antedated by thirty-one years the first order for tea by the directors of the English East India Company.

The Dutch still were bringing tea to Europe in driblets as late as 1650. Ships' papers found among the archives of the Dutch East India Company, covering eleven ships that sailed from the Indies at the end of that year, show that they carried to Holland a total of "twenty-two catti [about 30 pounds] Japanese Thia [tea], in five casten [boxes]."

In 1685, the situation had changed somewhat for The Lords Seventeen wrote the Governor General at Batavia:

We have resolved to augment the demand, lately made by us, to 20,000 pounds, on condition that it be good fresh tea, and packed in such a way as we have exposed in our demand; for as we have formerly written, tea deteriorated by age and bad tea are naught worth any money.

During the half century following, the tea trade of the Dutch company grew steadily. The statement of goods carried to Holland in the year 1734 shows 885,567 lbs. of tea. By 1739, tea had reached a position of prime importance among the Dutch East India Company's imports, when, for the first time, this commodity led in value all cargo items brought by a fleet from the Indies. About 1750, black tea began to displace the green teas previously brought to Holland. It also displaced coffee to some extent as a breakfast beverage.

There was a four-fold increase in the amount of tea imported into Holland by the company over the fifty-year period

from 1734 to 1784, during which the figures rose to 3,500,000 lbs. a year. However, rivalries and hostilities with the East India companies of other countries not only cut down the profits of the Dutch company, but finally resulted in the expulsion of the Dutch from the mainland of British India and the island of Ceylon. They had important factories in both places.

The Dutch retaliated by strengthening their hold on the Dutch East Indies, but at the cost of solvency. By the beginning of the eighteenth century they were in financial difficulties, and were heavily bankrupt when the conquest of Holland by Napoleon in 1798 brought about the final dissolution of the company and the abrogation of all its powers.

Java Tea Enters the Market

In 1835, the first consignment of Dutchgrown tea, raised and manufactured under Government monopoly in the island of Java, reached the Amsterdam market. The quality, however, was poor and the price realized—150 to 300 Dutch cents—was much below the cost of production. The Agrarian Act of 1870 changed the whole situation by allotting government lands to private planters. However, capital for tea culture at first was not readily forthcoming, as coffee and cinchona were looked upon as much more promising financially. For this reason, the Java teas of the 'seventies continued inferior, and the prices low as compared to British India teas.

At length, in 1877, Mr. John Peet, founder of the Batavia firm bearing his name, succeeded in awakening Java planters to the commercial possibilities of Dutch East



TEA SAMPLING ROOM, BATAVIA





Founders of Tiedeman & van Kerchem

Left—Mr. P. Tiedeman
Right—Mr. C. F. W. Wiggers van Kerchem

India tea, and sent samples to London to be tested by English brokers. The latter obligingly pointed out the defects in the Dutch teas, and sent back samples of good tea from British India for comparison. The ultimate result was a switch by Java planters from China tea plants to the Assam variety, and the adoption of machine manufacture. By slow degrees through the 'eighties and 'nineties the quality of Java teas improved, and in the prewar period Batavia was gaining an increasingly important position in the tea trade.

The Batavia market continued to develop consistently in the post-war period, and now ranks as one of the important primary tea markets of the world. The rules of contract governing the purchase and sale of tea were formulated by the Handelsvereeniging te Batavia, or Trades Association in Batavia. Buying is mostly in the hands of British firms, some seven or eight of whom are established or represented. The quantity of tea sold annually in Batavia varies somewhat, but averages close to 50,000,000 lbs.; the principal outlets being England, Australia, and the United States.

Prominent Java Tea Firms

The oldest agency firm in Batavia is TIEDEMAN & VAN KERCHEM, established in 1854 by Messrs. P. Tiedeman and C. F. W. Wiggers van Kerchem. Branches were opened at Amsterdam, in 1892, and Soerabaya, Java, in 1915. Mr. O. van Vloten, one of the tea pioneers of Java, was a partner from January 1, 1912, until December 31, 1916. The present partners are: Messrs. P. A. Waller and E. Ploos van Amstel in Amsterdam; Mr. S. W. Zeverijn

in Batavia; and Dr. J. Baron van Slingelandt in Soerabaya.

The firm of Geo. Wehry & Co., Batavia, was founded in 1867 by Messrs. J. G. Wehry and K. A. B. Froelke as a general importing firm, with head offices at Batavia and a buying branch in Amsterdam. The firm has been interested in tea distribution and exportation since the 'nineties, and now controls as manager or agent seven estates with a total annual outturn of 6½ million pounds of dry leaf. Among the partners who have figured prominently in the development of the firm's tea business, may be mentioned the late Messrs. Albert Mohr and Albert Wehry. The present partners are Messrs. E. W. Scholten, D. M. Kan, E. J. Weenink, G. J. Wehry, H. van der Vaart, J. Bijl, K. H. Raben, and J. W. Scholten.

Another of the older tea agencies in Java is the firm of John Peer & Co., established at Batavia in 1870 by the late Mr. John Peet, previously mentioned as the pioneer grower of the Assam variety tea plants, now universally cultivated in the island, and the introducer of tea manufacturing machinery. Upon Mr. Peet's retirement from active management in the East, he opened an office in London, where he continued as an active partner until his death in 1909. The present Batavia partners are Messrs. F. N. and M. Neumann.

Mr. Ferdinand N. Neumann, the present senior partner in both the Batavia and London firms of John Peet & Co., was born in Hungary, and shortly after his birth was taken by his parents to Vienna, where he received his preliminary and commercial education. His first business experience was gained in a brief connection with Adler Bros., at Acheen, Sumatra, with whom he was employed when eighteen years of age.







Mr. F. N. Neumann

Two years later he took a position with the firm of John Peet & Co. He has many other industrial and commercial interests. Mr. Neumann served as Belgian Consul in Java before the World War. He made a tour of the principal tea markets of the United States in 1924, and is now living in retirement at Scheveningen, The Hague.

N. V. HANDELSVENNOOTSCHAP VOORHEEN MAINTZ & Co., established at Amsterdam in 1917, has offices in Batavia and Soerabaya which facilitate its supervision of a number of Java tea estates. The Batavia agent is Mr. J. A. van Staveren; the representative in Soerabaya is Mr. C. Noome.

Rowley Davies & Co. was the first British firm to become established in the Batavia market. This was in 1904. In Batavia and London they act as secretaries and agents for several important tea estates.

The agency firm of Francis Peek & Co., Ltd., Batavia, is a branch of the London house of the same name. The Batavia branch was established in 1911 under the name of Peek Brothers & Winch, which, in 1913, was changed to Francis Peek & Co., Ltd. The late Mr. E. J. Hammond, who figured prominently in the development of Java tea, was managing director of the firm for many years. The present directors are: Messrs. Gerald Brooke [chairman], W. H. Daukes, N. C. S. Bosanquet, and W. J. Lloyd.

A branch of the tea-buying and exporting firm of Heath & Co., Ltd., Calcutta and Colombo, was established at Batavia in 1920, with Mr. R. C. Pickering as managing director, and Mr. A. C. A. House as director.

In 1921, the firm of H. G. Th. CRONE, Amsterdam, tea importers and estate agents, opened a branch at Batavia with Mr. G. J. F. Goorissen as manager. A branch also was opened at Semarang, with Mr. A. D. Zur Muhlen as manager.

NEDERLANDSCHE HANDEL MAATSCHAPPIJ, a banking institution with headquarters at Amsterdam, has one of its many branches at Batavia, and while it does not deal in tea on its own account, it sells it on a commission basis, in common with other colonial produce, for various estates in the Netherlands East Indies.

Other firms prominent in the tea trade of Batavia are: Dunlop & Kolff; M. J. Edgar & Co.; Harrisons & Crosfield,





Mr. H. J. Edwards Mr. H. J. O. Braund
1910–1920

BATAVIA TEA BUREAU EXPERTS

Ltd.; Koloniale Handel Maatschappij; Maclaine, Watson & Co.; and W. P. Phipps & Co.

Batavia Tea Trade Associations

Handelsvereeniging te Batavia, or Trade Association in Batavia, is the principal commercial organization at Batavia. It was formed May 1, 1850, by prominent business men of that period, to act as general representative of all Java trades and industries. There are approximately 185 members, including the heads of all business houses in the city. The Association established the rules for standard contracts and arbitrations which govern purchases and sales of tea in the Batavia market.

The THEE EXPERT BUREAU of Batavia, one of the chief influences systematically employed for the improvement of Java tea in the market, was established in 1905. The first tea expert for the Bureau was the late Mr. H. Lambe, who served from 1905 until 1910. He was followed successively by Mr. H. J. Edwards, from 1910 to 1920; Mr. H. A. Pullar, from 1920 to 1923; and Mr. H. J. O. Braund, who succeeded Mr. Pullar in 1923. In 1929, Mr. Braund retired and was succeeded by his assistant, Mr. T. W. Jones. Geo. Wehry & Co., Batavia, have handled the administrative and secretarial work of the Bureau from the beginning.

In 1922, a number of leading tea firms united in forming the BATAVIA TEA BUYERS' ASSOCIATION. This was done upon the initiative of Messrs. C. H. Roosemale Cocq, W. P. Phipps, W. G. Barney, and P. Daniel. Tea buyers only are eligible, and there are ten members.



THE HARBOR OF TANDJONG PRIOK, BATAVIA

Sumatra Teas Enter the Market

The first Sumatra tea was shipped to London in 1894 by the British Deli & Langkat Tobacco Co., Ltd., from their Rimboen Estate at Deli. The shipment consisted of six large, and seventeen small chests, and brought 2d. per pound. It was not until after Sumatra tea-growing was undertaken on an important scale by Harrisons & Crosfield, in 1910, followed in succeeding years by the Nederlandsch Indisch Land Syndicaat and other producing and exporting concerns, that teas produced on a big scale by the best modern methods gave Sumatra a place all its own in the tea trade,

Outstanding Companies in Sumatra

The three leading companies in the teatrade of Sumatra are, in the order of their importance: Harrisons & Crosfield, Ltd., Nederlandsch Indisch Land Syndicaat, and Handelsvereeniging "Amsterdam."

HARRISONS & CROSFIELD, LTD., is a name that looms large in commerce and trade throughout the East and Far East. Nowhere, however, is the firm more important than in Sumatra, where the name was associated with the pioneer tea estate enterprise. A British concern, it acts as general promoter and developer of estates, and as agent for the estates once they have become established. Mr. James Morton is the manager at Medan.

THE NEDERLANDSCH INDISCH LAND SYNDICAAT, floated at Amsterdam in 1910 by the late Mr. Johannes Hermanus Marinus, leader among the Dutch pioneers of Sumatra's tea industry, followed closely in

the footsteps of the British concern in promoting and developing estates. Today, the *Syndicaat* occupies a commanding position in the Sumatra tea trade. Mr. Marinus was the managing director until his retirement, in 1927, to Holland, where he died in 1930.

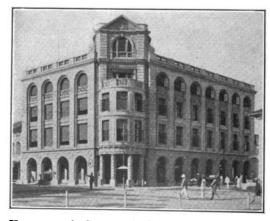
The Handelsvereeniging "Amsterdam," probably the largest plantation organization in the world, occupies third position among Sumatra tea shippers, although it has been interested in tea only since 1917. It is an extensive producer of tea and other products in Sumatra, with headquarters for the island at Medan; and has somewhat similar interests in Java, with headquarters at Soerabaya.

Dutch Trade at Amsterdam

As previously stated, tea was brought to Amsterdam regularly after 1637, and in 1685 the importations became of sufficient importance for the Dutch East India Company to reserve to itself the exclusive right of importation.

The directors of the Amsterdam Chamber of the East India Company divided themselves into five sections, which in the course of time came to be known as the Departments of Equipage, Delivery, Warehousing, Audit, and Indian Trade.

In the seventeenth and eighteenth centuries, the Department of Warehousing, or "Comptoir of the Warehouse" as it was called, was managed by two warehouse masters, who were required to be sworn before the Mayor of Amsterdam, and had their offices in East India House, the head-quarters of the East India Company.



HARRISONS & CROSFIELD'S BRANCH HEADQUARTERS
AT MEDAN, SUMATRA



THE OLD EAST INDIA HOUSE, AMSTERDAM From a painting before the rebuilding.

The Pakhuismeesteren van de Thee

About the latter half of the eighteenth century, the Department of Warehousing was consolidated with the Department of Equipage, and renamed the Department of Commerce. The latter survived the East India Company, which passed out of existence December 31, 1798, and from the Department of Commerce, in 1818, came the present firm of Pakhuismeesteren, or "Warehouse Masters."

Mr. Josua van Eik, the last warehouse master appointed by the East India Company, was founder of the present firm. He died in 1831, and was succeeded in the firm by his son, Mr. Josua van Eik, Jr., who remained a partner until his death in 1878. The present partners are Messrs. A. Bierens de Haan, C. F. Bierens de Haan, and L. L. Bierens de Haan.

For a time during the last century the firm specialized in coffee, as well as tea, but since 1858 it has handled tea only. The Association of Java Tea Importers, the Vereeniging van Thee Importeurs, which conducts the Amsterdam tea auctions, intrusts all of its importations to the Pakhuismeesteren.

The interests of the tea industry are represented at Amsterdam by two important organizations, the *Vereeniging van Thee Importeurs*, or Tea Importers' Association, and the *Vereeniging voor de Thee Cultuur*, or Tea Growers' Association. The

first of these, the Tea Importers' Association, was established in 1916 by firms and companies importing tea for garden account on the Amsterdam market. This association arranges the Amsterdam tea auctions in coöperation with the Pakhuismeesteren van de Thee, and its members are obliged to sell all tea consigned to them exclusively at the Amsterdam sales. In addition, it is required that buyers at these auctions buy only through brokers admitted by the association.

The first chairman of the Tea Importers' Association was Mr. Abr. Muller, who served for five years, from 1916–17 to 1920–21. He was followed by Dr. C. J. K. van Aalst in 1921–22 and 1922–23; Mr. C. J. A. Everwyn, six years, from 1923–24 to 1928–29; Dr. J. Bierens de Haan from 1929–30 to 1933–34; and Mr. A. A. Pauw in 1934. Mr. F. H. de Kock van Leeuwen was secretary from 1916 to 1934 when Dr. F. W. A. de Kock van Leeuwen succeeded him.

Mr. A. A. Pauw, present chairman of the Tea Importers' Association, was born September 1, 1880, at Haarlem. In 1898 he entered the employ of the Nederlandsche Handel-Maatschappij at Amsterdam. For twenty-six years he served in the company's offices in Surinam, Netherlands India, and the Far East. In 1930 he became managing director of the head office at Amsterdam.

DR. J. BIERENS DE HAAN, former chairman of the Tea Importers' Association, became one of the leaders in the Amsterdam market by his election to the chairmanship in 1929, and by his election, in the same year, to the board of the Tea Growers' Association. He was educated at the University of Utrecht, where he re-





Mr. Josua van Eik Mr. A. Bierens de Haan Founder and Partner, Pakhuismeesteren



FOUNDERS OF SOME OF THE NOTABLE FIRMS IN THE TRADE OF THE NETHERLANDS

1—H. Th. Karsen, G. N. Bakker & Co., Amsterdam; 2—H. G. Th. Crone, Amsterdam; 3—R. Jansonius, Groningen; 4—R. J. Kahrel, Commandluster Vennouskelbar Karsen, G. N. Bakker & Co., Amsterdam; T—H. Smith, Stoomkofflebranderij & Theehandel H. S. van Heekeren, van Heekeren & Co., Amsterdam; 10—Piet de Gruyter, N. V. Koninklyke Industrie en Handelmantschappij van P. de Gruyter & Zoon, Bosch: 11—13. van Heekeren, van Wollenhoven & Co., Amsterdam; 12—Ja van Heekeren, van Vollenhoven, Koninklyke Nederlandsche Stoomkofflebranderij v. N. Heybroek, Jr., Rotterdam; 13—G. Bydendyk, Rotterdam; 16—Jacs, van Vollenhoven Asn., van Vollenhoven & Poortman, Rotterdam; 18—J. E. Gunnink Bz., Goldschmidt, S. Golen, Amsterdam; 19—Robert Voûte, Jan Bacob Voûte & Zonen, Amsterdam.



ceived the degree of Doctor of Laws. He became secretary to the managing board of the Nederlandsche Handel Maat-[Netherschappij lands Trading Society] in 1900, and continued in this capacity until his election in 1918 as its managing direc-

Dr. J. Bierens de Haan

The Tea Growers' Association was organized in 1918 to unite protect the Dutch tea-planting industry. It includes in its membership all Netherlands Indian tea companies having their seats in Europe, and has as special members numerous individuals interested in tea. The association maintains, as a regular branch of its activities, a statistical bureau connected with the Secretariat, and a propaganda department under the direction of Mr. A. E. Reynst, a former Java tea planter. The propaganda undertaken by the association covers Holland and adjacent countries. Funds for propaganda purposes are obtained from a planting cess collected by the Netherlands Indian Government.

The first chairman of the Tea Growers' Association was Mr. S. W. Zeverijn, who served for two years in 1918-19 and 1919-20. The late Mr. W. C. Loudon was chairman from 1920 until his death in 1932. He was succeeded by the present chairman, Mr. P. Leendertz. Mr. F. H. de Kock van Leeuwen has been secretary from the time the Association was formed in 1918.



Mr. S. W. Zeverijn Chairman, 1918-20



Ar. W. C. Loudon Chairman, 1920-32

OFFICIALS OF THE TEA GROWERS' ASSOCIATION

Mr. S. W. Zeverijn went to Netherlands India in 1889. He got his early training with Wallenstein, Krause & Co., and Hard & Rand. He finally joined Tiedeman & van Kerchem, with whom he has been associated for over 32 years.

MR. F. H. DE KOCK VAN LEEUWEN, Secretary of the Tea Growers' Association, is a former officer in the Navy. He resigned in 1899 to take up a commercial career, becoming managing director of tea and rubber estates in Java. He is a partner in the importing and estate agency firm of de Kock & van Heel, Amsterdam. He was one of the promoters of the Amsterdam Tea Importers' Association, of which he was

the secretary for eighteen years.

Mr. A. E. Reynst, director of the Tea Propaganda Office of the Tea Growers' Association, is a grandson of the founder of





Mr. F. H. de Kock van Leeuwen Secretary, 1916-34

Mr. A. E. Reynst Director, Propaganda since 1914

OTHER OFFICIALS, TEA GROWERS' ASSOCIATION

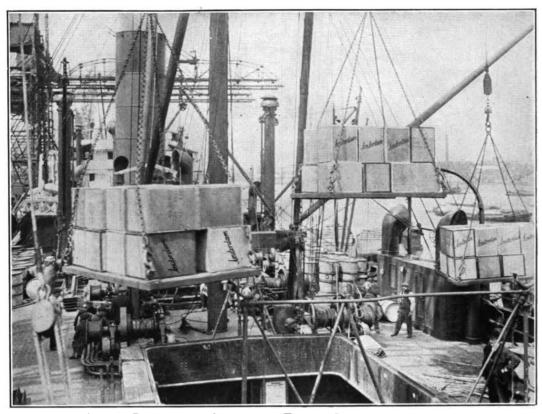
the firm of Reynst & Vinju, Batavia. For thirty years he was a planter in Java; the first ten years on the Sugar Experiment Station, and the last twenty years in tea. He returned to Holland in 1922, and since 1924 has been active in the Propaganda Office. He is the author of several monographs on tea.

Dutch Importing Trade

As previously mentioned in this chapter, the Dutch East India Company was the first importer of tea into Holland, but after the dissolution of the company in 1798, and consequent discontinuance of its special privilege, the trade was opened to private enterprise.

One of the oldest Dutch importing firms now in existence is the partnership styled H. G. TH. CRONE, founded at Amsterdam,





STEAMER DISCHARGING A SHIPMENT OF TEA INTO LIGHTERS AT AMSTERDAM

June 2, 1790, a few years prior to the termination of the East India Company's monopoly. The firm received its first consignments of Java tea from Batavia in 1885, and promoted the first Java tea growing company, the Landbouw Maatschappij Pangerango, of which it undertook the management, in 1893. This was the first tea company established in Holland to which the public was invited to subscribe. The firm has branches at Batavia and Semarang. The present partners are Mr. Gottfried H. Crone and Mr. W. F. Pahud de Mortanges.

NEDERLANDSCHE HANDEL-MAATSCHAPPIJ, or Netherlands Trading Society, of Amsterdam, a big Dutch banking house with branches throughout the East and Far East, as well as in Rotterdam and The Hague, is one of the leading concerns that undertake the sale of teas consigned to them at the Amsterdam auctions. The society was established by royal charter in 1824. Mr. C. J. K. van Aalst, K.B.E., is president. The managing directors are Mr. A. Pauw, Baron Collot d'Escury, and

Dr. Crena de Iongh. Dr. F. H. Abbing is secretary.

The Amsterdam tea and coffee importing firm of van Heekeren & Co., has existed under this style since 1828, but was a continuation of several earlier firms, bearing other names. The founder of the business was J. J. van Heekeren. The company sold teas at auction as early as 1870. In the last half of the nineteenth century, under the management of Mr. F. L. S. van Heekeren, the firm developed a large, general export and import business. Associated with Mr. van Heek-eren was Mr. S. C. van Musschenbroek. Mr. van Heekeren died in 1914, and Mr. van Musschenbroek died shortly after. Since the beginning of the twentieth century the firm has been acting regularly as importers of Java tea. The members of the firm are Messrs. G. F. W. A. K. van Musschenbroek, H. de Vries, and A. W. Wichers Hoeth.

NEDERLANDSCHE INDISCHE HANDELSBANK is a factor among the agency institutions connected with the importation and sale of

tea at Amsterdam and London. It was established in 1863.

N. V. HANDELSVENNOOTSCHAP VOORHEEN MAINTZ & Co., of Amsterdam, was established in 1917 and has offices at Batavia and Soerabaya. The company has the supervision of tea estates for which it sells the product at Batavia and the Amsterdam auctions.

N. V. MAINTZ' PRODUCTENHANDEL, established in 1923 to take over the general export business of the N. V. Handelsvennootschap voorheen Maintz & Co., has branch offices in Batavia, Semarang, Soerabaya, Macassar, Banjoewangi, Padang, Telok Betong, and Bandjermasin. The directors are Messrs. Ch. Heintzen and F. W. Hudig.

The Batavia agency firm of Tiedeman & van Kerchem opened its Amsterdam branch in 1892.

The firm of J. M. W. VAN DUSSELDORP & Co., Amsterdam tea importers, was founded in 1895. The present members are Messrs. W. F. van den Broek, W. van den Broek, and J. H. Blankenbey.

The firm of W. Tengbergen & Co., Amsterdam, importers, was established in 1907

by Mr. W. Tengbergen.

The importing and agency firm of DE KOCK & VAN HEEL, Amsterdam, became successors in 1914 to an earlier partnership, founded in 1899 by Baron E. van Heerdt tot Eversberg and Mr. F. H. de Kock van Leeuwen. The present partners are Mr. F. H. and Dr. F. W. A. de Kock van Leeuwen. The firm is represented at Batavia by a separate organization, de Kock & van Heel Co.

The Handelsvereeniging "Amsterdam," which has been mentioned in connection with the tea trade of Sumatra, has its

headquarters at Amsterdam.

Other tea importers that have identified themselves with the Dutch tea trade are: D. M. & C. Watering, van Eeghen & Co., Nederl. Indische Escompto Mij., Drost & Kappers, and Mirandolle, Voûte & Co., N.V., of Amsterdam; A. van Hoboken & Co., and Jacobson van de Berg & Co., of Rotterdam.

Tea Brokerage Business

The firm of Jan Jacob Voûte & Zonen, founded in 1795, were the leading tea brokers on the Amsterdam market until the death in 1878 of their most picturesque

member, Mr. Robert Voûte. Mr. Voûte was known to his contemporaries as "the

emperor of China."

The firm of Leonard Jacobson & Zonen, tea brokers, Rotterdam, bears an historical relationship to the introduction of tea cultivation into Java through Mr. J. I. L. L. Jacobson, son of the founder of the firm, who learned the business of a tea expert in the Jacobson establishment at Amsterdam and, later, became superintendent of tea cultivation for the Dutch Government of Java. Mr. I. L. Jacobson—father of J. I. L. L.—founded the brokerage business, which bore his name, in 1799. After I. L. Jacobson the firm became successively J. J. L. Jacobson, in 1822; Edward L. Jacobson, in 1827; Leonard L. Jacobson, in 1846; and Leonard Jacobson & Zonen since

The firm of Advocaat & Brester, Amsterdam, was founded by Mr. L. Advocaat in 1807.

The business of G. BYDENDYK, Rotterdam, was established in 1843.

The firm of G. N. BAKKER & Co., Amsterdam, was established by Mr. H. Th. Karsen in 1880.

The firm of Kolff & Witkamp, tea and coffee brokers, was founded in Rotterdam in 1884 by Mr. C. M. F. Kolff and Mr. James T. Witkamp, who were established tea and coffee brokers before this partnership, but in different firms. The present partners are Messrs. J. Kolff, J. J. Witkamp, Jr., and B. Witkamp, sons of the original members of the firm.

The business of A. CYFER, JR., tea broker, with offices in Amsterdam and Rotterdam, was established in 1913 by Mr. A. Cyfer, Jr., previously with Appleton, Machin & Smiles, Ltd., and Peek Bros. & Winch.

Ltd., London.

Other names associated with the history of the tea brokerage business are: Messrs. B. Alberts, W. F. H. Burgers, Jacs. van Hoorn, Jr., and Pusch & Co., of Amsterdam; and Mr. J. Boon and G. Duuring & Zoon, of Rotterdam.

Wholesale Tea Trade

One of the earliest Dutch wholesale tea distributing firms, dating back into the time when the Dutch East India Company brought tea and other oriental produce to Holland, is the N.V. Douwe Egberts, of Joure, Friesland, tobacco manufacturers,



coffee roasters, and tea distributors, established in 1753. The firm was founded by a Mr. Egbert, known as Egbert Douwe's, or Egbert, son of Douwe; there being no family names, at that time. The name of the business that has come down to the present is that of Douwe, son of Egbert, the founder, or Douwe Egbert's. The present managers of the firm—father and son—are Messrs. C. J. and J. H. de Jong, direct descendants of Egbert Douwe's.

Another Dutch wholesale tea and coffee concern, whose business has been established more than a century, is N. V. VAN REES, BURKSEN & BOSMAN'S HANDEL-MAATSCHAPPIJ, Rotterdam, tea importers and exporters. The company changed to its present name in 1923. It represents the amalgamation, in 1913, of Jan van Rees & Zoon, at Zwolle, tea merchants, established in 1819, and the firm of Burcksen & Bosman, at Rotterdam, coffee merchants, established in 1887.

The wholesale business of M. & R. DE MONCHY, Rotterdam, originated with Mr. E. P. de Monchy under his own name, in 1820, which places it in the centenarian group. The firm has had its present name since 1850.

L. Grelinger's Im- & Export Mij. N. V. Amsterdam, specializing in green tea and also Java, Sumatra, and China blacks, was founded in 1860 by Mr. L. Grelinger under the style of L. Grelinger & Co., which later became L. Grelinger. In 1923, the firm was changed into a limited liability company.

N. V. HEYBROEK & Co.'s Handel Mij., Amsterdam, wholesalers of tea to all parts of the Continent, with buying agents in Java, Calcutta, Ceylon, China, etc., and maintaining a branch office in Rotterdam, owes its beginning to Mr. W. Heybroek, Jr., in 1874, under the style of J. W. Meyer. In 1877, the name was changed to W. Heybroek & Co.; again in 1899, to Commanditaire Vennootschap Heybroek & Co. In 1919, after the death of Mr. W. Heybroek, Jr., the firm became N. V. Heybroek & Co.'s Handelmaatschappij, and the youngest son of Mr. W. Heybroek, Jr., was appointed sub-managing director.

The wholesale firm of VAN VOLLENHOVEN & POORTMAN, Rotterdam, was founded in 1882 by Mr. Jacs. van Vollenhoven Azn. and Mr. F. H. Schouten, under the name of van Vollenhoven & Schouten. K. Poortman was a partner from 1885 to 1922, and

C. G. Schouten from 1908 to 1916. The present partnership between Messrs. Johs. van Vollenhoven and A. W. Poortman has existed since 1914.

J. Goldschmidt & Zonen, wholesale merchants of Amsterdam, started their tea business in 1887, after their Mr. J. E. Goldschmidt had learned the business in London. At that time Java tea was mostly of inferior quality, made from China plants, and Mr. Goldschmidt did considerable to induce growers to substitute the Assam and Ceylon jats.

The Nederlandsche Thee Maatschappij, of Amsterdam, was founded in 1903 as a limited liability company by Mr. P. F. van Maarseveen, its first managing director. The present managing director is Mr. G. E. Hemmen.

The wholesale firm of A. VAN DER VALK, Rotterdam, was established in 1906 by Mr. van der Valk, and dealt in tea from the start. In 1912, Mr. van der Valk was joined by Mr. J. H. Roeters van Lennep as partner. The firm has connections at London, Foochow, and Shanghai.

Other well-known firms that have figured in the development of the wholesale tea trade are: Jacob Fritz & van Rossem, of Amsterdam; and D. J. Berkhout & Zoon and P. Kleyn van Willigen of Rotterdam.

Tea Packeting Trade

The tea blending and packing business of Otto Roelofs & Zonen, Amsterdam, purveyors to the queens of Holland, was founded in 1764—more than a century and a half ago—by Mr. Otto Roelofs.

The tea packing establishment of A. F. Kremer, Haarlem, distributing to all parts of Holland, owes its origin in 1796 to Mr. T. H. Kremer, who first sold tea as a medicinal herb. The business has successively passed through the hands of four generations.

In volume of business, the leader among Dutch packing concerns is DE ERVEN DE WED. J. VAN NELLE, at Rotterdam. The original van Nelle business was founded some time prior to 1806 and, after the decease of the sole partner, was carried on by his widow who, later on, was succeeded by the heirs. In the beginning, the firm dealt exclusively in manufactured tobacco; but soon a small coffee-roasting plant and a tea-blending and packing department



A Model Tea Packing Establishment at Rotterdam

Upper-By night. Lower-By day.

were added. New tobacco, coffee, and tea factories, with offices covering many acres, have been built in recent years. Branches have been established throughout Holland. The names of the present partners are: Messrs. J. J. van der Leeuw, P. L. A. van der Leeuw, A. H. J. Canters, C. H. van der Leeuw, and M. A. G. van der Leeuw. The managers are Messrs. M. de Bruyn and A. H. Sonneveld.

N.V. Thee- en Koffiehandel v/H Wijs & Zonen, tea and coffee importers and packers, Amsterdam, was founded in 1828 under its former style, Wijs & Zonen, and has dealt in tea from the beginning. The firm became a joint stock company in 1919. The present directors are Messrs. D. J. H. Wijs and H. J. Hendriksen.

The packing business of D. Janssen, Amsterdam, has been in existence since 1838, when it was founded by Mr. Dirk Janssen. Tea has been handled continuously from the start.

COMMANDITAIRE VENNOOTSCHAP KAHREL'S THEE, or Silent Partnership Kahrel'S Tea, Groningen, a most important packing concern in the Netherlands, is one of the few dealing exclusively in tea. Mr. Reinder Johan Kahrel, a vigorous pioneer in the tea trade of Holland, founded the business at Dokkum in 1848. It was transferred to

Groningen in 1851. The introduction of packet teas in the 'eighties made the establishment of branches advisable; depots were opened at Amsterdam and The Hague in 1913, and at Utrecht and Arnheim in 1915. Mr. R. J. Kahrel is the silent partner, and the sons, Messrs. Adolf Nicolaas and Herman, are managing directors.

TERWEE'S THEEHANDEL, prominent in the packing and distributing of tea at Zaandam, has dealt in tea exclusively since its establishment in 1852 by Mr. G. L. ter Wee.

THE STOOMKOFFIEBRANDERIJ & THEE-HANDEL H. SMITH, tea and coffee packing establishment at Groningen, has grown from a grocery started in 1855 by Mr. H. Smith. Only coffee and tea have been handled since 1895, when Mr. G. P. Smith succeeded to the management. In 1925, the business was changed into a limited company, with Mr. H. H. Smith as manager.

N.V. Koninklyke Nederlandsche Stoomkoffiebranderij v/H H. E. van Ysendyk, Jr., coffee and tea packers, Rotterdam, was established by Mr. H. E. van Ysendyk in 1855. Branches were opened at Zwolle, Holland, in 1895, and at Antwerp, Belgium, in 1903. The members of the board of directors are: Messrs. P. J. van Ommeren and Jac. de Lange, of Wassenaar, Holland; A. J. de Lange, of Brussels, Belgium; and H. E. van Ysendyk, of Zutphen, Holland. The managing directors are H. E. van Ysendyk Hzn. and W. H. van 't Hoogerhuys.

The business of P. D. Schilte, The Hague, was founded in 1868 by Mr. P. D. Schilte, and has dealt in packed tea from the start. The founder, the late Mr. P. D. Schilte, was succeeded in 1890 by his two sons, C. P. and P. C. Schilte, the present directors.

N.V. Maatschappij tot voortzetting van ten Brink's Theehandel, Leeuwarden, owes its origin to the late Mr. S. F. ten Brink, wholesale grocer, who started the business in 1874 and died in 1910. Mr. C. H. J. ten Brink, the son, after some years with his father, engaged in 1901 as a tea dealer on his own account at Leeuwarden under the name of ten Brink's Theehandel. The business was turned into a limited company under the present style in 1921.

The tea blending and export firm, N.V. P. E. THUERE'S THEEHANDEL, Utrecht, dates back to the 'seventies, having been

founded by Messrs. van der Pol and P. E. Thuere. Upon the deaths of these partners, Messrs. W. H. Molyn and B. van der Pol succeeded.

Wychgel's Theehandel, tea blending and packing, Arnhem, was founded by Mr. D. R. Wychgel at Leeuwarden in 1883. The business moved to Nymegen in 1898, and thence to the city of Arnhem in 1910. The house specialized in tea from the start. The name was D. R. Wychgel from 1883 until 1919, when it was changed to Wychgel's Theehandel. Mr. D. R. Wychgel was manager up to 1908, when he was joined in the management by Mr. G. U. U. Wychgel, the sole manager since 1925.

STOOMKOFFIEBRANDERIJ EN THEEHANDEL KANIS & GUNNINK, coffee and tea packers at Kampen, Holland, was established as Kanis & Gunnink in 1885. The firm was changed into a limited company in 1923. The present directors are F. Gunnink Bz. and his sons, J. J. and Jules Gunnink.

R. Jansonius, tea packer, Groningen, started in 1887, and had a branch in Leer, East Friesland, Germany, from 1894 to 1916. Since 1922 Mr. J. Jansonius, the

son, has been manager.

Other well-known Dutch tea packers not previously mentioned are: F. H. K. Bek-ker, J. C. Dorlas, and Spyker & Verko-ren, Amsterdam; J. & A. C. van Rossem, Rotterdam; de Erve J. van de Bergh, The Hague; W. Bonten Nzn., Dordrecht; N. V. Thee-en Koffiehandel R. H. Dykstra and Tj. de Vries, Leeuwarden; C. Schilte & Co., Delft; N. V. C. Keg's Groothandel, Zaandam; V. van der Plaats, Bolsward; and Simon Gaastra, Workum.

Multiple Tea Shops

N.V. Koninklyke Industrie en Handelmaatschappij van P. de Gruyter & Zoon, with headquarters at Bosch and its own retail shops throughout Holland, in Belgium, and Germany, is the Dutch counterpart of Lyons in England; for, in addi-

tion to its chain of multiple shops, the company manufactures and packs many fine grocery specialties. Tea was added to the firm's activities in 1895. The business was founded in 1818 by Mr. Piet de Gruyter under the firm name of P. de Gruyter & Zoon. It was changed to a limited liability company in 1918. The present directors are: Messrs. L. J. M. de Gruyter, J. A. M. de Gruyter, L. G. M. de Gruyter, Jzn., L. W. M. de Gruyter, Lzn., and G. J. M. de Gruyter, Jzn.

Another well-established Dutch multiple shop organization that does its own wholesaling and tea packing, is the firm of Simon de Wit, having headquarters at Zaandam, and branches in almost every town in Holland. The business was established in 1867 at Wormerveer by Mr. Simon de Wit, who specialized in butter and cheese at first. He soon added tea, and, in the succeeding years, under the able directorship of Messrs. Jacob Keyzer and Maarten de Wit, the business was expanded into one of the largest grocery concerns in Holland. The tea department is under the personal supervision of Mr. Jacob Keyzer's son, Mr. Jan J. Keyzer.

Other multiple shop concerns include: Albert Hein, Zaandam; N.V. Albino Maatschappij, Groningen; Unie Winkel Maatschappij, Schiedam; Focke S. Kleyn, Utrecht; and N.V. Koffie-& Theehandel K. Tiktak, Amsterdam.

The big Dutch coöperative wholesale society, Coöperative Groothandelsvereeniging "de Handelskamer," of Rotterdam, having 310 affiliated coöperative societies and about 1000 retail shops all over the country, buys and packs large amounts of tea in much the same manner as the English & Scottish Joint Coöperative Wholesale Society, Ltd., at London. The affiliated societies first began to handle tea in 1911. The name of the Coöperative Wholesale Society "de Handelskamer," was adopted in 1915. Its present directors are Messrs. G. A. J. Mirrer and Johs. Warmolts,

CHAPTER VII

HISTORY OF THE BRITISH IN TEA

PRIVATE ENTERPRISE TAKES OVER THE BRITISH TEA TRADE AS THE EAST INDIA COMPANY'S MONOPOLY ENDS—SPURIOUS TEAS FLOOD THE MARKET—LAWS AGAINST BAD TEAS—BLACK TEA SUPERSEDES GREEN—FLUCTUATIONS OF THE TEA DUTY—MINCING LANE IN HISTORY—INDIA AND CEYLON TEAS ENTER THE MARKET—TEA VIA THE SUEZ CANAL—BLENDING AND PACKETING COME INTO FAVOR—THE SYNDICATE RETAILER—THE TRADE IN THE EARLY PART OF THE TWENTIETH CENTURY

W ITH the exception of China, Great Britain is the largest tea consuming nation in the world; at the same time, it is a heavy reëxporter to other countries. The history of its early tea trade has been told in Vol. I, Chapter VI, "The World's Greatest Tea Monopoly." That monopoly having terminated in 1833, the duty of providing tea for the British consumer devolved on the English merchants; although the East India Company continued its governmental administrative functions in the East until some years later and, by virtue of this fact, was the actual governing power in India when the first attempts were made to start a tea industry there in 1834-35.

The teas which the East India Company brought to England were principally China greens of the highest quality obtainable but, because of the meager supply and the high rates of duty, they commanded prices prohibitive to a large proportion of the people. It was hoped with free competition the laying-down cost would be on such a favorable basis as to bring the teas within the reach of the masses. The outcome more than justified these hopes, for in the ten years following the termination of the monopoly the annual importations increased 63 per cent—to a total of 53,000,000 lbs. and by 1929 the figures reached 560,000,000 lbs., or a further increase of more than 1000 per cent.

The early English importers learned that, because of the limited amount of such qualities as the East India Company sup-

plied, green tea could not be procured on favorable terms so, to still the clamoring of the people for more and cheaper leaf, they resorted to spurious mixtures and artificial coloring. Some of this adulteration was done in China, but mostly the practice developed as a home industry. Small factories were established in London for the manipulation and coloring of the leaves of the willow, sloe, and elder, and for the collection of spent tea leaves.

One of the complaints made against retailers during this period was that of "mixing." Apparently, the mixing of sound teas was looked upon by some as a subterfuge of tea dealers intended solely as a means of working off inferior teas as of better quality; but then, as now, the mixing or blending of tea to improve its cup qualities was a sound and highly desirable trade practice when in the hands of reliable dealers.

Richard Twining I, 1749–1824, tea merchant and pamphleteer, tells of tea-mixing as it was done by his grandfather, Thomas Twining, 1675–1741, one of the first tea dealers in London:

In my grandfather's time it was the custom for ladies and gentlemen to come to the shop and to order their own teas. The chests used to be spread out, and when my grandfather had mixed some of them together in the presence of his customers, they used to taste the tea, and the mixing was varied till it suited the palates of the purchasers. At that time, no person would have liked the tea if it had not been mixed.



ENGLISH SHOP BILLS AND TRADESMEN'S CARDS OF THE EIGHTEENTH CENTURY From the Banks Collection in the British Museum.

The passage of the Commutation Act of 1784 killed smuggling and did away, to a great extent, with spurious teas that previously had flooded the market; but English tea dealers still experienced occasional difficulties with spoiled tea supplied by the East India Company. For example, in 1785, the retailers protested vigorously, through such able representatives as Rich-

ard Twining, Joseph Travers, and Abraham Newman, to the Court of Directors of the company, that some 360 chests, out of a total of 1087, offered at the March sale in that year, were entirely unfit for use, and should be withdrawn from sale.

In 1725, England passed its first law against tea adulteration. It provided for seizure and a fine of £100. In 1730-31,

the penalty was changed to a fine only, of £10 for every pound found in the possession of the offender. In 1766-67, a penalty of imprisonment was added. Another Tea Adulteration Act was passed in 1777. The preamble to this Act drew attention to the continued growth of the trade in adulterants of tea "to the injury and destruction of great quantities of timber, wood, and underwoods, the prejudice of the health of His Majesty's subjects, the diminution of the revenue, the ruin of the fair trader, and to the encouragement of idleness." Notwithstanding the penalties provided by this and the earlier Acts, Richard Twining was forced to complain, in a pamphlet written in 1785, that the Government had failed to suppress the sophistication of tea. He said it was well known that every year large quantities of other leaves were being manufactured in England for the sole purpose of adulterating tea, and that other substances even more harmful and revolting were being used.

In order that the public might be warned of the actual character of "smouch," as the adulterant mixture was called, Mr. Twining stated that domestic ash leaves were gathered and dried in the sun, then baked. After this, they were trodden on a floor that was none too clean, then sifted and steeped "in copperas with sheep's dung." Next, they were again spread on the floor to dry, after which the leaves were ready to be sold to tea dealers.

As recently as 1843 the English Inland Revenue Department was still prosecuting cases involving the redrying of tea leaves, and in 1851 the London Times records a case against a certain Edward South and his wife for alleged manufacture of spurious teas on a large scale. The first general Act against food adulteration was passed in 1860, and later, in 1875, the passage of the English Food and Drug Act marked the beginning of the end of the bad tea industry.

After the passage of the Food and Drug Act of 1875, large quantities of adulterated tea, maloo [exhausted] mixture, and li [spurious] tea continued to arrive at the port of London and were received through the Customs with the genuine teas. This placed the Government in an embarrassing position if the vendor was prosecuted later under the Act, and in consequence a tea examiner was appointed, whose duty it was



SMUGGLING TEA INTO ENGLAND From an eighteenth century print.

to see that none but genuine tea entered the Custom House. The wisdom of this step was soon apparent, for when the Chinese and their allies, the importers of fraudulent teas, found that their cargoes of maloo mixture were likely to be thrown back on their hands, the industry declined rapidly.

Intentional adulteration is almost non-existent now in the producing countries. All teas entering Great Britain are subject to careful examination, and if spurious substances or exhausted leaves are found the importations are liable to seizure and destruction. They can be delivered legally only with the sanction of the Commissioners of Customs and Excise, and may be used only for the manufacture of caffeine.

Black Tea Supersedes Green

As a result of all the trouble about coloring and adulteration, public confidence in green teas was considerably shaken and a demand for China blacks gradually developed. Those from the most favored districts—Moning, Lapsang, Kaisow, etc.—were imported, and so well versed had the trade become in the properties of black teas that, by the time the first British Indian teas appeared in the market, they simply followed on. There still remained

a taste for something well defined in aroma and flavor, however, and to supply this want the Orange Pekoes and Capers came into use, suggesting, as time has revealed, the creation of blends. To-day, the majority of the teas used are sold in blended form, and the blacks are far in the lead.

Tea Duty Fluctuations in Britain

Tea was long a favorite commodity for taxation by the British Government. In 1660, an excise duty of 8d. per gallon was levied on the beverage, which was sold at the coffee houses from kegs, like ale, and was heated for the consumer's use. In 1670, the tax was raised to 2s. a gallon, but in actual practice it was found that the expense of sending out excise men to gauge the tea after it had been brewed was far too heavy for the revenue realized; so the idea of a beverage tax was abandoned and, in 1689, an excise tax of 5s. a pound on the dried leaf was substituted.

By 1695, tea had become of sufficient commercial importance to occasion an additional tax of 1s. per pound, if brought direct from the East, or 2s. 6d., if imported from Holland.

In 1721, under the progressive ministry of Sir Robert Walpole, all import duties were removed from tea, coffee, and chocolate, in order to leave England's carrying trade in these products entirely free. In their stead, excise taxes on withdrawals from bond for domestic consumption were levied and, in 1723, British tea importations for the first time exceeded 1,000,000 pounds.

By 1745, tea duties amounting to 4s. per pound had been levied and, in addition there was an ad valorem customs duty of 14 per cent. In that year, a tea duty of 1s. per pound plus 25 per cent ad valorem on the price realized at the East India Company's sale was assessed. In 1748, the duty per pound remained 1s., but the ad valorem was raised to 30 per cent. In 1749, this was amended to the extent of making London a free port for teas in transit to Ireland and America.

However, the tendency of the duties was steadily upward, increasing from 65 per cent ad valorem in 1759 to 120 per cent in 1784. The duties were so high that a great deal of smuggling resulted. Organized bands hid their cargoes on lonely parts of the coast. Hurstmonceux Castle on the

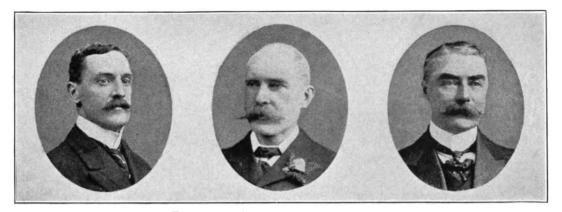
south coast was the headquarters of one of these bands, and a London newspaper tells of the discovery there, in May, 1776, of 2000 pounds of smuggled tea. At the same time, it was recorded that revenue officers had found and seized twelve bags of smuggled tea in a public house in Oxford Street, now London's great West End shopping center.

In 1780, the dealers in tea, coffee, and chocolate resident within the cities of London and Westminster and the Borough of Southwark formed an association for the protection of the trade against the competition of smuggled teas. The association offered a standing reward of £5, with aid and protection, to any person giving information regarding any violation of the law against adulterating, staining, or dyeing tea.

Smuggling increased and grew to such proportions that some estimates divided the tea imports of the period equally between the smugglers and the East India Company, while others conceded the smugglers a full two-thirds. However this may have been, Parliament passed the Commutation Act of 1784, which reduced the duty on tea from 120 per cent ad valorem to 12½; or to about one-tenth of its former amount. The removal of the excessive duty acted as a check on both smuggling and adulteration, while the legal imports of tea doubled.

The duty remained at a comparatively low figure for only a few years, before it began to climb again. This was brought about by the necessity imposed upon European nations of paying for the Napoleonic Wars. As a result of numerous changes, the tea duty reached 100 per cent ad valorem by 1819. This rate continued until 1833, when Parliament replaced it with a flat rate of 2s. 2d. a pound. The average value of tea was about 3s. 6d. at that time, but a great temperance movement in England supplied the background for a boom in the use of tea, and the average price dropped to 2s. 2d.; so the rate actually became 100 per cent of the value of the tea. Up to this time excise taxes, varying in amount, had been levied, as well as duty.

The year 1834 was a golden one in principle, for the excise was abolished and the duty graded. A rate of 1s. 6d. per pound was levied on the common varieties; 2s. 2d. per pound, on the finer; and 3s. per pound,



FOUNDERS OF THE ANTI-TEA-DUTY LEAGUE

Left to right-Mr. Frederick A. Roberts, Mr. A. G. Stanton, Mr. C. W. Wallace.

on the finest. This scale continued until the following year; the value of tea falling, with reduced taxation, from 2s. 2d. to 1s. 11d., or nearly 12 per cent.

The tea duty had been the football of successive Chancellors of the Exchequer for a matter of fifty years, but now it entered upon a period of stable taxation, although this did not alleviate its burdens. The rate fixed in 1836 was 2s. 1d. per pound, and this continued until 1840, when it became 2s. 1d. per pound and 5 per cent ad valorem, changing in 1851 to 2s. per pound plus 5 per cent ad valorem, and continuing for two years.

The rate of levy then came tumbling down. In 1853, it was reduced to 1s. 10d. per pound; in 1854 to 1s. 6d.; the two years of the Crimean War, 1855-56, saw it raised to 1s. 9d., but in the year of the Indian Mutiny, 1857, it fell to 1s. 5d. per pound. In 1863, it was 1s.; in 1865, 6d.; and in 1890, 4d.

Had the Empire been able to keep out of war, the duty might have remained at 4d., but the Boer War in 1900 caused the duty to be fixed at 6d.; and in 1906, at 5d., at which it stood until England entered the World War in November, 1914, when it was raised to 8d.; and in 1915 a further rise brought it to 1s., at which figure it remained until 1922. The budget of 1919 started the system of Imperial Preference, which took 2d. per pound off the duty on tea grown within the British Empire, but requiring other teas to pay the full rate.

In the budget of 1922, the duty was lowered to 8d.; and in 1923 this was cut in half, bringing the rate back to 4d.—the same as in the 'nineties. In 1926, a pro-

posal for a further reduction failed, although the Chancellor of the Exchequer stated in Parliament that the Government would regard it as a grateful task if it might remove the duty altogether.

might remove the duty altogether.

At last, on April 22, 1929, the tea duty which had been maintained continuously ever since the time of Charles II was taken off entirely, and tea entered the Kingdom free of impost for the first time in 269 years. After three years of free tea the duty was restored in 1932 with an impost of 4d. per pound on foreign and 2d. on Empire grown teas.

Before leaving the subject of the teaduty, it is proper to recall the important part played by the Anti-Tea-Duty League in rousing public opinion, which after a quarter of a century, destroyed this handy exchequer fetish and lifted the tea-duty yoke from the backs of the long suffering English people.

The League came about as a result of the excessive duty placed on tea after the Boer War. The idea was first canvassed in November, 1904, at a conference between Mr. C. W. Wallace, of R. G. Shaw & Co., Mr. F. A. Roberts, Chairman of the Indian Tea Association [London], Mr. A. G. Stanton, of Gow, Wilson & Stanton, and the late Mr. Herbert Compton. Later, they were joined by Mr. Arthur Bryans, of P. R. Buchanan & Co., in promoting the organization of the League, which was launched at a joint meeting of the India and Ceylon Tea Associations, held at 5, Fenchurch Street, January 18, 1905. The name, Anti-Tea-Duty League, was adopted January 23, 1905.

Because of his knowledge of tea, his



MINCING LANE, LONDON, AT THE CLOSE OF THE 19th CENTURY 126



AN ANTI-TEA-DUTY LEAGUE POSTER

energetic resourcefulness, and his fine advertising talents, the late Mr. Herbert Compton became the organizing secretary. Mr. Compton had been a tea planter in India for more than twenty years. After returning to England he gained quite a reputation as a writer of history and fiction. He brought to the work of the League keener intelligence than had marked any English tea trade propaganda before that time. It was based on agitation designed to "hit London in the eye at the outset," and it did just that. Mr. F. A. Roberts became chairman of the Executive Committee, and the Right Honorable Sir West Ridgeway became its president. There were sixteen vice presidents, as follow: the Earl of Glasgow, Lord Kingsale, Lord Elphinstone, General Lord Chelmsford, Colonel Sir William Bisset, Surgeon-General Sir A. C. C. De Renzy, Sir E. T. Candy, Sir Richard Cayley, Sir Auckland Colvin, Sir John Grinlinton, Sir Harry Johnston, Sir Roper Lethbridge, Sir John Morris, Sir A. Kay Muir, Bart., Mr. J. D. Rees, and Sir Cecil Clementi Smith. The Executive Committee was composed of: Frederick A. Roberts, Arthur Bryans, J. S. Fraser, H. K. Rutherford, R. A. Bosanquet, J. L. Shand, A. G. Stanton, J. N. Stuart, R. B. Magor, G. A. Talbot, R. A. Cameron, Norman H. Grieve, J. Innes Rogers, W. J. Thompson, and T. Carritt.

The League had its first offices at 35. Parliament Street, Westminster, S.W. The defeat of Mr. Balfour's Government in 1906 was largely credited to the agitation by Mr. Compton and his League for "a free breakfast table." Mr. F. A. Roberts. Chairman, in reviewing the first year's work, noted with satisfaction that a large number of parliamentary candidates pledged themselves to a support of the remission of the tea duty, and that the only modification of indirect taxation in the budget was given to tea in the shape of a penny reduction.

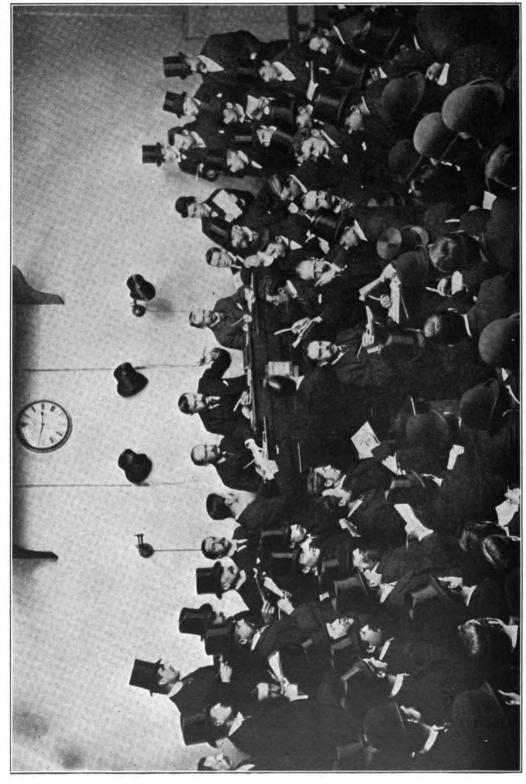
Mr. Compton's enterprising zealousness antagonized certain Mincing Lane interests, and in the early part of 1906 he withdrew to organize a rival league, to be known as The Free Tea League. But fate intervened and he never saw the fruition of his well-founded hopes. Frequently prostrated by malarial fever contracted in India, he suffered a nervous breakdown and, on a voyage to Madeira in 1906, either fell or leaped overboard from the "Agberi" and was drowned. Mr. Stuart R. Cope succeeded him as secretary of the Anti-Tea-Duty League, which was terminated in 1909.

Mincing Lane in History

Mincing Lane, the commercial heart of London, where are located the offices of merchants and brokers who handle a bewildering list of products, has been associated with trade in foreign produce since an early date. Stow's Survey of London, published in the sixteenth century, records that "men of Genoa and those parts, commonly called galley men, as men that came up in the galleys, brought up wines and other merchandise," and lived as a colony by themselves in Mincing Lane. The name "Mincing" is a corruption of the Old English word mynchen, meaning "nun," and referring to the nuns of St. Helen's, who passed their sequestered lives in meditation and prayer.

From the fortuitous traders of the sixteenth century, there evolved associations of merchants and brokers, having agents and correspondents in all parts of the world

Toward the end of the sixteenth century,



SCENE AT THE LONDON TEA AUCTION WHEN A LOT OF FINE CEYLON TEA BROUGHT £25.10.0 PER POUND



THE LONDON COMMERCIAL SALE ROOMS ABOUT 1813

the merchants and captains "trading to the Colonies" found that their business was facilitated by meeting each other in a particular coffee house. The West India merchants congregated at the Jamaica Coffee House, and those in the eastern trade used the Jerusalem Coffee House. The merchants subscribed a fee for the use of the house, and in return the proprietor provided the subscribers with files of newspapers and prices current, shipping lists, and the latest information from ports of call. Buying and selling, auctions "by the light of the candle," and the chartering of vessels, were transacted at these houses.

In 1811, the London Commercial Sale Rooms, the building which became the business center of Mincing Lane, was built by a number of London merchants. During the first twenty-three years of its existence, the trade of the Commercial Sale Rooms was principally in sugar, rum, and other West Indian products, together with tallow, spices, shellacs, barks, and wines. "John Company," as the East India Company was nicknamed, held the monopoly of the trade with India and China, bringing eastern produce in their ships, or "Indiamen," as they were called, to their own warehouses, and conducting frequent sales at India House.

After numerous complaints that the produce monopolized by the East India Company cost Englishmen much more than the same products sold for at private hands in other European countries, there was a parliamentary investigation, and a determined fight in which the India Company was defeated. This occurred in 1833–34. After

that, the sale of tea and other oriental produce, formerly sold at India House, took place at the Commercial Sale Rooms in Mincing Lane.

In 1896, the building was reconstructed and enlarged, and it has served the trade down to the present time. The rooms where the public auction sales are held are on the upper floor; while on the ground floor is the Subscription Room, or general meeting place of the subscribing members—those engaged in buying and selling.

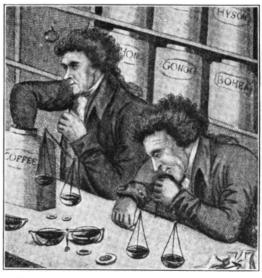
At first, only China teas were imported, but later, teas from the newer producing countries, and notably British-grown teas, began to be sold.

A memorable sale, and one which many London tea buyers still living attended, occurred on April 18, 1891, when a parcel of Gartmore Ceylon tea was knocked down to Mr. A. Jackson, as bidder for the Mazawattee Tea Co., at £25.10.0 per pound.

When used as a general term, "Mincing Lane" includes all of the produce markets. For tea, it includes Fenchurch Street, Great Tower Street, and Eastcheap.

Evolution of Tea Dealing

Tea was first sold in England by coffee houses and apothecary shops. Later, glass sellers, silk mercers, and chinaware dealers began to handle it. There is even a



"THE POLITE GROCERS OF THE STRAND," 1805

From a steel engraving entitled "Brother John and I" and understood to portray Aaron and John Trim of No. 449, Strand. Here we see tea and coffee being weighed in apothecary's scales.

reference to a shorthand author selling tea—his only other trade.

In the early part of the eighteenth century, the grocer evolved from the olden time pepperer and began to deal in tea. In the terminology of the period, he was a "grosser"; i.e., a dealer in gross lots. By the middle of the century, England's tea consumption had reached a million pounds annually, and a growing number of grocers made it a specialty. They were known as "tea-grossers," to distinguish them from ordinary grocers, who dealt in spices, dried fruits, sugar, etc., but sold no tea.

Throughout the eighteenth century, the grocer was the principal outlet for the East India Company's oriental produce. Other traders, however, were anxious to have a share in the profits to be made in this direction, and thus it was that earthenware shops, which purveyed English and Dutch ceramic wares to pot-house proprietors, began to sell chinaware imported from the East, and to dabble in tea, coffee, and choc-



Tea Catalogue, 1837

olate. The apothecaries and the confectioners, also trespassed to some extent on the grocer's preserves as sellers of tea, coffee, and chocolate.

The smaller tea grocers, and other retailers of tea, were somewhat handicapped in the matter of their purchases by the fact that the teas sold at the East India Company's sales

were offered in lots amounting to three or four hundred pounds each. However, they overcame this difficulty by clubbing together and bidding in the lots they selected. Every bit of tea that entered England legally had to be purchased from the East India Company, although there were middlemen, such as the firm of Smith, Kemble, Travers & Kemble, predecessors of the present firm of J. Travers & Sons, Ltd., who bought teas at the periodic sales of the Company and resold them to country dealers. They even supplied some city retailers.

By the beginning of the nineteenth cen-



DRUGS, MILLINERY, AND TEA

London Dealers' Cards from the eighteenth
century.

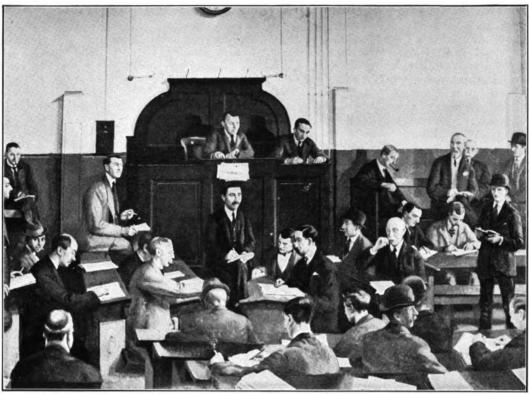
tury, tea had become the most profitable article stocked by the English grocer, and all retailers of the leaf were required by statute to display over their doors the words "Dealer in Tea," under penalty of £200 fine; and likewise, all purchasers of tea were forbidden to buy from any but a registered dealer or the East India Company, under a penalty of £100. Dealers were further required to keep a record of all sales of tea for inspection by excise men.

In time, the business of the grocer widened and he became a "grosser" of wines and other specialties as well as tea; but tea remained one of his best lines, and when the coöperative society, the department store, the multiple shop, the wagon route, present-giving company, and mailorder house came into being, tea became one of their leaders also.

Indias and Ceylons Enter Market

January 10, 1839, was a red-letter day in the annals of the British tea trade, for on that date the first India tea was sold at auction in London. For many years, there had been grave alarm among British merchants over the precarious state of the tea trade in China, but with the termination of the East India Company's trade monopoly, tea cultivation had been introduced into British India, where the Company still reigned supreme. In 1838, enough indigenous Assam leaf had been manufactured into made-tea so that a shipment of eight boxes was dispatched by the Company to London.

The impending arrival of the India tea



THE MINCING LANE TEA AUCTION, FROM A PAINTING BY MR. HAROLD HARVEY

had been heralded by notices of the progress of the ship which bore it, and its arrival and sale excited the liveliest interest. It was sold at India House, with the Company as vendor. Each of the eight boxes was auctioned as a separate lot; the successful bidder in each case being a public-spirited merchant in the Lane named Captain Pidding.

Mincing Lane brokers were impressed with the possibilities of Assam tea, despite acknowledged imperfections of the first shipment, and an offer was made to contract for 500 or 1000 chests at 1s. 10d. to 2s. per pound. This offer was not accepted, but in the following year a second shipment of Assam tea was offered for sale and, though the prices obtained were not equal to those of the previous year, they were still very high, running from 8s. to 11s. per pound, except for a very coarse quality called Toychong, which brought from 4s. to 5s. a pound. The following brokers and merchants reported on these teas: W. J. & H. Thompson, Joseph Travers & Sons, Wm. Jas. Bland, Richard Gibbs, Mr. Stevenson, and Twinings, Strand.

The first Kumaon tea—the first to be made from plants of the China jat in India —was taken to London in 1843 by Dr. Falconer, the retiring superintendent of tea cultivation in that province. A few years later, however, India tea producers came to recognize the superior qualities of the indigenous varieties and gave almost their entire attention to cultivating them. Meanwhile, the era of private planting enterprise had succeeded the introductory ownership of the East India Company. The ultimate success of the first two planting companies—the Assam Company, founded in 1839, and the Jorehaut Company, founded in 1858—caused numerous tea-planting enterprises to be started between the years 1863 and 1866.

The first regular tea sale at Calcutta was on December 27, 1861. This was followed by another, February 19, 1862. After this, auction sales were held at frequent intervals. Now they are held regularly on Mondays and, when sales exceed 30,000 chests, on Tuesdays also, throughout the season, which lasts about eight months of the year.

Ceylon first entered the market with a shipment of twenty-three pounds to London in 1873. After that there was a "rush into tea" on the part of Ceylon planters, with a corresponding growth of exports that constitutes one of the most remarkable instances of rapid development in the history of the tea trade.

The Colombo tea auctions, which are held weekly throughout the year, were inaugurated July 30, 1883, when the first public sale of Ceylon teas was held at the tea brokerage offices of Somerville & Co.—now Somerville & Co., Ltd.

The World War brought dark days for the Ceylon tea trade. Public sales in Colombo ceased in August, 1914. In 1919, the war-time Tea Control was lifted, and 1920 found the market flooded with inferior teas released from control. Restrictive measures, hastily adopted in that year, helped to restore the trade to normal.

Tea Via the Suez Canal

Throughout the years when Britishgrown teas were first creeping into the home markets, a type of vessel specially designed for the rapid carrying of tea from China to England was making tea history. These were yacht-like sailing ships, known as "China clippers." era ended in 1869, when the opening of the Suez Canal changed and shortened trade routes to and from the East. Later on, there was extreme competition in building steamers of great power and speed to land new season's teas in London with the least possible delay. The climax of this competition was reached in 1882, when the steamship "Stirling Castle" made the trip from Shanghai to London in the record time of thirty days.

The first canal steamers were small—only a few hundred tons—and the underwriters, fearing possible damage to goods shipped by the new route, charged heavy premiums. This fear was rapidly dissipated, and there was keen competition not only as to the speed of steamers built for canal trade, but as to size and carrying capacity as well. As a result of the latter competition some of the steamships in the eastern trade brought home cargoes of 5,000,000 lbs. and over. In 1890, the "City of Corinth" carried 5,095,000 lbs. of tea; in 1909, the "City of Paris" brought 5,-

000,000 lbs.; and in 1912, the "Collegian" carried a cargo of 5,400,000 lbs. to London.

Packet Tea Trade

The packet tea trade was begun in 1826 when Mr. John Horniman, a Quaker, founded, in the Isle of Wight, the business now conducted as W. H. & F. J. Horniman & Co., Ltd., tea merchants, London. Mr. Horniman started the sealed packet busi-



Mr. John Horniman

because the ness adulteration and artificial coloring of tea were so widespread that little pure tea was available to consumers. He packed sealed. lead-lined, paper packets of pure tea by hand. After a few years Mr. Horniman invented a crude hand-packing machine, which was used until the

growth of the business necessitated removal to London.

The Mazawattee Tea Co. was practically the first to place tea packeting on a mass production basis. This was in 1884 when they put out an extensively-advertised, high-priced, pure Ceylon tea. They had many imitators, and for a few years there was a run on Ceylon tea. This automatically raised the prices of Cevlon teas and ultimately made it necessary to blend them with India teas to keep prices within bounds. Packet teas had quite a vogue, but a lowering of retail prices made it difficult for newcomers in the field to maintain the advertising expenditures necessary to establish a new brand of tea on a successful basis; therefore, the next developments were along somewhat different lines.

Wholesale Blending for the Trade

These developments became manifest in the establishment of firms dealing in blended teas to suit all demands for price and quality. A number of these tea blending firms built up enormous businesses, and the equipment of their warehouses and tasting rooms soon exceeded anything previously known in the tea trade. This was because great skill and a wide selection of teas in stock were required to make blends suitable for every district and every water. Electric light and power were adopted in these blending plants, and complete systems of labor-saving machinery did work automatically that was formerly done by hand.

The Syndicate Retailer

The final development of the trade, to date, is the syndicate retailing company, operating "multiple shops." It consists in



Horniman's Tea Packing Machine.

grafting a tea business onto an existing business in provisions, centralizing buying and control, and eliminating all intermediate distribution profits. Various groups of shops have built up immense businesses of this sort. Akin to these is the buying for the English and Scottish Joint Co-Wholeoperative

sale Society, which is probably the largest individual power in the buying section of the tea trade.

Trade in the Twentieth Century

An advertising campaign for Ceylon tea—principally in America—was conducted from 1893 until 1908. It was supported by a tea cess in Ceylon. A cess for India tea was begun in 1903 and was used to push India tea in foreign markets because of an over-production of British-grown teas. Gradually demand caught up with the supply. During the World War the industry was prosperous, but peace found the market overloaded with tea.

This, coupled with the sudden rise in the price of silver, sent the rupee soaring to twice its previous value and ultimately brought on a serious crisis. During 1920, most of the producing companies suffered heavy losses, and the entire trade was more or less affected; but the recovery was rapid. In the next and following years, the British tea trade regained the momentum lost during the crisis.

Glancing briefly at the events in the English tea trade since the turn of the century, we find the London Tea Buyers' Association protesting in 1901 against the rule of the London Tea Clearing House which forbade buying from non-members. In 1903, the rule was rescinded.

A China Tea Association, now defunct, was formed at London in 1907. It sought to promote the use of China tea on hygienic grounds as being practically free from "the noxious element of tannin." In 1909, forty wholesale tea firms in Great Britain inaugurated "the Fine Tea Campaign," to increase the use of better grades of tea. It continued for five years and was voted a success.

In 1914, the World War started, and soon engulfed the tea trade in the general disaster. In the years 1914-15, numbers of ships laden with tea from British India were sunk by German raiders and submarines; among these ships were the "Diplomat" and the "City of Winchester," sunk by the "Emden" and "Königsberg." Exportation of teas from England was prohibited at first, to conserve the home supply; but presently the prohibition was somewhat relaxed. In 1915-16, shortage of supplies of tea combined with excessive freights drove prices to a high level. In September, 1916, the exportation of British teas was prohibited entirely except to the neutrals, Spain and Portugal.

In 1917, the British Ministry of Food was established as a war measure to control the distribution of food, and the Tea Control, one of the most violently assailed of the Government measures, was put in force. Furthermore, the importation of any teas not British-grown, was forbidden; thus shutting out supplies from China and Java, and making Britain dependent exclusively on Ceylon and India teas, in so far as they were obtainable.

The Shipping Controller promised at first to bring 16,000,000 lbs. of tea a month from India and Ceylon, as against a normal consumption of 6,000,000 lbs. or more a week, but this was found far from possible, and in the week ending September 29, 1917, for example, only 550,000 lbs. were available—less than a tenth of the normal consumption.

Notwithstanding the dissatisfaction that must inevitably arise from any interference with established trade practices, and the unexpected difficulties that had to be overcome by the untried methods of inexperienced committees, tea supplies under the Control steadily increased, and were distributed evenly to all comers at prices which, on the whole, were not unreasonable.

The Tea Control continued until June 2, 1919, when it was removed, and the tea trade was free to carry on in its own way. The after effect of the Control swept down upon the trade in the next year, 1920. At that time there was a vast accumulation of supplies resulting from the high prices which ruled during and immediately after the War. Much of the tea was of poor quality and was sold in Mincing Lane at about 5d. per lb. However, in the following years prosperity again returned to the war-scarred tea trade.

In 1926, a controversy raged in the English press over alleged speculation in the This was followed by wholesale trade. an investigation and report by the National Food Council. This report, reviewing fully the methods by which teas reach the retailer in Great Britain, was published in October following, and gave the trade a clean bill of health, in so far as the charges of speculative advances were concerned, but stated that "opportunities for speculation exist, since producers, who appear to be in a singularly fortunate position, restrict the quantities of tea offered at the London sales, with a consequent effect on prices."

The first consignment of tea from Kenya Colony, Africa, the latest British colony to start a tea industry, was sold at the Mincing Lane auction January 18, 1928. The consignment consisted of twelve packages from the Kenya Tea Company's Karenga Estate. The quality of this sample was considered good, and opinion was generally favorable.

A lively controversy was stirred up in the London tea trade during the summer and fall of 1928, when the growers of Ceylon and India tea, as represented by the Ceylon Association in London, the Indian Tea Association [London], and the South Indian Association in London, applied to the Board of Trade for an Order in Council, under the Merchandise Marks Act [1926], to require the marking of all tea, whether sold in packets or bulk, to show if it be Empire-grown, or foreign. The

reason for the application for the order lay in the increasing importations of Java and Sumatra teas, and the alarm occasioned thereby to India and Ceylon teagrowers.

The application was actively opposed by the Federation of Grocers' Associations, the Scottish Grocers' Association, the Association of Multiple Shop Proprietors, the Tea Buyers' Association, the National Federation of Produce Brokers, the Scottish Wholesale Tea Trade Association, the British Chamber of Commerce for the Netherlands, and the Parliamentary Committee of the Co-operative Congress. After due consideration the Board of Trade decided that in the present circumstances of the tea trade such an order would be inadvisable, and so reported to Parliament in March. 1929.

As a result of overproduction the India and Ceylon planters in 1920 agreed to a restriction plan which caused a substantial reduction of output.

There was a heavy surplus of common teas in the London market in 1929 as a result of bumper crops in British India, Ceylon, Java, and Sumatra, which induced a general slump in the prices of this class There was a good demand at all times for quality teas, but even the price of these teas was depressed by the general condition of the market. The effect of the overproduction became apparent before the end of the year in lowered or passed interim dividends by many of the producing tea companies. This situation resulted in a general agreement between the principal British and Dutch teaplanters' associations to restrict voluntarily the 1930 crop. The plan was only partly successful, owing to the inability of the Dutch to control shipments of native-grown teas, and was not renewed in 1931. However, continued overproduction resulted in a five-year, government-controlled tea export regulation between India, Ceylon, and the Netherlands East Indies, which became effective in 1933, and which restricted export shipments from the contracting countries sufficiently to assure reduction of surplus stocks to normal porportions. This plan was supplemented by a further agreement between the same countries to conduct a cooperative advertising campaign in the principal consuming countries. At the same time, British planters in India inaugurated a crop restriction plan.

CHAPTER VIII

TEA TRADE IN THE BRITISH INDIES

THE FIRST TEAS EXPORTED TO THE ENGLISH MARKET FROM BRITISH INDIA AND CEYLON—
THE CALCUTTA TEA TRADE—BRIEF SKETCHES OF FIRMS THAT HAVE FIGURED IN ITS HISTORY—THE CALCUTTA TEA TRADERS' ASSOCIATION—THE OLDER COLOMBO FIRMS ORIGINALLY INTERESTED IN COFFEE—THEIR SHIFT INTO TEA AFTER THE FAILURE OF COFFEE—
NEW COMPANIES ENTER THE FIELD—PHENOMENAL GROWTH OF THE TEA TRADE—
COLOMBO TEA TRADE ASSOCIATIONS

HE first teas exported to the English market from British India were shipped by the producers, but agency firms at Calcutta soon began to act for the producing companies. From the 'forties to the end of the nineteenth century a dozen important agency firms became active, and now ship the bulk of the India teas. These firms usually have holdings in the companies they represent, combining expert garden management with shipping and selling. Some of them have world wide distribution.

Calcutta Tea Firms

Brief sketches of the firms that have figured prominently in Calcutta's tea trade follow in chronological order.

GILLANDERS, ARBUTHNOT & Co., merchants, bankers, agents, and managing agents, 8, Clive Street, the oldest firm in Calcutta now connected with the tea trade, was founded in 1819 by Mr. Thomas Ogilvy and Mr. F. M. Gillanders, who were joined by Mr. G. C. Arbuthnot in 1832. The firm of Ogilvy, Gillanders & Co., Liverpool, was established in 1825, and the London firm of Ogilvy, Gillanders & Co., in 1873. The present partners in the Calcutta firm are Messrs. Albert Charles Gladstone, Arthur d'Anyers Willis, and Stephen Deiniol Gladstone.

The business of Kilburn & Co., 4, Fairlie Place, merchants and agents, was founded in 1842 by Mr. C. E. Schoene at 4. Garstins Place. In 1849, he was joined at the present address by Mr. E. D. Kil-

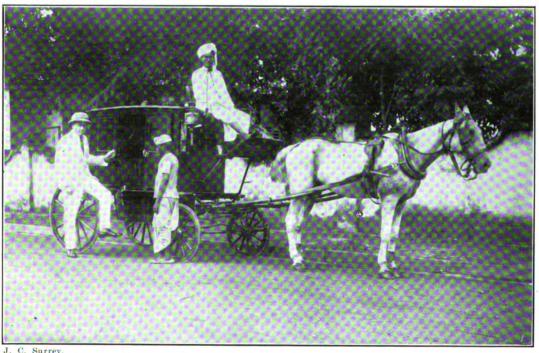
burn and the firm became Schoene, Kilburn & Co. Mr. Schoene retired in 1856, and in 1889 the firm name was changed to Kilburn & Co. Mr. Kilburn left India in 1865, and in 1868 founded the London firm of E. D. Kilburn & Co. [now Kilburn, Brown & Co.]. He retired from the Calcutta firm in 1900, and from the London firm in 1911. The present partners in the Calcutta business are: Messrs. E. J. Oakley, H. B. Whitby, London; and A. L. B. Tucker, A. N. Wardley, G. C. H. Kent, and J. F. Elton, Calcutta.

The business of Jardine, Skinner & Co., 4, Clive Row, pioneer tea estate agency firm, was founded in 1843 by Mr. David Jardine, who in 1845 formed a partnership with Mr. Charles Binney Skinner. Mr. Jardine died in 1853. This firm and Jardine, Matheson & Co., Ltd., Hong Kong, act for each other in their respective spheres. Messrs. J. J. Keswick and A. Wilson, former partners in the Calcutta firm, served the Indian Tea Association, Calcutta, as chairmen; Mr. Keswick in 1882, and Mr. Wilson in 1883, 1884, and 1885. The present partners are: Messrs. F. G. Steuart, R. Jardine Paterson, W. T. Hunter, and Sir Percy Newson, Bart., in Europe; and Messrs. C. G. Arthur, R. W. Weir Paterson, and J. H. Burder, in India.

The agency firm of George Henderson & Co., Ltd., 101/1, Clive Street, was established in Calcutta in 1850 by Mr. George Henderson as Henderson & Macurdie. This was five years after Mr. Henderson had established the London firm of George Henderson & Sons in Mincing Lane.



Offices of J. Thomas & Co., at No. 8 Mission Row This building, originally the residence of Sir John Clavering, member of Warren Hastings' council, was sold by its owner, The East India Company, after Sir John's death in 1778.



J. C. Surrey.

Office Jawn or Broker's Gari, Once a Familiar Sight

Since the advent of the telephone and the motor car these little box carts, used for running errands, are disappearing. Now the Sahib telephones or drives his car.

HISTORICAL REMINDERS OF CALCUTTA OF THE OLD DAYS





Mr. Robert Thomas J. Thomas & Co.

Mr. A. W. Figgis A. W. Figgis & Co.

FOUNDERS OF WELL-KNOWN TEA BROKERAGE FIRMS

The Calcutta firm became a private limited company in 1925. The present directors are: Messrs. G. P. Mackenzie, J. T. Finlayson, W. F. Scott-Kerr, F. M. B.

Lutyens, and J. E. Ordish.

The firm of J. Thomas & Co., brokers in tea, indigo, etc., 8, Mission Row, was founded about 1851 by the late Mr. Robert Thomas and Mr. Charles Marten under the name of Thomas, Marten & Co. Mr. Thomas died in 1865. The late Mr. W. L. Thomas, a nephew of the founder, was the member of the firm who was most active in developing the tea branch of the business. He was in India from 1863 until 1903, when he retired to England. He died in 1929.

The premises in which the business of J. Thomas & Co. is conducted were once the property of the East India Company and the residence of General Sir John Clavering, a member of Governor-General Warren Hastings' council. The firm's London correspondents are Thomas, Cumber-

lege & Moss, 27, Mincing Lane.

BEGG, DUNLOP & Co., Ltd., 2, Hare Street, agents and managing agents for tea estates, was founded in 1856 by Dr. David Begg and Mr. Robert Dunlop. Mr. Dunlop died in 1857. Mr. Henry Christie joined the firm during its first year, but was murdered at Cawnpore in the Mutiny of 1858. Mr. [later Sir] Donald Horne McFarlane, a nephew of Dr. Begg, was admitted as a partner shortly afterward. He and Mr. Henry Holmes Sutherland were joint senior partners of the Calcutta firm and of Begg, Sutherland & Co., Cawnpore, for many years. Sir Donald died in 1904, after having been a partner for about forty-four years. After Sir Donald's death Mr. David Cruickshank and Sir George Sutherland were joint senior partners until the death of Mr. Cruickshank in 1916.

In 1872, the partners were Messrs. D. H. McFarlane, Duncan Macneill, John Mackinnon, and H. H. Sutherland. Messrs. Macneill and Mackinnon retired in 1872, and started the firm of Macneill & Co. Mr. A. B. Inglis was then admitted as a partner of Begg, Dunlop & Co. Subsequent partners were: Mr. D. Cruickshank, Mr. J. F. McNair, Sir George Sutherland, Mr. D. A. Campbell, Mr. H. C. Begg, Mr. Charles W. Tosh, Mr. Geoffrey Pickford, Sir Alfred Pickford, Mr. T. D. Wood, Mr. D. S. K. Greig, Mr. T. D. Edelston, and Mr. W. G. Figg. In 1922, the business was converted into a private limited liability company, of which the present directors are Messrs. T. Lamb and H. A. Antrobus.

The firm of Begg, Dunlop & Co., Ltd., has been prominently identified with the affairs and progress of both the Tea Districts Labor Association and the Indian Tea Association, Calcutta. Partners in the firm who have held executive positions in the latter association are: Mr. A. B. Inglis, chairman, 1881; Mr. D. Cruickshank, secretary, 1881, and chairman, 1886 [and vicechairman, London, 1897 to 1901]; Mr. J. F. McNair, chairman, 1887; Mr. D. A. Campbell, vice chairman, 1904-06; Mr. C. D. Inglis, vice chairman, 1908; Mr. G. Pickford, vice chairman, 1907 and 1909; Mr. [later Sir] Alfred D. Pickford, chairman, 1915 and 1918; Mr. H. C. Begg, chairman, 1900 and 1903, and vice chairman, 1911; and Mr. T. D. Edelston, vice chairman, 1928.

Since the founding of the firm three of the partners have held the office of





Dr. David Begg

Mr. Robert Dunlop

THE FOUNDERS OF BEGG, DUNLOP & Co., Ltd.



GROUP OF CALCUTTA TEA TRADE MEN ABOUT 1883

Left to right, standing—Messrs. Consolo, H. R. McInnes, Thos. Watson, John Davenport, Thos. Traill, J. G. McLaren, Luther Hays. Seated—Messrs. C. J. Sharp, W. L. Thomas, C. F. Inskip, W. S. Cresswell, Carter, Geo. Cheetham, John Carritt, Browning. On the floor—Messrs. Watson, Jr. and Wilfred Oldham.

president of the Bengal Chamber of Commerce. They were: Mr. H. H. Sutherland, 1875; Mr. D. Cruickshank, 1886; and Sir George Sutherland, 1900. The firm's London correspondents are Begg, Roberts & Co.

Dr. David Begg, the founder, was born in Caithness, Scotland, in 1812. He arrived at Calcutta in the early 'forties and, after practicing medicine for several years, combined with his profession an agency business with Cawnpore and the indigo factories of Behar. He abandoned medicine in 1856, and died in 1868, having ceased to be a partner in Begg, Dunlop & Co. and Begg, Maxwell & Co.—as the Cawnpore business was then called—in 1862.

The firm of Duncan Brothers & Co., LTD., agents and managing agents, 101, Clive Street, was founded in 1859 by Messrs. Walter and William Duncan and Mr. [later Sir] Patrick Playfair as Playfair, Duncan & Co. The business was converted into a private limited liability company in 1924. The firm has been active in promoting the interests of the Indian tea trade through the Indian Tea Association and the Tea Cess Committee. Mr. T. McMorran was vice chairman of the Indian Tea Association, Calcutta, in 1903; chairman, 1909 and 1910; vice chairman, London, 1911 and 1919; chairman, 1920; and president, 1934. Mr. W. A. Duncan was vice chairman, Calcutta, 1919; vice chairman, London, 1922, and chairman, 1923–24. Mr. James Insch was chairman, Calcutta, 1929. Mr. John Ross, another director, was vice chairman of the Tea Cess Committee in 1928 and chairman in 1931. The London and Glasgow correspondents of the firm are Walter Duncan & Co. The directors are: Messrs. T. McMorran, D. P. McKenzie, L. T. Carmichael, and James Insch, London; and Messrs. J. A. Brown, Thomas Douglas, C. Pomphrey, R. W. B. Dunlop, J. S. Graham, and T. B. Nimmo, Calcutta.

Barlow & Co., merchants and agents, 37, Strand Road, were established about 1860 by the late Mr. Thomas Barlow as a branch of Thomas Barlow & Brother, Manchester and London. For many years they have acted as agents for a group of estates controlled by the firm of Thomas Barlow & Brother. The partners of the Calcutta house are Sir John D. Barlow and Mr. Thomas B. Barlow, England.

Thomas B. Barlow, England.

The growth of WILLIAMSON, MAGOR & Co., merchants and agents, 4, Mangoe Lane, has kept pace with the development of British-grown teas. The business was founded in the early 'sixties by Mr. J. H. Williamson, who came out to India in 1853 as manager for the Assam Company and changed the early failure of the Indian tea industry into success. After retiring from Assam he and his brother, Mr. George Williamson, established the London agency firm of George Williamson & Co., and soon

after 1860 Mr. J. H. Williamson started a similar agency in Calcutta. Mr. R. B. Magor joined him in 1869, and from that date the style of the firm has been Williamson, Magor & Co. Mr. G. G. Anderson joined the firm in 1874, previously having been a Ceylon planter. Mr. A. G. Watson became a member of the firm in 1875, after years as a tea planter in India. Mr. J. H. Williamson, the founder, retired from Calcutta in 1875, after which Mr. Magor acted as manager until he joined the London firm in 1884. Both Mr. J. H. Williamson and Mr. A. G. Watson died in the first decade of the present century, and Mr. R. B. Magor died in 1933. Mr. R. L. Williamson joined the firm as an assistant in 1898, and was admitted to partnership in 1904. He died in 1927. Members of the firm who have been prominently identified with the Indian Tea Association are: Mr. R. B. Magor, one of the founders, Calcutta, 1881; Mr. A. G. Watson, chairman, Calcutta, 1892; Mr. G. G. Anderson, chairman, Calcutta, 1898-99; Mr. Lockhart Smith, chairman, Calcutta, 1902, 1904-06; Mr. R. L. Williamson, chairman, Calcutta, 1908; Mr. Alex. D. Gordon, vice chairman, Calcutta, 1912, 1914, and 1923, and chairman, 1913, 1916-17, 1920, 1924, and 1928; Mr. R. K. Magor, vice chairman [London], 1907, and chairman [London], 1908-09; Mr. S. G. Anderson, chairman [London], 1919; Mr. K. B. Miller, chairman, Calcutta, 1934. Lockhart Smith and Mr. Alex. D. Gordon were also chairmen of the Calcutta Tea Traders' Association for many years. The present partners are Messrs. R. K. Magor, S. G. Anderson, E. R. Colman, and K. B. Miller. The London firm is George Williamson & Co.

The business of W. S. Cresswell & Co., tea brokers, 3, Clive Row, was established by the late Mr. W. S. Cresswell in 1862. Mr. Cresswell continued at the head of the firm until 1908 and was associated with the following partners: Mr. W. A. Aldam, 1878–1914; Mr. E. A. Mitchell, 1902–23; and Mr. E. H. Carter, 1905–17. Messrs. J. C. D. Naismith and N. D. Gye are the present partners. The London correspondents are Lloyd, Matheson & Carritt.

The firm of Andrew Yule & Co., Ltd., managing agents and secretaries, 8, Clive Row, was founded about 1865 by Mr. Andrew Yule, who remained at the head of the firm until 1902. He had a number of



IMPOSING CALCUTTA TEA OFFICES

Left—Macneill & Co. Right—Balmer Lawrie & Co.

partners, the most prominent of whom was the late Sir David Yule. The latter went to India in 1876, and soon took such an active part in the expansion of the business that he virtually directed it from about 1880 until about 1918, when he retired from India, leaving the reins in the hands of Sir Thomas Catto.

The firm of Balmer Lawrie & Co., Ltd., merchants, bankers, general agents, and engineers, 103, Clive Street, was founded in 1867 by Mr. Alexander Lawrie. Mr. Lawrie came out to India in 1862 as assistant in the Calcutta offices of W. H. Smith Barry & Co., becoming a partner in 1865. He started in business for himself the following year. In 1867, Mr. S. Balmer joined him as partner and the firm of Balmer Lawrie & Co. was established; but Mr. Balmer died almost immediately. Mr. Lawrie started the firm of Simpson, Lawrie & Co., Liverpool, in 1870, and shifted to London, founding Alexander Lawrie & Co. in that city in 1878. Mr. Lawrie guided the destinies of both the Calcutta and London firms until his death in 1908.

Members of the firm who have made important contributions to its progress are: Mr. J. N. Stuart, who became a partner in 1878, and left in 1895 to join the London organization; Mr. John Gemmell, senior partner for a number of years, leaving in 1907 to join the London firm; Mr. A. C. Lawrie, a son of the founder, who was a partner until 1891, when he joined the London firm; Mr. P. Balmer Lawrie, another son of the founder, who joined the Calcutta staff in 1891, becoming senior partner in 1901 and returning to the London firm in 1914; Mr. A. Preston, who was a partner from 1907 to 1913; Mr. A. N. Stuart, son of Mr. J. N. Stuart, who was a

partner for a number of years, and then left to become a director of the London firm; Mr. J. M. Chisholm, who joined the firm in 1905 and, after serving as partner in Calcutta, also became a director of Alexander Lawrie & Co., Ltd.; and Sir Hubert Winch Carr, who joined the firm in 1901, became a partner in 1914, senior resident partner in 1916, and retired as managing director in 1927.

Balmer Lawrie & Co. partners and directors who have been prominent in the Indian Tea Association include: Mr. Alexander Lawrie, the founder, who was a charter member of the London branch; Mr. J. N. Stuart, chairman of the Calcutta branch for five years, 1889–94, and chairman at London, 1907; Mr. G. A. Ormiston, chairman at Calcutta for two years, 1896–97; Mr. [later Sir] Hubert Winch Carr, chairman at Calcutta, 1919; and Mr. P. Balmer Lawrie, who was a member of the general committee at London in 1928.

The present directors of Balmer Lawrie & Co., Ltd., are: Mr. A. R. Mellis, who joined in 1913 and became a partner in 1922; Mr. W. B. Monair, who joined in 1896 and became a partner in 1921; Mr. H. C. W. Bishop, who joined in 1910 and became a director in 1925; and Mr. G. W. Gemmel. The manager of the tea department is Mr. J. G. Booth-Smith, who succeeded Mr. T. L. Trueman, when the latter resigned in 1932. Mr. Trueman joined Balmer Lawrie & Co. in 1913 and became head of the tea department in 1918. He is now a director of Alexander Lawrie & Co., Ltd., London.

The Calcutta branch of JAMES FINLAY & Co., Ltd., Glasgow, was established in 1870. Sir Alexander Kay Muir, son of



Offices of James Finlay & Co., Ltd.





Mr. R. Langford James Mr. Octavius Steel Founder
James Finlay & Co., Ltd. Octavius Steel & Co., Ltd.

the late Sir John Muir, and Mr. James Finlay Muir, present chairman, were managers from 1895 until 1902. The present directors are: James Finlay Muir; John Buchanan Muir, R. Langford James, J. D. Gatheral, W. Warrington, A. M. McGrigor, W. H. Marr, and J. T. Tulloch.

Directors who served the Indian Tea Association, Calcutta, as executives are: Mr. W. Warrington, vice chairman, 1910, and chairman, 1911; Mr. R. [later Sir] Graham, chairman, 1914, and vice chairman, 1917–18; Mr. J. A. C. Munro, vice chairman, 1921; and Mr. T. C. Crawford, chairman, 1921–23, 1926–27, 1930, 1932–33, and vice chairman, 1925 and 1929.

Mr. R. Langford James joined the Finlay staff in 1902 and had charge of the Calcutta branch from 1920 until 1923, when he went to the London office as manager. While at Calcutta, he was active in the Bengal Chamber of Commerce, the Legislative Council, and the Committee of the Indian Tea Association.

Mr. T. C. Crawford, for many years head of the tea department of James Finlay & Co., Ltd., at Calcutta, is a Scotsman, born in Renfrewshire, May 13, 1886. He joined James Finlay & Co., Glasgow, in 1903, and went to the Calcutta office in 1907. In addition to the service he has rendered the Indian Tea Association and its Tea Cess Committee, he has served as chairman of the Tea Districts Labor Association and as a member of the Bengal Legislative Council. He retired from India in 1934.

The agency house of Octavius Steel & Co., Ltd., 14, Old Court House Street, was founded in 1870 under the name of Steel, McIntosh & Co. by Mr. Octavius Steel and Mr. A. R. McIntosh. A London office was

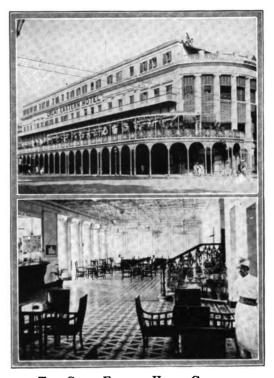
established in the same year, and for a time both concerns operated as one firm. The partnership with Mr. McIntosh continued until Mr. McIntosh's death in 1876, when Mr. Leslie Worke became Mr. Steel's partner and the firm name was changed to Octavius Steel & Co. Later Mr. R. R. Waller and Mr. John Steel, Jr., became members of the firm, and after they retired from India the late Messrs. George Henderson and J. S. Fraser took their places. Mr. Octavius Steel died in 1892 and Mr. George Henderson became the senior part-Subsequent changes brought Mr. Thomas Traill into the firm in 1901, and Mr. George Henderson went to the London firm. Mr. J. S. Fraser died in 1907. In 1905, Messrs. A. H. Abbott, H. W. Boyd, and F. G. Clarke became partners at Calcutta. In 1920, Mr. S. J. Best became a partner.

In 1922, Messrs. Traill and Boyd retired, and Mr. Traill died in 1927. Mr. Abbott retired from Calcutta sometime subsequent to the retirement of Messrs. Traill and Boyd, and was made a member of the London firm. In 1928, Mr. Best also retired from the Calcutta firm, and in 1929 joined Octavius Steel & Co., London.

Members of the firm of Octavius Steel & Co., Ltd., who have been identified with the Indian Tea Association are: Mr. George Henderson, vice chairman, London, 1903; Mr. J. S. Fraser, vice chairman, London, 1904; Mr. S. J. Best, vice chairman, Calcutta, 1920 and 1922, chairman, 1925, and chairman Tea Cess Committee, 1927–28; and Mr. F. G. Clarke, vice chairman, Calcutta, 1924, vice chairman, London, 1928, and chairman, 1929 and 1930. Mr. Clarke was also chairman of the Tea Cess Committee at one time.

The Hon. Samuel J. Best, was born in London, June 24, 1874; is a brother and heir presumptive of the sixth Baron Wynford; and went to India in 1897. He planted tea till 1908, and then joined the Calcutta office of Octavius Steel & Co., reporting on the gardens of the agency until admitted to partnership in 1920. In 1922, when the business was changed into a limited liability company, Mr. Best became a managing director.

The business of Macneill & Co., merchants and agents, 2, Fairlie Place, was founded in 1872 by two Scotsmen, Messrs. Duncan Macneill and John Mackinnon. The partners who succeeded the founders



THE GREAT EASTERN HOTEL, CALCUTTA

Upper—The original building in Old Court House
Street. Lower—The lounge in the old building.

are nearly all Scotsmen. The firm is extensively interested in the tea industry of Northern India. The present partners are: Rt. Hon. The Earl of Inchcape, Hon. Alexander Shaw and Messrs. G. F. Hotblack, H. H. Macleod, J. E. Roy, Col. F. G. Bailey, E. Millington-Drake, D. M. Hamilton, Sir William Currie, and W. N. C. Grant, London; E. G. Abbott, G. W. Leeson, and Balfour Smith, Calcutta. The London correspondents are Duncan Macneill & Co.

The business of Barry & Co., merchants and agents, 2, Fairlie Place, owes its inception in 1876 to Dr. John Boyle Barry, an enterprising Irish physician, and Mr. A. P. Sandeman, a tea planter. Dr. Barry died in the 'eighties and the business was continued by Mr. Sandeman in partnership with Mr. James Hewett Barry, son of the founder. Mr. [later Sir] Patrick Playfair became a member of the firm in 1884. A little later Mr. R. R. Waller joined the firm, coming from Octavius Steel & Co. Sir Patrick was the senior partner at the time of his death in 1915. From 1915 until his death in 1932, the head of the firm was the Rt. Hon. the Viscount Inchcape of



New Waterloo Block Extension of the Great Eastern Hotel

Strathnaver, G.C.S.I., G.C.M.G., K.C.I.E. The present partners are: The Rt. Hon. Kenneth, Earl of Inchcape, Hon. Alexander Shaw, Sir J. W. A. Bell, Sir W. C. Currie, Sir P. H. Browne, C. B. E., Col. F. G. Glyn Bailey, and Messrs. H. H. Macleod, G. F. Hotblack, J. H. Fyfe, E. Millington-Drake, Europe; and Messrs. J. S. Henderson, G. R. Campbell, C. G. Cooper, and W. A. M. Walker, Calcutta.

The firm of Carritt, Moran & Co., tea brokers, 9, Mission Row, was originally Carritt & Co., started in 1877 by Messrs. T. and A. Carritt. Mr. T. Carritt left India in 1883 and became a partner of Lloyd, Matheson & Carritt in London. He was succeeded by Mr. F. H. Cumberlege, and when Mr. A. Carritt died, Mr. S. Verschoyle was admitted to partnership. These two partners carried on the firm until sometime between 1892 and 1897, when Mr. F. H. Cumberlege left. In 1898, Mr. A. C. S. Holmes and Mr. M. Trevor were taken in to partnership with Mr. S. Verschoyle. In 1902, Mr. Verschoyle left India to join the London firm of George White & Co. as partner, and Messrs. Holmes and Trevor carried on the business of Carritt & Co. In 1904, Carritt & Co. absorbed the tea brokerage business of Moran & Co., and the title was changed to Carritt, Moran & Co. Mr. Trevor retired from India in 1909, and is a partner of Thomas, Cumberlege & Moss, London. Mr. Holmes left India in 1912 and is a partner of W. J. & H. Thompson, London. On Mr. Holmes' retirement, the firm of Carritt, Moran & Co. was carried on by Mr. G. H. Hilliard, Mr. E. H. Townend, and Mr. de C. Mackenzie who were taken into partnership on Mr. Trevor's departure in 1909. Mr. Hilliard left India in 1922 to become a partner in George White & Co., London. Mr. Townend left in 1926, and became a partner in Shepard & Co., tea brokers, London. Mr. Mackenzie died in Calcutta.

The Planters' Stores & Agency Co., Ltd., merchants, bankers, and agents, 11, Clive Street, is a branch of the company of the same name registered in England in 1878 to acquire the business of the Planters' Stores Co., Ltd., a previous Indian undertaking. Mr. James Warren is the present chairman and managing director in London; Mr. J. Elcock is general manager at Calcutta, and Mr. L. H. Sharpe has charge of the tea agency department.

The firm of SHAW, WALLACE & Co., 4, Bankshall Street, managing agents and general merchants, dates back to the 'eighties. They have branches in Bombay, Madras, Karachi, Colombo, etc. Their London correspondents are R. G. Shaw & Co. Members of the firm who have served as officers of the Indian Tea Association, Calcutta, are: Mr. H. S. Ashton, chairman in 1895 and 1901, and vice chairman, 1898-1900; Mr. Gerald Kingsley, chairman, 1907 and 1912; Mr. J. A. MacBean, vice chairman, 1926-27; Mr. H. F. Bateman, vice chairman, 1934. Mr. Ashton also was chairman of the Tea Cess Committee. The partners are Mr. H. S. Ashton, Mr. E. A. Chettle, Mr. G. Kingsley, Sir John B. Lloyd, Messrs. K. Campbell, J. L. Milne, H. F. Bateman, H. G. Stokes, P. Crawford, and H. D. Townend.

McLeod & Co., merchants and agents, 28, Dalhousie Square, was founded in 1887



DINING ROOM AND DANCE FLOOR, NEW WING EXTENSION, GREAT EASTERN HOTEL



THE OFFICES OF McLEOD & Co.

*Upper—From across the lake.

*Lower—Tea garden department.

by Mr. [later Sir] Charles Campbell Mc-Leod and Mr. A. Campbell. The original location was No. 5, Mangoe Lane. In 1890, the offices were removed from Mangoe Lane to 31, Dalhousie Square, the site on which Hong Kong House now stands, and twenty-eight years later the staff moved into McLeod House, one of the finest buildings in the city. Mr. A. Campbell remained a partner in the Calcutta firm until 1897. Mr. Charles C. McLeod retired from India in 1899 and joined the firm's London agents, D. M. Stewart & Co., who became Stewart, McLeod & Co., and later McLeod, Russel & Co. The present partners at Calcutta are: Sir Charles C. McLeod, Bart., Major Norman McLeod, and Messrs. E. A. Watson, M. C. McLeod, London; R. A. Towler, H. H. Burn, R. B. Lagden, J. R. Walker, H. N. Thomas, and H. E. Colvin, Calcutta.

LIPTON, LTD., Lipton's Buildings, 44 Weston Street, wholesale tea, coffee, and general export merchants, saw its inception in 1890, when the head office in London started a distributing business at Calcutta with Barry & Co. as agents. In 1892, Lipton, Ltd., opened a branch office in Dalhousie Square, removing in 1896 to Hare Street, and in 1904 to Standards Buildings. In 1909, the business was again removed to Weston Street, its present site. The tea department managers have been Messrs. Green, Macquire, Newby, F. E.

Hollis, and S. Wiggins. There are five other Indian branches.

The tea brokerage firm of A. W. Figgis & Co., "D" Block, Clive Buildings, was established in 1890 by the late Mr. A. W. Figgis, who died in 1933. The present members of the firm are Messrs. L. G. Notley and L. Squire.

HARRISONS & CROSFIELD, LTD., 6 Church Lane, the London tea and rubber company, in 1900 established a Calcutta branch under the name of Lampard, Clark & Co. The name changed to Harrisons & Crosfield, Ltd., when the parent company was registered in 1908. Mr. H. L. Puttock is the present manager of the Calcutta branch.

BROOKE BOND [INDIA] LTD., wholesale tea merchants, 2, Metcalfe Street, Calcutta, the head office in India of Brooke Bond & Co., London, was opened in 1902 by Mr. J. F. McKay. The Calcutta factory, located at the Kidderpore docks, packs tea for India, Burma, Egypt, Iraq, Palestine, and the Straits Settlements. They also are large exporters of teas to the United Kingdom, the U. S. A., Canada, South America, Australia, and New Zealand. The heaviest part of the Calcutta business, however, is the volume of its exports to Brooke Bond & Co., Ltd., at London and Manchester. Mr. H. Wheeler, who joined Brooke Bond (India) Ltd., in 1912, was elected chairman of the board in 1926, and is in charge of the Calcutta office.

HEATH & Co. [CALCUTTA] LTD., Grosvenor House, 60C, Chowringhee Road, tea buying and exporting house, was established in 1904, being a development of the business begun as Rodewald & Co. at Hankow and Shanghai in 1862. After Mr.



TEA TASTING ROOM AT HARRISONS & CROSFIELD'S



THE PALM GARDEN, GRAND HOTEL, CALCUTTA

J. F. Rodewald retired in 1892, the business was carried on as Heath & Co. by Messrs. A. H. and A. R. A. Heath. The China section of the business has been succeeded by independently organized branches at Calcutta, Colombo, and Batavia. In 1924, the business was changed into a limited liability company. It acts as buying agent for tea importers in consuming countries. The directors are: Messrs. A. R. A. Heath, W. J. Gibson, R. Cook, and H. R. G. Peirce.

Other merchandising or agency firms deserving of mention because of their association with the history of the Calcutta tea trade include: Davenport & Co., Ltd.; M. M. Ispahani & Sons; Kettlewell, Bullen & Co., Ltd.; Lyall, Marshall & Co.; Lyons [India] Ltd.; J. Mackillican & Co.; Martin & Co.; National Agency Co., Ltd.; George Payne & Co., Ltd.; Rowley Davies & Co., Ltd.; and Villiers, Ltd.

Calcutta Tea Traders' Association

The Calcutta Tea Traders' Association came into being September 8, 1886, when a meeting of those interested in the tea trade was held in the rooms of the Bengal Chamber of Commerce. Mr. D. Cruickshank was chairman of the meeting, the others present being Messrs. A. Wilson, J. Macfadyen, J. G. Mugous, C. J. Sharpe, A. Curritt, T. B. Cass, W. L. Thomas, G. A. Ormiston, and C. S. Hoare.

Ormiston, and C. S. Hoare.

The object of the association is to promote the common interests of sellers and buyers of tea in the Calcutta market. The chairmen since the association was formed are shown in the accompanying list.

The Colombo Tea Trade

The older Colombo firms now engaged in the Ceylon tea trade were interested as agents in coffee plantations before the failure of coffee, due to the leaf disease. They

LIST OF CHAIRMEN
of the Calcutta Tea Traders' Association

Year	Name	Year	Name
1886	D. Cruickshank	1910	D. Pym
1887	A. G. Watson	1911	D. Pym
1888	A. G. Watson	1912	W. J. Lloyd
1889	D. Cruickshank	1913	A. D. Gordon
1890	J. F. Macnair	1914	A. D. Gordon
1891	A. G. Watson	1915	W. J. Lloyd
1892	A. G. Watson	1916	W. J. Lloyd
1893	Geo. G. Anderson	1917	C. D. Inglis
1894	D. A. Campbell	1918	W. J. Lloyd
1895	H. C. Begg	1919	Hon. Samuel Best
1896	D. A. Campbell	1920	C. Reid
1897	G. G. Anderson	1921	W. J. Lloyd
1898	D. A. Campbell	1922	R. Baker
1899	Lockhart A. Smith	1923	R. R. Plowman
1900	H. C. Begg	1924	R. R. Plowman
1901	H. C. Begg	1925	O. W. Taylor
1902	Lockhart A. Smith	1926	R. R. Plowman
1903	Lockhart A. Smith	1927	O. W. Taylor
1904	Lockhart A. Smith	1928	N. T. Brain
1905	H. C. Begg	1929	T. C. Crawford
1906	G. Pickford	1930	H. Wheeler
1907	G. Pickford	1931	R. Baker
1908	R. H. A. Gresson	1932	J. C. Surrey
1909	G. Pickford	1933	C. K. Nicholl
		1934	N. T. Brain



QUEEN STREET, COLOMBO Showing clock tower with revolving light visible 18 miles at sea.

changed into tea when that product began to be commercially important along in the 'eighties. There was a phenomenal growth of the Colombo tea trade through the 'nineties and after the turn of the century as Ceylon tea found favor in new markets and Ceylon planters carried on an active advertising campaign abroad. A number of new companies entered the field and shared in the development of the commerce in tea, in addition to former coffee concerns that changed over. Three groups, or classes, of tea firms established themselves—selling brokers, estate agencies, and tea-buying and shipping merchants.

George Steuart & Co., estate, commission, and banking agents, 45, Queen Street, is the oldest firm now engaging in the tea trade in Colombo, having been established in 1837 by Captain James Steuart. Captain George Steuart, a ship's master, took over the business in 1839. The firm took up tea after the failure of coffee. The present partners are: Sir Thomas Lister Villiers, J.P., U.P.M., who was chairman of the Ceylon Estates Proprietary Association in 1922, Messrs. J. J. Park, D. C. Wilson, G. P. Madden, A. Hollingworth, J. M. Glasse, and C. G. C. Kerr, C. A.

The firm of J. M. ROBERTSON & Co., merchants and estate agents, 6, Prince Street, was founded in 1845 by Baring Bros., the first partners being Messrs. J. M. Robertson and George Christian. This was long before the beginning of the Ceylon tea trade, so neither Mr. Robertson nor Mr. Christian were ever identified therewith. Mr. Henry Bois, who died in 1922, joined J. M. Robertson & Co. in 1859. He retired in 1905. From 1859 to 1896, he

was chairman of the Chamber of Commerce for six terms. He also was mercantile member of the Legislative Council. Mr. W. D. Gibbon [later Sir William] became a partner after his retirement from coffee planting. He served the Planters' Association of Ceylon as secretary and as chairman. Mr. Giles F. Walker, a later partner, also served as chairman of the Planters' Association and as representative in the Legislative Council. A still later partner, Mr. Henry Gordon Bois, was made a member of the firm in 1896, and at one time was chairman of the Estates Agents' Association—later absorbed by the Ceylon Estates Proprietary Association. He became senior partner, and in 1900, after his retirement from Ceylon, was vice chairman of the Ceylon Association in London, and chairman for two years, 1901 and 1902. He died August 1, 1922.

Mr. HERBERT GORDON BOIS, M.A. [Cantab.], Barrister-at-Law, J.P., U.P.M., and one of the former partners in J. M. Robertson & Co., was born April 22, 1873. He was educated at Cheltenham College and Trinity Hall, Cambridge, and joined the staff in 1896. He was made a partner in 1899; served as chairman of the Ceylon Chamber of Commerce, Estates Agents' Association, Ceylon Estates Proprietary Association, and Colombo Club; and as a Member of the Legislative Council. He

died in 1933.

The business of Darley, Butler & Co., LTD., general merchants and estate agency house, 69, Queen Street, was established as Darley & Co., by Mr. E. J. Darley, in 1847. He was joined in the following year by Mr. Samuel Butler and the name of the concern was changed to Darley, Butler & Co. Both partners were Englishmen with nine or ten years previous experience in the estate agency business at Colombo as members of the former firm of Acland, Boyd & Co., which went down in the financial crash of 1847. The new firm did a large importing business, and to this was added an equally important export business in Ceylon produce, which later included tea. Mr. Butler retired to England in 1858, and was followed by Mr. Darley in 1862. Together they formed the London firm of Darley & Butler. Mr. Darley died in 1869, and Mr. Butler in 1893. Meanwhile, Mr. Stephen Darley, a brother of Mr. E. J. Darley, and Mr. Edward Darley, son of the latter, became partners in the

Colombo firm; and in 1863 they were joined by Mr. [later Sir] William Wilson Mitchell, who became sole partner after the Messrs. Darley left the firm sometime in the late 'sixties. Sir William was Ceylon tea commissioner at several exhibitions, a member of the Legislative Council, and a leader in the public affairs of Ceylon. He died in 1915. The present directors are: Messrs. W. A. Cole, O. P. Rust, J. M. Souter, G. A. Atkinson, and F. A. W. Mitchell. The London agents are Darley, Butler & Drew, Ltd.

Butler & Drew, Ltd.

The firm of Lee, Hedges & Co., Ltd., merchants and agency house, Hedges Buildings, originated as W. D. Lee in 1852, but in 1866 Mr. J. R. Hedges joined the firm, which then became Lee, Hedges & Co. Mr. W. D. Lee died in 1871, and in 1917 the business was changed into a limited liability company. At first it consisted mainly of coffee estate agencies and coffee merchandising, but its activities extended to tea estates with the inception of the tea industry. Mr. G. A. Talbot, one of the former partners, was prominently connected with the Ceylon Association in London, serving two terms as its chairman in 1904-05 and 1905-06. firm's London correspondents are Grace The present directors are: Bros. & Co. Major J. W. Oldfield and Messrs. J. C. Robinson, and L. P. Gapp.

The late Mr. CHARLES STEWART BURNS, F.I.I.B., former director of Lee, Hedges & Co., Ltd., was born in Inverness, Scotland, in 1879; educated at Inverness College and Edinburgh Academy; and was engaged in planting in Ceylon from 1897 until 1903. Later, he was with Aitken, Spence & Co. He became a partner and director in Lee, Hedges & Co., Ltd., in 1912; was chairman of the Cevlon Chamber of Commerce in 1921 and 1922; and chairman of the Ceylon Estates Proprietary Association in 1924. In 1927, Mr. Burns was a member of the Legislative Council; in 1927-28 a member of the Council of the Indian Institute of Bankers; and acting member of the Executive Council in 1927. He died in

MAJOR JOHN W. OLDFIELD, who became a director of Lee, Hedges & Co., Ltd., in 1925, came to Ceylon as a planter in 1907; was chairman of the Planters' Association of Ceylon for two years, 1924 and 1925; and vice chairman of the Ceylon Estates Proprietary Association in 1926.

Carson & Co., Ltd., agents and secretaries, Chartered Bank Buildings, Queen Street, was established in 1857 by Messrs. R. D. Carson and T. Wright. The present directors are: Messrs. W. Shakspeare, H. C. Bibby, W. Coombe, R. A. Sharrocks, M. L. Hopkins, T. Y. Wright, and E. L. Fraser. The tea department is in charge of Messrs. R. Shaw, J. M. Westwood, and J. C. Wyper. Three of the directors—Messrs. W. Shakspeare, W. Coombe, and T. Y. Wright—are prominently identified with tea association affairs.

Mr. Walter Shakspeare, who was vice president of the Ceylon Association in London in 1925 and again in 1928, became



Mr. Walter Shakspeare

acting president upon the death of Mr. W. D. Campbell, December 11, 1928. Following this, he was elected president in 1929 and succeeding years. He is a life director in Carson & Co., Ltd., and a director of the National Bank of India, Ltd., London; The Galle Face

Hotel Co., Ltd., Colombo; Colombo Commercial Co., Ltd.; and a number of tea and rubber companies. Mr. Shakspeare was born at Liverpool in January, 1869. He went to Ceylon in 1892 as an assistant in Carson & Co., Ltd., of which he now is chairman. He served on the Ceylon Planters' Association Committee, the Chamber of Commerce and Harbour Board, and for a number of years was Consul for Japan at Colombo. In 1913, he returned to England where he makes his home at Sefton, St. George's Hill, Weybridge, Surrey, with periodic visits to Ceylon.

Mr. T. Y. Wright was chairman of district planters' associations for four years, after which he was elected chairman of the Planters' Association of Ceylon for two years. Subsequently, he was the representative of the planters in the Legislative Council for five years.

MR. WILLIAM COOMBE, J.P., U.P.M., Major C.M.R., was chairman of the Ceylon Estates Proprietary Association in 1926 and was reëlected in 1927, 1928, and 1929.

The agency firm of LEECHMAN & Co.,

National Mutual Buildings, Chatham Street, was founded in 1866 by Mr. George Barclay Leechman, Sr. He was joined by his brothers, Mr. W. C. and Mr. C. A. Leechman. Mr. G. B. Leechman was a member of the Legislative Council between 1878 and 1884, and chairman of the Ceylon





Mr. G. B. Leechman Founder, 1866 FORMER HEADS OF LEECHMAN & Co.

Mr. J. J. Wall Senior partner, 1923-28

Chamber of Commerce from 1875 to 1878, and during the years 1880 and 1887. Mr. C. A. Leechman was especially interested in tea, became an expert taster, and had an important part in pushing the sale of tea shares in England. Mr. G. B. Leech-man, Sr., died in London, 1920, in his 82nd year. On his death, his son, Mr. G. B. Leechman, Jr., became head of the firm. He died in 1923, and was succeeded by the late Mr. James John Wall. The present partners of Leechman & Co. are Messrs. D. T. Richards, J. S. McIntyre, and F. A. Bond. The London agents are Lyall, Anderson & Co.; Shand, Haldane & Co.; and Grindlay & Co., Ltd.

Mr. James John Wall, J.P., U.P.M., came out to Ceylon in 1907 to become an assistant in the firm of Leechman & Co. He was a son of Major M. Wall of the Royal Fusiliers, born in Middlesex, England, in 1888. He won a high place in the mercantile community, serving as chairman of the Cevlon Chamber of Commerce, of the Rubber Traders' Association. and of the Tea Traders' Association. He died suddenly in England in 1928, while on holiday.

Mr. D. T. Richards began his career in tea by joining Joseph Tetley & Co., London, in 1903, and first went out east in 1906. In 1908, he joined Leechman & Co. as assistant in the tea department, and in 1928 became senior partner.

E. John & Co., National Mutual Buildings, founded in 1868 by Mr. E. John, is the oldest of the brokerage firms. It specialized in exchange and coffee at first, but other lines, including tea, were added later. The late Mr. Reginald Marshall John, who died in Kent, England, 1928, was at that time the oldest Colombo tea broker, and had been an outstanding figure in the trade for many years. He went to Ceylon some time in the 'eighties to assist his father, Mr. George John. The present partners are: Messrs. L. O. Leefe, R. J. M. Meaden, A. G. G. Hyde, L. C. A. Leefe, and T. Cuming.

THE COLOMBO COMMERCIAL Co., LTD., Imperial Bank Buildings, estate agents, merchants, engineers, etc., was established at London and Colombo by Mr. John Brown in 1875. The directors of the company [at London] are: Messrs. Walter Shakspeare, A. A. Prideaux, C. C. Stephen, and Andrew Young [managing director]. The Colombo tea department is in charge of Mr. C. J. Speer, who succeeded Mr. O. M. Ash after the latter's retirement in 1932. Mr. Ash's service with the company extended over 30 years.

The firm of Bosanquet & Skrine, Ltd., National Mutual Buildings, merchants and estate agents, combine the former businesses of Skrine & Co. and Bosanquet & Co., Ltd. Skrine & Co. was founded in 1878 by the late Mr. Duncan W. H. Skrine. pioneer coffee planter. After the failure of coffee he opened and owned one of the pioneer tea estates. He started business on his own in 1878, and later took as his partners Mr. J. G. Fort and Mr. Edward Skrine. He died in 1928, aged 82. Bosanquet & Co., Ltd., was founded in 1879 by Mr. Richard Arthur Bosanquet, who arrived in Ceylon in 1870, and started as a coffee planter. He was appointed estates visiting agent for George Wall & Co., and when that firm was forced into liquidation by the failure of coffee, he started Bosanquet & Co., to take over the business. Mr. Bosanquet was a member of the Legislative Council in 1884, and again in 1887. In 1890, the firm's London correspondent was established, and the late Mr. Gilbert F. Traill, pioneer Ceylon tea planter, joined Mr. Bosanquet as partner and visiting agent. In 1906, the London firm became Bosanquet, Traill & Co., in which Mr. Bosanquet is the senior partner. The directors of Bosanquet & Skrine, Ltd., are:





Mr. James Whittall Mr. W. H. Figg

The founder Late partner

FOUNDER AND LATE PARTNER OF WHITTALL & Co.

Messrs. Gilbert B. Traill, W. R. Matthew, G. O. Hunt, W. W. Berry, R. H. Skrine,

and G. R. Whitby.

The firm of Whittall & Co., merchants and agents, 14, Queen Street, having its head offices at Colombo and a branch in Klang, Selangor, Federated Malay States, was founded in 1879 by Mr. James Whit-At the end of the 'seventies Mr. Whittall started the firm of Whittall & Co. to take over the Colombo business of Mac-Gregor & Co., who were in difficulties as a result of the failure of coffee. Mr. Whittall was a China merchant, whose Ceylon tea connection was more or less accidental. He continued in Ceylon for only a short time. Subsequently he became vice president of the Ceylon Association in London, holding the position from the inception of the Association in 1888 until 1893. After his death, the firm, under the direction of the late Mr. Alexander Thomson, Mr. G. W. Carlyon, Mr. G. H. Alston, and Mr. W. H. Figg, became prominently identified with tea and rubber. All of these partners were pioneer promoters of both the tea planting industry and the tea trade of the island; Messrs. Thomson and Carlyon, in particular, started almost the first rupee tea companies up-country. The present partners are Messrs. C. H. Figg, A. S. Collett, I. L. Cameron, L. P. Samson, H. W. Urquhart, and C. E. Hawes. Messrs. G. A. Ponsford and M. P. Saunders are in charge of the tea department. The London correspondents are Thomson, Alston & Co., Ltd.

The late HON. MR. WILLIAM HENRY FIGG, long an outstanding figure in Colombo's business and racing circles, went to Ceylon in the late 'seventies and, after three years of planting, embarked upon a

highly successful commercial career in Colombo. He joined Whittall & Co. in 1896, and later became its senior partner. He was a member of the Ceylon Legislative Council, 1900–10; chairman of the Chamber of Commerce, 1897–99, and 1903–05; and first chairman of the European Association. After retiring from business, in 1921, he returned to England and died in 1925 at the age of sixty-five.

SIR JAMES THOMSON BROOM, East India merchant, became a member of the firm of Whittall & Co. in 1916. He had been connected with the Calcutta branch of James Finlay & Co., Ltd., and went to Ceylon in 1909 as manager of that company's Colombo branch. Sir James was chairman of the Ceylon Chamber of Commerce, 1914—15, and 1917—18; and served for some years as a member of the Legislative Council. He retired from the firm of Whittall & Co. in 1928 and died in 1931.

MR. CLIFFORD HENRY FIGG, was born in Colombo, January 16, 1890, and in addition to being the senior partner in the firm of Whittall & Co., he also has taken an active interest in the affairs of the Ceylon Estates Proprietary Association, of which he was chairman in 1923–24.

Somerville & Co., Ltd., brokers, 51, Queen Street, was founded in 1880 as Somerville & Co. by the late Mr. William Somerville. When Mr. Patrick Gow of London joined the firm, in 1912, the name was changed to Gow, Somerville & Co., Ltd. The present directors are Messrs. C. T. Young, H. G. Donald, and E. F. Burgess.

MR. WILLIAM SOMERVILLE went to Ceylon about 1870, and was connected for a time with the firm of Fowlie, Richmond





Mr. Patrick Gow The late founder of Gow, Wilson & Stanton

Mr. James Forbes One of the founders of Forbes & Walker

Two Well-known Brokerage House Founders

& Co. Later, he became a broker in association with Mr. G. Chapman Walker and Mr. James Forbes, and when these two formed the firm of Forbes & Walker, Mr. Somerville started his own organization under the name of Somerville & Co. He retired in 1910, and died in 1925, aged eighty-three.

The late Mr. J. T. Muggeridge went to Ceylon in 1901 after several years in the tea business in London; joined Mr. Somerville in 1908; and upon the retirement of the founder, in 1910, became the senior partner. Mr. Muggeridge died in 1923.

Mr. Geoffery Powell Adams, another of the former directors, went to Ceylon in 1919, and after planting for a short time joined Gow, Somerville & Co., Ltd.; later becoming a director. He died in 1929.

MR. PATRICK Gow joined the Colombo firm in 1912, when it was changed into a limited company, and was chairman and managing director of the London firm of Gow, Wilson & Stanton. He died in 1929, aged fifty-two. After Mr. Gow's death the name of the Colombo firm became Somerville & Co., Ltd.

Lewis Brown & Co., Ltd., agency house, Inveresk House, McCallum Road, was founded by the late Mr. Robert Lewis Maitland Brown about 1880. The firm represents, either as agents or as agents and secretaries, a long list of tea, rubber, and cocoanut estates. In 1916, the partnership was changed into a limited liability The directors are: Messrs. company. Robert Davidson, David Scott, A. F. Patterson, and G. K. Stewart [ret. 1934].

The brokerage house of Forbes & Walker, Prince Buildings, was established in 1881 by Messrs. James Forbes and G. Chapman Walker. Of the original founders, Mr. James Forbes has retired and Mr. G. Chapman Walker is dead. Later partners were Messrs. R. W. Forbes, G. R. Bacot, and C. H. Wellard. Messrs. Forbes and Bacot have retired, and Mr. Wellard is dead. The present partners are: Messrs. W. E. Drury, O. B. Forbes, H. H. Kirton, C. W. Walker, A. F. Wallace-Tarry, and N. Dru Drury.

The firm of Cumberbatch & Co., estate agents, Ambawatte House, Vauxhall Street, Slave Island, Colombo, was established in 1884. The present partners are: Messrs. A. J. Denison, C. C. Durrant, R. Whittow, J. A. Loram, and J. A. S. Agar. Mr. S. T. Pearce is visiting agent for the firm.

Boustead Bros., merchant and agency





Mr. Alexander Fairlie

Mr. J. A. Tarbat FORMER AND PRESENT MANAGERS OF JAMES FINLAY & Co., LTD.

firm, Union Place, was founded in 1886. The late Edgar G. Money, who was a partner in this firm with the late Mr. John Melvill Boustead, was a son of Lieutenant Colonel Edward Money, who wrote the prize essay, the Cultivation and Manufacture of Tea in India, widely read in the 'seventies. The present partners are: Messrs. G. M. Boustead, R. C. Boustead, E. D. Money, and G. B. C. Northey. The London agents are Boustead Bros.

JAMES FINLAY & Co., LTD., 63, Queen Street, branch of the Glasgow firm of the same name, was opened under its former name of Finlay, Muir & Co. in 1889. The branch imports piece goods, exports Ceylon produce on a large scale, and acts as agents for estates. The present manager is Mr. J. A. Tarbat, and the tea buyers are Messrs. D. L. Rossiter and D. F. H. Armitage.

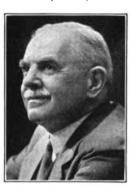
Mr. Alexander Fairlie, manager of the Colombo branch of James Finlay & Co., Ltd., for many years, was, at various times, chairman of the Colombo Chamber of Commerce, the Colombo Tea Traders' Association, and a member of the Legislative Council. Mr. Fairlie was born at Glasgow in 1857. He went to Ceylon from India in 1893 as manager of Finlay, Muir & Co. In 1913, he retired from Cevlon to Kilmarnock, Scotland.

Mr. George Turnbull, who recently retired from the management of James Finlay & Co., Ltd., Colombo, took a leading part in promoting the tea and rubber planting industries, having been chairman of the Ceylon Estates Proprietary Association in 1922-23, and member of the Rubber Restriction Board during the same period. Mr. Turnbull is a Scotsman, born August 26, 1879. He joined James Finlay & Co., Glasgow, in 1899, and went to India in 1901. He planted in Southern India till 1905 and was in the Calcutta office of James Finlay & Co., from 1905 to 1917, after which he went to the Colombo branch, retiring from the management in 1929.

Mr. John Allan Tarbat, present manager of James Finlay & Co., Ltd., was born in Arbroath, Scotland, in 1891. He joined Messrs. Finlay & Co. in 1910.

Bois Bros. & Co., Ltd., tea planters, merchants, and estate agents, 59, Queen Street, was formed as a partnership in 1891 by Mr. [later Sir] Stanley Bois and his brother, Mr. Percy Bois. It was changed into a limited liability company in 1920. The present directors are Messrs. G. C. Slater, L. G. Byatt, and Commander Cyril Goolden. Mr. Slater, the senior partner, was chairman of the Ceylon Estates Proprietary Association, 1924–26.

SIR STANLEY BOIS was born in London June 20, 1864, and received his early busi-



Sir Stanley Bois

ness experience in a London ship broker's office. He first went to Ceylon in 1882, when he joined Alston, Scott & Co. In 1891 he and his brother took over the business, renaming it Bois Bros. & Co., Colombo, and Robertson, Bois & Co., London. He was a member of the Municipal Council, Colombo; Chairman of

the Ceylon Chamber of Commerce; and a member of the Legislative Council. Also, he has been president of the Ceylon Association and the Rubber Growers' Association in London; Commissioner General for Ceylon at the St. Louis World's Fair, 1904. He was knighted in the Order of the Thistle, 1905.

The firm of Gordon Frazer & Co., Ltd., agents and secretaries, Imperial Bank Buildings, was founded in 1892 by Colonel Gordon Frazer and a Mr. Buchanan, both of whom now are dead. The present directors are: Messrs. F. H. Layard, R. J. Hartley, A. W. Harrison, and L. F. H. Bray.

MR. FRANK HENRY LAYARD, J.P., U.P.M., director of Gordon Frazer & Co., Ltd., played an important part in promoting the

tea planting industry in the island. He joined the firm in 1914 and retired from active work in Ceylon in 1928.

The Colombo branch of Lipton, Ltd., London, growers of tea, rubber, and cocoa, and dealers in Ceylon produce, Maddema Mills, Cinnamon Gardens, was established in 1892. Sir Thomas Lipton purchased Dambatenne Estate in 1890, and the opening of Colombo offices followed. Mr. G. L. H. Doudney is general manager and visiting agent, and Mr. S. A. Wilmshurst is manager of the tea department.

McMeekin & Co., tea merchants and exporters, 63, Queen Street, was established as a buying branch of the London from of the same name in 1893. The branch has its office with James Finlay & Co., Ltd., and is managed by Mr. D. L. Rossiter, tea buyer, and Mr. D. F. H. Armitage, assistant tea buyer of the latter

The Colombo branch of Harrisons & Crosfield, Ltd., the London tea and rubber concern, occupies the imposing Prince building on Prince Street, and was established in 1895 by the late Mr. C. A. Lampard—generally known as Mr. "Arthur" Lampard—under the name of Crosfield, Lampard & Co. The name was changed to Harrisons & Crosfield, Ltd. in 1908. The business of the branch is to act as tea



SCENE IN PRINCE STREET, COLOMBO Showing the offices of Harrisons & Crosfield, Ltd.





Mr. J. A. Henderson Mr. H. J. Hanscomb FOUNDER AND PRESENT SENIOR, HENDERSON & Co.

and general produce merchants, estate agents, and general importers. Mr. George Croll, who was the first manager, later became chairman of the company at London. He died in 1922. The present manager is Mr. H. G. P. Maddocks. Mr. Lampard died in 1916.

Mr. H. G. P. Maddocks was born in Shropshire, England, in 1878. For eight years he was in the firm of Meares & Co., Philpot Lane, London, and went to Ceylon in 1903 to join Harrisons & Crosfield, Ltd. He was head of their tea department from 1909 to 1924, and has been manager since 1925.

The business of Henderson & Co., export merchants and estate agents, 77, Gordon Road, was founded as Tarrant, Henderson & Co. by the late Mr. J. A. Henderson in 1896. The firm of Henderson & Co. succeeded Tarrant, Henderson & Co. in 1903. The present partners are Messrs. H. J. Hanscomb and G. K. Logan.

MR. J. A. HENDERSON, who founded Henderson & Co., Colombo, and the London firm of J. A. Henderson & Co., began his business career in 1879 with the London tea brokerage firm of Lloyd, Matheson & Co. In 1887, he became tea buyer for Whittall & Co., Colombo, where he remained until after the death of his principal. From 1896 until his death in 1928 he was associated with the business which bore his name.

Mr. H. J. Hanscomb went out to Calcutta for the Tower Tea Co., Ltd., London, and purchased teas for them in 1908-09. Early in 1910, he joined Henderson & Co. He was admitted to partnership with Mr. Henderson in 1916, and since Mr. Henderson's death has carried on the business in partnership with Mr. G. K. Logan. He acted for several years as Belgian Consul

in Ceylon, and is a member of the Board of Arbitrators of the Ceylon Chamber of Commerce.

The firm of R. Gordon & Co., brokers, Prince Buildings, was established as R. Gordon & Wilson by Mr. R. Gordon in 1901. The late Mr. F. W. Chalk joined the original firm as an assistant, and continued after the change, being admitted to partnership some years ago; he died in 1927. The present partners are Messrs. S. F. O. Lovell and W. T. Bogle.

HEATH & Co., merchants and commission merchants, 9, Park Street, are independently organized as a branch of the former China tea firm of the same name. The Colombo branch was established in 1897 by Mr. A. R. A. Heath, of the original China firm. The present partners are Mr. A. R. A. Heath and Mr. G. L. Lyon.

The firm of Keell & Waldock, brokers, Australia Buildings, was founded in 1902 by Mr. W. E. Keell and Mr. H. M. Waldock. The present partners are: Messrs. W. E. Keell, A. J. C. Lintott, E. Masters, W. R. Maguire, N. S. Bostock, and F. A. Waldock.

The late Mr. Frederick William Wal-



TEA PACKETING IN COLOMBO

Lower—Weighing, filling and sealing. Conter—
Labeling the packets. Upper—Boxing for shipment.

DOCK [died 1924], a brother of Mr. H. M. Waldock, was for twenty years a partner in Keell & Waldock. He came out to Ceylon in the 'nineties and for a time was manager of the Orient Co., Ltd. He was also secretary of The Tea Traders' and Importers' Association, and of the Chamber of Commerce.

Bartleet & Co., general brokerage, 35, Queen Street, was established in 1904 by Mr. Wilton Bartleet. Mr. Bartleet was for some years previous to 1904 a prominent figure in the China tea trade at Foochow. He represented the firm of Fraser Ramsay & Co., Colombo, until the present firm was established under the style of George White, Bartleet & Co.—a combination of Mr. Bartleet and the Mincing Lane brokers, George White & Co. In 1911, this partnership was dissolved and the name changed to Bartleet & Co. The present partners are: Messrs. Wilton Bartleet, P. J. Parsons, A. Boys, W. S. Flindall, and E. H. F. Layard. The London agents are George White & Co.

The business of A. F. Jones & Co., Ltd., merchants and shippers, Stratford Stores, was founded in 1918 by Mr. A. F. Jones, previously with Lipton, Ltd., and George H. Macy & Co., Colombo. In 1919, Mr. H. W. Dainty joined Mr. Jones as a partner. Mr. Dainty had been with Harrisons & Crosfield, Ltd., London, and went out to China for them. Later, he had been man-



THE FAMOUS "G. O. H."

Lower—Hotel front facing the harbor quay.

Upper—The dining room.





Mr. Wilton Bartleet Senior partner, Bartleet & Co.

Maj. H. Scoble Nicholson Eastern Produce & Estates Co.

ager for George H. Macy & Co. in Colombo. Mr. H. J. Moppett and Mr. S. Stansby are now the directors, Mr. Dainty having retired.

Brooke Bond (Ceylon), Ltd., 58, Union Place, Slave Island, was established as the Colombo branch of the London tea firm in 1919. They acquired the former business of the Webster Tea Packeting Factory at Colombo of which Mr. W. Trevellick Hicks was manager, Mr. Hicks becoming a director of Brooke Bond [Ceylon], Ltd. He died in November, 1929. The present directors of the firm are Messrs. W. K. Wilson [managing], M. J. Harding, W. R. N. Philps, and H. Broome. The Webster Automatic Packeting

FACTORY, LTD., tea packers, estate agents, etc., 58, Union Place, Slave Island, perpetuates the name of Captain R. Valentine Webster, who established the business in 1906. Captain Webster was one of the most picturesque characters produced by Ceylon's tea planting and tea trading activities of the early 'nineties. He was born in South Africa, in 1868; was educated in Ireland; came to Ceylon to engage in tea planting in 1887; in 1890, started the Cooperative Tea Gardens Company to pack and export teas grown on his estates; in 1904, bought out his partner and became the sole proprietor; in 1905, purchased the property in Union Place and built the first steel factory in Ceylon. After Captain Webster's death the business became a limited liability company with Mr. H. G. Greenhill as managing director. He was succeeded by Mr. W. H. Atkinson, who resigned in 1924 to accept an appointment in Batavia. The business is now conducted by Brooke Bond [Ceylon], Ltd.

The Eastern Produce & Estates Co.,



THE GALLE FACE HOTEL AT COLOMBO

Ltd., estate proprietors and agents, Prince Street, Fort, and 59, Eastcheap, London, E.C., has for its manager in Ceylon Mr. R. Jewell-Thomas.

MAJOR H. SCOBLE NICHOLSON, O.B.E., J.P., U.P.M., widely known in the planting industry because of his labor-recruiting activities, was born in London, June 14, 1874; was educated at Eastman's Royal Naval Academy and Lancing College; and in 1893 came out to Ceylon as assistant superintendent for the Eastern Produce & Estates Co., Ltd. In 1912, after managing several of the company's larger estates, he accepted an appointment as Ceylon Labor Commissioner in South India. After serving in the World War, he returned to South India as Labor Commissioner in 1919. Subsequently, he was appointed Ceylon Emigration Commissioner. He retired from India in 1926; was made an honorary life member of the Planters' Association of Ceylon in 1928; returned to Ceylon as manager of the Eastern Produce & Estates Co., Ltd., in 1929; and in 1930 became vice chairman of the Cevlon Estates Proprietary Association. He retired to England in 1933.

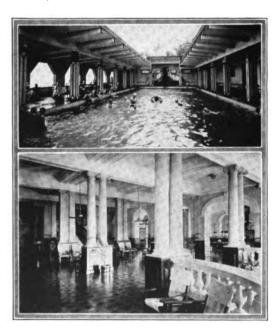
Other merchandising or agency firms associated with the history of the Colombo tea trade, include:

AITKEN, SPENCE & Co., LTD.; C. S. ANTONY & Co.; W. E. BASTIAN & Co.; CARGILLS, LTD.; CLARK, YOUNG & CO.; COOPERATIVE TEA GARDENS CO.; E. B. CREASY & Co.; DODWELL & Co., LTD.; ENGLISH & SCOTTISH JOINT CO-OPERATIVE WHOLESALE SOCIETY, LTD.; FRAMJEE BHIKHAJEE & Co.; GALAHA CEYLON TEA ESTATES & AGENCY CO., LTD.; HAYLEY & KENNY; M. S. HEBTULABHOY & Co.; HULL, BLYTH & Co., (Colombo), LTD.; MACKWOODS, LTD.;

MARAVILLA CEYLON TEA CO.; R. O. MENNELL & CO.; MILLER & CO., LTD.; GEORGE PAYNE & CO., LTD.; ROSEHAUGH CO., LTD.; ROWLEY DAVIES & CO., LTD.; SALADA TEA CO. OF CANADA, LTD.; SHAW, WALLACE & CO.; and JOSEPH TETLEY & CO., LTD.

Co.; and Joseph Tetley & Co., Ltd.
The Colombo Tea Traders' Association
was organized August 9, 1894, and has
about fifty members.

The Colombo Brokers' Association was formed in 1904. Its members are the six Colombo produce and share brokers: Somerville & Co., Ltd.; E. John & Co., R. Gordon & Co., Forbes & Walker; Bartleet & Co.; and Keell & Waldock.



FAVORITE SPOTS AT THE GALLE FACE HOTEL

*Upper—The swimming pool.

Lower—The hotel lobby.



Showing London Bridge (the third), the upper, and lower pools. On the north (left) bank, beyond Tower Bridge, are the London and St. Katherine Docks through which most of the tea enters the Port. Mincing Lane and the tea district are at the left, midway between London and Tower Bridges. THE TEA CAPITAL OF THE WORLD IN THE HEART OF THE CITY OF LONDON, FROM THE AIR

154

CHAPTER IX

NOTED FIRMS IN THE BRITISH ISLES

A CHRONOLOGICAL RECORD OF FIRMS AND INDIVIDUALS WHO HAVE MADE IMPORTANT CONTRIBUTIONS TO THE DEVELOPMENT OF THE TEA TRADE IN THE UNITED KINGDOM—THOMAS GARWAY FOUNDS THE FIRST TEA BUSINESS IN LONDON—PIONEER TEA FIRMS THAT ARE STILL ACTIVE—FIRMS OF THE VICTORIAN ERA—TWENTIETH CENTURY FIRMS—FOUNDERS, PRESENT PARTNERS, OR DIRECTORS, WITH BRIEF BIOGRAPHIES OF THOSE PROMINENT IN THE BUSINESS OR TRADE-ASSOCIATION WORK

N ANY outline history of the tea trade of the United Kingdom it would be well nigh impossible to mention all the individuals and firms that figured in the introduction of the leaf as a saleable commodity. In the present chapter, however, the author has endeavored to mention, in chronological order, those firms and individuals that have made important contributions to the development of the various branches of the tea trade in the United Kingdom, the first part being devoted to the pioneers.

The founder of the English tea trade was Thomas Garway, or Garraway, who first publicly sold the leaf and drink at his London coffee house in 1657. The business was continued by his descendants until the year 1866, which marked the passing of this historic establishment. The original place was destroyed by the London Fire of 1748. In 1841–42, Garway's was the center of a wild speculation in tea, when fluctuations of 6d. and 8d. a pound induced many Londoners to make speculative purchases and sales.

In Garway's time tea was as much a medicine as a social beverage, for we recall that Pepys informs us in his Diary of June 29, 1667, "Home and found my wife making of tea; a drink which Mr. Pelling the potticary tells her is good for her cold and defluxions." So we must include Mr. Pelling, the worthy "potticary," among the pioneers of the tea trade as of the period 1666-67, and thank the tireless diarist for this addition to our knowledge of early trading activities.

Joseph Travers & Sons, Ltd., wholesale grocers, 119, Cannon Street, London, is one of the firms that have figured prominently in the history of the tea trade down to the present time. The firm traces its ancestry, under various changes of name, back to approximately 1666, the year of the Great Fire. The little retail grocer's shop, from which the present establishment has grown, was located close to the site now occupied, and carried on business under the sign, "The Cannon by London Stone." By 1709 a secondary, wholesale business had been begun, and it was in this way that the firm became jobbers of teas imported by the East India Company.

In 1728, the business was conducted by Mr. Joseph Smith, and had become strictly wholesale. Joseph Smith was followed by the brothers Samuel and Benjamin Smith. In 1798, Samuel Smith was succeeded by his son, William Smith. The name of Travers first came into the business when William Smith was joined by Benjamin Travers, who married Smith's sister in 1743. Benjamin Travers had six children, the youngest of whom were twin sons named Joseph and Benjamin, born in 1752. Their descendants have served the firm in uninterrupted succession. John and Joseph Travers, sons of Joseph, joined the business. John's sons, James Lindsay, John Ingram, Samuel Smith, Archibald. business. and Roderick, all became partners. Of these sons, John Ingram became head of the firm. He retired in the early 'sixties and died in 1866. After John Ingram's retirement, Samuel Smith, Archibald, and



Jos. Travers & Sons' Building, Cannon Street

Roderick were the remaining partners, James Lindsay having previously retired. Subsequently Samuel Smith and Roderick left the firm, and Archibald Travers became the sole proprietor. He remained in this capacity until he sold the business to the staff in 1889, the year in which he died.

During Archibald Travers' lifetime three younger members of the family joined the firm; they were John and James Lindsay Travers, nephews of Archibald, and Walter Francis Travers, great-grandson of Benjamin, twin brother of Joseph. John Travers and James Lindsay Travers retired after serving the firm for many years.

The style of the business has changed from time to time. In 1779, it was Smiths, Nash, Kemble & Travers, changing in 1783 to Smith, Kemble & Travers. In 1786, it became Smith, Kemble, Travers, & Kemble. This was changed in 1798 to Smith, Travers & Kemble. In 1800, it was Smith & Travers, changing in 1805 to Smith, Travers, Son & Kemble. In 1809, it became Smith, Travers & Kemble. In 1812, it was

changed to Smith, Travers, Kemble & Co., and in 1813 this was altered to Joseph Travers & Son. In 1819, the word "Son" in the style became plural, making it Joseph Travers & Sons, and in 1889 the business was changed into a limited liability company under its present style of Joseph Travers & Sons, Ltd. In June, 1929, the firm took over the business of Game & Son, Ltd. The present directors are:

Thomas Messrs. Edwin Dottridge, C.B.E. [chairman], Frank Travers [deputy chairman], Sidney Loder, Henry Bowron, O.B.E., and Robert Russell Shaw, C. A. For many years the manager of the tea department was Mr. Alexander Ibbetson, who joined the firm in 1886. Mr. Ibbetson represented the tea dealers on the Tea Control Committee during the World War, as well as being a member of various wartime subcommittees. For this he was awarded the Order of the British Empire [O.B.E.]. Mr. Ibbetson is the author of a text book on tea, entitled Tea From Grower to Consumer. He retired in 1935.

The firm of Robert Jackson & Co., Ltd., wholesale and retail tea dealers, grocers, and wine merchants, 171-172, Piccadilly, London, W.1, was founded in 1700 by Mr. Robert Jackson, on the site in Piccadilly now occupied by the Royal Institute of Painters. In 1866, it was removed to 45, Piccadilly, and 1883 to the Egyptian Hall, Piccadilly, where it remained until the expiration of the lease in 1905. A new Crown lease was then acquired, and the present premises erected. The firm has the following branches in the West End of London: ALDERMAN & BECKFORD, Curzon Street; JURY & BAR-RETT, Sloan Street; Morel Bros., Buckingham Palace Road; Cosenza & Co., Whitcomb Street; STARLEY, Shepherd's Market; British Produce Supply Assn., LTD., Wigmore St. There also is a branch in Inverness, Scotland. All of these branches have been absorbed at various times, but trade under the names of their original proprietors.

The business of R. Twining & Co., Ltd., tea merchants, 216, Strand, London, W.C., dates back to the year 1706, when Mr. Thomas Twining started a coffee house in Devereux Court that achieved wide popularity under the style of "Tom's Coffee House." Here he sold brandy, punch, ambrosia, arrack, snuff, coffee, tea, bread,





Thomas Twining 1675-1741

Richard Twining I 1749-1824

Two Famous Twinings

and butter. The entrance into the Strand was formed in 1787. About 1717, the tea and coffee part of the business having outgrown the others, it was segregated in a establishment adjoining "Tom's" where, for the first time, women, as well as men, came to select their blends. At this time the buildings were not numbered, so each tradesman hung out a sign to distinguish his place of business, or else advertised that he was near this or that sign. Thomas Twining chose the sign of the "Golden Lion" for his new establishment. The tea and coffee business at the "Golden Lion" prospered to such an extent that Thomas Twining soon built himself a fine country residence at Twickenham, and his portrait was painted by Hogarth.

Thomas Twining died in 1741, and was succeeded by his son Daniel, under whose management the "Golden Lion" continued to grow. Daniel Twining had three sons, Thomas, Richard, and John. The second son, Richard, showed such aptitude for the business that he was taken into it at the early age of sixteen. Daniel Twining died in 1762, and from then until 1780 the business was managed by his widow, Mary Twining. She was succeeded by her son Richard, who was joined by his brother John, and together they conducted the business under the firm name of Richard & John Twining.

Richard Twining distinguished himself as the leader and champion of the retail trade, and was particularly outspoken in his protests against tea smuggling and adulteration. He died in 1824, and his brother John in 1827. They were followed in the business by Richard's sons, Richard II, George, and John Aldred Twining.

Richard II, like his father, was a man of keen business ability. He died in 1857. Richard Twining III, son of Richard II, shared the management of the business with his cousin, Samuel Harvey Twining. In 1910, the firm celebrated its 200th anniversary, although, as previously stated, it was actually established a few years prior to 1710.

Mr. Richard Twining III retired in 1897, and died in 1906. The business was changed into a limited company under the present style, R. Twining & Co., Ltd., in 1904. The present directors are: Messrs. Charles Twining Sidgwick, John Montgomery Lawrence, and Percy Howieson, with Mr. H. Cromwell as secretary. The





TWININGS IN 1830 (LEFT) AND 1930 (RIGHT)

first two are direct descendants of Thomas Twining, the founder.

Twining, the founder.

THE WEST INDIAN PRODUCE ASSOCIATION, LTD., at the sign of the "Crown and Three Sugar Loaves," 14, Creechurch Lane, E.C., is another pioneer of London's early tea trade. The firm traces its descent



The Crown and Three Sugar Loaves, the ancient sign of Davidson Ray, grocer, and it
Newman & Co.

from Daniel Rawlinson, friend of Pepys, who in 1650 established himself owner of the Mitre Tavern. The tavern was destroyed in the Great Fire of 1666, and was rebuilt by Rawlinson, who took in adjoining property. Rawlinson was vintner. A grandson of Daniel was ap-

was some time in this period that the name of Rawlinson became associated with tea and produce.



A THOMAS RAWLINSON INVOICE OF 1745 Now in the Guildhall Library.

The earliest exhibit of the firm is a receipt dated February 20, 1740, now in the collection of Mr. Ambrose Heal, of Beaconsfield, Bucks. At that time the proprietor was Daniel Rawlinson's greatgreat nephew, Thomas Rawlinson, who became Lord Mayor of London in 1753, and by purchase became Lord of the Manor of Stowlangtoft, near Bury St. Edmunds. For some years the style of the firm was "Sir Thomas Rawlinson," but this was altered to Rawlinson & Davison when, shortly before he became Lord Mayor, Mr. Rawlinson admitted into partnership Monkhouse Davison. In 1764, Abram Newman having been made a partner, the firm traded as Rawlinson, Davison & Newman; but after the death of Sir Thomas Rawlinson in 1769 its name was changed to Davison, Newman & Co.: Late Sir Thomas Rawlinson.

Both Mr. Davison and Mr. Newman made fortunes out of the business. They finally became partners in death, as they had been in life, for they share the same vault in the Church of St. Olave, with one .tablet to record their virtues. They were succeeded by a Mr. Thwaites, who had been one of three clerks taken into the firm upon terms of paying £500 each. The next and final change was the acquisition of the Davison, Newman & Co. business by the West Indian Produce Association, Ltd. The firm still preserves many interesting relics of its historic past; these show that it was shipping tea to Boston in 1772 and 1773, the year of the memorable "Tea Party."

FORTNUM & MASON, LTD., dealers in fine teas and table delicacies, at 182, Piccadilly, London, W.1, was founded sometime during the reign of Queen Anne, 1702–14, when Messrs. Fortnum and Mason left the royal service to establish, along modest lines at

first, but with high patronage, the business which has come down to the present time. It started in Duke Street, but in 1756 it was transferred to the Piccadilly location. In 1905, it became a limited company. In 1929, the firm completed and now occupies a commodious new building. In 1930 a New York branch was opened.

A tea and coffee price list issued by Fortnum & Mason, Ltd., upon the opening of their new building, draws attention to the historic background of the business and mentions some famous old-time customers, among them Dr. Johnson, Miss Florence Nightingale, Captain Cook, Charles Dickens, and Mrs. Jane Welsh Carlyle. The present directors of the firm are: Lt. Col. C. E. Wyld [Chairman], Norman C. Walters, Sir Martin Hall, Bart., W. Thornton-Smith, and R. Wright. Mr. B. Rand, F.G.I., is the tea buyer.

The business of R. O. MENNELL & Co., tea merchants, 41, Eastcheap, London, E.C.3, was founded in 1725 by Maria Tewk [Mary Tuke], spinster, at York. William Tuke, a nephew, was apprenticed to his aunt in 1746, and six years later she died, leaving him her property and the business. In 1785, Henry, the eldest son of William Tuke, entered into partnership with his father under the firm name of William Tuke & Son. In 1862, the tea was transferred to London. business Samuel Tuke, eldest son of Henry Tuke became a partner of his father and grandfather in 1805. Henry Tuke died in 1814 and William Tuke, the grandfather, retired in 1818 and died in 1822. Upon William Tuke's retirement Robert Waller and Favill James Copsie joined Samuel Tuke as partners. Samuel Tuke was the father of twelve children, two of the sons, James Hack and William Murray, becoming partners in the firm in 1841 and 1846, respectively. Robert Waller retired in 1837, and Favill James Copsie in 1846.

In 1849, a branch office was opened in London by William Murray Tuke and John Casson, who had joined the firm in 1842. Samuel Tuke retired in 1852. In 1857, James Hack Tuke left the business to become a banker and the management of the York office fell to Samuel Tuke's cousin, Henry Hipsley, until 1862, when the York office was given up, insofar as the Tuke interest was concerned. In 1863, William Murray Tuke went into banking and transferred the business to his nephew,





Mr. William Tuke Mr. Robert O. Mennell
The Progenitor and the Present Head of R. O.
Mennell & Co., Founded in 1725

Henry Tuke Mennell. The latter, having no commercial knowledge of tea, took into partnership George William Dodds, a well-known tea expert. For the next forty-six years the firm was known as H. Tuke Mennell & Dodds. In 1906 Mr. Dodds retired, but H. Tuke Mennell continued to head the firm until 1923. Mr. Dodds died in 1929.

In 1899, H. Tuke Mennell's oldest son, Edward Newman Mennell, and John Martin Viney had been admitted as members of the firm. Edward Newman Mennell retired in 1912. His place was taken by his brother, Robert Oscar Mennell. Before his death in 1923, H. Tuke Mennell transferred his interest in the firm to his son, R. O. Mennell, the firm being reconstituted under the style of R. O. Mennell & Co. Mr. Mennell is the author of Tea: An Historical Sketch, in which he has told the story of the house of Tuke and incorporated something of the romantic, the commercial, and political history of tea.

The business of Samuel Hanson & Son, wholesale grocers, 14, Eastcheap, London, E.C.3, was inaugurated in 1747, by Mr. Samuel Hanson in Botolph Lane. Tea became a principal item with the firm in 1871. The firm has branches in Liverpool and Manchester. A former senior partner, Sir Reginald Hanson, Bart., M.P., J.P., LL.D., was Lord Mayor of London in 1887, and, later, represented the city in Parliament. His son, a more recent partner, the late Sir F. S. Hanson, served the offices of alderman and sheriff of the city. The present directors are: Messrs. P. Machin [Chairman], N. P. Machin, J. E. Dunning, A. C. Sharwood, P. N. Winter,

E. W. Saunders, J. E. Palmer, and D. S. L. Gregson

The firm of Tipping & Morris, retail tea and grocery merchants, Malvern, is said to have been founded in 1750. Old invoices that have been preserved date back to the early part of the nineteenth century. The present sole proprietor is Mr. H. Lloyd Morris.

The firm of James Finlay & Co., Ltd., East India merchants, secretaries, and agents, with head offices at 22, West Nile Street, Glasgow, was founded as James Finlay & Co. by Mr. James Finlay in 1750. Branches have been established at London; at Calcutta, Bombay, and Karachi, in India; and at Colombo, in Ceylon.

Mr. James Finlay was born in 1727 at Moss, on the Blane Water, near Killearn, where his ancestors had been small lairds for some 200 years. He came to Glasgow as a young man and established himself as a merchant and manufacturer. In 1790, he died and his son, Mr. Kirkman Finlay, inherited the business.

Mr. Kirkman Finlay became an India merchant, and had the distinction of freighting the first ship, the "Buckinghamshire," to sail direct from Glasgow to Calcutta. In 1870, Mr. Robert Williamson, after an apprenticeship with James Finlay & Co., in Glasgow, was sent to Calcutta to open the firm's branch there. The London branch was started in 1871. Tea was added in 1882 through the initiative of Sir John Muir, Bart., who became a partner in 1860, and was head of the firm from 1870 until his death in 1903. The firm's large tea interests are due to the foresight and action of Sir John, who paid several visits to India. In 1890, Mr. Robert Williamson was transferred to London. He





Mr. Kirkman Finlay Sir John Muir, Bart. EARLY PARTNERS OF JAMES FINLAY & Co., LTD.





Sir A. K. Muir Mr. J. F. Muir
Past and Present Chairmen of James Finlay
& Co., Ltd.

retired in 1901. In 1909 the business was converted into a private limited liability company. Mr. Williamson was made a director of the Chubwa Tea Company, of which James Finlay & Co., Ltd., are the secretaries, and was its chairman from 1921 until his death in 1926.

In 1924, the Finlay business was changed into a public company. Sir A. Kay Muir, who then was chairman, retired in 1926 after forty years of service. At that time he had been head of the concern for almost twenty-five years. A. Kay Muir and Mr. J. F. Muir, the present chairman, joined the firm in 1886 and 1887, respectively, and from 1895 to 1902 they were in India managing the Calcutta branch. The present directors of the company are: Messrs. J. F. Muir, J. B. Muir, R. Langford James, A. M. McGrigor, J. D. Gatheral, C. A., W. Warrington, and J. T. Tulloch, C. A. Mr. T. C. Crawford, former head of the tea department at Calcutta, joined the Glasgow office in 1934.

The firm of David Lloyd, Pigott & Co., importers, packers, and wholesale dealers in tea, 32–38, St. Mary-at-Hill, London, E.C.3, with branches throughout the United Kingdom, was established in 1760 by Mr. David Pugh, under his own name. In 1806 the firm became Pugh & Rider, and this was changed in 1830 to Rider & Lloyd. In 1842, the name of Rider disappeared and the firm became David Lloyd & Co. In 1890, the name of Pigott, that of the present management, was added, and since then the style has been David Lloyd, Pigott & Co.

The present partners are: Messrs. Leonard Webb Pigott, John Richards Pigott, Edward William Pigott, and Thomas

George Milledge. The late Mr. Richard Pigott, former senior partner, was chairman of the Tea Control Committee during the early part of the World War, and in 1917–18 was director of tea supplies at the Ministry of Food.

Wm. Jas. & Hy. Thompson, tea and rubber brokerage firm, 38, Mincing Lane, London, E.C.3, was started in 1760 by Mr. William James Thompson, who began as produce broker to the East India Company in East India Avenue. Early in the nineteenth century the firm moved to Dunster House, Mincing Lane, and in 1838 acquired its present premises. At that time the firm was known as W. J. Thompson. In 1840, the name was changed to W. J. Thompson & Son, and to its present style in 1852. From its inception the business has remained in the same family. The late Mr. W. J. Thompson III, was the great-grandson of its original The present partners are his founder. brother, Mr. Arthur Thompson; his son, Mr. Wm. Jas. Thompson; Mr. Arthur C. S. Holmes; Messrs. Rupert S. and Maurice S. Thompson, and Mr. Wm. Jas. Thomp-

In the middle of the nineteenth century, when India tea began to replace China teas, the senior partner was Mr. W. J. Thompson, father of the present senior. To his foresight and energy the trade in London owes a great debt. He initiated the present system of weight-notes, by which the actual weight of every package of tea coming to England is recorded for the benefit of sellers and buyers, and was largely responsible for the present "Conditions of Sale," which, with only minor alterations, have stood the test of time. From its earliest days this firm has been





Mr. W. J. Thompson 1778-1852

Mr. W. J. Thompson 1844-1931

Two Notable Thompsons





The First Robert Stokes

The Present Robert Stokes, Grandson

ROBERT STOKES, SALISBURY

the leading tea broker in "the Lane." It played an important part in introducing and establishing India, Ceylon, and Java teas to the English market. Mr. Arthur Thompson was one of those present at the first meeting of the Indian Tea Association, and Mr. William James Thompson was one of the founders of the Ceylon Association in London. The firm is said to handle a fifth of all the tea sold on the London market. They sold for the Government tea that was captured during the war with Napoleon, over 100 years ago, and again sold tea for the Government that was captured during the late World War.

Mr. William James Thompson III, former senior partner, was born in 1844, educated at Harrow, and joined the Thompson firm at the age of nineteen. He served as a member of the council of the Ceylon Association in London from its inception and, in 1927, was made an honorary life member. He died in 1931.

The business of Joshua Wilson & Bros.,

LTD., produce merchants, importers, and tea packers, Sunderland, with a branch at Stockton-on-Tees, was founded in 1761 by Mr. Caleb Wilson. It was carried on by his descendants until 1906, and then was formed into a private limited liability company under its present style of Joshua Wilson & Bros., Ltd.

The firm of R. M. HOLBORN & SONS,

Ltd., wholesale tea, coffee, chicory, etc., 6-7, Crutched Friars, London, E.C.3, was founded in 1775 by Mr. Robert Major Holborn. It was carried on from 1849 under the name of R. M. Holborn & Sons, and was acquired in 1926, by a private limited company as R. M. Holborn & Co., Ltd.

ROBERT STOKES, grocer and tea blender, of Salisbury, is a rare instance of the continuance of a business by a single family. This concern has been handed down from father to son for more than 150 years. In 1776, it was started by Mr. Francis Stokes as an apothecary shop where medicines and leeches were sold; but subsequently he introduced tea and Italian groceries. Finally the apothecary business was overshadowed by the grocer and tea activities. By 1798, Mr. Stokes had the distinction of being one of two tea dealers outside of London to receive regularly the catalogues of the East India Company. He was succeeded in 1819 by his sons, Francis and Charles, but the former left the business in 1824, after which it was carried on by Mr. Charles Stokes till he took his son into partnership and the firm became Stokes & Son. The son, Robert, took it over in 1849, being followed in 1882 by his son Robert, father of the present proprietor, who in his turn, became proprietor in 1912.

The business of John Copeman & Sons, Ltd., wholesale grocers and tea packers, Norwich, originally styled Cozens & Copeman, was established in 1789. Its members have been prominent citizens as well as notable tea men. Mr. John Cozens was the founder of the business, and about







Mr. John Copeman Partner, 1791



Mr. Henry John Copeman Director, 1934

PROMINENTLY IDENTIFIED WITH THE DEVELOPMENT OF THE BUSINESS OF JOHN COPEMAN & SONS, LTD., NORWICH

1791 he took into partnership Mr. John Copeman. Mr. John Cozens was a sheriff, and Mr. Jonathan Davey, who was a partner for a short time in the early years of the nineteenth century, was an alderman. Mr. Jonathan Davey Copeman, son of John Copeman and nephew of John Cozens and Jonathan Davey, joined the firm in 1837, but later became a partner in the London provision firm of Yeats, Acocks & Copeman. The present directors of John Copeman & Sons, Ltd., are: Messrs. H. J. Copeman, W. O. Copeman, and J. L. Copeman.

EWART, MACCAUGHEY & Co., LTD., tea brokers, 130, Fenchurch Street, London, E.C.3, are the direct business descendants of James Arthur, who started the business about 1793. The earliest record of the firm is an old contract dated March 16, 1793, for 135 chests of tea bought on that date for a client at the East India Company's Sale. A further record is an old lease dated in 1799, from which it appears that James Arthur, tea broker, at Copthall Court, rented the whole house for £120 per annum. In 1800, he took Mr. Edmund

Larken as partner. Mr. Arthur died in 1812, and in the same year Charles Varnham became a partner, and the style of the firm became Larken & Varnham. Mr. Larken withdrew in 1825, and John Ewart came in. Mr. Varnham retired in 1837, and died in 1847; then Messrs. Hugh Wade Maccaughey and T. F. Delafosse joined, and the firm was styled, Ewart, Maccaughey & Delafosse. Mr. J. T. Mounsey became a partner in 1852. Mr. Delafosse's retirement in 1861 caused the firm's name to be changed to Ewart, Maccaughey & Mounsey. Ewart died in 1871, and Mr. Maccaughey in 1872. Mr. Mounsey died in 1886, and his son, Mr. Oswald Mounsey, carried on the business. Mr. J. G. Maclean joined in 1890, and three years later Mr. C. J. Sharpe became a partner. In 1897, the firm became a private company under the name of Ewart, Maccaughey & Co., Ltd.
The firm of James McLaren & Sons,

The firm of James McLaren & Sons, wholesale tea, coffee, and cocoa merchants of Edinburgh with branches at London, Glasgow, Leith, and Stornoway, was founded in 1795 by Mr. James McLaren, who took his sons into partnership. Back in the 'fifties, when China was the sole supplier of teas for the British Isles, the firm had a buying branch at Hankow man-



FROM LOTTERY OFFICE TO TEA MERCHANT Two rare 18th century trade cards showing the transformation of the London Genuine Tea Co.

aged by the Chinese tea merchant Saoqua. The present sole proprietor of the business is Mr. Walter Eckford.

The firm of Samuel Budgett & Co., Ltd., wholesale tea and coffee merchants, 24, Great Tower Street, London, E.C.3, was started about the year 1797 by Mr. Henry Hill Budgett as a small retail grocery at Kingswood, Bristol. He had with him as an apprentice his younger brother Samuel, who in 1818 became a partner, and by his remarkable business ability, laid the foundation for the present wholesale business.

BARBERS' TEAS, LTD., packet teas, 30–32, Pershore Street, Birmingham, was established originally as a branch of Barber & Co., Bishopsgate Street, London, E.C., founded in 1797. The original firm went into liquidation many years ago, and the present firm bought the Birmingham shop. It was then a purely retail business, but later the shop was closed and the firm now engages exclusively in tea packeting.

During the early part of the nineteenth century several firms not now in existence were active in the China tea trade of London. Among them were Moffat & Co., and James Staines; while those in the general trade were Sparrow's of the Minories and Ludgate Hill, Antrobus of the Strand, the London Genuine Tea Company of Ludgate Hill, the London Tea Company of Fleet Street, and Abbey & Cocks of Pancras Lane.

PEER Bros. & Winch, Ltd., wholesale grocers, Peek House, Eastcheap, London, E.C.3, was established in 1810 under the name of Peek Bros., being founded by

Messrs. William and Richard Peek. The business was carried on by them in Liverpool, which, at that period, was the principal port in the United Kingdom for the importation of tea, coffee, and spices. When Liverpool became less important and London the great market, the firm opened a London establishment at 20, Eastcheap, and the houses in London and Liverpool were thereafter conducted as separate businesses by descendants of the founders of the original house. The owners of the Liverpool firm considered it desirable in 1865 to open their own branch in London, under the style of Francis Peek, Winch & Co., at 23, Rood Lane, sub-sequently moving to 3 and 4, Fenchurch Street. The original London house continued under the name of Peek Bros. & Co.

The Francis Peek whose name appeared in the London branch of the Liverpool firm was either a son of one of the original Peek Brothers, or else their nephew; it is not known which. Mr. Winch, who was a partner with Mr. Francis Peek, did not live for many years, but was succeeded in the early days of Francis Peek, Winch & Co. by his nephew, Mr. W. R. Winch, under whose guidance the business was considerably developed, and it was through his influence that the firm became a strong rival of the original London house of Peek Bros. The two houses continued as rivals for many years, but in 1895 they joined hands, and formed Peek Bros. & Winch, Ltd. A few years later the present house formed a company in the United States, under the title of Peek Bros. & Winch [America], with offices and a warehouse in New York. The American business was closed in 1914. The present directors of Peek Bros. & Winch, Ltd., London, are: Messrs. Edmund Burke [Chairman], Edmund Burke, Jr., Frank Moss, D. D. Drury, and E. White.

The late Mr. Rowland Alston, for many years in charge of the firm's China department, was one of the best known figures in the London tea trade. Born in 1858, he started business at the age of seventeen with Francis Peek, Winch & Co. When the firm of Peek Bros. & Winch, Ltd., was formed he was made a director. He died in 1927.

The business of James Lyle & Co., Ltd., grocers, 1, 2, and 3, Boyle Street, London, W.1, was established in 1811 by Mr. James Lyle at 17, Old Bond Street, London. The



VIEW ALONG EASTCHEAP, SHOWING PEEK HOUSE

firm has specialized in the sale of China tea from the start. The business always has been conducted under the same name, but in 1898 it was changed into a limited company, and in 1930 it was re-incorporated.

Rich in historic background is the Scottish house of Melroses, Ltd., wholesale and retail tea and coffee merchants, of Edinburgh. The business was launched in 1812 when Mr. Andrew Melrose opened a retail grocery and tea shop in Canongate, Edinburgh. To enhance his buying power, he soon started in the wholesale business. He bought his teas from the East India Company in London, and from there they were shipped in sailing smacks to Leith. When the East India Company's monopoly ended in 1833, Mr. Melrose showed his enterprise and vision by immediately sending a buyer to China. He was rewarded later by receiving the first cargo of tea ever sent to a Scottish port. The ensuing auctions drew buyers from Liverpool, Hull, and all parts of Scotland, as his importations were considerable for those days.

Mr. James McLeish was associated with Mr. Melrose as partner from 1818 to 1827. Another partner, Mr. John Simpson, retired in 1862. Andrew Melrose died in 1855, leaving the business to Mr. Simpson and his sons, Messrs. William, John, and Andrew Melrose. William went to China as buyer for the firm, and remained for



FENCHURCH St. OPPOSITE THE ENTRANCE TO MINCING LANE

many years. Andrew and John worked in Edinburgh and London. John remained a partner until his death in 1883.

The late John Macmillan joined the business as an apprentice in 1859. Within four years he was given sole charge of the buying and blending. Under Mr. Macmillan's guidance, the business grew and prospered. He died in 1901, and was succeeded by his three sons, Messrs. G. Macmillan, T. F. Macmillan, and W. R. Macmillan, and his grandson John Macmillan, who are the present directors of the company. In 1923, the previously existing partnership was converted into a private limited liability company under the name of Melroses, Limited.

ROWLEY, DAVIES & Co., LTD., general merchants, growers, and exporters of tea, 5, Fenchurch St., E.C.3, have been established in London since 1819. For the first fifty years of its existence the firm dealt only in China teas, of which it was a big buyer. Records of the firm mention the purchase of whole cargoes of sailing vessels bringing tea from China.

Some thirty years ago the firm entered the tea export trade, and shortly afterwards was instrumental in introducing Ceylon, India, and Java teas into Russia. This departure had an important bearing on the trade—particularly the trade in British-grown teas—for Russia became, after England, the largest consumer. At various times between the 'nineties and the commencement of the World War, Rowley, Davies & Co., Ltd., were the largest shippers of British-grown and Java teas to Russia. Branch offices are located in Calcutta and Batavia. The firm has been interested in the Java tea industry since

1904. It was the first British concern specializing in tea to establish offices in Batavia. They are agents and secretaries for a number of tea, rubber, and cinchonagrowing estates. The present chairman and managing director of the firm is Mr. Walter Hilliers, who has been connected with Rowley, Davies & Co. for some thirty years, while the other directors are Messrs. C. H. Parsons, Basil R. Worthington, and Richard Walter Hilliers. The two latter are sons of Mr. Frederick Worthington and Mr. Walter Hilliers, respectively. Messrs. Frederick Worthington and Walter Hilliers were the only two shareholders of the firm when it was converted into a private limited liability company.

CHARLES HOPE & Son, brokers of tea and rubber and tea and rubber shares, 71, Eastcheap, London, E.C. 3, was founded in 1821 under the style of Watkins, Smith & Hope. After the death of his partners Mr. Hope continued the business with his son under the present name. The partners are Messrs. T. P. and A. J. H. Stewart.

The firm of Moore Bros., Ltd., tea merchants, 52 and 53, Great Tower Street, London, E.C.3, dates from 1823. Sir John Voce Moore, who purchased the business in 1854, was an outstanding figure in the commercial and public life of the city. Born in 1826, he learned the tea business in the house of Peck Brothers. He engaged in business on his own at Cambridge, married, and remained until 1854, when he purchased the business which bears his name in Great Tower Street. He became a member of the Court of Common Council in 1870, a position which he held for nineteen years. He was sheriff in 1893-94, at which time he received the honor of knighthood. In 1898-99, he was Lord Mayor of London. Throughout the period of his public services he threw all the



WHERE BARROW'S STORES STARTED IN 1824





Mr. L. T. Carmichael Mr. James Insch PARTNERS IN WALTER DUNCAN & Co.

weight of his various positions into the fight against tea adulteration which ended in the passing of the Food and Drugs Act and the appointment of a public analyst whose duty it is to inspect all teas imported. He died in 1904.

The present directors of Moore Bros., Ltd., are: Colonel P. S. Moore [Managing], Dr. K. B. Edwards, B.Sc., Ph.D., Colonel F. T. Halse, and E. J. Skinner [Secretary].

Barrow's Stores, groceries, provisions, and cafés, Corporation Street and Bull Street, Birmingham, originated in 1824. In that year Mr. John Cadbury founded the enterprise by opening a small warehouse at 93, Bull Street. The business was taken over in 1849 by Mr. Richard Cadbury Barrow, a nephew of the founder. In 1882, an old established grocery business, dating from before 1700, was purchased from Mr. John Naden. Besides directing the business for forty-five years, Mr. R. C. Barrow filled the mayoralty chair in 1889. After his death in 1894, the business was turned into a private limited liability company, of which one of his sons, Mr. Harrison Barrow, is chairman. In 1905, the first café was opened as a part of the Barrow establishment, to enable customers to taste the teas and coffees on sale. An old business established by members of the Pratchett family in 1756, was acquired in 1906. Mr. John Cadbury was also the founder, in 1849, of the famous cocoa and chocolate concern at Bournville.

The firm of Walter Duncan & Co., East India merchants, 137, West George Street, Glasgow, with branch offices at 149, Leadenhall Street, London, E.C.3, and 101, Clive Street, Calcutta, was founded by Messrs. Walter and William Duncan about 1824 in

Glasgow, which is the headquarters of the business. The present partners are: Messrs. L. T. Carmichael, D. P. Mc-Kenzie, and James Insch. Messrs. Carmichael and Insch have been prominent in the executive affairs of the Indian Tea Association; Mr. Insch in Calcutta, where he was chairman in 1929, and Mr. Carmichael in London, where he was chairman in 1926 and 1927.

The firm of Ogilvy, Gillanders & Co., East India merchants, Liverpool and London, saw its inception in 1826 at the hands of Messrs. Thomas Ogilvy and F. M. Gillanders, when the Liverpool house was opened to take care of the home end of the business of Gillanders, Arbuthnot & Co., Calcutta. Later, after the change from sail to steam caused a shift of the bulk of eastern commerce to London, offices were opened there. This occurred in 1873 and in 1930 the Liverpool office was transferred to London. The present partners are: Messrs. Albert Charles Gladstone. Arthur d'Anyers Willis, and S. D. Gladstone.

The business of W. H. & F. J. HORNI-MAN & Co., Ltd., tea merchants, Shepherdess Walk, London, N.1, was started by and under the name of John Horniman in 1826. In that year Mr. Horniman initiated the sale of teas in sealed packets. At first, they were distributed to the public by peddlers. His teas were packed by hand in a room over a stable in the Isle of Wight. After a few years of pioneering by peddlers, first chemists and confectioners, and, later, wholesale grocers, took up the sale of "Horniman's Pure Tea." Machinery took the place of hand-packing—John Horniman invented a crude packing ma-



HORNIMAN'S ORIGINAL TEA WAREHOUSE, LONDON



A VIEW IN LEADENHALI. STREET

The first white-fronted building on the right hand side is occupied by Walter Duncan & Co.

chine—and the head offices were moved to London. In 1868, Mr. Horniman retired from the business, which at that time was conducted under the name of Horniman & Co., and was succeeded by Messrs. William Henry Horniman and Frederick John Horniman who had taken an active part in the management for many years. The sons acquired their father's interest in 1889, and registered a private company under the style of W. H. & F. J. Horniman & Co. The business was changed over into a private limited liability company in 1901. In 1918, a controlling interest was acquired by J. Lyons & Co., Ltd., through an exchange of shares. The Overseas Trading Corporation, Ltd., was registered in Jersey in 1920 to acquire the tea business of Walker Hermanos, Buenos Aires, and Walker Bros. of Jersey, together with the export packing rights [exclusive of the British Empire] of J. Lyons & Co., Ltd., and the export rights of W. H. & F. J. Horniman & Co., Ltd.; Messrs. Horniman having the controlling interest. On October 12, 1925, Messrs. Horniman acquired the tea and coffee business of Brodie, Williams & Boyes, Ltd., founded prior to 1895. The present directors of W. H. & F. J. Horniman & Co., Ltd., are: Messrs. Harry Salmon [Chairman], John Eric Horniman, grandson of the founder [managing], G. A. Pollard, J. D. Garrett, and Julian Salmon.

The firm of Arbuthnot, Latham & Co., Ltd., merchants and bankers, 9, St. Helen's Place, London, E.C.3, was founded in 1833. Its directors were not originally interested in tea, but the firm now is general manager for the Consolidated Estates Co., Ltd., tea and rubber, Ceylon, founded in 1891.

TEETGEN & Co., LTD., wholesale and retail grocers, New Street, Bishopsgate, London, E. C. 2, was founded by Augustus Teetgen in 1834. The present directors are: Messrs. W. W. Shepherd [Chairman], Wm. Hammond, E. W. Derry, and J. Passmore.

JOHN LYTLE & Sons, 34, Victoria Street, Belfast, Ireland, is another of the houses that have been in the hands of the same family from the start. Lytle's is one of the leading wholesale tea houses in Ireland. John Lytle, the founder, died in 1871. The business was incorporated in 1906.

RIDGWAYS, LTD., tea and coffee merchants, with head and wholesale offices at 290, Old St., London, E.C.1, and agencies and branches throughout the world, was founded in 1836. In that year Mr. Thomas Ridgway established himself in King William Street, London, as a direct importer and trader in tea. To-day, Ridgways, Ltd., have branches throughout England, but the principal one is still in King William Street, London. They also have several high-class cafés throughout Eng-The business in the United States was established about 1900. Ridgways, Inc., New York, dates from 1910.

In 1836, the London business was known as Ridgway & Co. In 1896, Ridgways, Ltd., began as a public company. During the period between 1836 and 1929 the business was managed by the late Mr. Thomas Ridgway, the late Sir Alfred Cooper, and Mr. John Maitland. The shares in the company are now owned by International Tea Company's Stores, Ltd. The present directors are: Messrs. John Maitland [Chairman and Joint Managing], A. H. Poole, J. K. Maitland [Secretary], F. G. Pearce, and A. J. Evans [Joint Managing].

JOSEPH TETLEY & Co., LTD., Mansell Street, E.1, tea packing house, was founded in 1836 by Mr. Joseph Tetley, the elder, and his brother, in Huddersfield, Yorkshire. The style of the firm was Tetley Bros. The business moved to London in 1856, and the name became Joseph Tetley

& Co. Mr. Joseph Tetley, the younger, was made a partner in 1871, and in 1888 the American business was started in New York. The London partnership was changed over into a limited company in 1907, with Mr. Joseph Tetley, Jr., as chairman. The business in the United States was incorporated in 1913. For almost a century the company has specialized in the blending and packing of fine teas. The men who have figured prominently in its later development have been Messrs. Joseph Tetley, Jr., Robert Cather [deceased], and William Tetley Jones, managing director. The present directors are: Joseph Tetley, William Tetley Jones, P. K. Read, F. N. Mackie, A. Notcutt, R. Booth-Smith, and E. H. Lashmar.

Tea Firms of the Victorian Era

The firm of Williamson, Cloudsley & Co., Ltd., wholesale tea dealers, 24, Rood Lane, London, E.C.3, was established in 1837 by Mr. Thomas Williamson. The business was acquired in 1913 by a private limited liability company under the style of Williamson, Cloudsley & Co., Ltd.

The business of LLOYD, MATHESON & CARRITT, tea, rubber, and produce brokers, 130, Fenchurch Street, E.C.3, was founded in 1839, and has been carried on under its present style since 1888. The partners are Messrs. George H. Carter, Rupert R. Plowman, W. L. Carter, and O. W. Latham.

The business of Laughland, Mackay & Co., Ltd., import and export merchants, 9, Fenchurch Ave., E.C.3, was founded in 1844 by Mr. Thomas Cobbett, and was registered as a private limited liability company in 1911.

Harrisons & Crosfield, Ltd., tea and rubber, 1-4, Great Tower Street, London, E.C.3, was founded at Liverpool in 1844 by Messrs. Daniel Harrison, Smith Harrison, and Joseph Crosfield. From the commencement of the partnership, Smith Harrison regularly attended the fortnightly tea sales in Mineing Lane, and as early as 1854 he persuaded his partners to move the business from 6, Temple Place, Liverpool, to London where, on July 3, offices were opened at 3, Great Tower Street. By then the business had become a considerable one; for some years the average annual sales had amounted to more than 100,000 chests of tea. Toward the close of the





Mr. Joseph Tetley, Jr. Mr. William Tetley Jones
Chairman Managing Director
Officers of Joseph Tetley & Co., Ltd.

nineteenth century the firm acquired its own warehouses for blending and storing tea, and developed a large business in the shipment of packets of tea under its own trade mark—the "Nectar" brand.

In 1895, a branch was established at Colombo under the name of Crosfield, Lampard & Co., and in 1900 the Calcutta branch, Lampard, Clark & Co., was opened. Mr. C. A. Lampard, known as "Arthur" Lampard, the partner who opened the Colombo and Calcutta branches, was later a tea pioneer in Sumatra. Subsequent to 1900, tea ceased to be the firm's sole interest. The days of plantation rubber arrived and Harrisons & Crosfield, Ltd., became prominent in its development as well as in other tropical produce. Branches were opened at New York, in 1903; at Montreal, in 1905; at Kuala Lumpur, F. M. S., in 1907; at Melbourne, in 1910; at Batavia, Java, and Medan, Sumatra, in 1910; at Quilon, in 1912; at Kobe, in 1917; and at Shanghai, in 1918. Some of these branches were merged subsequently in the associated companies mentioned later.

The business was registered as a limited company in 1908. The first chairman was the late Mr. James B. Crosfield, eldest son of Joseph Crosfield, one of the original founders. Mr. James B. Crosfield retired in 1911, having been with the company for forty-six years. He died in 1928. The other directors were: Mr. Charles Harrison [died 1916], son of Daniel Harrison, another of the original founders; Mr. George Theodore Crosfield, another son of Mr. Joseph Crosfield, who first became a partner in the firm in 1872, retiring in 1910 [died 1927]; Mr. Charles Heath Clark, partner 1894, chairman 1911–1919,



FOUNDERS AND EARLY DIRECTORS OF HARRISONS & CROSFIELD, LTD.

Daniel Harrison.
 James B. Crosfield.
 Joseph Crosfield.
 Smith Harrison.
 Charles Harrison.
 George Theodore Crosfield.
 Charles Heath Clark.
 George Croll.

and again 1921-1924 [died 1926]; Mr. C. A. Lampard [died 1916]; Mr. George Croll, the first manager of the Colombo branch and subsequently chairman of the company [died 1922]; and Mr. H. Eric Miller, the present chairman. The blending, packeting, and retail business was transferred to Twining, Crosfield & Co., Ltd., in 1908.

The Harrisons & Crosfield organization is composed of the following associated companies: Irwin-Harrisons-Whitney, Inc., with headquarters in New York and twelve branches in the United States, Japan, and Formosa; Harrisons, King & Irwin, Ltd., with headquarters in Shanghai branches at Foochow and Hankow: Harrisons Ramsay Proprietary, Ltd., with headquarters at Melbourne, four branches in Australia, and four in New Zealand; Harrisons & Eastern Export, Ltd., at Calcutta and Colombo; Harrisons & Crosfield [Borneo], Ltd., at Sandakan and two branches in British North Borneo; Harrisons, Barker & Co., Ltd., at Singapore and Penang, at Kuala Lumpur and Ipoh, F. M. S., and four subbranches in the Straits Settlements; Harrisons, Davis & Co., Ltd., Kobe, Japan; and Davenport & Co., Ltd., at Calcutta.

The present directors of Harrisons & Crosfield, Ltd., London, are: Messrs. H. Eric Miller [Chairman], H. O. Peake, E. Macfadyen, A. L. Mathewson, H. W. Horner, and Carl Reid [in charge of the tea department].

Mr. H. Eric Miller joined Harrisons & Crosfield in 1899, became a director in 1908 when the business was changed into a limited company, and was made chairman when Mr. Heath Clark retired, in 1924. Although Mr. Miller was occupied with the tea side of the business when he first joined the company, his special sphere almost from the beginning has been rubber, and he is recognized as one of the leading authorities on the plantation rubber industry.

Mr. Carl Reid was born in Ireland, February 23, 1877. He started his career with a five-year apprenticeship to H. & E. Musgrave, wholesale tea dealers, Belfast, after which he became assistant buyer to Mitchell Bros. & Co., another firm of Belfast tea wholesalers. In 1904, he was with Mc-Meekin & Co., London, and first went to Calcutta in 1907 as one of their assistant buyers. He joined Harrisons & Crosfield,

Ltd., Calcutta, in 1909, as their senior tea buyer, and was in charge of the tea department till 1924, when he took over the management of the Calcutta business. He left Calcutta in 1929, and in 1930 he became a director of the London company. Mr. Reid has been active in Indian tea association affairs. He was chairman of the Calcutta Tea Traders' Association for one year, and served on its committee for many years. He was a member of the executive committee of the Indian Tea Cess Committee from 1924 to 1929, inclusive; was its vice chairman in 1928, becoming chairman in 1929.

English & Scottish Joint Cooperative WHOLESALE SOCIETY, LTD.—The first successful profit sharing store was founded in 1844 by some weavers at Rochdale, England, and was the beginning of the great cooperative movement which gradually spread throughout England, Scotland, and Ireland. The cooperators at Rochdale aimed, as had others before them, at being their own grocers, provision merchants, etc. Their success, where others had failed, is ascribed to their system of trading, which limited the amount of interest paid on capital, and of sharing net profits with customers proportionately to the amount of their purchases. Wholesalers made considerable difficulty about selling to the cooperative stores at first, but, as they became outlets for groceries, teas, etc., on a substantial scale, this resistance was soon Meanwhile, the movement, overcome. which had begun at Rochdale, was gradually extending. By 1862, there were 450 cooperative societies in the United Kingdom, with a membership of approximately 90,000; and this increased until there now



Mr. H. Eric Miller Chairman



Mr. Carl Reid Tea Department

DIRECTORS OF HARRISONS & CROSFIELD, LTD.



A VIEW IN GREAT TOWER STREET Harrisons & Crosfield building on the right.

are upwards of 1200 coöperative societies with more than six million members.

In 1863, some of the societies united in forming the English Coöperative Wholesale Society to do their buying for them. This was followed by the founding of the Scottish Coöperative Wholesale Society, and the two are now in partnership under the style of the English and Scottish Joint Coöperative Wholesale Society, Ltd., with headquarters of the tea and coffee department at 100, Leman Street, London, E.1. Mr. P. F. Howlett is the chief buyer for the Wholesale Society, which has a turnover of more than 100,000,000 lbs. of tea annually, making it one of the biggest tea-buying concerns in the world.

Mr. P. F. Howlett, tea buyer for the Joint Coöperative Wholesale Society, who has been active also in the Tea Buyers' Association in London and was its president in 1927, began his business career at the age of fourteen, when he went to London and secured a position with the Cooperative Wholesale Society. His first job was in the postal department at 7s. a week. During the World War Mr. Howlett was a member of the committee formed by the Food Controller in connection with the price and distribution of tea.

The business of George Henderson & Sons, East India merchants, 7, Mincing Lane, London, E.C.3, was founded in 1845 by Mr. George Henderson, trading as such. In 1884, Mr. Henderson took his sons—none of whom are now living—into partnership, and changed the style of the business to George Henderson & Sons. The eastern correspondents of the firm are George Henderson & Co., Ltd., Calcutta.

Burgons, Ltd.—In 1847, there appeared a grocery house that was later to make its name widely known in the multiple shop field. This was Burgons, Ltd., of Manchester, established by Mr. Isaac Burgon as Burgon & Co., and having upward of sixty branches in Lancashire, Cheshire, and Derbyshire. The firm was converted into a limited company in 1898.

JOSEPH GARRATT & Co., LTD., the Irish tea firm of 82-83, Thomas Street, Dublin, was founded in 1847 by Mr. Joseph Garratt. The firm was turned into a private

limited company in 1918.

HARRODS, LTD.—Mr. Henry Charles Harrod opened a modest grocer's shop in Brompton in 1849, and thus founded the enterprise now known as Harrods, Ltd., London department store, Brompton Road, S.W. In 1868, Charles Digby Harrod, the son and successor of the founder, began the change into a general, or department, store, entrusting the general management to Mr. William Kibble. In 1899 the business was registered as a limited company. Mr. [later Sir] Richard Burbidge became general manager in 1891, and rebuilt the premises on a then unprecedented scale.

Harrods has one of the biggest tea blending and packing plants of any department store in the world. Its teas are bought at the public auctions in Mincing Lane, and a system has been worked out whereby all operations, from the time the tea is taken from the chests until it is sealed in packets, are conducted on one floor of the building, in contrast to the usual method of spreading the plant over several floors. The buyer, Mr. Sidney E. Slade, has had over twenty-five years' experience in the trade.

The business of PHILLIPS & Co., of Cardiff and Newport, is the only pioneer tea enterprise in South Wales. It was established about 1850. The firm has a van delivery service in the principal towns, and in addition to supplying shopkeepers they have an extensive door-to-door trade.

The firm of Appleton, Machin & Smiles, Ltd., wholesale merchants and dealers in tea and coffee, with offices and warehouse at 14, College Hill, Cannon Street, London, E.C.4, was established in 1853 as Haslam & Hickson. Since then there have been various changes in the style; the name of Appleton, Machin & Smiles being adopted in 1885. The business was converted into a private limited liability company in 1897. Mr. John Davies, who was formerly associated with the firm as buyer and director, joined Haslam & Co., as the firm then was styled, in 1876. He retired about 1924, and died in 1928, at the age of seventy-two. The present directors are: Messrs. William K. Appleton [Chairman], B. W. Appleton [Managing], H. Peacop, A. M. B. Hillman, E. P. Alger, S. C. Hall, and W. J. Miles.

The business of Burbidge, Pritchard & Bartleet, wholesale tea merchants, 16, Philpot Lane, London, E.C.3, was founded in August, 1858, at 14, Little Tower Street, E.C.3, as Davidson & Burbidge. In 1872, a dissolution of partnership occurred and the business was reconstituted under the present style. In 1892, Mr. Burbidge retired and Mr. J. H. Tanner joined the firm. Mr. J. W. Hollander became a partner in 1931, and in 1933 Mr. Tanner died.

W. PINK & Sons, Ltd., multiple shop grocers specializing in the sale of their own tea blends, with head offices at 110-114, Commercial Road, Portsmouth, was established in 1858 by Mr. [later Sir] William Pink at No. 112 of the present address. In 1887, the founder took his three sons— Messrs. Ernest William, Harold Rufus, and Victor Emmanuel—into partnership. name was then changed to W. Pink & Sons. During his later life Mr. William Pink interested himself in public affairs, and in 1901 was knighted by Queen Victoria after serving five terms as mayor of Portsmouth. He died in 1906. Mr. [later Sir] Harold Pink succeeded his father as head of the firm, and followed his example in public affairs. He was knighted by King George in 1919 because of his war-time activities. In 1912, the partnership was changed into a limited company. Sir Harold remained as chairman, and Mr. Frank Pink was made secretary. After the World War Mr. Frank Pink became the active head. The present directors are: Sir Harold R. Pink [Chairman], Messrs. Victor E. Pink,





Sir William Pink

Sir Harold Pink

FOUNDER AND PRESENT CHAIRMAN OF W. PINK & SONS

Frank Martin, Percy V. Fuller, R. Jeffreson, G. A. Cooper, and R. B. Pink.

There are thirty-seven Pinks' retail shops in and near Portsmouth. Also there is a subsidiary concern, Pinks' Supply Company, formed in 1920, with a large warehouse at St. George's Square, Portsea, where practically all the tea sold in the company's shops is blended. The tea and coffee department is under the charge of Sir Harold Pink, assisted by Mr. G. A. Cooper, manager of Pinks' Supply Company.

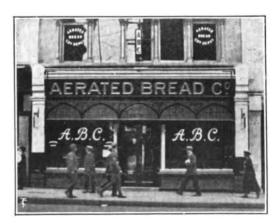
The business of Pulbrook & Co., tea merchants, 6, Cross Lane, London, E.C.3, was established in 1859 as Palmer & Pulbrook. In 1863, the style was Henry Pulbrook & Co.; in 1875, Pulbrook, Hyde & Co.; in 1897, Pulbrook, Newsom & Co.; in 1880, Pulbrook & Co.; in 1894, Pulbrook, Robertson & Co.; and since 1902 under the style of Pulbrook & Co. The present sole partner is Mr. Edward P. Pulbrook.

Darley, Butler & Drew, Ltd., tea estate agents and secretaries, with offices at 31-33, Corn Exchange Chambers, Seething Lane, London, E.C.3, was founded in London as Darley & Butler in 1860. The founders were Messrs. E. J. Darley and Samuel Butler, who opened offices in London to handle the home end of the business of Darley, Butler & Co., which they had established at Colombo thirteen years earlier. The London business was converted into a limited liability company in 1920. The present directors are Messrs. R. W. Forbes, N. W. Browning, and W. C. Burder.

THE AERATED BREAD COMPANY, LTD., the tea room pioneer in London, familiarly known as the "A. B. C.," was founded

about the middle of the past century for the sale of bread manufactured under the patented aërated process of Dr. Daugleish. The shops, in order that people could sample the bread, installed facilities for furnishing a cup of tea along with the bread and butter. This subsidiary feature in a short time became the most important part of the business. The company multiplied its tea rooms, enlarged its bill of fare to include cooked foods; and, while nowadays the A. B. C. caters to many thousands daily, it is doubtful if anyone ever buys a loaf of bread to take home. The head offices are located at 21, Camden Road, N.W.1. The company was registered in 1862, and in 1918 acquired the business of W. & G. Buszard, Ltd. In the following year it purchased almost all of the share capital of Bertram & Co., Ltd. In 1927, it obtained controlling interests in James Cottle, Ltd., J. P. Restaurants, Ltd., and W. H. Hill & Son, Ltd. It also holds the entire issued share capital of Alsford Estates, Ltd. The present directors are: Lord Greenwood [Chairman], Rt. Hon. Sir E. Cornwall, Bart., D.L., J.P. [Deputy Chairman], Sir A. J. Hawkey, Sir R. R. F. Butler, Bart., A. Davidson [Managing], and J. G. Girdwood, C.A.

The firm of Snelling, Absoloms & Lampard, Ltd., tea and coffee merchants and buying agents, 23, Rood Lane, London, E.C.3, was established in 1860 under the name of Jacob Lampard & Co., by Mr. Jacob Lampard. He was succeeded by his son, Mr. Arthur Lampard, who later joined the firm of Harrisons & Crosfield, Ltd. In 1875, Mr. H. A. Snelling established the firm of H. A. Snelling & Co., and in 1896 these two firms—Jacob Lam-



A TYPICAL A. B. C. SHOP

pard & Co., and H. A. Snelling & Co.—amalgamated as Snelling, Lampard & Co. In 1929, the firm name was changed to Snelling, Lampard & Campbell, Ltd. The present directors are Messrs. R. Lawson [Managing], C. O. Basill [Managing], and Matthew Campbell. Miss Violet W. Mait-



Miss Violet W. Maitland London's premier woman tea taster.

land, a former director, probably is the original woman tea-taster in the London market. She has been tasting, valuing, buying, and selling tea since 1913. She also prepares lectures on tea, and sometimes broadcasts for the Glasgow Station of the BBC. In 1935, the firm was merged with Absoloms, Ltd., becoming

Snelling, Absoloms & Lampard, Ltd.

THE EXPRESS DAIRY Co., Ltd., dairymen, bakers, confectioners, and refreshment caterers, with chief office at 26-30, Tavistock Place, London, W.C.1, and scores of dairy and eight refreshment branches throughout the metropolis, was founded by Sir George Barham in 1864 as the Express County Milk Co. In 1880, the company was registered. The present directors are: Messrs. G. Titus Barham [Chairman and Joint Managing], Walter Archibald Nell, A.M.I., Mech. E., H. J. Burgess, Robert Henry Hewson, Walter Crosland, William F. Pearce, William G. Snell, E. J. Strutt, Rt. Hon. Lord Rayleigh and Lieutenant General Sir Travers Clarke, G.B.E., K.C.B., K.C.M.G.

THE CIVIL SERVICE SUPPLY ASSOCIATION, LTD., 425 Strand, London, W.C.2, saw its inception in 1864, when a little group of postal clerks bought a half-chest of tea from a well-known wholesale house, and, making the contents up into small packets, sold them to others in the Post Office at a profit of 9d. per pound. The authorities lent the group a cupboard which served as a warehouse, and this humble enterprise pioneered the way for the Civil Service shops, or department stores, of the country.

The business of James B. Leckie & Co., tea and silk merchants and tea estate secretaries, 7, Laurence Pountney Hill, London, E.C.4, was established in 1867 under

the name of Coenen Leckie & Co. The style of James B. Leckie & Co., was adopted in 1871. Mr. James B. Leckie and Mr. Patrick Stewart Leckie are directors in several British Indian tea producing companies.

The brokerage business of Wilson, Smithett & Co., 39, Mincing Lane, London, E.C.3, was founded in 1865 by Messrs. Alfred Wilson and William Smithett. Since 1884 the firm has handled large quantities of Ceylon tea; the tea department being under the guidance of Mr. George Stehr. The present partners are: R. G. Bradshaw, A. E. Cope, E. G. Loudoun Shand, and L. E. Cope.

The firm of George Williamson & Co., East India merchants, 138, Leadenhall Street, London, E.C.3, was formed in 1866 by Mr. J. H. Williamson and his brother, Mr. George Williamson, and has been carried on under the present style since 1871. Mr. J. H. Williamson also launched the firm of Williamson, Magor & Co., Calcutta. Jointly the two concerns owned or controlled extensive tea interests in Assam. They afterwards were amalgamated into one partnership, and in 1884 Mr. R. B. Magor, senior partner at Calcutta, left there to become the senior London executive. He died in 1933. Members of the firm, who have served the Indian Tea Association [London], are the late Mr. George Williamson, one of the founders, who was vice chairman from 1887 to 1895;



Mr. R. K. Magor Senior Partner Geo. Williamson & Co.

Mr. R. K. Magor, son of Mr. R. B. Magor, vice chairman in 1907, and chairman in 1908 and 1909; and Mr. S. G. Anderson, chairman in 1919. The present partners are: Messrs. R. K. Magor, S. G. Anderson, E. R. Colman, and K. B. Miller.

THE ROYAL ARSENAL CO-OPERATIVE SOCIETY, LTD., whose

scores of retail provision shops are scattered throughout the London metropolitan area, started in a small bedroom. Mr. William Rose first thought of the plan in 1867. In a little bedroom above his shop he started with a chest of tea, a hundredweight of sugar, and twenty-four pounds of butter. His Society has grown until it has more than 200,000 members, with an annual turnover of about £7,000,000.

The Irish firm of PRATT & MONTGOMERY, LTD., tea merchants, 55, York Street, Belfast, was established in 1867 by Messrs. William Nicholas Pratt and Lancelot Turtle Montgomery. Mr. Richard Pratt, brother of the founder, joined the firm in 1884; he died in 1929. The present directors are: Messrs. Goodwin Pratt and Edward Montgomery Pratt, sons of Messrs. William N. and Richard Pratt, respectively.

The tea brokerage firm of HANCOCK Bros. & Co., Ltd., 28, Mincing Lane, London, E.C.3, had its beginning in 1868, when the brothers, E. H. and H. A. Hancock became sworn tea brokers and opened their office at the same address. Mr. E. H. Hancock left the firm in 1902, and Mr. H. A. Hancock in 1912. Mr. H. S. Hancock joined the firm in 1882, and died in 1924, aged eighty years. Previous to this, in 1917, the business was changed into a limited company under the present name, but since 1924, there has been no Hancock in it. The present managing director, Mr. F. Wallace, joined the firm in 1889. There are two other directors, Mr. A. F. G. Renton and Katherine F. Wallace.

KILBURN, BROWN & Co., East India merchants, 42, New Broad Street, London, E.C.2, were established in 1868, when Mr. E. D. Kilburn founded the firm of E. D. Kilburn & Co. to become the London agents and correspondents of Kilburn & Co., Calcutta. The latter firm had been established at Calcutta in 1849, with Mr. Kilburn as one of the founders. He left India in 1865. In 1900, he retired from the Calcutta firm, and from the London firm in 1911. The present partners are: Messrs. C. J. Elton, C. C. Kilburn, S. G. L. Eustace, and H. B. Whitby.

The business of J. B. Barry & Son, merchants and East India agents, with offices at 117-118, Leadenhall Street, London, E.C.2, was established in 1869 as John Boyle Barry, and since 1877 has been carried on under the present style. The firm is associated with Duncan Macneill & Co., of the same address. The present partners are: The Earl of Inchcape, Hon. Alexander Shaw, Mr. H. H. Macleod, and Mr. G. F. Hotblack.

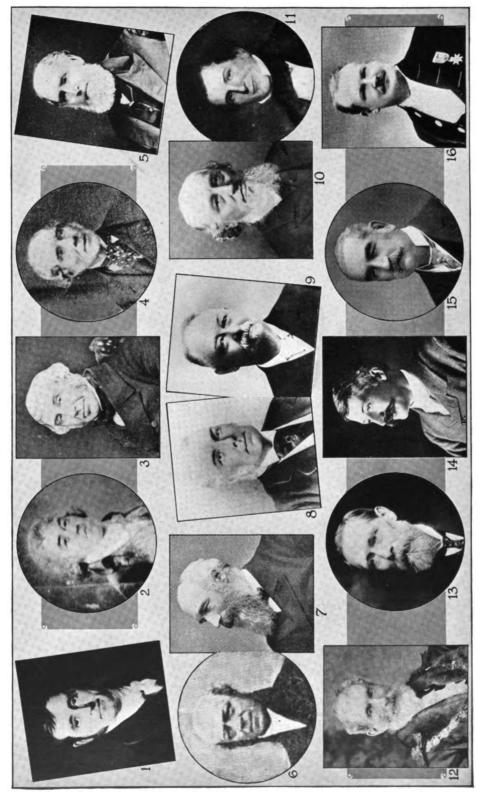
The business of J. Sainsbury, Ltd., 10,

Stamford Street, London, S.E.1, multiple tea and provision shops, was founded in 1869 by the late Mr. John James Sainsbury, who died in 1928 at the age of eighty-three. The founder was assisted by his wife when he opened his first small shop in Drury Lane. Now there are 100 retail branches in the metropolitan area alone, and the business is still a family affair. Six sons and six grandsons of the founder are in it. It was registered as a private company in 1922. The present directors are: Messrs. J. B. Sainsbury [permanent governing], and Alfred Sainsbury [life.]

SHEPARD & Co., tea brokers, with offices at 30, Mincing Lane, London, E.C.3, was founded at Liverpool in the 'sixties by Mr. John Shepard. In 1864 the business was transferred to London under the name of Shepard, Harrison and Kelden, which was later changed to Shepard & Shepard, and then to its present style. The present partners are Messrs. Vernon Dean, E. H. Townend, and H. C. B. Shepard.

The business of YULE, CATTO & Co., Ltd., East India merchants, 7, Great Winchester Street, London, E.C.2, succeeded that of George Yule & Co., founded in 1870 by the late Mr. George Yule. Mr. Yule went to Calcutta in 1875, where he joined his brother's firm of Andrew Yule & Co., Mr. Andrew Yule thereupon taking his place in London. Mr. George Yule died in March, 1892, and his partner, Mr. George M. Weekley, carried on the business until about 1902, when Sir David Yule became a partner. In 1920, the concern was taken over by Yule, Catto & Co., Ltd., Mr. Weekley retiring and Sir David Yule remaining as a director. The present directors are: Mr. Vivian H. Smith [Chairman], Sir Thomas S. Catto, Bart., Messrs. G. M. Yule, R. H. V. Smith, T. H. Graham, and D. W. Gordon. The company is the London representative of Andrew Yule & Co., Ltd., Calcutta.

The business of the Mazawattee Tea Co., Ltd., wholesale tea merchants, dealers, and importers, Tower Hill, London, E.C.3, was started in Eastcheap in 1870 by the late Mr. John Boon Densham. He was joined in partnership by his four sons under the style of Densham & Sons. The business was converted into a limited company under the name of the Mazawattee Tea Co., Ltd., in 1896, at which time there were two surviving sons of the founder, the late Messrs. John Lane Densham and Ben-



 Andrew Meirose 2. Edmund Larken 3. H. W. Maccaughey 4. John Ewart 5. Thomas Ridgway 6. John Cadbury 7. Richard Cadbury Barrow
 Alfred Wilson 9. William Smithett 10. Isaac Burgon 11. Jos. Tetley, Sr. 12. Sir John Voce Moore 13. W. N. Pratt 14. Arthur Brooke 15. J. C. Sanderson 16. Sir Alfred Cooper. PIONEERS AND FOUNDERS OF FIRMS IN THE TEA TRADE OF THE UNITED KINGDOM

jamin Densham, who were the original joint managing directors.

The business grew rapidly, resulting in the establishment of the company's extensive factories and warehouses at New Cross. London, S.E.14, where "Mazawattee" blends are packed by modern machinery. Branches and agencies have been established throughout

the world. In 1891, the company gained wide publicity by its purchase of the famous "Golden Tips"—a parcel of Gartmore Ceylon tea—which was bid in by the late Mr. Alexander Jackson, former chairman and managing director, at £25. 10s. per pound. The present directors are: Messrs. Joseph Alexander Densham [Chairman], Alexander Frederick Jackson, William Roberts, William Samuel Stokes, and William T. Rest.

Brooke Bond & Co., Ltd., growers, importers, packers, and distributors, with head offices in Goulston Street, London, E.1, was founded at Manchester in 1870 by Mr. Arthur Brooke. He was among the first to develop tea blending on a big scale, and built up a large business in blended teas with several associated companies in the East. The company operates separate and private warehouses for export trade to many parts of the world. In 1892, the business was converted into a public liability company. The present directors are: Messrs. Gerald Brooke [Chairman], John R. F. McKay, and J. H. N. Peel.

The business of Octavius Steel & Co., East India merchants, 14, Fenchurch Street, London, E.C.3, was established in Calcutta in 1870 by the late Mr. Octavius Steel, and was first represented in London between 1870 and 1875, by the late Mr. C. A. Goodricke in Cannon Street. In 1881, the business moved to offices in the Palmerston Buildings, 34, Old Broad Street. The late Mr. George Seton became manager in 1881, and retired in 1890 to deal in tea shares, establishing the Indian Tea Share Exchange as a private business enterprise. He had been associated previously with James Finlay & Co., Glasgow,







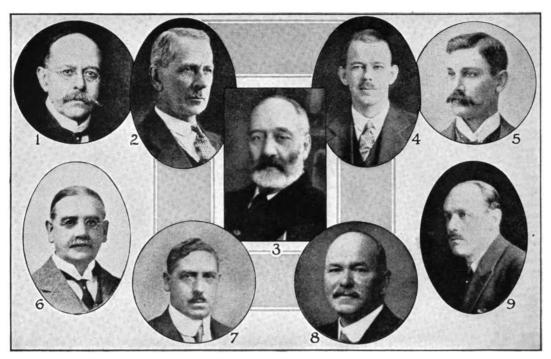
Mr. James Steel Mr. A. H. Abbott Mr. F. G. Clarke Partners in the Firm of Octavius Steel & Co., London—Calcutta

and Finlay Muir & Co., Calcutta. He died in 1929.

The London and Calcutta offices of Octavius Steel & Co., operated as one firm at first, but later were separated. The late Mr. George Henderson succeeded Mr. Seton as London manager. After the death of Mr. Octavius Steel in 1892, Mr. Henderson and Mr. J. S. Fraser carried on the partnership, until joined in 1897 by Mr. James Steel. Mr. Fraser died in 1907. In 1879, Mr. Henderson went to Calcutta as assistant; became head of the London office in 1905; retired from active business in 1924; and died at London in 1925. Later, Mr. Thomas Traill was admitted as a partner, but retired in 1922, and died in 1927. Mr. W. E. Ilbery was admitted as partner in 1913, and Mr. A. H. Abbott, in 1923; the former retired in 1927. Mr. G. R. B. Henderson was admitted to partnership in 1923; Mr. G. H. Robertson, in 1925, retiring in 1932; and Mr. F. G. Clarke, in 1927. The present partners are: Messrs. James Steel, A. H. Abbott, F. G. Clarke, and G. R. B. Henderson.

Mr. James Steel, senior partner in Octavius Steel & Co., was born at Glasgow in 1866, and in due time entered his father's shipping firm, Steel, Bennie & Co., Glasgow. In 1897, he joined the firm of Octavius Steel & Co., London. He has been active in the affairs of the Indian Tea Association [London], having been vice chairman in 1914 and 1915, and chairman in 1916 and 1917. He also served on the committee of the association for twenty years.

Mr. A. H. Abbott was born in London on June 1, 1864. He went out to Calcutta as engineer to Octavius Steel & Co. in 1888, and returned to join the London office as a partner in 1921.



PARTNERS AND DIRECTORS, ALEX. LAWRIE & Co., Ltd., London

1. J. N. Stuart 2. Sir Hubert Carr 3. Alexander Lawrie 4. J. Alex. Gemmell 5. A. C. Lawrie 6. P.
R. Balmer Lawrie 7. J. M. Chisholm 8. J. Gemmell 9. A. N. Stuart.

Mr. F. G. CLARKE was born in London, March 4, 1870. He joined the office of Taylor, Coleman & Sudlow, brokers, off Fenchurch Street, in 1885; left there to go to the London offices of Octavius Steel & Co. in 1886; went to the firm's Calcutta office in 1892; and in 1927 returned to rejoin the London office. He has served as vice chairman of the Indian Tea Association, Calcutta, chairman of its Tea Cess Committee, vice chairman of the Indian Tea Association [London], and was its chairman in 1929 and 1930.

The business of Alexander Lawrie & Co., Ltd., East India merchants, 14, St. Mary Axe, London, E.C.3, was established at Liverpool in 1870 as Simpson, Lawrie & Co., by Mr. Alexander Lawrie; but in 1878 he moved it to London. Previous to this, in 1867, Mr. Lawrie had founded the Calcutta firm of Balmer Lawrie & Co. It was Mr. Lawrie who first conceived the idea of forming the Indian Tea Association in London. Alexander Lawrie & Co. was changed into a limited liability company in 1924, a few months after Balmer Lawrie & Co. The present directors are: Messrs. A. N. Stuart, J. Alex. Gemmell, J. M. Chisholm, W. E. Stewart, and T. L. Trueman.

Mr. James Nicholson Stuart, who had served as a partner in the Calcutta firm, joined Alexander Lawrie & Co. in 1895, and, on the death of Mr. Lawrie in 1908, became senior partner. Mr. Stuart was born at Calcutta in 1855. He joined Balmer Lawrie & Co. in 1877, becoming a partner in 1878. He remained in Calcutta until 1894, during which time he was, for several years, chairman of the Indian Tea Association. After coming to London, he served for a long time on the committee of the Indian Tea Association [London], being chairman in 1907. He died in 1928.

Mr. John Gemmell, another Balmer Lawrie & Co. partner, left India in 1907 to join Alexander Lawrie & Co., and was managing director till his death in 1927. Mr. Gemmell was born in 1860, and joined Simpson Lawrie & Co., at Liverpool, in 1877. He went out to the Calcutta branch of the business in 1888.

Mr. A. C. Lawrie, son of the founder, joined the London staff of Alexander Lawrie & Co. in 1887, becoming a partner in 1891. After serving as a partner in Calcutta for some years, he returned to London, where he remained a partner until his death in 1918.

MR. P. R. BALMER LAWRIE, another son

of the founder, went to India in 1891, and, after a short time in the Calcutta office, spent two years on one of the tea estates in the Lawrie group. He became a member of the London firm in 1900, and of Balmer Lawrie & Co., in 1901. After several years as senior partner at Calcutta, he returned to London in 1914, and became senior and managing director of Alexander Lawrie & Co., Ltd. He died in 1933.

Mr. A. N. STUART, son of the late Mr. J. N. Stuart, joined the London office in 1908, and became a partner in 1914. After serving as partner in Calcutta, he now is one of the directors in London.

Mr. J. M. Chisholm is another of the present directors at London who first served as partner in Calcutta.

JOHN PEET & Co., agency firm, 4, East-cheap, London, E.C.3, was started about 1871 as a branch office of John Peet & Co., the pioneer merchants and tea estate agents of Batavia. It was established as a separate firm in 1926. The present partners are Messrs. F. N. Neumann and F. G. Guthrie.

The firm of Duncan Macneill & Co., East India merchants, 117-118, Leadenhall Street, London, E.C.3, was established in 1870 by Mr. Duncan Macneill, and the present style was adopted in 1878. The partners are: Rt. Hon. The Earl of Inchcape, Hon. A. Shaw, Messrs. G. F. Hotblack, H. H. Macleod, J. E. Roy, D. M. Hamilton, and W. N. C. Grant, all of whom also are partners in the firm of Macneill & Co., Calcutta.

Mr. SINCLAIR MACLEAY, of Duncan Macneill & Co., joined the committee of the Indian Tea Association [London] in 1902. He was elected chairman in 1905

and 1906. He died shortly after relinquishing the chairmanship.

COOPER & Co.'s STORES, LTD.—The year 1871 saw the beginning of the multiple shop business now known as Cooper & Co.'s Stores, Ltd., with central warehouses in Glasgow, Liverpool, and London; and branches in towns throughout

Scotland and England. Mr. Thomas George Bishop, the founder, previously had made a specialty of blending teas for one of the leading wholesale houses, and in 1871 he opened the first Cooper & Co. shop in Howard Court, Glasgow, for the sale of Cooper's blends at wholesale prices. The business was changed into a limited company in 1922. The present directors are: Messrs. A. H. Bishop [Chairman], W. B. Chrimes [Managing], T. G. Bishop, and Alex. Neil.

The firm of Theodor & Rawlins, tea merchants, 71, Eastcheap, London, E.C.3, was founded in 1872 by and as F. E. Theodor. In 1879, it became Theodor & Rawlins, and has long maintained branches at Shanghai, Foochow, Batavia, Colombo, and Calcutta. The present partners are Messrs. William Theodor, E. F. Seymour, and P. W. Beavan.

The business of McMeekin & Co., teagrowers, importers, and tea estate agents and secretaries, with head offices at 10-11 Lime Street, London, E.C.3, was established at Glasgow in 1873 by Messrs. Thomas McMeekin and Peter Macdonald. In 1881-82 the head office was moved to London, although the Glasgow office was retained, with Mr. John Hutton in charge. The firm established its own buyer at Calcutta in 1883, and at Colombo in 1893. In 1911, a buyer was established at Batavia, and from 1904 to 1911 there was a branch office in New York. Mr. W. Dinnis and Mr. G. H. Jones are the present partners.

MR. THOMAS MCMEEKIN, the founder of McMeekin & Co., was one of the pioneers of tea planting in India. He was born in 1835 and died in 1907.

Mr. Peter Macdonald, Mr. McMeekin's







Mr. Thomas McMeekin Mr. Peter McDonald Mr. John McEwan Founders and Late Partner, McMeekin & Co.

partner, was born in 1838, and died in

The late Mr. John McEwan, widely recognized authority on tea, joined the firm in 1876, and became a partner upon Mr. Macdonald's retirement in 1880-81. Mr. McEwan was born at Glasgow in 1855, and joined McMeekin & Co. in 1876. He retired from the firm in 1917, and died in 1924.

The firm of GEO. WHITE & Co. (TEA Brokers) Ltd., 37, Fenchurch Street, was founded in 1872 by Messrs. George White and E. A. Still. The directors are Messrs. Herbert Buchanan Yuille, George Herbert Hilliard, Archibald Buchanan Yuille, and Kenneth Edward Stares Colman.

MR. HERBERT BUCHANAN YUILLE, chairman of Geo. White & Co., was born in Edinburgh, December 12, 1868. He started his business career in 1885 as assistant in a London tea broker's office. From 1893 to 1902 he was tea buyer for Balmer Lawrie & Co., Calcutta, and in the latter year he became a partner in the firm of Geo. White & Co. He was president of the Tea Brokers Association of London in 1918 and again in 1934.

Mr. G. H. HILLIARD was born in 1877, and spent his early days in the tea trade with W. J. & H. Thompson. After eight years he went to Calcutta as assistant to Carritt, Moran & Co., later becoming



LLOYD'S NEW BUILDING ON THE SITE OF THE OLD EAST INDIA HOUSE IN LEADENHALL STREET





Mr. G. H. Hilliard

Mr. H. B. Yuille DIRECTORS IN GEO. WHITE & Co.

senior partner. In 1920, he returned to England and became a partner in Geo. White & Co. He has served the Tea Brokers' Association as its vice president in 1925, and as president in 1926 and 1927.

The Colombo Commercial Co., Ltd., estate agents, merchants, engineers, etc., Thames House, Queen Street Place, London, E.C.3, and Colombo, was established in 1875 by Mr. John Brown, a civil engineer and Ceylon coffee planter. The company was organized for the purpose of acting as coffee curers and Colombo agents for the Ouvah, Spring Valley, and Hunas-geria Coffee Companies, of which Mr. Brown was chairman and managing director. The venture was floated at an inauspicuous time, however, for the leaf disease shortly destroyed the coffee indus-Fortunately, tea came to the rescue and Mr. Brown's Company took a leading part in its development. The present directors are: Messrs. Walter Shakspeare, A. A. Prideaux, Andrew Young [Managing], and C. C. Stephen.

Mr. Alfred Brown, the late chairman of the Colombo Commercial Co., Ltd., joined the staff at Colombo in 1884, and succeeded his father, Mr. John Brown, as chairman at London upon the latter's death in 1895. Mr. Alfred Brown was twice president of the Ceylon Association in London. He died in 1934.

Mr. A. A. Prideaux became a director of the Colombo Commercial Co., Ltd., at London in 1920, after being identified with the company's tea-growing and tea-trading interests in Ceylon for twenty-six years.

Mr. Walter Shakspeare, who served as vice president of the Ceylon Association





Mr. Andrew Young

Mr. John Brown

Managing Director and Founder of Colombo Commercial Co., Ltd.

in London in 1925 and 1928, and as president from 1929 to 1934, joined the board of the Colombo Commercial Co., Ltd., at London in 1921.

Mr. John G. Wardrop, late general Ceylon manager of the Colombo Commercial Co., Ltd., in London, went out to join the Colombo staff in 1877. Three years later he was appointed manager, which position he held until 1915, when he left Ceylon to become a director in London. Mr. Wardrop was on the Ceylon Association council in London, and the council of the Rubber Growers' Association. He died in 1934.

Mr. Andrew Young joined the staff in Colombo in 1905. He left Ceylon in 1922 to become managing director in London.

LIPTON, LTD.—In 1876, a young Ulster-Scot, one Thomas J. Lipton, opened a provision shop in Stobcross Street, Glasgow. Here was born the multiple shop organization of Lipton, Ltd., wholesale and retail provision merchants, with head offices at 179–189, City Road, London, E.C.1, and branches throughout the United Kingdom.

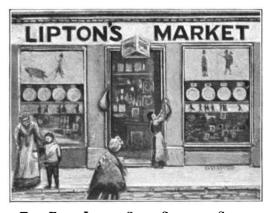
In speaking of his modest start Sir Thomas commented that he worked all hours of the day, and studied all the time how to please his customers. He slept on the premises, and was a daring advertiser from the first. He was a believer in low prices, and made a direct bid for the trade of thrifty housewives. The mother shop shortly gave birth to its first offspring, to be rapidly followed by others, until, in a comparatively few years, Lipton shops were spread over Scotland, and had found their way over the border into England and across the Irish Sea to Ireland.

Sir Thomas first entered the tea trade

in 1889. When his initial purchase, 20,000 chests, arrived at Glasgow he sent fifty dray loads through the streets, accompanied by brass bands and pipers. In the same year he moved his head offices to City Road, London, where he later built large factories and palatial offices. Up to this time, tea had been sold in England mostly from 3s. a pound upward, and nothing under 2s. 6d. was known. Sir Thomas opened his campaign by selling his tea—"The Finest the World Can Produce"—at 1s. 7d. a pound, and very soon captured a large portion of the consumer business.

By 1890, there were seventy-odd Lipton shops in London, besides a constantly increasing number in the provinces. Later Sir Thomas extended his activities well around the world, interesting himself in tea gardens in Ceylon, and in jam factories, bakeries, and other allied enterprises at home. In 1929, there were 590 Lipton shops scattered throughout the United Kingdom—100 of them in London—and the company had depots and branches in many countries. When Sir Thomas converted his business into a public company in 1898, the scramble for shares was amazing. More than 200,000 people subscribed £50,000,000 for £2,000,000 worth of stock.

Sir Thomas became chairman of Lipton, Ltd., and continued in this capacity up to 1927, when he retired in favor of Sir John Ferguson. Sir Thomas was elected honorary life president. At the same time it was announced that an agreement had been reached between Lipton, Ltd., and Meadow Dairy Co., Ltd., whereby the latter concern had become interested in the manage-



THE FIRST LIPTON SHOP, STOBCROSS STREET, GLASGOW, 1876

ment of Liptons. Sir John Ferguson became deputy chairman of the Meadow Dairy Co., Ltd., and Mr. George Beale,



Sir Thomas J. Lipton

chairman of the latter, became deputy chairman of Lipton. Ltd. Since 1931, the company has been a subsidiary of The Home and Colonial Stores. Ltd. Thomas died in 1931. He left an estate valued at approximately \$7,000,-000.

The American and Canadian Lipton

business is entirely separate and distinct

from the English company.

The present directors of Lipton, Ltd., are: Sir James Martin, J. P. [Chairman], Messrs. A. Greig, A. Purves, H. A. Snelling, and C. P. Tomlin [Managing Directors], and Mr. Malcolm W. Keith [Director].

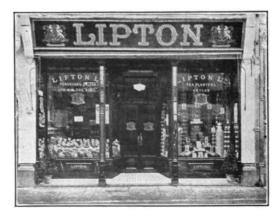
SIR THOMAS JOHNSTONE LIPTON, First Baronet and Knight Commander of the Victorian Order, tea merchant extraordinary, all around good sportsman, and the most picturesque figure the tea trade has produced, was born of Irish parents in Glasgow, May 10, 1850. At the age of seventeen, young Thomas emigrated to America to try his luck in the New World. He landed in New York and had jobs in Virginia and New Orleans. After several years of hard work and saving, he returned to Glasgow and in 1876 started business of his own. He brought home with him £100, a sack of flour, and a rocking chair for his mother.

In the little shop which he opened in Stobcross Street, he sold Irish produce, such as cheese, hams, bacon, butter, and eggs. The staff consisted of himself, a boy, and a cat. "There wasn't a neater, brighter store in the City of Glasgow," he said in speaking of this period, "and I did things in a humorous way to attract attention. I used to have cartoons of the local news, comic drawings, and snappy tickets on the eggs."

He was a born showman, and one of his earliest efforts at the spectacular in advertising was to parade through the streets of Glasgow two of the largest pigs in captivity clothed with bright banners on which were lettered "Lipton's Orphans." They were driven by two Irishmen in native costume. The drivers were warned to keep out of the way of the police, but the pigs drew tremendous crowds and ended by tying up the tram cars in one of the city's worst traffic jams, which naturally called for police officers to untangle it. Of course, the papers were full of the incident, so it came to pass that everyone in Glasgow knew about Lipton's. This was Sir Thomas's first front page achievement.

Those were the days of hardest work for Sir Thomas, but he must have liked it, for he early hung up in his office a framed motto, which read, "There's no fun like work." Presently Lipton's shops were to be seen everywhere. In the mean time, he had ransacked Ireland for produce, America was sending him sides of bacon by the thousand, Denmark sent tons of butter, and his own plantations in Ceylon produced tea for him. Within ten years from the opening of the initial shop he was employing 8000 men.

Sir Thomas's American business had its origin in 1893. Some years previous to this date he had purchased several tea estates in Ceylon, and the exhibit of the tea from these estates at the Chicago World's Fair marked the introduction of Lipton's tea to the United States. The business, which was later registered as Thomas J. Lipton, Inc., was first organized as Thomas J. Lipton, Tea Planter, Ceylon, with an office in New York. The chief offices and factory were subsequently removed to their present location in the Hoboken Terminal Building, Hoboken,



TYPICAL LIPTON SHOP OF TODAY

New Jersey—across the North River from New York City.

Sir Thomas was knighted by Queen Victoria in 1898, and was made a baronet by King Edward in 1902, after receiving the K.C.V.O. the year previous. He was a confirmed bachelor. The only romance that ever entered his life was his love for his mother. Incidentally, Sir Thomas drank only tea; this for reasons of neither advertising, prohibition, nor economy, although, when asked by a friend why he never had married, he replied that the price of tea was "far too low to keep a wife."

Sir Thomas's struggle for the greatest of yachting trophies, the America's Cup, won the admiration of sportsmen throughout the world. His five Shamrocks were successively defeated, but he won for himself the title of the World's Best Loser. After his last race, in 1930, his American admirers presented him with a consolation loving-cup valued at \$6000, which sum was

raised by popular subscription. Tower Tea, Ltd., 71, Eastcheap and 24, Rood Lane, London, E.C.3, formerly the Tower Tea Co., was founded in 1876 by Messrs. William and Thomas Lough. Previous to 1876, blending and grading tea had been mainly the work of the retail grocer. These two Irishmen were among the first to go into blending on a large scale. They introduced their "Tower" packet tea in one quality, "London Broken," and sold it at the uniform price of 1s. 8d. a pound. The low price, made possible by mass production, was a big factor in the success of the business, although grocers at first objected strongly to the packets being marked with the price. Their opposition was overcome, however, when they learned the advantages of buying and selling packet tea. The present directors of the firm are: Messrs. W. H. Lough [Chairman and Managing Director], Edward E. B. Prest, J. A. Chapman, and C. E. Lough.

FERGUSON, HOLNESS & Co., LTD., tea and coffee merchants and importers, tea blenders and packers, Oxford House, 15, John Street, London, E.C.3, was established in 1876 by Messrs. James Ferguson and Edwin Holness. This firm, which is one of the first in London to have its own bonded warehouse, has branches in Colombo and Nairobi. The business was changed into a private limited company

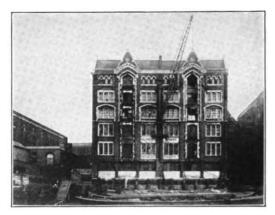


AN INTERNATIONAL STORES FRONT

in 1912. The present directors are: Messrs. J. P. Eyre, Edwin Holness, Edwin Cutler Holness, N. A. Grant, J. M. Pittendrigh, Viscount Suirdale, and H. H. G. Redshaw.

The International Tea Company's Stores, Ltd., multiple provision shops, with head offices in Mitre Square, London, and branches throughout the country, had its inception in 1876, and became a limited company in 1895. At the outset, the company opened its own branches, but during the last twenty years it has been a part of the company's policy, in addition to opening branches, to buy grocery businesses that appeared suitable for development. From these two sources the branches totalled 520 in 1929. In addition to its own branch activities, the International controls Kearley & Tonge, Ltd., importers and wholesale merchants; and has acquired, since 1929, the Star Tea Co., Ltd., Ridgways, Ltd., the Pegram shops, and George J. Mason Ltd. The International group is the only important combination in tea and provisions outside of the Allied Suppliers group. International, in 1928-29, also became buying agents and managers on a commission basis for the John Quality, Ltd., group of food stores, of which there are approximately a score in the metropolitan district. present directors of the International Tea Company's Stores, Ltd., are: Messrs. Guy Collier [Chairman and Joint Managing Director], Colin Cooper, E. D. Davies, Frank Drowley, H. N. Hume, Charles Frederick Lombard Hunt, F. G. Pearce and Joseph Hartley.

Mr. Guy Collier is the chairman and joint managing director of the International Tea Company's Stores. Ltd., and



WAPPING OLD STAIRS AND OLIVER'S WHARF
This tea warehouse scene is characteristic of the
London Dock section. The famous Wapping Old
Stairs of the Ballad are on the left of the picture.

also is a director of Kearley & Tonge, Ltd.

Mr. Colin Cooper, son of the late Sir
Alfred Cooper, who for many years was
chairman of Ridgway's, is vice chairman
and joint managing director of the International Tea Company's Stores, Ltd., and
a director of Kearley & Tonge, Ltd., and
Crompton & Parkinson, Ltd. In 1927, he
purchased the International Tea stock of
Lord Devonport and the late Mr. G. A.
Tonge, thus making himself the largest
shareholder. Mr. Tonge, former chairman,
died in 1927, aged sixty-nine.

Kearley & Tonge, Ltd., wholesalers, importers, tea blenders and packers, cake and biscuit bakers, and jam manufacturers, with offices and warehouse at Mitre Square, E.C.3, and stores at Durward Street, E.1, Fulbourne Street, E., Selby Street and Bethnal Green, E.2, was founded about 1876 by Mr. Hudson Ewbanke Kearley, who later became Lord Devonport. The business was registered as a limited company in 1895, and is controlled by International Tea Company's Stores. The present directors are: Messrs. Edward Dyer Davies, Frederick George Pearce, Guy Collier, Charles Frederick Lombard Hunt, Colin Cooper, Stanley C. Hooker, and Ernest Luce Dowsett.

The firm of P. R. Buchanan & Co., East India merchants, secretaries and agents for tea, coffee, and rubber companies, warehousemen, etc., 9, St. Helen's Place, London, E.C.3, was established by Messrs. P. R. Buchanan and A. Bryans in 1877. Located originally in the west end of London, the offices were moved in 1890 to 45, Leadenhall Street, and to the present

address in St. Helen's Place, in 1929. The present members of the firm are: Messrs. R. Graham, E. L. Sparks, W. B. Bryans, and James Finlay & Co., Ltd.

MR. P. R. BUCHANAN was a former tea planter, who first went to India in 1863. He was resident in Great Britain from 1877, afterwards paying visits to the East and remaining the senior of the firm until his retirement in 1904. He died in 1929.

Mr. A. Bryans, former partner and one of the founders, has the distinction of being the only life member of the Indian Tea Association [London]. He was elected a member of the general Committee in the 'eighties and was vice chairman in 1901 and 1902. Mr. Bryans was elected president of the Association in 1930. He was also a member of the general committee of the South Indian Association in London. He first went to India in 1869 to engage in tea planting, but returned to England in 1877. He retired from the firm in 1933.

SIR ROBERT GRAHAM, partner in P. R. Buchanan & Co., has rendered signal service to the cause of Indian tea. In 1914, he was chairman of the Indian Tea Association, Calcutta, and of the Tea Cess Committee in 1914-15; vice chairman of the Indian Tea Association, Calcutta, in 1917 and 1918; chairman of the Tea Cess Committee again in 1921; and chairman of the South Indian Association in London in 1922. He was vice chairman of the Indian Tea Association (London) in 1930, and chairman for three years thereafter. In 1933, he became the first chairman of the International Tea Committee. Sir Robert went to Colombo in 1897 and there obtained an appointment with the Kanan Devan Hills Produce Co., Ltd., in Travancore. In 1902, he was



Mr. P. R. Buchanan Mr. A. Bryans Founders of P. R. Buchanan & Co.



transferred to the office of James Finlay & Co., Ltd., in Calcutta, where he continued for nearly a score of years. In 1921 he returned to London and became a partner



Sir Robert Graham

in P. R. Buchanan & Co. He was knighted in 1935.

The PLANTERS' STORES & AGENCY Co., LTD., tea and general merchants, 17, St. Helen's Place, London, E.C. 3, was registered in England in 1878 to acquire the business ${
m the}$ Planters' Stores Co., Ltd., an Indian undertaking at Calcutta.

Calcutta business has since operated as a branch of the London company. The company's interests are distributed between London, Calcutta, Assam, and the F. M. S. The present directors are: Messrs. James Warren [Chairman], C. T. Wale, W. K. Warren, and Sir D'arcy Lindsay, C.B.E.

MR. JAMES WARREN, has been an earnest worker for the advancement of the Indian tea industry. He was vice chairman of the Indian Tea Association [London] in 1912 and '13 and chairman 1914 and '15.

The business of Gow, Wilson & Stanton, Ltd., tea, rubber, etc., share brokers, 13-15, Rood Lane, London, E.C.3, was established in 1879 by Messrs. William Gow, William Trafford Wilson, and A. G. Stanton, and in 1904 was registered as a private limited company. The present directors are: Messrs. Charles Bulkeley Sutton, Spencer Brett, P. S. Martin, and J. A. Meston.

Mr. WILLIAM Gow, the senior partner and, after the firm became a limited company, its chairman of directors, was considered an authority on the history of British-grown tea. He died in 1908.

Mr. W. T. Wilson, the second partner, was one of the best known men in tea circles for over twenty years. He died in 1906.

Mr. A. G. Stanton, the third member of the firm, was a keen statistician, and the oldest member of the committee of the Indian Tea Association [London] at the time of his death, in 1908.

Mr. Patrick Gow, who succeeded Mr.

William Gow as chairman and managing director, died in 1929.

STENNING, INSKIPP & Co., tea brokers, 14, Mincing Lane, London, E.C.3, was founded in 1881 by Messrs. C. F. Inskipp, J. C. Stenning, and S. H. Cheshire. The present partners are: Messrs. J. K. Stenning, B. W. Stenning, W. Inskipp, and M. W. S. Pemberton.

DICKSON, ANDERSON & Co., LTD., East India merchants, 139, Cannon Street, London, E.C.4, was started in Fenchurch Street in 1882-83 as Dickson & Co. by the late Mr. Thomas Dickson of London and Colombo. The business was changed over into a limited company in January, 1921. The present directors are: Messrs. T. Dickson, W. G. B. Dickson, C. H. Jenkins, and J. A. Loram.

The business of STEWART, HOLL & Co., LTD., East India merchants, 14, St. Mary Axe, London, E.C.3, was established in 1883 under the style of Stewart, Holl & Co. It was converted into a private limited liability company in 1925. The present directors are: Messrs. William Esplin Stewart [chairman], C. F. K. Mainwaring, and A. N. Stuart.

Begg, Roberts & Co., 138, Leadenhall St., London, E.C.3, are successors to the business of Begg, Dunlop & Co., and



A VIEW IN OLD BROAD STREET



F. A. Roberts & Co., both of London. Begg, Dunlop & Co., was started in 1883 by Sir Donald Macfarlane and Mr. H. H. Sutherland [father of Sir George Sutherland, one of the present partners] with Mr. A. B. Inglis, a former partner in the Calcutta firm, in charge of the business. Mr. Inglis died in 1885. The change in the firm name was made in 1916, when Sir George Sutherland arranged an amalgamation of his firm with that of Mr. F. A. Roberts. Both concerns had been closely connected through the Jorehaut and other Assam tea companies from the days of Mr. William Roberts [father of Mr. F. A. Roberts], in the early 'sixties. The present members of the firm are: Mr. F. A. Roberts, Sir George H. Sutherland, Lieutenant Colonel A. H. C. Sutherland, Mr. F. W. S. Roberts, and Sir Alfred D. Pickford.

MR. FREDERICK ARTHUR ROBERTS, senior partner in Begg, Roberts & Co., was born in 1860, and joined his father in business in 1881. He became a director of the Jorehaut Tea Company in 1887, and managing director in 1897. This company, of which Mr. Roberts still is the managing director, dates back to 1859. Mr. Roberts served on the committee of the Indian Tea Association [London], and was its vice chairman in 1903; its chairman in 1904; and again its vice chairman in 1910. He was one of the founders of the Anti-Tea-Duty League, and its first chairman.

LIEUTENANT COLONEL A. H. C. SUTHER-LAND, O.B.E., M.C., is another member of the firm of Begg, Roberts & Co., who has been an active worker for the advancement of the British tea industry. Following a distinguished military career during the World War, which took him with the Black Watch to the front, where he lost a leg, and where he was thereafter attached to General Headquarters and on Lord Haig's staff, he joined the firm of Begg, Roberts & Co. He was vice chairman of the Indian Tea Association [London] in 1929, becoming chairman in 1930.

The business of C. A. GOODRICKE & Co., merchants and East India agents, 9, Billiter Square, London, E.C.3, has been established since 1884, and conducted under the present style since 1895. The partners are Messrs. E. A. Mitchell, G. O. Theobald, and C. W. A. Treyor.

The firm of R. G. Shaw & Co., managing agents and secretaries, Winchester House, Old Broad Street, London, E.C.2,





Mr. H. S. Ashton

Mr. Gerald Kingsley

PARTNERS IN R. G. SHAW & Co.

saw its inception in the year 1884. The late Mr. R. Gordon Shaw was the founder. He had gone to India in the early 'sixties, where he became the proprietor of a small tea garden in the Sadiya District. He took up land and opened up fresh estates, which were amalgamated eventually and now form the properties of the Assam Frontier Tea Co., Ltd., of which R. G. Shaw & Co., are secretaries and agents. Mr. John Alston, who later became Mr. Shaw's partner in R. G. Shaw & Co., went to India some years after, and he also opened out new properties, some of which were sold to the Assam Frontier Tea Co. at the time of its formation. Mr. Alston has been active in the Indian Tea Association [London], and was the vice chairman in 1905 and 1906.

The Eastern correspondents of R. G. Shaw & Co. are Shaw, Wallace & Co., of Calcutta, who have branches at the principal ports of India, and in Colombo. The present members of the London firm are: Mr. H. S. Ashton, Mr. E. A. Chettle, Mr. Gerald Kingsley, Sir John B. Lloyd, Mr. G. H. Champion, Mr. W. M. Fraser, Mr. R. M. H. Savage, Mr. J. L. Milne, and Mr. H. C. Garbatt.

Mr. H. S. Ashton, the senior partner, in R. G. Shaw & Co., was born in Lancashire in 1862, and in 1883 went to Calcutta to join the firm of Carlisle, Nephews & Co. After about five years he joined Shaw, Wallace & Co. as an assistant, and later became senior partner. He was active in Calcutta tea circles, serving for years on the committee of the Indian Tea Association, and was vice chairman and chairman at different times. He was chairman of the Tea Cess Committee also. In Lon-

don, he was chairman of the Indian Tea Association for two years, 1912-13.

LORD GREENWAY, former senior partner of Shaw, Wallace & Co., and R. G. Shaw & Co., was born at Taunton in 1857, and in 1885 went to India, where he played a prominent part in its commercial and industrial development. He returned to England in 1908, and died in 1934.

Mr. Gerald Kingsley, partner in Shaw, Wallace & Co., and R. G. Shaw & Co., was born at Bowden, Cheshire, in 1867. He was educated at King Williams College, Isle of Man, and then followed the sea as a sailor for two years. In 1887, he became a tea planter in Assam, where he remained for eleven years. Mr. Kingsley joined Shaw, Wallace & Co., Calcutta, in He was keenly interested in the activities of the Indian Tea Association, Calcutta, and is a former chairman of both the Association and the Tea Cess Committee. In 1914, he joined the firm of R. G. Shaw & Co., London, while still retaining his interest in the East. Mr. Kingsley has figured prominently in the promotional affairs of the Indian Tea Association [London]; was vice chairman in 1916, 1917, and 1920; and chairman in 1918, 1921, and

SIR JOHN BUCK LLOYD, partner in Shaw, Wallace & Co., India and Ceylon, and R. G. Shaw & Co., London, was born at Tunbridge Wells in 1874, and went to India to join Shaw, Wallace & Co. in 1897. He rereturned to England in 1919.

Mr. W. M. Fraser, partner in R. G. Shaw & Co., London, first went to India in 1895 as an assistant on a tea plantation in the Dooars. In due course he became manager, and later went to a tea estate in Sylhet, afterwards returning to the Dooars. In 1907, he joined Shaw, Wallace & Co., and while in Calcutta served on the committee of the Indian Tea Association until October, 1921, when he returned to London, and became a partner in the firm of R. G. Shaw & Co. Fraser served as vice chairman of the Indian Tea Association [London] in 1923, 1924, and 1927, and as chairman during part of 1928.

THE HOME AND COLONIAL STORES, LTD., grocers, of the Allied Suppliers group, with head offices at 179–189 City Road, London, E.C.1, and retail shops throughout Great Britain and Ireland, started in a modest way in 1885, with tea as its



A HOME AND COLONIAL STORE

principal line. The founders were Messrs. John Musker and J. C. Drew. The original company, which by 1888 owned four large stores and nine smaller branch establishments, was known as the Colonial Trading Association, and was acquired by the present company in 1888.

A policy of expansion was adopted from the first. In 1890, forty-three branches were opened, and since then the growth has been continuous. By January 1, 1929, the company owned and controlled 1030 branches in Great Britain and Ireland. Since 1929, the wholesale buying and packing of the Home & Colonial, together with those of its correlated companies, have been done by the Allied Suppliers, Ltd., a corporation created by joint action of the

group for this pur-

pose.

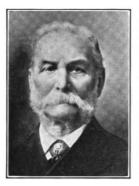
Mr. J. C. Drew was the tea director in the early days, and his policy of giving the highest possible quality at the smallest margin of profit set a new standard of values for tea in England. The successive heads of the tea department always took a



Mr. T. V. McLeod

prominent part in associations connected with the trade. In fact, the London Tea Buyers' Association was founded mainly through the activities of one of the first of the company's buyers, Mr. T. V. Macleod, who was closely associated in this effort with the late Mr. Geo. Payne.

The first chairman of the board was the late Sir William Capel Slaughter, under whose skillful guidance the company





Mr. H. R. Stimson Mr. Rowland Stimson Two Stimsons, Father and Son

achieved its large measure of success. The company controls Lipton, Ltd., Meadow Dairy Co., Ltd., and its subsidiaries, Pearks Dairies, Ltd., and others. It is associated with Maypole Dairy Co., Ltd. The present directors are: Sir James Martin, Kt., J.P. [Chairman], A. Greig and A. Purves [Joint Managing], W. Saunders, A. R. Wilson, and A. Hoskins.

The firm of Rowland Stimson & Co., wholesale tea and coffee merchants, 28, Tower Hill, London, E.C.3, was founded in 1885 by Mr. W. G. Archibald as the Ceylon, China and India Tea Co., and was one of the first firms to introduce Ceylon tea into England. Mr. Archibald was succeeded in 1886 by Messrs. F. Whitley and C. P. Jones. In turn, they were succeeded in 1887 by the late Mr. H. R. Stimson, and he by his son, Mr. Rowland Stimson, who was joined in partnership by Mr. F. W. Crothall in 1932.

Mr. Rowland Stimson has been with the firm more than forty years, and for the last twenty years has encouraged the retail trade to develop a mail-order business with the slogan "Tea Direct from Ship to Teapot." More recently, as chairman of the Traders Committee of the Imperial Cash on Delivery Association, he was associated with the group that secured the adoption by the British Post Office of the inland C. O. D. service. The firm of Rowland Stimson & Co., has been represented at Hamburg by Mr. Sidney Lipert, as agent, since 1925. Early in 1928, the firm secured the whole of the first public sale consignment of tea imported into England from Kenya. To signalize the occasion, a chest of it was presented to His Majesty, King George V. Again, in 1932, the firm received the first consignment of tea from Tanganyika, and a chest was presented to His Majesty the King.

J. W. CLARK & Co., tea brokerage firm, 40, Eastcheap, London, E.C.3, was established in 1885 by Messrs. Frank Turner and John William Clark, trading as Turner & Clark. This partnership was dissolved in 1895, the business being continued by Mr. Clark as J. W. Clark & Co., with his son, Mr. Harold Haydon Clark, and Mr. W. H. S. Davy as buyers. These gentlemen were admitted as partners in 1900. Mr. Davy retired from active business in 1924, and in June, 1927, after upwards of sixty years' association with the tea trade, Mr. J. W. Clark also retired. He died in 1931. Since June, 1927, the business has been carried on by Messrs. Harold Haydon Clark, Albert Victor Ward, and Walter Edward Seymour.

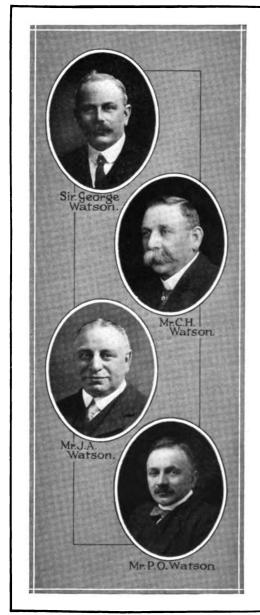
The firm of Shand, Haldane & Co., tea and rubber estate agents, secretaries, and tea and rubber importers, 24, Rood Lane, London, E.C.3, was established in 1886 by Mr. J. L. Loudoun-Shand and Mr. R. C. Haldane. The present partners are Messrs. W. E. Loudoun-Shand and C. C. Durrant.

Mr. J. L. Loudoun-Shand went to Ceylon as a coffee planter in 1864. After coffee failed he devoted his attention to cinchona and tea. He became chairman of the Planters' Association of Ceylon, and planters' representative on the Legislative Council. In 1886, he returned to London, and in association with Mr. Haldane, started the business of Shand, Haldane & Co. He died in 1932.

Mr. R. C. Haldane was a tea planter in Ceylon for many years, and was in partnership with Mr. Loudoun-Shand from 1886 until 1899, when he retired. He died a few years later.

Mr. W. E. LOUDOUN-SHAND, son of Mr. J. L. Loudoun-Shand, went to Ceylon as a tea planter in 1894. He joined the firm of Shand, Haldane & Co. in 1916.

The Maypole Dairy Co., Ltd., of the Allied Suppliers group, with head offices at 179–189 City Road, London, E.C.1, saw its inception in 1887, when the first Maypole shop was opened in Queen Street, Wolverhampton, by the four brothers, Sir William George, Mr. J. A., Mr. P. O., and Mr. C. H. Watson. By 1908, the number of shops grew to 105, when there was an amalgamation with the old established business of George Jackson, Ltd., Birming-



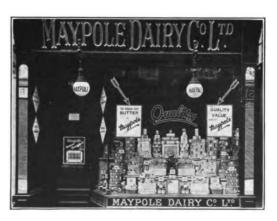
FOUNDERS OF THE MAYPOLE DAIRY CO.

ham, which then owned eighty retail branches. In 1924, the Home and Colonial Stores, Ltd., acquired a substantial interest. The present chairman is Sir James Martin, Kt., J.P.; Mr. W. E. Mortimer is vice chairman; and the managing directors, who are also managing directors of the Home and Colonial Stores, Ltd., Lipton, Ltd., and Meadow Dairy Co., Ltd., are Messrs. A. Greig and A. Purves. Other directors are Messrs. J. B. Wakefield and M. A. Mackenzie.

THE UNITED KINGDOM TEA CO., LTD., multiple shop retailers of teas, coffees, groceries, etc., with head offices at 1, Paul Street, London, E.C.2, was founded in 1888 by Mr. John Layton. As a young man, Mr. Layton went into the firm of Edward Tetley & Sons, eventually becoming a partner. The name was then changed to Tetley, Sons & Layton. In 1888, he left the Tetleys and founded the United Kingdom Tea Co., which he registered as a private company. The business was converted into a public limited liability company in July, 1896. Mr. Layton remained the managing director until he retired in 1903. He died in 1914. The present directors are: Messrs. C. E. Ayshford [Chairman and Managing Director], T. E. Ayshford, C. V. Henderson, E. Whitley, and W. G. F. Cristall.

Cross, Sons & Absolom, Ltd., tea and coffee merchants, 27, Mincing Lane, London, E.C.3, started in 1888. The business was founded as Cross & Son by the late Mr. Thomas John Cross, previously of the firm of Tyson & Cross, and his son, Mr. Frederick Edmund Cross, present chairman. The company was registered in 1900, on the fusion with the business of Mr. Edward Herbert Absolom, whose grandfather entered the tea trade in 1802. Mr. Thomas John Cross died in 1914, and Mr. Fred E. Cross became chairman of Cross, Sons & Absolom, Ltd. The present directors are: Messrs. Frederick Edmund Cross [Chairman], Stanley Herbert Cross, and Arthur Cresswell Howe.

Mr. Frederick E. Cross was born in 1863, and entered the tea business in 1881. As a member of the committee of the Tea Buyers' Association, he has been an earnest



A MAYPOLE DAIRY CO. STORE

promoter of unity in the tea trade, and was president of the Association in 1914 and 1927. During the World War he was on the executive committee of the Tea Control, and also was on the special committee formed by the Army Council to advise on the purchase of tea for the British troops.

The brokerage firm of Sanderson & Co., now of 23, Rood Lane, London, E.C.3, was founded in 1888 by the late Mr. John Cornelius Sanderson, the late Mr. Keith Fraser Arbuthnot, and Mr. John Harry Goodwin. Before launching Sanderson & Co., October 1, 1888, Mr. Sanderson had been connected with the firm of Patry and Pasteur. He continued to administer the affairs of Sanderson & Co. until he retired in October, 1912, after fifty-six years of business life in Mincing Lane. He died in Other changes have been as fol-1916. Mr. Arbuthnot retired from the partnership in 1899 and died in 1914; Mr. Goodwin retired in 1904; Major Guy Butler Owen, for ten years manager of the firm's tea department and the present senior partner, was admitted in 1904; Mr. Arnold Spencer Moore, of the present firm, became a partner in 1909; Messrs. Chas. H. Lullin and Bernard Murdoch, in 1912; and Mr. Harry Douglas Cowan was admitted in 1915. Mr. Lullin died subsequently. In 1929, Mr. Murdoch retired, and Messrs. A. Rosling, F. M. M. Le Roux, C. F. Hall, and C. W. Boodle, all of whom had been connected with the business for many years, were admitted to partnership. In 1933, Messrs. Cowan, Le Roux, and Hall retired. Major Owen now is adviser to the War Department for tea supplies.

The firm of Rowe, White & Co., Ltd., merchants and tea company secretaries, 4, Lloyds Ave., London, E.C.3, was founded in 1890, and was registered as a limited company in 1906. The present directors are: Messrs. Bertram Francis White [Chairman], David Erroll Sinclair, and Henry Bayford Owen.

The business of S. J. Palmer & Co., Ltd., was founded at Newcastle-upon-Tyne in 1890 by Samuel James Palmer. They have dealt in tea from the start as packers, importers, and exporters. The directors are Messrs. S. J. and G. A. Palmer.

The firm of Bosanquet, Traill & Co., colonial merchants and tea estate agents, 4, Market Buildings, 29, Mincing Lane, London, E.C.3, was founded in 1890 by Mr. Richard Arthur Bosanquet. In 1906,

he was joined in partnership by Mr. Gilbert Francis Traill, a veteran ex-Colombo merchant, who died in 1927, at the age of seventy-six. He left two sons, one of whom, Mr. Gilbert Barsham Traill, is a director of Bosanquet & Skrine, Ltd., Colombo. The late Mr. Traill was an authority on tea and rubber in Ceylon. The present partners are Mr. Richard Arthur Bosanquet and his son, Mr. Raymond Francis Bosanquet.

Mr. RICHARD ARTHUR BOSANQUET first went to Ceylon in 1870, and founded the firm of Bosanquet & Co., Colombo, in 1879.

ROBERTSON, BOIS & Co., 13, Rood Lane, London, E.C.3, another well-known firm of colonial merchants, and tea estate secretaries and agents, was founded in 1891 by Mr. Charles Murray Robertson, formerly of Yoxford Estate, Dimbula, Ceylon, and Mr. Edgar Bois.

The firm has no branches in the East, but is closely connected with the Colombo firms of J. M. Robertson & Co., and Bois Bros. & Co., Ltd.; the London firm having been launched with the idea of acting as agents for these two firms, which had been established many years previously.

In 1901, Mr. Edgar Bois retired from the firm and Mr. Charles Gordon Bois was admitted. Mr. Charles Gordon Bois later became senior partner. He died in 1932. In 1920, Sir Stanley Bois, former partner in the firm of Bois Bros. & Co., Ltd., and Mr. Norman Douglas Alston were admitted to the firm. In 1929, Sir Stanley Bois retired, and Mr. William Henry Miles, formerly of George Steuart & Co., of Colombo, was admitted to the firm which now consists of Messrs. Norman Douglas Alston, William Henry Miles, Al-





Mr. C. M. Robertson Mr. Edgar Bois Founders of Robertson, Bois & Co.

fred Churchill Matthew, and W. R. Temple Picton-Warlow.

The firm of Brash Brothers, 13, Rood Lane, London, E.C.3, was founded in 1891 by Messrs. Thomas and W. R. A. Brash. Mr. Thomas Brash was born in Edinburgh, and as a young man was apprenticed to James McLaren & Sons, tea merchants, of the same city. He

came to London in 1887. Mr. W. R. A. Brash was born in Edinburgh also, and served his apprenticeship there with Brodie, Hamilton & Co., tea dealers. In 1891, he joined his brother in establishing the firm of Brash Brothers. Mr. W. R. A. Brash died in 1915, and Mr. Thomas Brash became sole proprietor. In 1931, Miss Margaret Irving, one of the few women tea buyers in the trade, was admitted to partnership.

Mr. Thomas Brash was Director of Tea Supplies at the Ministry of Food during the latter years of the World War, and after the armistice he carried through the decontrol of tea. Since then he has acted in an advisory capacity for the Board of Trade, and during the general strike in 1926 was appointed Commissioner of Tea for London. He also has been prominently identified with the affairs of the London Tea Buyers' Association, of which he was president in 1922.

MISS MARGARET IRVING, who hails from



Mr. W. R. A. Brash Founder



Mr. Thomas Brash Founder



Miss Margaret Irving

FOUNDERS AND PARTNER OF BRASH BROTHERS, LONDON

Surrey, came to Brash Bros. in 1915, when there was such a scarcity of men, due to the World War, that she was placed at once in the sales department. There she showed such a natural aptitude for tea tasting that in 1922 she was made an under buyer, and since 1925 has been the head buyer.

The wholesale tea business of The "PRIORY" TEA & COFFEE Co., LTD., located in Tooley Street, London, S.E.1, and Lower Priory, Birmingham, was founded in 1893 at Birmingham by the late Mr. T. H. Saunders and the late Mr. J. H. Brindley. The original firm bore the style of Saunders & Brindley. In 1898, the business was registered as The "Priory" Tea & Coffee Co., Ltd. With this company in 1909 was incorporated Aston & Co., Ltd., and in 1911, John Tregilgas & Son, London and Birmingham. The present directors are Mr. Fred J. Tregilgas, Chairman, Major W. H. Brindley, M.A., M.C., and Mr. J. D. Kerr. Mr. Fred J. Tregilgas



Mr. T. H. Saunders Founder



Mr. J. H. Brindley Founder

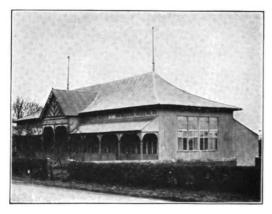


Mr. Fred J. Tregilgas
Chairman



Major W. H. Brindley

FOUNDERS AND DIRECTORS OF THE PRIORY TEA & COFFEE CO., LTD., LONDON AND BIRMINGHAM



WHERE THE LYONS BUSINESS STARTED

has lectured for more than twenty years before the Grocers' Institute.

The firm of Lyall, Anderson & Co., tea and rubber estate agents and secretaries, 16, Philpot Lane, London, E.C.3, was established in 1893 by Messrs. George Gray Anderson, James Ferrier Anderson, William Dixon Campbell, E. J. Marshall, and R. A. Lyall. The late Mr. William Dixon Campbell, senior partner at the time of his death in 1929, was prominently identified with the development of tea and rubber in Ceylon. He was vice president of the Ceylon Association in London, in 1927, and president in 1928. The present partners of the firm are Messrs. R. Stewart, R. B. Campbell, H. S. Campbell, and C. Stewart.

J. Lyons & Co., Ltd.—In September, 1894, the first Lyons' tea shop was opened in Piccadilly, London. It was an unpretentious little place, but it filled a public want. To-day, the firm is the foremost catering concern in the world. It operates

the largest chain of tea shops, employs over 30,000 people, and supplies the public with more than 10,000,000 meals every week. The managing directors are: Major Sir Isidore Salmon, C.B.E., D.L., J.P., M.P., Chairman, and Messrs. Harry Salmon, Maurice Salmon, Major M. Gluckstein, O.B.E., and J. Salmon. The remainder of the board includes: Messrs. Geo. W. Booth, F.C.I.S., I. M. Gluckstein, B. S. Gluckstein, B. A. Salmon, Geo. Dee, G. A. Pollard, and A. C. Watkins.

The inception and growth of the Lyons' tea shop idea reads more like romance than fact. The secret of its rise to fame and fortune was the supplying of a good pot of tea for twopence, instead of a single cup for threepence; and a pot of Lyons' tea is enough "tea for two." Though actual prices have varied, that principle remains in force today.

The late Messrs. Montague Gluckstein, Alfred Salmon, Joseph Lyons [later Sir], and Isidore Gluckstein, founded the firm of J. Lyons & Co. Mr. Montague Gluckstein was a salesman for the cigar business conducted by the Gluckstein family. Seeking a wider field for his talents, he conceived the idea of starting a catering business. His brothers promised financial aid providing the family name was not used, because they thought catering was not so dignified as cigar making. Mr. Gluckstein thereupon entered into an arrangement with Joseph Lyons, a distant relative of his brother's wife, whereby Lyons closed down a stall which he was operating at a Liverpool exhibition, and, as J. Lyons & Co., secured the catering concession for the Newcastle Jubilee Exhibition of 1887. They served the best tea they could buy for twopence.



Mr. Montague Gluckstein



Mr. Alfred Salmon



Sir Joseph Lyons



Mr. Isidore Gluckstein

FOUNDERS OF J. LYONS & Co., LTD.



THE FIRST LYONS TEA SHOP

It is at 213, Piccadilly, London. It was opened in 1894 and is in use today.

They engaged Barcza and his famous Hungarian orchestra, at a cost of £150 [\$750] a week to attract trade to their kiosk. The venture was a success. Following came the Bishop's Palace Tea Rooms at the Glasgow Exhibition, with waitresses dressed in costume of the Mary Stuart period; the Franco-British Café and Restaurant at Paris in 1889; the Barnum & Bailey show at Olympia; and the first London tea shop. That year, 1894, two additional shops were opened; in 1895, twelve more.

About that time J. Lyons & Co. was converted from a private concern into a public limited liability company. Two reforms were started: no gratuities, and commissions to waitresses, both working successfully to-day. Followed the "supercafés," the famous Corner Houses and Maisons Lyons in London, and their State Cafés in Manchester, Liverpool, and other cities. Next they acquired the Trocadero Music Hall and demonstrated that it was possible to run a West End restaurant at popular prices. The old style waitress evolved into the engaging "nippy." Such a demand was created for Lyons tea shop tea for home consumption that a huge factory covering seventy acres was built at Greenford in Middlesex. Now over 1,250,-000 packets of Lyons tea are sold daily. There are some 250 Lyons tea shops, more than forty of them in the provinces. The company owns controlling interest in W. H. & F. J. Horniman & Co., Ltd., and the Strand Palace, Regent Palace, and Cumberland Hotels, London. The company's head offices are at Cadby Hall, which covers eleven acres.

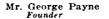
To Lyons belongs the distinction of having provided the world's greatest banquets —8000 guests and 1300 nippys at the Masonic Banquet at Olympia, in 1925, and 7000 guests at Lord Northcliffe's "Daily Mail" Banquet at Olympia in 1921.

GEO. PAYNE & Co., LTD., wholesale tea, chocolate, and cocoa, Queen Elizabeth Street, London, S.E.1, was founded in 1896 by the late Mr. George Payne, one of the most forthright figures that Mincing Lane produced in several generations. In his early years Mr. Payne was tea buyer and blender for Brooke Bond & Co. In 1896, he commenced trading on his own account under the firm name of George Payne & Co., Ltd., at 31, Minories, E.C., as a tea and coffee blender. The business moved to the Queen Elizabeth Street address in 1904. Mr. Payne took a keen interest in trade organizations, was a president of the Tea Buyers' Association, and the first president of the Tea Trade Benevolent Fund, established in 1925. He died in 1927. The managing director of the business is Mr. H. H. Payne, son of the founder.

Pearks Dairies, Ltd., multiple shop, retail provision merchants, a subsidiary of the Meadow Dairy Co., Ltd., of the Allied Suppliers group, and having branches in London and throughout England, was registered originally as Pearks, Gunston & Tee, Ltd., in 1896. The company was reorganized under the present style in 1914, with nearly all of the share capital owned by the Meadow Dairy Co., Ltd. The present directors are: Messrs. A. Greig [Chairman], A. Purves, A. Hoskins, and N. Bulow.

THOMAS, CUMBERLEGE & Moss, London







Mr. H. H. Payne Managing Director

FOUNDER AND MANAGING DIRECTOR, GEO. PAYNE & Co., Ltd.

tea brokers, 27, Mincing Lane, E.C.3, was established in 1897, when Messrs. F. H. Cumberlege and W. H. Moss united in partnership under the style of Cumberlege & Moss. In 1899, the firm became Thomas, Cumberlege & Moss by the inclusion of J. Thomas & Co., the long-established Calcutta tea brokers. Mr. W. H. Moss died in 1931. The present partners include: Messrs. Francis Henry Cumberlege, Edward M. Magor, C. F. Cumberlege, and Arthur H. Antrobus.

The business of Henry Miles & Co., wholesale tea and coffee dealers, Scotland Passage, Birmingham, was founded in 1897 by Mr. Henry Miles, who has carried on the business since that date. The firm's London office is at 27, Mincing Lane, E.C.3.

Thomson, Alston & Co., East India merchants, 2-4, Idol Lane, London, E.C.3, agents and secretaries, was established in 1898 by the late Mr. Alexander Thomson. Formed into a private limited company in 1929, the present directors are: Messrs. Clifford H. Figg, R. F. Megginson, and H. McD. Morison.

The head offices of Dodwell & Co., Ltd., general merchants, importers, exporters, and commission merchants, 24, St. Mary Axe, E.C.3, were removed from Hong Kong to London in 1898. The business was begun in China in 1858 by the late Mr. George Benjamin Dodwell. For thirty years Mr. Dodwell was with the company in the Far East, where he achieved prominence in steamship and tea circles, and finally returned to London to become managing director of the company's business. He retired in 1923, and was succeeded by his nephew, Mr. Stanley Hudson Dodwell. Mr. George B. Dodwell died in 1925, aged seventy-five. The present directors are Messrs. Stanley H. Dodwell [Chairman and Managing and George Melville Dodwell.

The firm of McLeod, Russel & Co., merchants, 50-51, Lime Street, London, E.C.3, was established originally as Stewart, McLeod & Co. in 1899, when Mr. [later Sir] Charles C. McLeod retired from McLeod & Co., Calcutta, and joined the firm's London agents, D. M. Stewart & Co., at 10-11, Lime Street, E.C. The firm of D. M. Stewart & Co. dated back to 1890, when it was formed by Mr. D. M. Stewart, who had returned to London from India to enter the tea department of the shipping





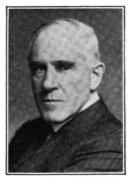
Sir Charles C. McLeod, Mr. Patrick Russel Bt. FOUNDERS OF McLeod, Russel & Co.

firm of George Duncan & Co. This department continued until 1890, when Mr. Stewart established a firm of his own. In both these previous connections Mr. D. M. Stewart had acted as agent for McLeod & Co., Calcutta, and this led to the founding, in 1899, of the London firm of Stewart, McLeod & Co. In 1905, Mr. Stewart retired and was succeeded by Mr. Patrick Russel, the name of the firm being changed to McLeod, Russel & Co. In 1917, the office buildings at 10–11, Lime Street were shattered by a bomb in a German air raid, and the business was removed to the present location.

The present partners in McLeod, Russel & Co. are: Sir Charles C. McLeod, Bart., Major Norman McLeod, Messrs. E. A. Watson, Vincent Routledge, and M. C. McLeod. Members of the firm who have had important parts in directing the affairs of the Indian Tca Association [London] include: Sir Charles C. McLeod, who was chairman in 1903 and president in 1933; Mr. Patrick Russel, vice chairman in 1908 and 1909, and chairman in 1910 and 1911; Major Norman McLeod, who was vice chairman in 1918, 1925, and 1926; and Mr. E. A. Watson, vice chairman, 1931–33, and chairman in 1934.

SIR CHARLES CAMPBELL McLeod, First Baronet and Knight, Knight of Grace Order of St. John of Jerusalem, East India merchant, senior partner of McLeod, Russel & Co., London, and of McLeod & Co., Calcutta, is not only one of Great Britain's leading East India merchants, but one of her foremost public men. He was born on the island of North Uist, off the northwest coast of Scotland, June 19, 1858. Sir Charles first went to India in 1877, and





Major Norman McLeod Mr. E. A. Watson Partners in McLeod, Russel & Co.

ten years later he founded the firm of Mc-Leod & Co. in Calcutta.

Major Norman McLeod has been closely associated with McLeod, Russel & Co. for more than fifty years.

Mr. Edwin Alexander Watson, partner in McLeod, Russel & Co., was born in Scotland May 13, 1880. After completing his education there, he served an apprenticeship in the jute mills of Dundee, and in 1902 went out to India to join McLeod & Co., Calcutta. He became a partner in 1915, and was senior partner from 1918 until 1928, when he retired from India to become a partner in McLeod, Russel & Co., London, although still retaining his interest in the Calcutta firm. In 1931, he was elected vice-chairman of the Indian Tea Association [London] and in 1934 he succeeded Mr. [later Sir] Robert Graham as chairman. He is a director of tea-planting and other companies.

Twentieth Century Tea Firms

Boustead Bros., agents and secretaries, Walsingham House, Seething Lane, E.C.3, was the first London tea firm founded in the twentieth century. It was established by the late Mr. J. M. Boustead, and the late Mr. E. G. Money, in 1901. The latter was a son of the late Colonel Edward Money who wrote the prize essay Cultivation and Manufacture of Tea in India, published at Calcutta in 1874 and 1884. The present partners of the firm are Messrs. G. M. Boustead, E. D. Money, and R. C. Boustead. The firm's eastern correspondents are Boustead Bros., Colombo.

WAITROSE LTD., wholesale grocers and provision merchants handling teas, coffees, etc., with head offices at 21–23, Gloucester Road, South Kensington, London, S.W.7, and nine branch houses, is a commercial

monument to the ability of the sole director and founder, Mr. Wallace Wyndham Waite, F.G.I., who in 1903 first established the business at 203, High Street, Acton, London, W.3.

The business of A. D. NIND & Co., LTD., China and East India merchants, 23, Rood Lane, London, E.C.3, was founded by Mr. A. D. Nind in 1904 and incorporated into a limited company in 1924. They succeeded T. A. Gibb & Co. and the successors of that firm, Livingston, Halton & Co. In 1935 the business was merged with Snelling, Absoloms & Lampard, Ltd.

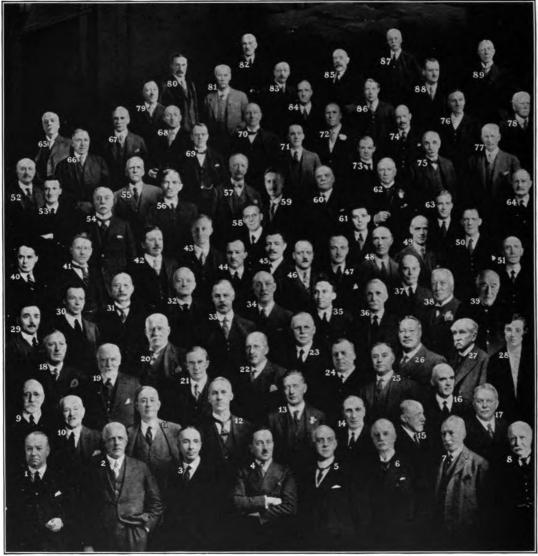
SUMNER'S "TY.PHOO" TEA, LTD., merchants and importers, Birmingham, was founded in 1905 by the late Sir John Sumner, F.S.A. The business developed from John Sumner & Sons, tea merchants and grocers, which dates back to 1756. The present directors are: Messrs. J. R. Hugh Sumner [Chairman], Alfred Tustain [Managing], and Sebastian Hosgood.

MEADOW DAIRY Co., Ltd., of the Allied Suppliers group, multiple shop retail provision merchants, with headquarters at 179-189 City Road, London, E.C.1, and branches throughout the North of England, was incorporated in 1906 and is now controlled by the Home and Colonial Stores. Ltd., through whom it is associated with Maypole Dairy Co., Ltd. In 1927, it entered into an agreement with Lipton, Ltd., under which it became associated with the Board in the management of the latter company. Its subsidiary companies are: Pearks Dairies, Ltd.; Sherry's Dairy Co., Ltd.; Neales' Tea Stores, Ltd.; and Broughs, Ltd. The present directors are: Messrs. A. Purves [Chairman and Joint Managing], A. Greig [Joint Managing], W. Hayes, A. Hoskins, M. W. Keith, W. Saunders, Alan Sly, H. E. Wells, and A. R. Wilson.

The business of Cox, RITCHIE & Co., exporters of tea and Indian produce, 21, Mincing Lane, London, E.C.3, was founded in 1910 by Messrs. A. J. Ritchie and J. C. Cox. The present sole proprietor is Mr. Cox.

The firm of J. A. Henderson & Co., Ltd., 24-25, Great Tower Street, London, E.C.4, was established in 1910 by the late Mr. J. A. Henderson, to act as agents for the firm of Henderson & Co., Colombo, founded fourteen years earlier by Mr. Henderson. He died in 1928.

The business of Francis Peek & Co.,



H. J. Whitlock & Sons, Ltd.

SOME OF THE LEADING MEMBERS OF THE LONDON TEA

1	Thomas Brash	22 H. Barton	44 A. B. Yuille	67 E. Cardwell
2	F. E. Cross	23 George A. Pollard	45 R. W. M. Arbuth-	68 G. Hawley
3	J. D. Garrett	24 John F. Bunting	not	69 B. B. Coggins
4	H. A. Snelling	25 P. W. Sinclair	46 F. B. Kerr, Jr.	70 S. W. H. Blake
	A. Ibbetson	26 D. Pvm	47 R. C. Kerr	71 P. C. Phillips
	Col. Sir R. D. Mon-	27 W. L. Thomas	48 T. F. Macmillan	72 C. F. C. Steward
٠	crieffe, Bart.	28 Miss Margaret	49 W. R. Macmillan	73 G. W. Lack
7	Sir C. C. McLeod.	Irving	50 F. G. Clarke	74 N. W. Lack
•	Bart.	29 W. E. Seymour	51 James Steel	75 C. Lack
Q	W. J. Thompson, Sr.	30 A. H. Fost	52 J. W. Armitage	76 Hon. Fred J. Tregil-
	Harold Peacop	31 A. T. Paterson	53 F. H. Martin	gas
	A. A. Winton	32 W. J. Lloyd	54 J. A. H. Jackson	77 L. W. Badnall
	C. F. Till	33 H. B. Yuille	55 J. S. Nicolls	78 J. Hamilton
	P. F. Howlett	34 Brig. Gen. Sir A. G.	56 N. Hardy	79 P. H. A. Berkhout
		Balfour	57 E. H. Gregory	80 J. H. Batten
	J. B. Sidgwick			81 F. C. Gubbins
	H. A. Game	35 Bernard Bunting	58 J. A. Masters	
	A. H. Abbott	36 F. H. Henderson	59 E. Robinson	82 V. Wethered
	G. H. Hilliard	37 A. W. Wade	60 D. B. Crane	83 C. W. Broughton
	Gerald Kingsley	38 A. Thompson	61 Robert Ross	84 N. G. Anderson
	B. W. Appleton	39 H. Pulbrook	62 W. G. Kent	85 H. F. Turner
19	Sir R. Shafto Adair,	40 L. G. Hare	63 Frank Bunting	86 H. W. Backhouse
	Bart.	41 R. O. Mennell	64 Noel Bingley	87 E. V. Harding
20	J. M. Viney	42 C. B. Sutton	65 E. Holness	88 H. F. Copeman
21	E. F. Slade	43 H. A. Robinson	66 C. H. Roper	89 J. F. Barnes



TRADE, FROM A GROUP PHOTOGRAPH MADE IN 1929

1 Sir Stanley Bois
2 W. D. Campbell
Z W. D. Campben
3 W. Shakspeare
4 H. K. Rutherford
5 James Forbes
6 A. J. Austin Dick-
son
7 H. W. Horner
8 W. Saunders
9 F. A. Roberts
10 V. W. Dean
11 Buxton Laurie
12 H. J. Welch
13 H. E. Miller
14 Norman W. Grieve
15 A. R. Wilson-Wood
16 H. B. Carritt
17 W. H. Cooke
18 A. B. Newsom
19 J. Mackie
20 Sir P. W. Newson,
Bart.
21 C. Fetherstonhaugh
22 Frank Wallace

23	Patrick Gow
24	J. N. Stuart
25	
26	C. G. Bois
27	
28	S. B. Robinson
29	Col. A. J. M. Mc-
	Laughlin
30	A. Lea Juckes
31	George Compton
32	R. B. Fidler
33	Rupert S. Thomp-
-	son
3 4	A. V. Ward
35	H. H. Sowerbutts
36	R. R. Plowman
37	F. W. Stillman
38	H. B. Thurgood
39	Col. A. M. Mc-
	Laughlin
40	G. S. Townend
41	Maj. Norman Mc-
	Leod
42	G. J. Lakeman
	G. J. Dakeman

43 G. M. A. Matson
44 T. P. Stewart
45 E. C. Holness
46 Lt. Col. E. Royds
47 S. T. Willcox
48 T. E. Stockwell
49 T. W. Torring
50 W. K. Goff
51 George S. Coppen
52 H. H. Clark
54 J. W. Hart
55 J. M. Hart
56 A. Jackson
57 Maj. W. H. St. J.
Mildmay
58 T. A. Boyd
59 F. G. Loch
60 Hugh Doherty
61 A. U. Crowe
62 G. Beach
63 F. E. Burton
64 W. Bennington
65 A. G. Hoseason

	John D. Morris
67	Charles Horne
68	Jas. Groom
69	T. G. Bass
70	
71	C. W. Gaze
	H. D. Cowan
72	H. W. Putley
43	n. w. Fulley
74	C. J. Phillips
	W. H. Brindley
	H. W. Ling
77	
78	A. B. Easterbrook
79	
80	W. Holmes
	F. Tomkinson
	H. Riley
	J. Stanes
	H. W. Denton
	W. Loveday
	J. E. M. Urry
	Maj. H. Edgington
88	C. Ivor E Groom

Ltd., tea estate secretaries and agents, 5-7, Eastcheap, London, E.C.3, is an off-shoot of the London firm of Peek Bros. & Winch,



Mr. W. H. Daukes

Ltd., having been established in 1913 as a separate concern by the late Mr. E. J. Hammond. Mr. Hammond, who in later years figured prominently in the development of the Java tea industry, had a long experience in the tea trade in England before going to the East, and for many years

was managing director of Francis Peek & Co., Ltd. He died in 1926. The firm acts as agent for the Anglo-Dutch Plantations Co., of Java, and other produce estates in Java, Malaya, Southern India, and Ceylon. The present directors are Messrs. W. H. Daukes and W. J. Lloyd.

The firm of Bunting & Co., Ltd., tea buying brokers, of 23, Rood Lane, London, E.C.3, was founded in 1915 by Messrs. John J. Bunting, A. Jeffrey, and Bernard L. Bunting; the latter being the elder son of the senior member of the concern. Mr. Frank Bunting, the younger son, entered the business later. The present directors are: Messrs. John J. Bunting [Chairman], Bernard L. Bunting, Frank Bunting, Bert Liggett, Coffee Jeffries, Richard J. Allen, and Miss Eleanor Williams.

Mr. John Joseph Bunting has been called the "stormy petrel" of the English tea trade because of his strenuous activities at the London tea sales. He was born in 1873. At the age of twelve, he went to work for Mr. Edward Caffin, a



Mr. John J. Bunting

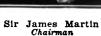
small tea broker at Rood Lane. Here he washed the cups and pots. He remained until the proprietor died and the business was closed in 1897. From 24, Rood Lane, Mr. Bunting went on commission to another firm of brokers, Walker, Lambe & Co., 23,

Rood Lane, where he remained four and one-half years, after which he became an assistant buyer for Harrisons & Crosfield. He ultimately rose to the position of chief buyer for their western business, and was in charge of the export and blending departments. Owing to a re-organization at Harrisons & Crosfields, in 1913, Mr. Bunting joined Peek Bros. & Winch, but only for a short time, as in March, 1915, the firm of Bunting & Co., Ltd., was registered and began its career. He helped form the Tea Buying Brokers' Association, of which he now is president.

Twining, Crosfield & Co., Ltd., tea, coffee, and cocoa merchants, 9, Mincing Lane, London, E.C.3, was formed in 1916 to amalgamate and operate the wholesale tea distributing businesses carried on by Harrisons & Crosfield, Ltd., of Ceylon Wharf, Bankside, S.E., and R. Twining & Co., Ltd., of 9, Mincing Lane, E.C. Neither the business of Harrisons & Crosfield, Ltd., 1-4, Great Tower Street. London, E.C., nor that of R. Twining & Co., Ltd., 216 Strand, London, W.C., were affected by this amalgamation, otherwise than by losing their wholesale tea distributing sections. The company originally was formed under the name of Twining, Harrisons, Crosfield & Co., Ltd., but because the public was inclined to understand from this name that the company had taken over the business of Harrisons & Crosfield, Ltd., it was decided to delete the name "Harrisons." The present officers of the company are: Mr. C. T. Sidgwick [Chairman]; Messers. H. T. Crosfield and H. W. Backhouse, joint managing directors; Messrs. A. J. Tweed, J. M. Lawrence, E. J. Gailey, S. G. Nichols, E. F. Ilieve, H. O. Peake, and H. Hawley, directors.

Robinson Bros. & Masters, Ltd., tea, coffee, and cocoa merchants, 17, Greenwood Street, Manchester, was formed in 1916 as an amalgamation of three firms—Edward Robinson & Sons, Hepworth & Co., and R. Aspin & Co. The oldest of these was Edward Robinson & Sons, founded about 1837 in Manchester, by Mr. Edward Robinson, who died in 1869. Thereafter the business was conducted by his son, Edward, until his death in 1915. The son was succeeded by the present Mr. Edward Robinson and Mr. Harold Robinson. The second of the firms, chronologically, was that of R. Aspin & Co., founded in 1850 by Mr. Richard Irwin. Mr. Irwin







Mr. W. E. Mortimer Director



Mr. A. Greig



Mr. A. Purves
Director

DIRECTORS OF ALLIED SUPPLIERS, LTD.

died in 1890, and the business was taken over by Mr. Robert Aspin, who died in 1931. The third firm was Hepworth & Co., established in 1867 by Mr. Hepworth and Mr. Robinson, who were followed by Messrs. J. Masters and J. Radcliffe, and, in 1891, by the present Mr. J. A. Masters.

P. M. Kousmichoff & Sons, Russian tea firm, 575, Mansion House Chambers. London, E.C.4, was started in 1919, by Mr. Viacheslav Kousmichoff. This is the only old Russian tea firm to survive the catastrophe which in 1917 overwhelmed the tea trade of Russia. Messrs. Viacheslav Kousmichoff and Michail Kousmichoff, sons of Mr. Pavel M. Kousmichoff, the founder of the business in 1867, who died in 1910, are the sole proprietors. There are branches in Berlin, Paris, Hamburg, Belgrade, and Zagreb. The firm retails "Kusmi" Russian blend teas in the same style of packets that it formerly did in Russia, and makes a specialty of soft-tasting Russian teas for consumers "who prefer to drink tea without milk."

ASIATIC TRADING CORPORATION, LTD., importers of tea, coffee, and cotton, 59, Mark Lane, London, E.C.3, with branches in the East, was registered in 1921. The directors are Messrs. A. J. Penny and C. A. Snodgrass.

The firm of Absoloms, Ltd., importers and exporters of tea, Trinity Square, London, E.C.3, was formed in 1924 by the late Mr. Edward Borgmann, who for many years prior to the World War was the principal partner in Messrs. Reinachs Nephew of London. After the war he reentered business as Absoloms, Ltd. Mr.

Borgmann died in 1929. That same year the tea department of the Cookson Produce & Chemical Co., Ltd., London, was amalgamated with Absoloms, Ltd., and in 1935, by a further consolidation, the style of the firm became Snelling, Absoloms & Lampard, Ltd.

ALLIED SUPPLIERS, LTD., 179-189, City Road, London, E.C.1, was established in 1929 as a private limited liability company to acquire the undertakings in connection with tea blending and packing of the group of multiple shop companies which includes the Home and Colonial Stores, Ltd., Lipton, Ltd., Maypole Dairy, Ltd., Meadow Dairy, Ltd., and Pearks Dairies, Ltd. The company also carries on extensive operations as producers, warehousemen, and purveyors of and dealers in butter, cheese, eggs, groceries, tea, coffee, and provisions. The offices and warehouses of the various companies were combined with a view to reducing overhead and administrative charges, but each company continues to operate as a separate entity, although cooperating closely with the others. The present directors are: Sir James Martin, Kt., J.P. [Chairman], Messrs. W. E. Mortimer, A. Greig, A. Purves, and A. Hoskins.

In addition to the tea firms described in this chapter, there are a number of teabrokerage concerns in London that have contributed to the history and progress of the tea trade. Among them are such firms as: Lloyd & Carter, Ltd.; T. A. Kerr & Sons, Ltd.; E. A. Franks & Gandar; and Richard Gibbs Co.

CHAPTER X

BRITISH TEA TRADE ASSOCIATIONS

BRIEF HISTORICAL OUTLINES OF THE SIX ASSOCIATIONS WHICH PROMOTE AND PROTECT THE INTERESTS OF THE BRITISH TEA TRADE IN LONDON, TOGETHER WITH PERSONAL SKETCHES OF SUCH OFFICERS AS HAVE NOT RECEIVED SPECIAL BIOGRAPHICAL MENTION IN THE PRECEDING CHAPTERS—THE INDIAN TEA ASSOCIATION [LONDON]—THE CEYLON ASSOCIATION IN LONDON—TEA BROKERS'

Association—Tea Buying Brokers' Association—Tea Buyers' Association

HE interests of the tea trade in London are promoted and protected by six associations: Indian Tea Association [London], Ceylon Association in London, South Indian Association in London, Tea Brokers' Association of London, Tea Buying Brokers' Association of London, and Tea Buyers' Association of London.

Indian Tea Association [London]

In order to bring about a unanimity of action among owners and managers of Northern Indian tea estates in matters relating to their joint interests, the Indian Tea Districts Association, now the Indian Tea Association [London], was organized at a well-attended meeting held in the Guildhall Tavern, Gresham Street, July 22, 1879. Among those present were: Colonel [later General] Henry Hopkinson, Dr. F. N. Macnamara, Dr. William Thomson, Messrs. Herbert Knowles, George Williamson, William Roberts, W. J. Thompson, Alexander Lawrie, R. B. Magor, R. U. Potts, Harold S. King, H. Burkinyoung, Frank Holl, Arthur Wheeler, Robert Lyell, Alfred Holiday, J. H. Williamson, William Sangster, B. Grindrod, J. B. Knight, S. Ward, F. O. S. Reade, W. Spink, Samuel Bird, Paul Bird, W. T. Carnegy, Parke Pittar, J. W. Roberts, Edward Wahab, R. A. Lawrie, John Hudson, G. Carpmael, C. E. Williamson, E. Tye, John Mackintosh, Arthur Thompson,

F. Parker, C. Lepper, C. Bergman, and Dr. Macdonell.

Sir T. Douglas Forsyth, K.C.S.I., C.B., was elected to the chair and moved the resolution of formation, which was enthusiastically adopted. The reason the Association was formed in London instead of in India, was thus set forth in the prospectus:

The large field prevents its establishment in India. Tendency of the owners and others interested to gravitate toward London, points to that city as the best location for the head-quarters of the Association. At the same time, the cooperation of planters and others resident in India having kindred interests would not only be most valuable, but almost indispensable to the support of the Association.

The more important objects were stated to be:

(1) To serve as a center or medium of intercommunication to those directly or indirectly interested in the cultivation of tea in British India, and to collect and disseminate information calculated to be of service to that industry.

industry.

(2) To endeavor to bring about a certain degree of concert and unity of action amongst owners and managers of tea property upon all important questions, having for their object to cheapen the cost of production, improve the quality of the product, and increase the demand

(3) To watch the course of legislation in India and England in so far as it affects the tea industry and the general interests of the districts in which that industry is prosecuted, and to procure such amendments and modifica-



MINCING LANE ENTRANCE TO HEADQUARTERS OF INDIAN TEA ASSOCIATION [LONDON]

tions of existing laws as may be found necessary for the realization of the objects in view.

(4) To take such action as may be found needful to improve the means of communication and transport, and to promote a fuller and freer stream of immigration, both of laborers and settlers, into such of the tea districts as require it.

The minimum annual subscription from individuals was fixed at one guinea, but companies and owners of estates were solicited to subscribe on a larger scale. The response was immediate, and seventy members were enrolled within a fortnight. Sir Douglas Forsyth, who presided at the organization meeting, was elected chairman, and Mr. Ernest Tye was appointed secretary.

The Indian Tea Association, Calcutta, was formed May 18, 1881, at a meeting of tea estate agency firms at the Bengal Chamber of Commerce.

The London association dropped the name "Indian Tea Districts Association" in 1894, at which time an agreement was reached to consolidate the Indian Tea Districts Association of London and the Indian Tea Association of Calcutta into one association to be known as the "Indian Tea Association," with branches at London and Calcutta. The object sought was to bring about as close a relationship as possible between the two associations which had but a single end in view—the promotion of the Indian tea industry.

The London branch deals with all questions arising in England, and the Calcutta branch has under its jurisdiction all questions arising in India. Each branch appoints a general committee to direct and manage its affairs, and to issue recommen-

dations to members on questions arising from time to time, but neither general committee has power to enforce any recommendation. The offices of the London Association are at 21, Mincing Lane, E.C.3. The annual general meeting and election of officers is held in July. The officers of the London Association since its inception are shown in the accompanying List Number One [page 200]. There are 181 members, twenty-three individual subscribers, and one honorary life member—Mr. Arthur Bryans, of P. R. Buchanan & Co.

SIR THOMAS DOUGLAS FORSYTH, K.C.S.I., C.B., first chairman of the Indian Tea Association [London], was born in Liverpool in 1827. At the age of twenty-one he went to India as a writer in the service of the East India Company, and in 1849 became assistant commissioner in The Punjab. During the succeeding twenty-five years he occupied various positions under the Civil Government, including the commissionerships of Lahore and Oudh. In 1874, he became a member of the Legislative Council and received the Order of Knight Commander of the Star of India. The following year he was sent as special envoy to Burma, and retired in 1878. After retirement, Sir Thomas devoted his energies to the direction of Indian railway companies, etc., and assisted in the formation of the Indian Tea Districts Association. He was its chairman from 1879 until his death, in 1886.

GENERAL HENRY HOPKINSON, C.S.I., the first vice chairman of the Indian Tea Association [London] and later its chairman, was born in 1820, and joined the 15th Regiment, B.N.I., in 1838. During the next twenty-two years he was successively commissioner of Arakan, Tenasserim, and As-



THE DIRECTORS' ROOM, I.T.A. [LONDON]

ASSOCIATION LIST NO. 1 Past Officers of the Indian Tea Association [London]

Year	Chairman	Vice Chairman	Secretary
1879/80	Sir T. Douglas Forsyth	Col. Henry Hopkinson	Ernest Tye
1880/81	do.	Gen. Henry Hopkinson Col. R. H. Keating	do.
1881/82	do.	do.	do.
1882 /83	do.	do.	do.
1883/84	do.	do.	do.
1884 /85	do.	do.	do.
1885/86	do.	do.	do.
1886 /87	LtGen. Henry Hopkinson	MajGen. R. H. Keating George Williamson	do.
1887/88	do.	do.	do.
1888/89	do.	do.	do.
1889/90	do.	do.	do.
1890/91	do.	do.	do.
1891/92	do.	do.	do.
1892/93	do.	do.	do.
1893/94	do.	do.	do.
1894/95	do.	George Williamson J. Berry White	do.
1895/96	do.	do.	do.
1896/97	do.	do.	do.
1897 /98	do.	W. H. Verner D. Cruickshank	do.
1898/99	Sir Henry Seymour King	do.	do.
1899/00	do.	do.	do.
1900/01	do.	D. Cruickshank A. Bryans	do.
1901/02	do.	A. Bryans J. N. Stuart	do.
1902/03	do.	George Henderson C. C. McLeod	do.

Year	President	Chairman	Vice Chairman	Secretary
1903/04	Sir H. Seymour King	C. C. McLeod	F. A. Roberts	Ernest Tye
1904/05	do.	F. A. Roberts	J. S. Fraser	do.
1905/06	do.	Sinclair Macleay	J. Alston	do.
1906/07	do.	do.	do.	Sir James Buckingham
1907/08	do.	J. N. Stuart		
			R. K. Magor	do.
1908/09	do.	R. K. Magor	P. Russel	do.
1909/10	do.	do.	do.	do.
1910/11	do.	P. Russel	F. A. Roberts	do.
1911/12	do.	do.	T. McMorran	W. Skinner
		(T. McMorran	H. S. Ashton	
1912/13	do.	H. S. Ashton	J. N. Stuart	do.
		J. N. Stuart	James Warren	401
1913/14	do.	H. S. Ashton	James Warren	W II. Pease
1914/15	do.	James Warren	James Steel	do.
1915/16	do.	do.		do.
1916/17			do.	
	do.	James Steel	G. Kingsley	do.
1917/18	do.	do.	do.	A. F. Bruce (Acting)
1918/19	The Rt. Hon. Lord Sydenham	G. Kingsley	Major Norman McLeod	ćs.
1919/20	Sir John P. Hewett	∫Major Norman McLeod	S. G. Anderson	W. H. Pease
1010/20	Dir Comm 1. Hewett	S. G. Anderson	T. McMorran	W. II. I ease
1920/21	do.	S. G. Anderson	T. McMorran	
1920/21	ao.	T. McMorran	G. Kingsley	do.
1001 00		G. Kingslev	W. A. Bain	
1921 /22	do.	W. A. Bain	W. A. Duncan	do.
1922 /23	do.	W. A. Bain	W. A. Duncan	
1923 /24	do.	W. A. Duncan	W. M. Fraser	do.
1924 /25	do.			do.
		do.	do.	do.
1925 /26	do.	G. Kingsley	Major Norman McLeod	do.
1926 /27	do.	L. T. Carmichael	do.	do.
1927 /28	do.	do.	W. M. Fraser	do.
1928 /29	do.	W. M. Fraser	F. G. Clarke	do.
	ao.	F. G. Clarke	W. A. Duncan	ao.
1929/30	do.	F. G. Clarke	LtCol. A. H. C. Sutherland	do.
1930/31	Arthur Bryans	LtCol. A. H. C.		1
		Sutherland	R. Graham	do.
1931/32	do.	R. Graham	E. A. Watson	do.
1932/33	do.	do.	do.	do.
1933/34	Sir Chas. C. McLeod	do.	do.	do.
1934/35	T. McMorran	E. A Watson	Sir Alfred Pickford	do.

BANKERS:
The National Bank of India, Limited, 26, Bishopsgate, E. C. 2
ADDRESS:
Indian Tea Association (London), 21, Mincing Lane, E. C. 3







Sir Henry Seymour King

Sir John Prescott Hewett

FORMER PRESIDENTS OF THE I.T.A. [LONDON]

sam, and agent to the governor general on the Northwest Frontier. He was decorated for services as commissioner of Assam, and as agent to the governor general, and also received various military decorations. He lent enthusiastic support to the formation of the Indian Tea Districts Association, and was elected vice chairman at the first election of officers in 1879, holding this office until the death of Sir T. Douglas Forsyth, the first chairman, in 1886, when he succeeded to the chairmanship. He continued as chairman for twelve years, and died a year later, in 1899.

SIR HENRY SEYMOUR KING, K.C.I.E., M.A., F.R.G.S., M.P., who succeeded General Henry Hopkinson as chairman of the Indian Tea Association [London], was a London banker. He was born in Essex in 1875 and educated at Charterhouse and Balliol College. He first was elected chairman of the Indian Tea Association [London] in 1898. He held the office for five years, and then became president in 1903, when the name of the honorary office in the Association was changed from "chairman," as it had been up to that time, to "president," which it has remained since. Sir Henry continued as president for fifteen years, retiring from the office in 1918.

THE RT. HON. LORD SYDENHAM OF COMBE, K.C.M.G., G.C.I.E., G.C.S.I., G.B.E., F.R.S., succeeded Sir Henry King as president and served for one year. Lord Sydenham was born in Lincolnshire in 1848, and after a distinguished military career, served on important committees and commissions connected with the War Office; became governor of Victoria, Australia; governor of Bombay, India; chairman of the British Empire League, 1915–21; vice

president of the Royal Colonial Institute; and has held numerous other posts of honor.

SIR JOHN PRESCOTT HEWETT, G.C.S.I., K.S.C.I., C.S.I., K.B.E., C.I.E., who was president of the Indian Tea Association [London] from 1919 until he resigned in 1930, was born in Barham, Kent, 1854. Previous to his election to the post of honor in the I.T.A., he had a long and distinguished career in India, during which he occupied many positions in the Civil Service, and finally became lieutenant governor of the United Provinces from 1907 to 1912.

Mr. Arthur Bryans, who succeeded Sir John Hewett as president, is senior member of P. R. Buchanan & Co. Practically all his life he has been associated with tea. Born in London in 1852, his connection with planting began in 1896, when he first went to India. In 1877, he returned to London, where he joined with the late Mr. P. R. Buchanan in forming the firm of P. R. Buchanan & Co.

Mr. Thomas McMorran, who was elected president of the I.T.A. [London]

in 1934, was born in Dumfriesshire, Scotland, 1863. He is a former director of Duncan Bros. & Co., Ltd., Calcutta, and partner of Walter Duncan & Co., London. He retired from active business in 1930.



Mr. Thomas McMorran President, I.T.A. [London], 1934

DR. J. BERRY WHITE, Bengal Medical Service, retired, who was elected vice chairman of the Indian Tea Association [London]

in 1895, and again in 1896, became connected with the tea industry as director of a number of important Indian tea planting companies subsequent to a career as military and civil surgeon in India, which ended with his retirement to England in 1880. A trained scientific observer, Dr. White was particularly well informed on all matters connected with India tea. His counsel was much in demand by his fellow directors and by the I.T.A. [London]. He was one of the founders of the Assam Dinner, held annually in London. He died in 1896, in the middle of his second year as





Dr. J. Berry White Vice Chairman 1895-96

Sir James Buckingham Secretary, 1906-12

FORMER VICE CHAIRMAN AND SECRETARY, I.T.A. [LONDON]

vice chairman of the I.T.A. [London]. Brief biographies of other chairmen and vice chairmen of the Association have appeared previously, in connection with the histories of their respective firms.

Mr. Ernest Tye, the first secretary of the Indian Tea Association [London], died in 1919. He had held the post of secretary from its inception, in 1879, until his retirement in 1906, after which he was made an honorary life member.

SIR JAMES BUCKINGHAM, C.I.E., who succeeded Mr. Tye as secretary, had a picturesque career in tea both before and after his connection with the Association. He also was the author of a widely read brochure on India tea. Sir James was born at South Devon in 1843, and was the son of the rector of the parish. He was educated at Blandford and afterward at Cheltenham College. He went to India in 1864. Soon after landing he went to Assam, where he joined the Jorehaut Tea Company. 'sixty-eight he became manager of the Dufflating Estate for the East India Tea Company, leaving there the following year to join Messrs. Berners & Doyne, barristers of Calcutta, in developing estates at Amgoorie and Bosbain. This service occupied his time for thirty-four years. During this period he was prominent in the volunteer military forces of India, and in 1895 was made honorary aide de camp to the viceroy. In 1897, he retired with the rank of colonel.

Sir James was especially selected to represent the tea industry in the Legislative Council when the Government of India decided to amend the Act of 1882 relating to labor on tea estates. In 1902, he re-

ceived a silver service from the general committee of the I.T.A., and a handsome Chippendale clock from the members, in recognition of his services to the industry. In 1905, when he retired from the East, the Indian Tea Association, Calcutta, and proprietors and agents of tea gardens showed their appreciation of his distinguished service by entertaining him at a public dinner in Calcutta, and by presenting him with a purse of £1000 in gold. In 1906, he received his Order of Knighthood, and was appointed secretary of the Indian Tea Association [London] in the same year. He continued as secretary of the Association until his death in 1912.

MR. WILLIAM SKINNER, previously chairman of the Assam branch of the Indian Tea Association, succeeded Sir James Buckingham as secretary of the Indian Tea Association [London] in 1912, and served until he died, April 17, 1914.

Mr. W. H. Pease, the present secretary of the I.T.A. [London], became assistant



Mr. W. H. Pease Secretary, I.T.A. [London], since 1914

secretary in 1902, and was appointed to the secretaryship in 1914, upon the death of Mr. Skin-Immediately thereafter, he joined His Majesty's forces in the World War. He returned from with the service army in 1919. During Mr. Pease's absence the post of secretary was occupied by Mr. A. F. Bruce. Mr. Bruce

had a long business experience at Calcutta, having acted on the general committee of the Calcutta Indian Tea Association. Mr. Pease was born in Coventry in 1878.

Ceylon Association in London

The Ceylon Association in London was formed April 30, 1888, for the protection and furtherance of the general interests of Ceylon. The original proposal for its formation was made by Messrs. James Sinclair and H. Kerr Rutherford at a meeting of the Ceylon Planters' Association held in Kandy, Ceylon, December 17, 1887, and this was confirmed at the annual general meeting of that body February 17, 1888.





Mr. A. J. Denison

Mr. W. D. Campbell

FORMER PRESIDENTS, CEYLON ASSOCIATION IN

A preliminary meeting of Ceylon interests was held in the board room of the new Oriental Bank Corporation, Ltd., London, April 16, 1888, at which the proposal of the Planter's Association was considered and accepted.

The first meeting of the new association was held a fortnight later at the same place Mr. J. Whittall was chairman, and others present were: Messrs. A. Brooke, J. F. Churchhill, A. Dent, T. Dickson, A. Gray, J. Hamilton, W. Rollo, J. L. Loudoun-Shand, W. J. Thompson, Jr., G. Vane, J. T. White, and W. M. Leake.

It was decided that the name should be the Ceylon Association; that the officers should be a president, vice president, and secretary; and that the subscription should be £1 1s. 0d. for individuals, and £3 3s. 0d. for firms. Mr. J. Whittall was elected vice president; and Mr. W. M. Leake, secretary. The latter was instructed to invite Sir W. H. Gregory, K.C.M.G., the retiring governor of Ceylon, to accept the office of president as soon as he returned to London. The members of the first executive committee, chosen at this meeting, were: Messrs. J. Whittall, A. Brooke, J. F. Churchill, T. Dickson, J. Hamilton, W. Palle, J. J. Louden, Sharl, W. J. Thankson, J. Thankson, W. Rollo, J. L. Loudoun-Shand, W. J. Thompson, Jr., G. Vane, and the secretary.

In its first year the membership was eighty-eight, but by 1925, the number had reached 554, of which 135 were companies, fifty-four were agents and firms, and 365 were private individuals. Since 1925, the membership figures have changed only slightly from year to year. The annual general meeting and election of officers is held on the last Monday in April. A list of the officers since the Association was formed, is shown in the accompanying List Number Two [page 205].

There is no general, or executive, committee of the Ceylon Association in London, but instead, there is "The Council," consisting of the president, the vice president, and fifty-six members. Also, there are three honorary life members: Sir Hugh Clifford, G.C.M.G., G.B.E., Norman W. Grieve, Esq., and H. K. Rutherford, Esq. The last two are tea men.

The first president of the Ceylon Association in London, the RT. Hon. SIR WIL-LIAM HENRY GREGORY, K.C.M.G., F.R.S., was an ex-governor of Ceylon. He served from the time the Association was formed, in 1888, until his death in 1892, when he was succeeded by the Rt. Hon. Sir Arthur H. Gordon, also a former governor of Cey-

lon, who became the first Lord Stanmore in 1893. He retired from the presidency in 1901, and died in

1912.

Mr. D. Erroll SINCLAIR, who was elected president in 1934, was born July 30, 1875, at Peley Culter, Kincardineshire, Scotland. He has been identified with the tea industry since 1896. He is a director of



Mr. A. O. Whiting Secretary, 1915-30, Ceylon Association in London

Rowe, White & Co., Ltd., London.

Brief biographies of other officers have appeared in connection with the histories of their respective firms.

Mr. Algernon O. Whiting succeeded





Mr. D. Erroll Sinclair

Mr. A. G. Baynham

PRESIDENT AND SECRETARY, CEYLON ASSOCIATION IN LONDON, 1935



GROUP OF CEYLON GOLFING SOCIETY MEMBERS AT WEYBRIDGE, ENGLAND, 1928

よななずらめて

20.5.2.6.0.2

36. G. E. Woodman 37. Major S. Nicholson 38. Col. Parsons 39. Capt. T. Cumming A. A. Prideaux
F. J. Hawkes
Sir Hugh Clifford
W. Shakspeare
W. T. Greswold
W. J. Beecham
H. B. Yullle

A. O. Whiting
C. Henley
C. H. Figg
E. G. Wood
Capt. Lousada
C. C. Trevanion

88888888 864.66.66

D. J. Durham
A. H. Erskine
E. D. Padwick
A. F. G. Renton
Sidney Johnston
A. D. Atkins
J. G. Wardrop

Mr. Leake as secretary in 1915. He was born in London in 1861, and planted in Ceylon from 1889 to 1910. He retired in 1930, and died in 1931.

Mr. John Still, who succeeded Mr. Whiting as secretary in 1930, was secretary of the Planters' Association of Ceylon, 1912-14 and 1919-26.

Mr. A. G. BAYNHAM, who succeeded Mr.

Still in 1935, is a former Ceylon planter and ex-chairman of the Planters' Association.

The secretarial offices and headquarters of the Ceylon Association in London are at 11, Idol Lane, Great Tower St., E.C.3. As regards the relationship between the Association and various promotional and protective associations in Ceylon, all are

ASSOCIATION LIST NO. 2. Past Officers of the Ceylon Association in London

Year	President	Vice-President	Secretary
1888–1889	Rt. Hon. Sir W. H. Gregory, K.C.M.G.	J. Whittall, Esq.	Wm. Martin Leake, Esq
1889–1890	do.	do.	do.
1890-1891	do.	do.	do.
891-1892	do.	do.	do.
1892–1893	The Hon. Sir Arthur H. Gordon, G.C.M.G. afterwards		
1893–1894	The Rt. Hon. Lord Stanmore, G.C.M.G.	Hy. Kerr Rutherford, Esq.	do.
1894-1895	do.	do.	do.
895-1896	do.	do.	do.
896-1897	do.	do.	do.
897-1898	do.	do.	do.
898-1899	do.	do.	do.
899-1900	do.	do.	do.
900-1901	do.	Henry Bois, Esq.	do.
1901-1902	Henry Bois, Esq.	l	do.
1902-1903	do.	l	do.
1903-1904	Hy. Kerr Rutherford, Esq.	l	do.
1904-1905	G. A. Talbot, Esq.		do.
905-1906	do.		do.
906-1907	Norman W. Grieve, Esq.		do.
907-1908	do.		do.
908-1909	Alfred Brown, Esq.		do.
909-1910	do.		do.
910–1911	Chas. J. Scott, Esq.		do.
911–1912	do.		do.
1912–1913	J. L. Loudoun-Shand, Esq.		do.
1912–1913 1913–1914	do.		do.
1914–1915	Sir Edward Rosling, Kt.		do.
1914–1916	do.		A. O. Whiting, Esq.
1916–1916	Sir Stanley Bois, Kt.		do.
	do.		do.
1917-1918	do.		do.
1918–1919			do.
1920	T. C. Owen, Esq.		do.
1921	do.		do.
1922	do.		do.
1923	do.		do.
1924	do.	W Chalanaan Dan	do.
1925	G. H. Masefield, Esq.	W. Shakspeare, Esq.	do.
1926	do	A. J. Denison, Esq.	
1927	A. J. Denison, Esq.	W. D. Campbell, Esq.	do.
1928	W. D. Campbell, Esq.	W. Shakspeare, Esq.	do.
	W. Shakspeare, Esq.		3-
1929	W. Shakspeare, Esq.	5 7 7 6 7 7 7	do.
1 93 0	do.	D. Erroll Sinclair, Esq.	Do. and
	_	,	John Still, Esq.
1931	do.	do.	do.
1932	do.	do.	do.
1933	do.	do.	do.
1934	D. Erroll Sinclair, Esq.	1	do.

independently organized, but work harmoniously together for the general good of the island.

South Indian Association, London

The South Indian Association in London was formed in January, 1918, in order that South Indian interests should have an association in London to take up general questions regarding all matters concerning planting, shipping, trading, and commerce in Southern India.

The objects of the Association, as laid down in the rules approved at an extraordinary general meeting held on February 28, 1918, are as follows:

The promotion of the interests of the planting, mercantile and industrial businesses of South India, either alone or in co-operation with the United Planters' Association of Southern India or other associations or bodies having similar objects, and the doing of all lawful things as are incidental or conducive thereto.

At the first meeting, held January 24, 1918, the following appointments were made: Mr. H. M. Knight, chairman; Mr. J. R. Hugh Pinckney, vice chairman; committee: Messrs. W. H. Cox, A. Bryans, G. Croll, O. A. Bannatine, Ernest Black, Brooke Mockett, Sir J. D. Rees, W. J. Lucking, and W. L. Grant.

Association List Number Three gives the chairmen and vice chairmen since the organization's inception in 1918. There are forty-five members and thirty-one sub-



Mr. J. Mackie Chairman, South Indian Association, 1928–30

scribing business firms and individuals.

Mr. J. Mackie, chairman of the South Indian Association in London, in 1928–30, is a Scotsman, born in Aberdeen. In 1911 he went out to India for Messrs. Harrisons & Crosfield, Ltd., and opened an office for them in Quilon. He con-

tinued as their South Indian manager until he retired from the East in 1929.

Mr. John Robert Hugh Pinckney, chairman of the South Indian Association in London, in 1920–21, 1926–27, and 1931–34, was born May 11, 1876, at Bradford-on-Avon. He was educated at Wellington College, Trinity, and Cambridge. He is a director of a number of tea and rubber producing companies in India and Ceylon.

The association since its inception has cooperated with the United Planters' Association of Southern India, and the Indian Tea Association of Calcutta and London on all matters affecting mutual interests.

Tea Brokers' Association, London

This Association was formed in 1889, for the purpose of protecting the interests

ASSOCIATION LIST NO. 3. Officers of the South Indian Association in London from 1918 to 1934

Year	Chairman ·	Vice Chairman	
1918) 1919	H. M. Knight	J. R. Hugh Pinckney	
$1920 \\ 1921 $	J. R. Hugh Pinckney	D. McArthur	
$1922 \\ 1923 $	R. Graham	Maj. Herbert Edgington	
1924 \ 1925 \	Maj. Herbert Edgington	J. R. Hugh Pinckney	
1926\ 1927	J. R. Hugh Pinckney	W. J. Lucking	
1928	W. J. Lucking and J. Mackie	J. Mackie and W. Lyall Grant	
1929) 1930	J. Mackie	W. Lyall Grant	
19 31	J. R. Hugh Pinckney	H. R. Lockie	
1932	do.	do.	
1933	do.	do.	
1934	do.	do.	





Mr. Rowland Alston

Mr. Richard Pigott PAST PRESIDENTS, TEA BUYERS' ASSOCIATION

of first-hand selling brokers. The present membership [23] includes two buying brokers who were elected a number of years ago before the adoption of the rule strictly limiting the membership to selling brokers. There is a committee of six, including a chairman and vice-chairman, elected at the annual general meeting in January. The committee names the order in which the members sell at auction, handles all matters connected with the necessary printing and with selling conditions, and keeps planters' and buyers' associations advised of matters affecting their interests. Weekly market reports are issued from the Association's office at 30, Mincing Lane, E.C.3. Mr. H. B. Yuille is chairman and the secretary is Mr. A. B. Newson.

Tea Buying Brokers' Association

This association was founded in London According to the articles, "its in 1917.

primary object is the protection, preservation, and general promotion of the commercial welfare and interest of its members." There are about ten members. Mr. John J. Bunting is president, and the honorary secretary is Mr. S. T. Willcox, 5 Idol Lane, E.C.

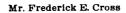
Tea Buyers' Association, London

The Tea Buyers' Association founded in 1899 to protect the interests of members, to frame rules and by-laws as to the conduct of the business of tea buying, and to alter and modify the same from time to time. The officers include a president, treasurer, and a committee of There are 115 members, and membership is restricted to genuine buyers on the London market. The Association looks after the interests of the buying trade generally, and often is in communication with other trade associations on matters of mutual interest. Following is a list of the past presidents of the association: Messrs. W. K. Appleton, John Lecky, Innes Rogers, C. Tanner, R. Alston, G. Theodor Crosfield, John McEwan, C. W. Armitage, Richard Pigott, H. A. Game, F. Aldous, Gerald Brooke, A. Ibbetson, F. E. Cross, W. Tetley Jones [two years], H. A. Game, Hugh T. Crosfield, A. Jackson, W. Saunders, Thomas Brash, R. Booth Smith, George Payne, H. A. Fleming, P. F. Howlett, F. E. Cross, J. D. Garrett, P. W. Sinclair, H. H. Payne, and Leonard W. Pigott [1934].

The secretary is Mr. R. R. Buckfield, 1, Oxford Court, Cannon Street, E.C.4.









Mr. William Saunders



Mr. P. F. Howlett

PAST PRESIDENTS OF THE TEA BUYERS' ASSOCIATION, LONDON

CHAPTER XI

TEA SHARES AND TEA SHARE TRADING

IT TOOK YEARS TO ESTABLISH IN THE PUBLIC MIND THE MERIT AND VALUE OF TEASHARES AS INVESTMENTS—MANY RELIABLE SOURCES OF INFORMATION AND READY MEANS OF NEGOTIATION AVAILABLE TO-DAY—HOW THE MARKET HAS GROWN—SOME REMARKABLE DIVIDEND RECORDS—SHARE LISTS AND HANDBOOKS OF INFORMATION FOR INVESTORS—THE TEA INDUSTRY ON A BASIS WHICH IS REGARDED AS FINANCIALLY SOUND—CONTINUED STEADY GROWTH APPEARS REASONABLY CERTAIN

P TO a few years ago the shares of most tea companies were held by the people who opened up the estates, their friends and relatives, and were kept well within limited circles; indeed, in many cases this is the situation to-day. Tea shares were dealt in fairly regularly during the period mentioned, but there was not a free market for them. However, the prosperous years from 1922 to 1928 greatly increased public interest in tea shares as an investment, and broadened the market.

Trading in Tea Shares

The bulk of tea share trading is confined to London, and the London Stock Exchange is the principal market for such trading, although a certain amount of business in tea shares is transacted by the general Stock Exchange at Amsterdam; the Mincing Lane Tea and Rubber Share Brokers' Association, Ltd., London, and the shares of Scottish companies are dealt in to some extent at Glasgow and Edinburgh. The rupee shares of India and Ceylon are traded in at Calcutta and Colombo.

All tea shares are in registered form and, in the case of most British companies, are transferable by deed. In the past, the market has been hampered in many cases by the large denominations of the shares. The denominations were usually 100 rupees or £5 and £10 sterling. Some were even £100, but it has been found more convenient

for market purposes to have the par values converted to 10 rupees or £1 sterling, and these are the denominations in which most British company stocks now stand.

How the Market Has Grown

The chief developments in the history of tea shares have occurred during the last 30 to 40 years, and the most important, since 1922. The first company to be formed was the Assam Co., founded in 1839, while the next was the Jorehaut Tea Co., in 1859. Both were sterling companies. During the 'sixties, 10 more companies were formed. Nine were added to the list in the 'seventies; 22 in the 'eighties; while a boom during the 'nineties brought 103 more.

The companies as originally formed were the result of private enterprise by planters who, in most cases, risked their all in an unhealthy climate, and with the funds subscribed by themselves and friends, started the enterprises which, in most instances, are well known on the London market. When the planters retired from the East they sold or converted their estates into limited companies, and in many cases continued in an official capacity as directors or as chairmen of the boards. This policy has assured careful management and has added many fine estates to the holdings of numerous successful limited companies.

The London Stock Exchange has approximately 4000 members and continues to be the biggest market for sterling tea shares.

However, the Mincing Lane Share Exchange is preferred by some because it specializes in tea and rubber shares. It was opened at No. 14 in 1913 by the Mincing Lane Tea & Rubber Share Brokers' Association, Ltd., in order to accommodate the share brokers domiciled in the immediate vicinity of "the Lane." There are about twenty-five members, and they hold two sessions daily, at 11 A.M. and 3 P.M.

Some Record Dividends

The sterling shares of some fifty British tea planting companies out of about 230 are officially quoted on the London and provincial stock exchanges. Many of them have been consistent dividend payers for years, while other and newer companies have interesting possibilities for the investor, especially in view of the fact that shares in some of the best paying companies are closely held and rarely come onto the market.

A remarkable record is that of the famous old Jorehaut Tea Company which was formed in 1859, and paid its first dividend in 1860. During seventy-three years it only thrice missed paying dividend—in 1866, 1880, and 1932. The 100th dividend was paid in 1927. In 1919, the capital was increased from £100,000 to £200, 000 by the distribution of 50,000 bonus shares and the issue of 50,000 shares at the par value of £1. In 1921 and 1928, additions to the capital authorized and issued brought it up to £400,000.

The highest annual dividend paid by any company in the post-war period was 130 per cent, free of tax, the equivalent of 150 per cent less 20 per cent tax, paid in 1922 to shareholders of the Ghoir Allie Tea Company, Ltd.

Dividends of 75 to 80 per cent and even higher are by no means uncommon, and have been paid at various times in the last ten or fifteen years by such successfully-managed limited companies as the Bandarapola Ceylon, Battalgalla Estate, Duckwari Tea and Rubber Estates, Standard, and Telbedde Estates, all Ceylon companies; and the Borbheel, Brahmapootra, Chubwa, Deamoolie, Dima, Doloi, Pabbojan, Rajmai, Romai, and Rungajaun companies in India.

Others have made enviable records over the same period and their shares are, in many cases, more actively traded than some of the higher priced ones. This is because the net return depends on the price an investor has to pay for his shares, and it often happens that a smaller dividend gives a better yield per cent on shares that have been bought reasonably. Of course, where no dividend was earned the investors received no return. This was true of some companies in 1920 and again in 1929—32, during periods of over-production.

There have been a considerable number of alterations in the capital of tea producing companies owing to the issuance of bonus shares and, in some cases, the acquisition of fresh properties. A particularly striking example is afforded by the Assam Company, Ltd., whose capital of £200,000 in the old company is represented by £1,000,000 in the new; each shareholder having received one hundred £1 shares for every original £20 share.

Share lists of the leading tea companies, giving the latest information pertaining to the acreage, earnings, dividends, market prices of shares, etc., are published by several share brokers and in the leading financial papers of London, Amsterdam, Calcutta, and Colombo.

Several tea share handbooks are published annually for the convenience of stock brokers and investors. These books, in addition to giving financial information, list the leading tea planting companies whose shares are quoted on the market. The best-known handbooks of sterling companies are: Wilkinson's Tea & Coffee Share Manual, issued by The Investors' Chronicle, London; Tea and Coffee Producing Companies, by Mr. R. P. Wilkinson, one of the partners in De Zoete & Gorton, London; Tea Facts and Figures, by Frederick C. Mathieson & Sons, London; and Tea-Producing Companies, compiled by L. G. Stephens, and issued by the Mincing Lane Tea & Rubber Share Brokers' Association, Ltd.

The leading handbooks of rupee companies are: The Investor's India Year Book, published by Place, Siddons & Gough, Calcutta; and the Handbook of Rupee Companies, by the Colombo Brokers' Association, Colombo.

In conclusion, it may be said that the tea industry is on a basis which conservative investors regard as financially sound, in spite of occasional depressions, and the prospects for increased tea consumption throughout the world are good.



THE WATER FRONT AT SHIMIZU, WITH MOUNT FUJI IN THE BACKGROUND



LOADING TEA FROM A LIGHTER AT SHIMIZU FOR EXPORT TO AMERICA

The port was opened to foreign trade in 1900, when 209,799 lbs. of tea were exported. In recent years Shimizu has become Japan's principal tea-shipping port, with annual exports in excess of 22,000,000 pounds.

SCENES AT SHIMIZU, THE SHIPPING PORT FOR SHIZUOKA TEAS

CHAPTER XII

TEA TRADE HISTORY OF JAPAN

THE EXPORT TRADE BEGINS WITH SMALL PURCHASES BY THE DUTCH EAST INDIA COMPANY—TWO CENTURIES OF ISOLATION—COMMODORE PERRY'S SUCCESSFUL INTERVENTION—MADAM KAY OURA IS THE FIRST TO ESSAY "DIRECT EXPORT"—FOREIGN TRADE IS BEGUN ON A COMMERCIAL SCALE WITH THE OPENING OF THE PORT OF YOKOHAMA—KOBE BECOMES A TEA PORT—THE BUSINESS SHIFTS TO SHIZUOKA—PROMINENT FIRMS AND LEADING FIGURES—TEA ASSOCIATIONS

EA had been cultivated in Japan for centuries, but none was exported until after the Dutch East India Company was permitted by the *Bakufu*, or Tokugawa feudal government, to establish a factory on the island of Hirado, in 1611. The Dutch factory was transferred to Deshima, a small island in the harbor of Nagasaki, in 1641. James Specx, a Dutch envoy who came to Japan in 1609, was the first director at Hirado.

The Dutch fleet came once a year, arriving in April and remaining until September. At first, only three or four ships came, but the number increased to as many as three score on several occasions. They brought a wide variety of cargo items, ranging from sugar to spectacles, telescopes, and clocks. The main exports they carried away were copper and camphor, with many lesser items, such as lacquer, bamboo wares, and tea.

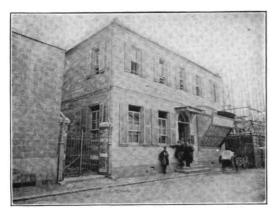
In 1621, the English East India Company also established a factory at Hirado, but they purchased no tea, and the manager, Mr. Richard Cox, finding the business unprofitable, closed it in 1623.

The Japanese built two seagoing ships shortly after the arrival of the Dutch, sending one across the Pacific to Mexico and the other to Rome. About this time, however, certain unfortunate episodes connected with the teaching of Christianity by the Portuguese convinced the Tokugawa feudal government that national security could be assured only by isolation. In 1638, the ports were closed to all foreign trade, except a limited traffic with the

Dutch and Chinese at Nagasaki. At the same time a rigidly enforced edict forbade natives to build any ships large enough for ocean navigation. From 1641 until 1859, Nagasaki was the only port in Japan where the Dutch and Chinese, to the exclusion of all other foreigners, were allowed to trade; and no Japanese ship was permitted to visit a foreign shore.

Japan's policy of islation was maintained for more than two centuries, but in 1853 Commodore Matthew Calbraith Perry [1794–1858], U.S.N., paid his memorable visit to Japan, and, by a friendly display of force followed by successful diplomacy, convinced the Tokugawa administration that further seclusion would be inadvisable. Commodore Perry's mission was not immediately productive of results, for it was not until 1859 that Yokohama, the first of the treaty ports, was thrown open to foreign trade.

Madam Kay Oura, a native tea merchant of Nagasaki, was first to essay a direct export business under the inspiration of Commodore Perry's visit. In 1853, Textor & Co., a Dutch firm at Nagasaki, sent samples of her teas to America, England, and Arabia. One of the samples attracted an English tea buyer named Ault, and in 1856 he came to Nagasaki, where he gave Madam Oura an order for 100 piculs [1 picul = 133 1/3 lbs. of Ureshino Gunpowder tea. This order the enterprising lady filled by collecting tea from all parts of the island of Kyushu and shipping it to London. Mr. Ault opened an office at Nagasaki under the name of Ault & Co. Mr. E. R.



AMERICAN TEA GODOWN IN OLD YOKOHAMA

The M.J.B. headquarters before the earthquake.

Hunt was connected with this firm and later, in partnership with Mr. Frederick Hellyer, organized Hellyer & Hunt at the same place. Madam Oura died in 1884.

Inception of the Trade

The beginning of the export trade on a commercial scale came in 1859 with the opening of the port of Yokohama. By the end of May, in that year, Jardine, Matheson & Co. of Hongkong, had completed buildings at British No. 1, Yokohama; Thomas Walsh & Co., predecessor of Walsh, Hall & Co., were located at America No. 1; and other foreign firms occupied locations up to No. 8, including the British firm of Butterfield & Swire, whose branch occupied No. 7. Owing to the lateness in the season, only 400,000 lbs. of tea were exported in 1859. This was bartered for calico and other products. A part of this first year's export was shipped to the United States by the firm of Thomas Walsh & Co., known to the Japanese as Ame-ichi, or "America, No. 1."

From the start, America was Japan's best customer. This was due partly to the direct ocean route, and partly to a general preference for green tea in America at that time. Following the initial shipments of 1859, a total of 35,012 lbs. was exported to the United States in 1860. This represented a little more than a tenth of one per cent of the American consumption. Ten years later, in 1870, the figures had grown to 8,825,817 lbs., or 25 per cent; by 1880, to 33,688,577 lbs., or 47 per cent; and, in the years before the World War, America was taking 40 million pounds an-

nually, amounting to almost half of the teas consumed. The export trade was then at its peak, tea districts throughout the islands reached their maximum production, and there was widespread prosperity. In the war years, from 1914 to 1918, Japanese labor costs increased, and many fine tea districts, such as Yamashiro, Yamato, Omi, Ise, and Shimosa, dropped out of the export market. Two districts of Shizuoka Prefecture, Suruga and Yenshu [Totomi], now supply the foreign trade which has fallen to approximately 26 million pounds annually. Of this amount 17 million pounds go to the United States, constituting about 16½ per cent of America's total consumption. The balance is taken by Canada and other countries.

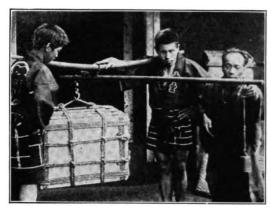
Early Days of the Trade at Yokohama

It was a new experience for the native tea men to deal with foreigners at Yokohama, but the foreign firms overcame the mutual lack of knowledge of language and customs by hiring Chinese compradores to act as go-betweens. These men understood both the English and Japanese languages, as well as being men of judgment and shrewdness in buying and in weighing out coin in settlement of accounts. This had to be done in native money at first, but Mexican silver pesos soon came into use, the same as in China where they long had been the recognized standard for settlement. It was a dozen or more years before the domestic monetary system could be readjusted by the Government and Japanese trade dollars coined.

Another difficulty arose from improperly prepared teas and teas in new chests,



OLD-TIME TEA TASTING ROOM, YOKOHAMA, 1899



OLD METHOD OF WEIGHING TEA CHESTS

which moulded on the long voyage across the ocean. Lead lining did not come into use until some years later, and only old, well-seasoned chests were considered safe to use. Re-firing was unknown. Shipment was by barque for transshipment at a Chinese port, and thence by clipper to destination. Tea was the only commodity the foreign merchants could buy in sufficient quantities to fill out their cargoes, so they all handled it.

Yokohama then was a primitive farming and fishing village of only eighty-seven houses, where a bare strip of land, leased by the *Bakufu* to the aliens, was in process of being transformed into a pioneer trading settlement. By the end of 1859, the year the port was opened, the foreign colony consisted of eighteen Englishmen, twelve Americans, and five Dutchmen. The next year thirty more foreigners applied for and received leases and the number of buildings increased accordingly.

Notwithstanding the opposition of the anti-foreign party, native merchants were allowed to trade with the foreign merchants if granted permission by their provincial authorities. Soonpu [now Shizuoka] tea merchants found less difficulty than those from other sections in obtaining permits and in 1859 ten Soonpu tea commission houses established themselves at Yoko-Among these were Hikozaemon hama. Nozaki, Mohei Surugaya, and Denyomon Ogawa [later Sunsho]. In the same year, the business of Nozaki was bought out by the house of Junnosuke Chujo, of Tsu, province of Ise, and the office was placed under the charge of Ihei Hasegawa. The following year, 1860, Kyujiro Shimmura became manager and changed his name to Kvujiro Nozaki.

In 1861, Kahei Otani [later Hon.], one of the foremost figures in Japan's export tea trade, established himself among the commission merchants at Yokohama, subsequently transferring his activities to Shizuoka. Recalling the early days of the Yokohama trade Mr. Otani said, "The supply of tea came from Yamashiro, Goshu, Ise, and Suruga. Besides the direct shipments from the producing districts, the large wholesale houses like Rihei Negai, Yohei Itaya, Seizamon Ohashi, and Ihei Koizumi shipped their teas to Yokohama for sale through commission houses. The teas were of good character and so well dried that they required hardly any re-firing for export." These teas were packed in large, moisture-proof, porcelain jars holding about $\frac{1}{2}$ to $\frac{5}{8}$ picul [66% to 83% pounds], and were known as "porcelainfired" teas, to distinguish them from teas packed in wooden chests or boxes having no protection from moisture. The method of effecting a sale was for the native commission merchant to show a sample to the If a bargain was struck, both parties clapped their hands three times in token of a contract.

In 1862, the first re-firing godowns, to



OLD GRAND HOTEL, YOKOHAMA, DESTROYED BY EARTHQUAKE, 1923

Upper—Exterior view of house and grounds.

Lower—The main floor lobby.



NEW GRAND HOTEL, YOKOHAMA

condition and pack country teas for export, were built in the foreign settlement at Yokohama. Experienced Chinese operatives were brought from Canton and Shanghai to do this work, and they introduced the Chinese handpan together with the practice of facing and artificial coloring, previously unknown in Japan. tea thus finished was called "pan-fired." The tea known as "sun-dried" was not introduced until much later. So little were the by-products of the industry valued or understood at the time, that the fine dust taken out of pan-fired tea was loaded into lighters and dumped at sea. Nevertheless, Brinkley states that the profits of the early traders ran as high as 40 per cent, but this did not last long; with the ever-increasing demand for export teas, prices mounted higher each year and profits narrowed.1 High grade tea that was offered freely at Yen 20 a picul in 1858, went up to Yen 27 in 1862, and to Yen 42, or more than double the 1858 price, in 1866. At the same time, the volume of the exports increased steadily, offsetting the narrower margin of profit, and the trade prospered.

While the foreign tea trade at Yokohama was making such satisfactory progress, there was lively interest and some apprehension among the traders over the prospective opening of the second treaty port, Hiogo, which, according to the treaty, was due to be opened January 1, 1863. However, the opening was postponed until 1868. In the meantime, the prospect of further commercial encroachment alarmed and enraged the anti-foreign samurai into a last stand that ended in a complete overthrow

of the feudal system in 1867, and the reestablishment of the imperial rights of the Emperor. The nominal opening of the port of Hiogo, followed on January 1, 1868, but the foreign contingent urged their preference for Kobe, as better suited to their use, and permission for this change was granted by the Government.

Kobe Becomes a Tea Port

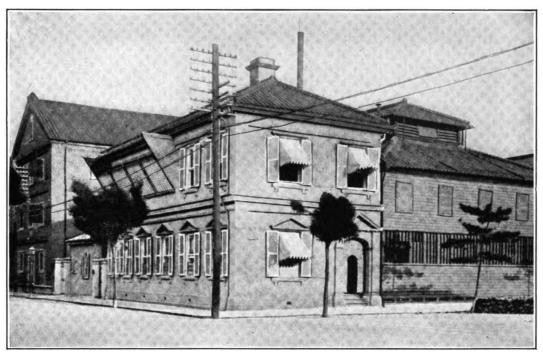
The new Government at once began the task of draining and preparing a tract of land at Kobe to be used for the foreign trade, and the foreigners proceeded quietly to form connections with native merchants, keeping their plans as secret as possible. By September, 1868, part of the land had been raised from sea level and the privilege of using the lots, into which it was divided, was auctioned at the customs house.

The first offices and godowns at Kobe were completed by three German firms: Gutschunow & Co.; Shrutz, Reis & Co., and L. Kniffler & Co. By May, 1869, a number of others were erected. Among these were the buildings of Jardine, Matheson & Co., at No. 1; Thomas Walsh & Co., at No. 2; Smith, Baker & Company's brick godown at No. 3; and the brick godown and office of Adrian & Co. The Dutch firm of Textor & Co. built an artistic godown and residence at No. 9. By the end of 1869, there were 186 foreigners at Kobe.

According to Kobe Shi, a history of Kobe City, published by that municipality in 1920, "The first lot of tea was consigned by Heibei Fukiya, Kiyemon Tsukaya, and Genbei Hishiya, all Osaka men, to Gisaburo Uriya of Kobe who sold part of it to Mr. Harrison, of Jardine, Matheson & Co., and the remainder to Mr. Robinson of No. 103 Yokohama." This statement is disputed, however, by Juzo Sonobe, who has been at Kobe ever since the opening. Mr. Sonobe states that the first lot of tea was sold to Smith, Baker & Co. when they were occupying a native building prior to the completion of their office and godown.

At the start, the larger native dealers in the vicinity of Kobe were too conservative to want to trade with the foreigners, and the latter had to depend mainly on small merchants of meager means who followed them from Nagasaki and Yokohama. Later on, wealthy tea men like Mr. Kametaro Yamamoto, of Osaka, had extensive dealings with the foreign firms.

¹ Captain F. Brinkley, Japan: Its History, Art and Literature, Boston-Tokyo, 1901, vol. ii, pp. 246-275.



EARLY AMERICAN TEA FIRM'S OFFICES AND GODOWNS AT KOBE

The protruding window screens on the second floor are designed to reflect light in the tea-testing room. These premises were the headquarters of George H. Macy & Co.

Nagasaki lost importance as a tea trading port after the opening of Kobe. From that time on the sources of supply split into two great divisions known in the trade as "Kobe teas" and "Yokohama teas." The Kobe teas included such famous varieties as Uji of Yamashiro, Asamiya of Goshu, etc., while those of Yokohama embraced equally famous teas like Kawane, Honyama, and Sakura of Shizuoka Prefecture; and Hachioji produced in the eastern district of Tokyo, etc. The Yokohama teas had better style than those of Kobe.

The godowns built by foreign firms at Kobe were nearly all refiring plants at first. But Yokohama had superior facilities in this respect and for many years surplus raw leaf was diverted there. Many of the buyers had branch offices at both Kobe and Yokohama, but there was little rivalry because each place had its own buying territory.

First Attempts at Direct Trading

From the beginning of the export trade, the business had been carried on by the foreign merchant as the buyer and the native commission house as the seller. The latter received 4½ per cent on the gross proceeds of teas sent in from the country. However, production finally caught up to, and passed, the existing demand, and the surplus caused difficulty in maintaining prices that would cover the cost of production. The more intelligent and far-seeing tea men up-country sought to develop some use for the surplus rather than curtail production. Two plans were suggested: one being to attempt the manufacture and "direct export"—without the intervention of the foreign merchants—of black tea; and the other, to manufacture pure, uncolored green tea and export it direct.

Accordingly, in 1873, the Agricultural Section of the Bureau of Industry started experimental black tea manufacture in several prefectures. These attempts were failures, but, in 1875, Minister Okubo of the Department of the Interior caused experiments to be made at manufacturing black tea from the yamacha, or wild tea, growing on Shikoku and Kyushu Islands, and these efforts were more successful. Two Chinese black tea experts were hired to direct factories at Kinoura, Oita Province, and Yoshihito, Shirakawa [now Kumamoto] Prefecture. The tea produced

was re-fired by natives and exported to America with satisfactory results.

As a result of the other plan,—the manufacture of pure, uncolored green tea—Tsuneuji Kammuchi was sent to America in 1876 with samples which were well liked, and it was planned to send at least 33,000 lbs. monthly. Kenzaburo Okamoto was granted permission to manufacture the uncolored tea in the government experimental factory at Kobikicho, Tokyo, but, unfortunately, a sharp decline in the market brought the venture to a disastrous end.

In 1876, a number of direct exporting concerns were organized, such as the Shekishinsha at Numazu, Shizuoka-ken; the Seicha Kaisha at Muramatsu, in Nigataken; and the Sayama Kaisha of Irima County, in Saitama-ken. At the same time, Messrs. Takashi Masuda [later Baron], Kijyu Hirao, Jisaku Yoda, and Samuro Saka interested themselves in the advancement of direct trading and held a meeting for its promotion at Gyokusentei, Kudan, Toyko. However, none of the men who embarked actively in direct exporting had any knowledge of foreign commerce, or had any marketing connections abroad, and only Mr. Masuda had knowledge of the English language. None of the ventures succeeded, and soon all were out of business.

While the Government and various firms were engaged in a futile attempt to improve the market situation, actual relief appeared in an unexpected quarter. In 1876, two tea experts, Messrs. Tamasaburo Akahori and Yesuke Kando, in charge of the tea factory of Mr. Ichiro Nomura, in



FANCY BASKET-FIRED TEA

First introduced in 1876 by T. Akahori and Y. Kando, tea-firing experts of Shizuoka. Also known as "spiderlegs" or "pine needles."

the village of Hina, Fuji County, Shizuoka Prefecture, invented the process for making basket-fired tea. The new tea found a ready market in the United States, and thenceforth the demand for basket-fired rapidly increased. In a few years, the annual export reached more than six million pounds, and from the first it contributed to the expansion of markets for Japan tea.

Although Fuji County was the birthplace of basket-fired tea, the green leaf grown in Shida County proved to be the best suited to its manufacture, and at present Fujieda, a country town about twelve miles west of Shizuoka City is the center of basket-fired tea manufacture.

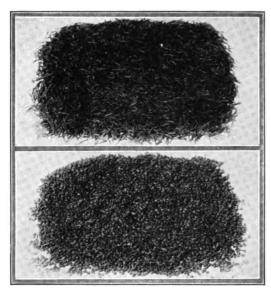
Promotional Exhibits

In 1876, Japan decided to make an important exhibit of her products, including tea, at the Philadelphia Centennial Exposition, and this was the beginning of an intensive propaganda for Japan tea in America that has been continuous with only brief interruptions ever since.

Another important exhibition of Japan teas was made at the Sydney Exposition, held in 1879, where Japan black tea received the highest award. Thus encouraged, the Government continued its efforts to promote the black tea industry, and the next year all the black tea companies were consolidated into a single concern known as the Yokohama Kocha Kaisha [Yokohama Black Tea Company]. This concern made a large shipment of black tea to Melbourne, and sent 1500 piculs [200,000 lbs] to America consigned to Smith, Baker & Co. However, neither of these shipments brought successful returns, so the company was discontinued.

The first hinpyokai, or competitive show for tea growers, was held in Yokohama Town Hall September 15, 1879, the entire exhibition consisting of tea samples. A jury of twenty-eight tea men assembled to pass their expert judgment on the exhibits, and make the awards. After this had been done they organized the Seicha Shudan Kai, or Tea Consulting Club, for the purpose of discussing questions pertaining to the tea industry and trade.

In this period, the pan-fired as well as the basket-fired tea was colored by the then secret Chinese method. Even the "sun-dried tea," the supposedly natural, un-



Two Kinds of Japan Tea

Upper—Regular Sencha, for pan-fired and natural
leaf teas.

Lower—Guri, for Young Hyson and Hyson.

colored leaf was treated with some yellow substance to supply a more convincing sun color.

The Entire Industry Organizes

In 1882, the United States passed a law prohibiting the importation of adulterated teas, thus making it imperative to check the manufacture of colored and poorly made teas. Measures having this end in view were taken by the Shudankai at a meeting held after the second hinpyokai, in Kobe, October 9. A memorial was addressed to the Government citing the necessity of organizing the country's tea men for the purpose of eliminating corrupt practices of manufacture.

Provisional tea association rules were promulgated in January, 1884, and local tea associations were organized in every producing district. In May, representatives from all the local associations held a meeting at Tokyo, and formed the Japan Central Tea Traders Association. The first officers were: Mr. Hideji Kawase, president; Mr. [later Baron] Kihachiro Okura, chief secretary; and Messrs. B. Maruo, M. Nakayama, K. Otani, K. Yamamoto, and H. Yamanishi, secretaries.

The Association engaged from the first in the work of improving manufacture and expanding foreign markets for Japan tea.

The Trade from 1885 to 1900

Japan's foreign tea trade recovered and experienced a boom in 1885–87. This resulted in an increase in the number of refiring factories and the formation of new tea companies. Among the former, the Yamashiro Tea Company established a refiring factory at Fushima, Yamashiro, and two others were built at Otsu and Tsuchiyama, in Shiga Prefecture. New tea exporting companies were formed at Shimizu, Kobe, Osaka, and Kyoto.

The eight years beginning in 1888 was a period of investigation of foreign markets with a view to the expansion of the export trade. Commissioners were dispatched to Russia where they gathered first-hand information. This led to the organization of the Japan Tea Company, with Mr. Otani as president, to sell tea to Russia and to investigate the American market. However, a storm of jealousy arose at home, and in 1891 the company was dissolved.

In 1892, Butterfield & Swire, at No. 7, Yokohama, discontinued their tea department. In the same year, Bernard, Wood & Co., at No. 210, were succeeded by Bernard & Co., and the firm of Frazer & Vernum was reorganized as Frazer, Vernum & Co.

In 1892, the Japan Central Tea Association was invited to exhibit at the Chicago World's Fair to be held the following year. Mr. Kumao Ito went to Chicago at once, and upon his return a decision was reached to open the Japanese tea garden which be-



Mr. T. Furuya



Mr. H. Komada

EARLY PROPAGANDISTS FOR JAPAN TEA



SOME PIONEERS OF THE JAPANESE TEA TRADE

The late Bunroku Maruo.
 The late Ihei Osaki.
 Gensaku Harasaki.
 Motojiro Osaki.
 The late Yeisuke Mori.
 The late Shiroji Mitsuhashi.
 Tsunejiro Suzuki.
 Kakujiro Yoshikawa.
 Saijiro Ishigai.
 Tokujiro Sasano.

came one of the popular attractions at the Fair. Mr. Ichihei Ito was sent to make the preparations, and he was assisted by Mr. Takenosuke Furuya, then a student in America; Mr. Tetsunosuke Yamaguchi was the manager and Mr. Hikonojo Komada, counselor. While the exposition was in progress, Messrs. Yamaguchi and Ichihei Ito traveled extensively through the United States, investigating the principal markets.

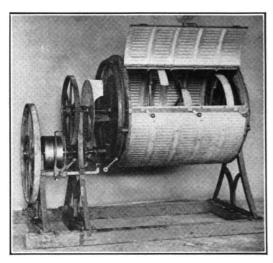
In order to capitalize the newly acquired knowledge of American markets and discuss the formation of a "direct trading" company, the Japan Tea Society, or Chagyokai, was promoted in 1894 by leading native tea men in Japan who acted under the advice of Mr. Masana Mayeda, former Vice Minister of Agriculture. Headquarters were established at Tokyo with branch offices at Yokohama, Kobe, and in the island of Kyushu. In the same year the Society appointed Mr. Hikonojo Komada, who had been counselor at the Columbian Exposition, as commissioner to survey the American market. Mr. Komada was experienced in business, conversant with the English language, and rendered valuable service during his commissioner-

ship. Subsequently, he traveled to America for many years as representative of the Japan Tea Exporting Co. of Kobe.

In 1894, the American firm of C. P. Low & Co. failed on account of a heavy loss in silk, and was succeeded by Nitto Boycki Kaisha, a native firm capitalized in part by creditors of the former concern. The Nitto firm shipped tea to C. P. Low of Chicago for some years, but finally went into liquidation. In 1894, the China-Japan Trading Co. dropped its tea department. Carter, Macy & Co., of New York, sent their buyer to Japan during this period, but the re-firing was done by Cornes & Co., of Yokohama. Mr. Ah Ows, formerly compradore for a foreign firm, started his own re-firing factory at No. 131, Yokohama, in 1895, and shipped his teas to Singapore.

In 1896, the Japan Tea Re-firing Co. was organized at Yokohama, and the Japan Tea Exporting Co., at Kobe. Both companies were organized for "direct trading."

In 1897, the first direct shipments of tea were made out of Shizuoka, independent of Yokohama, and tea-making throughout the country began to change from hand to ma-



HARASAKI'S TEA ROLLING MACHINE

chine production. The first green tea manufacturing machine, a tea roller, was invented by Mr. Kenzo Takabayashi a dozen years before, but was not taken up by manufacturers until 1897. Some sort of a re-firing machine had been in use by Frazer, Farley & Vernum since 1892, and later Hunt & Co., and Hellyer & Co. installed re-firing machinery which was kept secret. However, the device which contributed most to the advancement of the re-firing industry was the invention in 1898 of a labor-saving re-firing pan by Mr. Gensaku Harasaki, of the Fuji Co., Shizuoka; later came his tea roller.

In 1898, Morrison & Co., at No. 48, Yokohama; Middleton & Smith, at No. 22; and Frazer & Vernum Co., at No. 143, discarded their tea departments. In 1899, the native exporters remaining in the tea business were: the Japan Tea Exporting Co., Kobe; The Japan Tea Firing Co., Yokohama; Fushimi Kigyo-Kaisha, Fushimi; and the Fuji Co., of Horinouchi, Shizuoka Prefecture.

The seven years from 1897 to 1903 form a period in which the natives made an attempt to expand their foreign markets with a view to disposing of the ever increasing surplus production. In 1897, Messrs. Kahei Otani and Kihei Aizawa obtained from the Government an annual subsidy of yen 70,000 [about \$35,000] for the Japan Central Tea Association to use in the ensuing seven years for propaganda abroad.

In 1898, an import duty of 10 cents a pound levied by the United States as a war

tax, had the effect of cutting off the trade in higher grades. In 1899, Mr. Otani, former president of the Japan Central Tea Association, sailed to the United States to urge the abolition of the import duty. Later, in 1901, the Tea Duty Repeal Association was formed in New York, and in 1903, the duty was removed.

At the Break of the Century

In 1901, Mourilyan, Heimann & Co., No. 33, Yokohama, failed, and in the following year, Cornes & Co., No. 221, closed their tea department; whereupon, Carter, Macy & Co., whose re-firing had been done by Cornes & Co., opened their own re-firing plant at No. 216.

The tea exporting firms remaining in Kobe at the end of 1902, were: Hellyer & Co.; Smith, Baker & Co.; John C. Siegfried & Co.; Carter, Macy & Co.; and the Japan Tea Exporting Co.

Re-firing plants established in Shizuoka Prefecture following the opening of the port of Shimizu included:

1899.—The Shizuoka Tea Co., Shizuoka.
1900.—The Fuji Co., Shizuoka Branch.
1902.—Tokai Tea Trading Co., Yejiri; Tokujiro Sasano, Fujicde; Yeisuke Mori and Jinnojo
Namuoka Shizuoka: Venichiro Nakamura

iro Sasano, Fujiede; Yeisuke Mori and Jinnojo Naruoka, Shizuoka; Yenichiro Nakamura, Yoshida Mura; Ogasa Tea Co., Kakegawa; Makinohara Tea Co., Makinohara.

1903.—Kakujiro Yoshikawa, Shizuoka.

1904.—Gitaro Saito and Shimada Tea Co., Shimada; Muramatsu Tea Co., Kanaya; Tsunejiro Suzuki, Fujieda; and others.

These native firms and individuals ap-

These native firms and individuals appointed as their American agents T. Furuya & Co., of New York; T. Mizutany & Co., of Chicago; and Shaw T. Nishimura & Co., of Montreal. The second named was consolidated with N. Gottlieb, agent for the



HARASAKI'S LABOR-SAVING TEA REFIRING PANS



In Shizuoka

Upper—Fugetsu (Floating Moon) Tea House.

Lower—The Daitokwan Hotel.

Japan Tea Exporting Co. of Kobe, under the style of Gottlieb, Mizutany & Co., about 1900.

The Trade Shifts to Shizuoka

In the meantime, the export trade began to shift to Shizuoka City, close to the two great tea-producing districts of Shizuoka Prefecture which now supply the export trade. The port of Shimizu, the seaport of Shizuoka City, was opened to foreign trade in 1900, and 209,799 lbs. of tea were exported that year. J. C. Whitney & Company was the first foreign firm to establish a branch there. In the spring of 1903, Mr. Fred Grow went from Chicago to Shizuoka as buyer for F. A. Jaques Tea Co., and later in the same year joined J. C. Whitney & Co.

In 1904, the port of Yokkaichi, Ise Province, was opened to foreign trade and 565,635 lbs. of tea were exported to the United States and Canada in that year.

From the beginning, the tea business in Shizuoka followed a different system than the older markets. Instead of the exporters buying from commission houses, the business was carried on more directly between the exporting firms and the re-firing houses or raw leaf holders. The exporters, except those who migrated from the old markets,

did not trouble to establish their own refiring factories but bought their supplies of tea from native re-firers.

Gottlieb, Mizutany & Co., of Chicago, was the first foreign firm to establish itself at Shizuoka as a buyer of re-fired teas. This was in 1906. In 1908, Gottlieb, Mizutany & Co. split up and was succeeded by The Gottlieb Co. In the same year, T. Mizutany & Co., W. I. Smith & Co., J. H. Peterson & Co., and Barkley & Co. established their offices. John C. Siegfried & Co. opened an office some time previous to 1908, and Jardine, Matheson & Co. erected a spacious re-firing factory, while Hellyer & Co., moved their headquarters to Shizuoka and greatly extended their refiring factory and godown. These latter firms equipped their re-firing plants with modern Harasaki pans, and Hunt & Co., when they moved from Yokohama in 1912, brought along their "secret re-firing machine."

The tea exporting department of Smith, Baker & Co., Yokohama, was taken over by Mr. Otis A. Poole and in 1910 moved to Shizuoka. In 1912, Geo. H. Macy & Co. closed their godown at No. 101, Yokohama, and, like the others, moved to Shizuoka.

At the end of 1912, only one firm of tea exporters, Brandenstein & Co., remained at Yokohama. The Japan Tea Exporting Co., the last firm at Kobe, was dissolved some time before. Thus the history of the old tea trade was practically ended.

The War Years-1914-18

The Japanese tea trade was favorably affected by the World War. In the years from 1914 to 1918 exports increased both in quantity and value. Quantities of black tea, brick tea, and Formosa Oolong were



THE CLUB HOUSE AT SHIZUOKA



LOCAL COLOR AT SHIZUOKA

Some charming Geisha pose as Tea Girls

shipped to Japan from other producing countries for reëxport, and this helped to swell the total exports from an average of about 40 million pounds for the five prewar years, 1909-13, to well over 50 million during the five war years, 1914-18. The principal difficulty encountered was to secure sufficient tonnage. This had its effect on freights, which rose sharply. The cost of producing tea in Japan also advanced to the highest point in the history of the industry. The end of the period was attended by the evil of coarse manufacturing, and this, together with the higher cost, worked to the subsequent disadvantage of the trade.

The Post-War Decade

The decade from 1919 to 1928, following the World War, witnessed a marked increase in the consumption of East Indian black teas by Japan's best customer, the United States, with a corresponding decline in the imports of Japan green teas, which have dropped from their pre-war average of about 40 million pounds and their wartime average of more than 50 million, to an average of approximately 17 million. Most of the foreign export firms once actively engaged in buying and shipping Japan's justly famed teas have disappeared from the market, leaving it to a bare handful of the original number and to an almost equally small number of veteran native tea firms who have been successful in realizing the national aspiration for "direct trading."

Japan Tea Exports, Table Number One, shows the tea exporters in Japan in

the crop year, May 1 to April 30, 1932–33. The table also shows the amount shipped by each and the countries to which the teas were sent.

In addition to the exporters the present Japan tea market is composed of about forty re-firers and a large number of raw leaf merchants. The re-firers for export are:

RE-FIRE THEIR OWN.—Hellyer & Co. and The Fuji Co., Kitabancho, Shizuoka City.

RE-FIRE AND SELL.—Choyomon Ishigaki, Dodayucho; Fushimi Gomei Kaisha, Zaimokucho; Japan Tea Firing Co.; Kanetaro Unno, Aoicho; Monjiro Nozaki, 3 Chome Anzai; Naojiro Uchino, 2 Chome Anzai; Sataro Sase, Nishitera Machi; Seihoku Tea Co., Kitabancho; Shizuoka Tea Co.; Shozaburo Yamamoto, 5 Chome Anzai; Sunsei Tea Co., 1 Chome Anzai; Tsurukichi Murao, 3 Chome Anzai; Yasukichi Tsuji, 3 Chome Anzai; and Yoshikawa Gomei Kaisha, 3 Chome Anzai, all of Shizuoka City.

ČOUNTRY RE-FIRERS [SHIZUOKA-KEN].—Dai Ichi Seicha Saiseijo and Daikichi Suganuma, Shimada; Gomei Kaisha Sasano Shoten and Gomei Kaisha Nishino Shoten, Fujiyeda; Hachiro Aribara, Kawsaki; Izayemon Hitokoto and Jun Saito, Tochiyama; Kosaku Suzuki, Fujiyeda; Kumajiro Nishino, Morimachi; Marusan Seicha Saiseijo, Tochiyama; Morimachi Tea Co., Morimachi; Sunkosha, Okabe; Takejiro

JAPAN TEA EXPORTS, TABLE NO. 1 For the Crop Year, May 1 to April 30, 1932-33

Shippers	Pounds	
rwin-Harrisons-Whitney, Inc	9,100,202	
Siegfried-Schmidt Co	8,938,953	
Iellyer & Co	8,412,801	
The Fuji Co., Ltd	8,123,871	
apan Tea Direct Exporting Corp	2,421,598	
apan Tea Buying Agency	2,005,780	
urita Bros. & Co	878,656	
litsui Bussan Kaisha	848,741	
. J. B. Co	671,025	
litsubishi Shoji Kaisha	189,607	
he Japan Green Tea Growers' Corp'n.	73,755	
oshinaga Shoten	41,500	
izuoka Boeki Kaisha	89,182	
pan Central Tea Association	27,988	
thers	21,650	
Total	26,745,254	
o New York	7.465,833	
o Chicago	7,733,708	
o Pacific Coast	1,831,915	
otal United States	17,031,456	
o Canada	2,117,968	
o Russia	4,475,649	
o Other Countries	8,120,181	
Total	26,745,254	



Some American Tea Buyers at Shizuoka in 1924

Left to right: Top row—W. H. and John Seigfried of Siegfried & Co.; P. E. Bousfield, A. T. Hellyer, Frederick Hellyer, and C. H. Lightfoot of Hellyer & Co.; the late J. F. Oglevec and Paul Ahrens of Irwin-Harrisons-Whitney, Inc. Middle row—D. J. Mackenzie and associate of Irwin-Harrisons-Whitney, Inc.; J. H. Peterson, W. L. Harrington, and C. Kunkel of Carter, Macy & Co.; the late John Becker and associate of M. J. Brandenstein & Co. Bottom row—A. C. Walliser of J. A. Folger & Co.; A. V. C. Maher and the late Otis A. Poole of the Otis A. Poole Co.; the late N. Gottlieb.



PACKING TEA FOR OVERSEAS SHIPMENT, SHIZUOKA

Hanazawa and Tsunejiro Suzuki, Fujiyeda; Yenshu Seicha Co., Futamata; and Yuzo Hori, Kakegawa.

Prominent Tea Firms in Japan

There was a delay of approximately six years after Commodore Perry's visit before Yokohama, the first of the Japanese ports, was opened to foreign trade. The name of Jardine, Matheson & Co., appears early among the pioneer foreign tea exporting firms.

Jardine, Matheson & Co., of Hong Kong, having established their first Japanese branch at Yokohama in 1859 followed in later years with subsidiary branches at Tokyo, Shimonoseki, Shizuoka, Kobe, and Dairen. Mr. F. H. Bugbird is the present manager for the company, with headquarters in Yokohama.

Another pioneer of the Japan tea export trade was the firm of SMITH, BAKER & Co., founded at Yokohama about 1859. The original partners were—Messrs. William Horace Morse, Elliott R. Smith, Richard B. Smith, Colgate Baker, and Jesse Blydenburgh. Branches were established at Kobe, Shizuoka, and Yokohama in Japan; at Taipeh in Formosa, and in New York.

Mr. Morse was born in Boston in 1840,

and went to Japan as a young man. Elliott R. Smith was a cadet at West Point, but resigned and, like Morse, went to Japan. There they met and, with Richard Smith, organized the firm. Mr. Morse was American Consul at Yokohama.

The business was changed into a stock company in 1906, and the head office was moved to New York. The directors were: Messrs. Elliott R. Smith [president], John C. Wirtz [vice-president], William O. Morse, and Gayle Young. In 1910, the tea exporting department of the company at Yokohama was taken over by Mr. Otis A. Poole and moved to Shizuoka, where it was continued as Otis A. Poole & Co. The Smith, Baker Co. continued in business until January 1, 1916, when it was merged with Carter, Macy & Co.

Foremost among the pioneer native tea men who figured conspicuously in the export tea trade was Mr. Kyujiro Nozaki. Arriving in Yokohama in 1859, he quickly mastered the intricacies of tea trade with the foreigners, and aided his fellow merchants by showing them how to sell their teas. He was equally ready to give counsel to the Chinese compradores. On the other hand, the foreign buyers depended upon him to fill their orders, and this he was always prepared to do. He died in

1877, and the compradores with whom he had dealt erected a monument in his honor at Yokohama.

Mr. Kahei Otani.—Any account of the leading figures in Japan's export tea trade must do honor to the late Mr. Kahei Otani, president of the Japan Central Tea Association for many years and Grand Old Man of the Japan tea trade. Mr. Otani was one of the few men in history who were honored during their lifetime with monuments in recognition of distinguished services. Two portrait statues now to be seen in Kiyomidzu Park, Shizuoka, and Miyazaki Cho, Yokohama, were unveiled in 1917 and 1931 respectively. He died in 1933.

Born in 1844, Mr. Otani joined the firm of Smith, Baker & Co., Yokohama tea merchants, at the age of 18. He served first as their chief buyer and, later, as their counselor. Previous to entering the firm Mr. Otani had established himself as a tea commission merchant, a business he continued even after going with Smith, Baker & Co. During his connection with the latter firm, their affairs, as well as his own, enjoyed a degree of prosperity that soon made them outstanding successes.

Mr. Otani's interest in the tea business in Japan soon brought him into prominence in the councils of the Japan Central Tea Traders' Association and, in 1887, he was chosen president, a position from which he retired in 1927 after forty years of service.

Mr. Otani visited America and Europe in 1899-1900, when he represented both the Tokyo and Yokohama Chambers of Commerce at the Philadelphia Commercial Convention. At this meeting he made an address urging the necessity for laying the



Mr. Frederick Hellyer



Mr. Harold J. Hellyer



Two Statues Erected to a Great Tea Merchant during His Lifetime

Upper—The Otani statue in Yokohama. Lower—The Otani statue in Shizuoka.

trans-Pacific cable [later accomplished] and also urging the abolition of the Spanish-American War duty on tea.

HELLYER & Co.—The late Mr. Frederick Hellyer, for many years a leader among the foreign tea merchants who annually made the journey to Japan, was born in England in 1849. He first went to Japan in 1867, and joined his uncle, Mr. Hunt, who was the head of the firm of Ault & Co., tea exporters, established in 1856. About 1869, the firm of Ault & Co. retired from business and the firm of Hunt, Hell-



Mr. Arthur T. Hellyer



Mr. Walter Hellyer

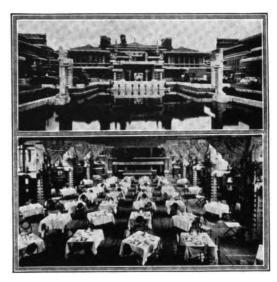
FOUNDER AND PROMINENT FIGURES IN A PIONEER AMERICAN TEA FIRM IN JAPAN

yer & Co. was established. This firm continued until 1874 when it was succeeded by Hellyer & Co., composed of Mr. Frederick Hellyer and his brother, Mr. Thomas Hellyer. They engaged in the tea export business in Kobe, and opened a branch at Yokohama. Mr. Frederick Hellyer came to the United States in 1888 and opened a branch at Chicago, the present headquarters of the firm and, in 1899, another Japanese branch was opened at Shizuoka. The Kobe and Yokohama offices were closed Mr. Frederick Hellyer died in 1915. The business, the oldest of the surviving foreign tea firms, was carried on by Messrs. Arthur T. and Walter Hellyer of Chicago, and Mr. Harold J. Hellyer of Shizuoka, until the death of the latter in 1925, when the two former succeeded. Mr. Arthur T. Hellyer is a member of the

Japan Tea Promotion Committee.

M. J. B. Co., Inc., of Shizuoka, Japan, and San Francisco, successors to M. J. Brandenstein & Co., who in turn succeeded Siegfried & Brandenstein, of San Francisco and Yokohama, established their own teapacking plant at Yokohama in 1893. The original partners were John C. Siegfried and M. J. Brandenstein, and their Japan tea buyer from 1894 to 1900 was Mr. Alfred Alden, now in charge of the New York office. The business continued under the style of Siegfried & Brandenstein until 1902, when Mr. Siegfried left to organize his own firm of John C. Siegfried & Co., and the original business continued as M. J. Brandenstein & Co., with the late Mr. John Becker as buyer. Mr. Becker was a wellknown figure of the old days in Yokohama. The firm moved its Japanese headquarters from Yokohama to Shizuoka in September, 1923, following the earthquake. Mr. M. J. Brandenstein and Mr. Becker both died in 1925 and in the following year the business was transformed into a corporation under the present style of M. J. B. Co., Inc. The only member of the former firm now living is Mr. Edward Bransten [originally Brandenstein] of San Francisco, who is president of the company and chairman of the United States Board of Tea Experts. Mr. K. Nakajima of the M. J. B. Co. of Shizuoka is a member of the Japan Tea Promotion Committee.

THE FUJI Co., LTD., 62, Kitabancho, Shizuoka, which heads the native direct trading firms in volume of exports to the United States, has been in business since



THE IMPERIAL HOTEL, TOKYO Upper-Main entrance. Lower-The dining room.

1888 when it succeeded Kenkosha, a Yokohama firm that had been engaged in the raw leaf commission business since 1880. The Fuji Co. at first exported novelties and food products under the management of Messrs. Bunroku Maruo, Ihei Osaki, Gensaku Harasaki, Hichiro Yasuda, and others. In the 'nineties, the firm began exporting tea and, in 1891, established a re-firing factory at Horinouchi. Here experiments at re-firing tea by a new method were conducted under the supervision of Mr. Harasaki. In 1894, the style of the partnership was changed to Fuji Goshi Kaisha, and in 1898 Mr. Harasaki patented his labor-saving re-firing pan which revolutionized the method of preparing Japan tea for export. In 1900, a branch of the firm was opened at Shizuoka, and the following year the headquarters were removed to that city. In December, 1921, the firm was reorganized as the Fuji Co., Ltd. The officers in 1935 were Mr. Motojiro Osaki, president, and Mr. Gensaku Harasaki, managing director. Mr. Harasaki is a member of the Japan Tea Promotion Committee.

CARTER, MACY & Co.—The name of Macy was first associated with the tea trade of Kobe and Yokohama about 1894 when the pioneer foreign tea firm, Frazer, Farley & Vernum—the first to re-fire tea by machinery—was taken over by Carter, Macy & Co. of New York, with Mr. Frank E. Fernald as buyer. The company was incorporated in 1916, and in 1917 the office was moved to Shizuoka. In 1918, Mr. George H. Macy died and in 1926 the business was discontinued.

The business of N. Gottlieb, Shizuoka, with headquarters in Chicago, began in 1898 when the late Mr. Nober Gottlieb became a buyer and exporter of native-fired Japan teas. About 1903, Mr. Gottlieb formed a partnership with Mr. T. Mizutany under the style of Gottlieb, Mizutany & Co. to act as agents for the Japan Central Tea Association for the distribution of Japan teas at Chicago. In 1906, the firm established a branch office at Shizuoka. Gottlieb, Mizutany & Co. went into liquidation in 1908, and in 1909 Mr. Gottlieb started again as Gottlieb, Peterson & Co. In 1910, the firm changed to the Gottlieb Co.; and in 1921, to N. Gottlieb. Mr. Gottlieb died at Chicago in June, 1929. He was a member of the Japan Tea Promotion Committee from 1925 until his death.

K. Ito's Tea Firing Department, Ltd., Muroyama, Ise, under the management of Mr. Kozaemon Ito, established a re-firing business in 1897 under the name of Kozaemon Ito. In 1917, the style was changed to K. Ito's Tea Firing Department. The concern became a direct exporter and continued as such up to and including the year 1924.

The firm of SIEGFRIED & Co., Shizuoka and Chicago, was established by Mr. John C. Siegfried as John C. Siegfried & Co. in 1902. Previously, Mr. Siegfried had been a partner in the firm of Siegfried & Brandenstein, but in that year he established his own tea-buying business at Shizuoka. Mr. John C. Siegfried died July 8, 1915, and in 1917 the business was reorganized under the style of Siegfried-Schmidt Co. with Mr. Walter H. Siegfried, son of John



Mr. Walter H. Siegfried Mr. John Siegfried

Directors of Siegfried & Co.



C. Siegfried, as its head. The other directors were Messrs. E. Schmidt, C. E. Grahn, and John Siegfried, another son of the founder. Mr. Schmidt retired from the business in 1933 and the style was changed to Siegfried & Co. Mr. Walter H. Siegfried has been a member of the Japan Tea Promotion Committee since its organization in 1925.

The firm of Otis A. Poole & Co., prominent among the foreign tea-exporting firms of Shizuoka for a score of years, was founded in 1909 by Mr. Otis A. Poole to take over the tea business formerly conducted by Smith, Baker & Co. of Yokohama. It was discontinued upon Mr. Poole's retirement in 1926.

Mr. Otis A. Poole was born at Beloit, Wisconsin, in 1848. In 1875, he started his



Mr. Otis A. Poole

career in tea with Mr. Henry Sayres, a Chicago jobber. In 1880, he became buyer and manager of Reid, Murdoch & Fisher's tea department, Chicago. Four years later, he joined E. A. Schoyer & Co., Chicago tea importers, and in 1886 went to Shanghai as their representative. In 1888, he became

a member of the staff of Smith, Baker & Co., at Yokohama, Japan. His long friendship with Mr. Kahei Otani, former president of the Japan Central Tea Association and pioneer of the Japan export tea trade with America, started at that time. In 1888, also, he brought his wife and three children from Chicago to Yokohama, where they lived for thirty years. Mr. Poole retired from business in 1926 and died at Berkeley, California in 1929.

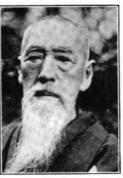
MITSUI BUSSAN KAISHA, or MITSUI & Co., Ltd., the great Japanese banking and mercantile house, with head offices at Tokyo, and branches in commercial centers throughout the world, first entered the tea trade in 1911. Simultaneously, an office was opened in New York. The company, which is extensively interested in the production and sale of Formosa teas, only recently has begun to figure as direct exporters of Japan teas, although they have sold them in America for years. Beginning in 1928, however, Mitsui & Co., Ltd., estab-



Hon. Kahei Otani

President, 1907-27

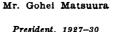






Vice President, 1909-15







Mr. Yenichiro Nakamura President, 1931-84

OFFICERS OF THE JAPAN CENTRAL TEA ASSOCIATION, 1907-1934

lished their own branch at Shizuoka to carry on a direct tea trade with America, and placed it under the supervision of Mr. Kahei Otani. In the first year, the company's exports were more than a million pounds, placing them sixth in a list of seventeen tea exporters.

The Shizuoka branch of IRWIN-HARRISONS-WHITNEY, Inc., the largest single exporter of Japan tea, is the successor of the branch of the J. C. Whitney Co., established by Messrs. C. Atwood and Fred A. Grow in 1906, and the branch of Irwin, Harrisons & Crosfield, Inc., established by Messrs. R. F. Irwin and A. P. Irwin in 1914. Mr. Grow, who was one of the directors of the J. C. Whitney Co., Chicago, went to Japan annually until some time previous to 1913. Meanwhile, Mr. J. F. Oglevee became associated with the firm, and when Mr. Grow discontinued going to Japan Mr. Oglevee succeeded him as Japan manager. Mr. Grow took an active interest in promotional activities in behalf of Japan tea, and was a member of the first Japan Tea Promotion Committee, organized in 1925. He became vicepresident of Irwin-Harrisons-Whitney, Inc. after the consolidation. In 1929, he retired and resides in Chicago.

After 1914, Irwin, Harrisons & Crosfield, Inc., maintained their own buying office at Shizuoka. In 1918, Mr. R. F. Irwin, treasurer of the present company, went to Japan and reorganized the affairs of the branch, remaining for about five years.

The two companies—J. C. Whitney & Co. and Irwin, Harrisons & Crosfield, Inc. —consolidated in March, 1924, under the present style of Irwin-Harrisons-Whitney, Inc., with Messrs. J. F. Oglevee, D. J. Mackenzie, and Paul D. Ahrens as buyers in Japan. Mr. Oglevee retired to Columbus, Ohio, in 1925, and has since died. Messrs. Mackenzie and Ahrens are the buyers at the present time. Mr. Mackenzie has been a member of the Japan Tea Promotion Committee since 1926.

Nosawa & Co., Tokyo, began shipping teas to America previous to 1920; then to Australia. In 1925, they resumed shipping to America. In 1933, they appointed Bingham & Co., New York, as their tea agents for the United States.

The Japan Tea Buying Agency, was established at Shizuoka in 1924. The proprietor, Mr. Kenzo Ikeda, formerly was connected with Furuya & Co. of New York and later with Ikeda, Homma & Co. The Japan Tea Buying Agency occupies the building formerly owned by Jardine, Matheson & Co., and is engaged in direct export trade.

Anglo-American Direct Tea Trading







Mr. Y. Miyamoto

DIRECTORS OF JAPAN TEA PROMOTION COMMITTEE



Mr. K. Unno
Managing Director,
1909-15



Mr. Kihachi Awaya Vice President, 1928-34



Mr. S. Mitsuhashi Managing Director, 1928-34



Mr. I. Nishi Secretary, 1909-23

OTHER OFFICERS OF THE JAPAN CENTRAL TEA ASSOCIATION, 1909-1934

Co., INC., with headquarters in New York City, opened a tea-buying office in Shizuoka in 1934, with Mr. Seichi Ishii as manager. Mr. Ishii, a director of the Japan Tea promotion Committee and formerly a director of the Fuji Co., Ltd., Shizuoka, is well known to the trade in the United States through annual visits since the early 1900s. Assisting Mr. Ishii is Mr. R. G. Coughlin, former tea buyer for the Anglo-American at Taipeh.

Japan Tea Associations

At a meeting of the Seicha Shudankai, or Tea Consulting Club, held in 1883, the dangers threatening the tea business were discussed, and a memorial was prepared asking the Government that tea traders be allowed to organize to regulate the production of undesirable teas.

The Government cordially responded and in the following year, 1884, promulgated regulations for tea associations, and granted

yen 1500 [about \$720] as an aid to their progress. Local tea associations were formed in each county and large city, with joint associations, such as the Tea Guild of Shizuoka City, composed of representatives from the locals, to govern their interrelations. The Japan Central Tea Traders' Association, with headquarters at Tokyo, was established to control and unite all the local associations, conduct tea inspection, and promote the export trade. The word "Traders" was subsequently dropped from the name. Membership is obligatory on "any person engaged in the manufacture of, or dealing in tea, or any person who owns a tea plantation and sells the fresh tea leaf, or any person who acts as a broker or sells the fresh leaf or manufactured tea."

The officers who have served the Japan Central Tea Association since its inception are shown in the accompanying list.

Mr. Gohei Matsuura, late president of the Japan Central Tea Association and of the Japan Tea Promotion Committee, was

one of the leading statesmen of his country, having been a member of Parliament for many years. He was interested in railroad and mining companies as well as in the tea industry. His election to the presidency of the association, in 1927, followed many years as a director and active worker in the organi-He died in zation. 1931.



Mr. T. Kato 1923-30



Mr. S. Saigo 1923-30



Mr. K. Torii

SECRETARIES OF THE JAPAN CENTRAL TEA ASSOCIATION SINCE 1923

LIST OF OFFICERS OF THE JAPAN CENTRAL TEA ASSOCIATION

1884.—H. Kawase, K. Okura, B. Maruo, M. Nakayama, K. Otani, K. Yamamoto, H. Yamanishi.

1885.—B. Maruo, K. Otani, K. Yamamoto, H. Yamanishi, R. Miyamoto.

-Same as in 1885.

1887.—B. Maruo, K. Otani, K. Yamamoto, H. Yamanishi, M. Nakayama.

-H. Kawase, K. Otani, K. Yamamoto, H. Yamanishi, S. Saka, G. Ono, K. Okura.

1889.—Same as in 1888.

1890.—Same as in 1889. 1891.—Same as in 1890.

1892.—K. Yamamoto, K. Otani, B. Maruo.

1893.—J. Ohara, R. Azuma. 1894.—K. Otani, K. Yamamoto, B. Maruo.

1895.—Same as in 1894. 1896.—K. Yamamoto, K. Otani, B. Maruo, K. Aizawa, S. Saka, H. Fukayama.

1897.—S. Mitsuhashi. 1898.—K. Otani, K. Yamamoto, S. Mitsuhashi, K. Aizawa, S. Saka.

1899.—Same as in 1898.

-K. Otani, K. Yamamoto, S. Mitsuhashi, K. Aizawa, S. Saka, Y. Kaki. 1900.-

1901.—Same as in 1900.

1902.—K. Otani, K. Yamamoto, S. Mitsuhashi, K. Aizawa, S. Saka, Y. Wakino.

1903.—Same as in 1902.

1904.—K. Otani, K. Yamamoto, S. Mitsuhashi, K. Aizawa, S. Saka, K. Ito.

M. Alzawa, S. Saka, K. 110.

1905.—Same as in 1904.

1906.—K. Otani, K. Yamamoto, H. Kinoshita,
J. Ohara, G. Matsuura, Y. Shimazu,
K. Aizawa, S. Fukase, S. Saka, Y. Nakamura, K. Ito, Y. Kaki.

1907.--Same as in 1906.

-K. Otani, K. Yamamoto, H. Kinoshita, K. Aizawa, S. Saka, K. Ito. 1908.-

Fiscal Year	President	Vice President	Managing Director	Secretary
1909 1910	K. Otani	K. Aizawa	K. Unno	I. Nishi
1911	**	"	"	•
1912	66	**	"	"
1913	66	44	"	**
1914	66	- "	"	
1915	64	I. Ozaki	K. Aizawa	- 44
1916	**	**	"	"
1917	**	44	"	**
1918	**	**	"	**
1919	"	- 44	"	"
1920	**	" .	"	44
1921	66	46	44	"
1922	44	44	44	44
1923	**	44	44	T. Kato & S. Saige
1924	44	44		
1925	44	46	**	
1926	44	46	**	1 " "
1927	G. Matsuura	J. Ohara		"
1928	"	K. Awaya	S. Mitsuhashi	
1929	"	46	***	" "
1930	44	46	66	** **
1931	Y. Nakamura	66	46	K. Torii
1932	" " " " " " " " " " " " " " " " " " "	46	**	11. 10.11
1933	. "	44	44	66

Mr. YENICHIRO NAKAMURA, who succeeded Mr. Matsuura as president of the Japan Central Tea Association, was born in Yoshida-mura, Shizuoka Prefecture, in 1867. He was the son of Yenzo Nakamura, a pioneer in the Yokohama tea He was graduated from Senshu University, Tokyo; and succeeded to his father's extensive tea-trading and soybrewing interests. Mr. Nakamura twice visited the markets of Europe and America -once in 1899-1900 and again in 1904-

giving valuable advice to the tea trade of Japan on his return. In 1929, he received the Junior Sixth Court Rank in addition to a Green Ribbon Medal previously conferred. He is a member of the House of Peers, president of the Shizuoka-ken Tea Association, chairman of the Japan Tea Promotion Committee, president of Shizuoka-ken Tea Refirers' Guild, president of Shizuoka-ken Tea Merchants Association, president of Nakamura Tea Department, and president Thirty-Fifth Bank, Ltd.

CHAPTER XIII

THE FORMOSA TEA TRADE

EARLY COMMERCE IN TEA WITH THE MAINLAND OF CHINA—BRITISH CONSUL SWINHOE DISCOVERS THE FORMOSA OOLONG INDUSTRY AND REPORTS ITS POSSIBILITIES—JOHN DODD, PIONEER FOREIGN BUYER—A TRIAL SHIPMENT IS SENT TO NEW YORK—RAPID DEVELOPMENT OF THE OOLONG TRADE—AID BY THE TAIWAN GOVERNMENT GENERAL—FORMOSA'S OTHER TEAS—TEA TRADE ASSOCIATIONS—BRIEF HISTORICAL MENTION OF LEADING FIRMS AND OUTSTANDING FIGURES IN THE TRADE

HE Formosa Oolong trade began with occasional shipments to the mainland of China a few years after 1810, the approximate date when Chinese merchants from Amoy first introduced tea cultivation into the island. By 1824, however, Formosa tea was being exported to China in considerable quantities.

In 1861, Mr. Robert Swinhoe, the first British consul in the island and the man who is credited with the discovery of the Formosa tea industry, reported its pos-

sibilities to his government.

In 1865, Mr. John Dodd, an Englishman who came to the island the year before, visited the farmers in the Tamsui District and made a personal investigation of the supplies of Formosa Oolong available for export. As a result, he established the firm of Dodd & Co., the pioneer foreign tea concern, and in the following year started buying. In 1867, Dodd & Co. made a shipment to Macao, via Amoy. In the same year, Ko Sing, a Chinese tea buyer, came to Tamsui in the interest of Tait & Co., of Amoy, and shipped a few baskets.

Up to the year 1868, the unfired leaf was shipped to Amoy for firing, but in that year Dodd & Co. established their own tea re-firing godown in Banka, Taipeh, and brought experienced Chinese operatives from Amoy and Foochow to do the work. This was the beginning of tea refiring in the island, and from that year

onward the firing was done before shipment.

In the next year, 1869, Dodd & Co. sent a trial shipment of 2131 piculs [284,133 lbs.] direct to New York, where the tea was well liked, and from this start the Formosa Oolong trade increased by leaps and bounds. In 1879, at the end of ten years, it had grown to ten million pounds annually. At the end of another decade, in 1889, the figure reached fifteen million. A peak of twenty-two million pounds was achieved in the biggest years, but the average was seventeen to eighteen million up to the post-war years. After the World War there was a decrease to the present average of about seven million pounds annually.

At the outset of the Formosa trade, foreign tea firms controlled the firing and packing exclusively, but subsequently Chinese began to enter the field, and gradually absorbed the largest share of it. Up to 1901, Formosa Oolong was shipped mostly from Tamsui, a shallow harbor which could only be entered by light-draft steamers; larger ships had to anchor outside, about a mile from shore. Formosa teas intended for export were taken to Amoy for matting and shipment. After Formosa passed under Jananese sovereignty, the harbor of Keelung was deepened into a safe and convenient haven for large ships, and, since 1901, has absorbed almost all of the tea business formerly done at Tamsui.

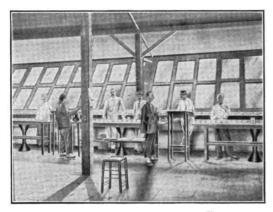
In 1901, the Taiwan Government Gen-

¹ Julius Heinrich Klaproth, Memoires relatifs a l'Asie, Paris, 1824, p. 327.

eral appropriated Yen 25,000 [\$12,500] as its share in the expense of the Japan-Formosa tea pavillion at the Paris Exposition. In 1922, the Government General began a newspaper campaign to popularize Formosa tea in the United States, and this has been continuous to the present time.

An important event in the recent history of the Formosa tea trade was the promulgation of a general order of the Government General, in 1923, providing for inspection of the quality of the tea exports; all teas falling below the adopted standard being refused shipment.

The latest happening in the Formosa tea trade at home was the removal, in 1930, of the manufacturing tax of Yen 2.40 per 100 kin [approximately \$1.20 per 132.28 lbs.] on tea, which had been virtually an export tax. The removal of the levy by the Government General came as a re-



AN OLD-TIME TEA TASTING ROOM, TAIHOKU

sponse to several years of agitation by the leading exporters of Formosa teas.

Formosa's Other Teas

In addition to the Oolong teas, shipped largely to the United States, Formosa manufactures quantities of Pouchong for shipment to China, the Dutch East Indies, Straits Settlements, and the Philippines. Oolongs constitute approximately half of the exports; while most of the balance are Pouchongs, although a small amount of black tea is exported.

Pouchong tea manufacture was introduced into Formosa in 1881 by Go Fok Roh, a Chinese merchant who came from Fukien Province and settled at Taihoku. From this beginning the Pouchong trade developed steadily and has furnished a





Mr. John Dodd

Mr. R. H. Bruce

PIONEERS OF THE FORMOSA TEA TRADE

ready outlet for surpluses of the raw leaf not required for the Oolong trade.

Mitsui & Co., Ltd., manufacture and export still another variety of tea called "Improved Formosa Oolong." It is an Oolong tea that is given a longer period of fermentation, and is wholly machine made. The first samples were sent to America in 1923. Since then shipments have been kept steadily before the trade with increases from season to season.

Mitsui & Co., Ltd., also manufacture black tea; a large part of their Kappanzan factory being devoted to its production. By duplicating Ceylon and India methods they are able, so far as climate and soil conditions permit, to produce a black tea of similar quality.

Tea Trade Associations

The Taihoku Tea Merchants' Association, 89, Teiheicho, 2 Chome, Taihoku [Taipeh], known locally as the "Tea Guild," was organized in 1893. The majority of the members are Formosan Chinese. The scope of its operations includes the prevention of bad tea manufacture, and during the tea-buying season its officials



HAND PICKING TEA IN A NATIVE HONG



Tea Transport at Taihoku

Upper—Coolie hand-cart transfer.

Lower—Loading tea in railway cars for Keelung.

regularly patrol the tea district of Daitotei, the suburb of Taihoku where the godowns of the tea men are located.

The North Formosa Foreign Board of Trade, 22, Minatocho, 1 Chome, Taihoku, unifies the activities of the foreign firms, including those in tea. This Association was established by British and American merchants in 1900 as the Tamsui Chamber of Commerce. The name was changed in 1906.

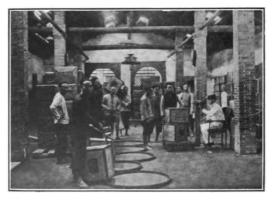
Tea Export Firms

Dodd & Co., the first foreign tea-export firm in Formosa, preserved the name of Formosa's tea pioneer for many years. Mr. Dodd possessed in high degree the adventurous spirit of the pioneer. From the time of his arrival at Tamsui in 1864 his imagination had been stirred by the facts in regard to Formosa Oolong previously uncovered by British Consul Swinhoe. The only questions, apparently, were whether the farmers could supply the leaf in sufficient quantities for export to new markets, and if so how could he, having no knowledge of Oolong tea manufacture, best prepare the product for shipment.

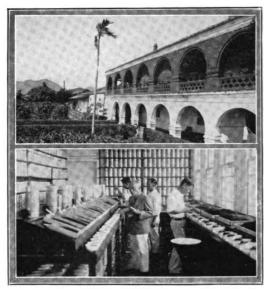
Mr. Dodd spent a good share of his first year on the island visiting Chinese small farmers in the district about Tamsui, avoiding other nearby territory overrun by head-hunting aboriginees. He made arrangements with the farmers for increasing their tea production, and even made a trip or two to Amoy in the junks carrying tea to the factories there. The next year Mr. Dodd started buying, and shipped to Amoy, where he had his teas fired and packed, and then sold them locally at a small profit. The cost of the extra handling was, he found, an insurmountable obstacle to entry into the English and American markets on which he had built his hopes for the success of his enterprise, so in 1868, he built the first tea refiring plant in Formosa at Banka, Taipeh. Thither he brought skilled Oolong tea refiners and packers, recruited from Amoy and Foochow, to finish the semi-manufactured teas purchased from the farmers.

In 1869, Mr. Dodd's firm shipped 2131 piculs [1 picul = 133½] lbs.] by two sailing vessels to New York. The success of the new tea was immediate, and it obtained a wide popularity in the Eastern and New England States. Mr. Dodd lived until the early 'nineties, and enjoyed a long and profitable career in the industry he created. His firm went out of business sometime between 1893 and 1900.

TAIT & Co., Ltd., was established at Tamsui as a branch of Tait & Co. of Amoy by Mr. Robert H. Bruce in 1870. Three years previous to this the Amoy firm had sent a Chinese tea-buyer over to Tamsui to feel out the market, and he shipped back a few packages of semimanufactured Oolong. This was the beginning of the Tait & Co. business in Formosa. After the opening of the port of Keelung they moved to Daitotei, Taihoku, their present address. Since 1922, the business has been affiliated with the American firm of Irwin-Harrisons-Whitney, Inc., under the style of Tait & Co., Ltd. Mr. Francis C. Hogg is the director in charge; assisted by Mr. A. L. Pink.



PACKING TEA, TAIHOKU



TEA BUYING IN FORMOSA Upper-Tea buyer's home on the Bund at Daitotei. Lower—Tea tasting room, Anglo-American Direct Tea Trading Co.

Foreign tea firms at Amoy and Foochow did not at first regard Tamsui as a possible rival in the Oolong trade, but they soon awoke to the rapidly increasing popularity of the Formosa Oolongs and hastened to establish themselves in the island. In this way, Elles & Co., Brown & Co., and Boyd & Co., all British firms, opened Formosa offices in 1872. Of these, Brown & Co. and Elles & Co. were succeeded by the American firm of Russell & Co.; and when the latter concern failed, it was succeeded by Lapraik, Cass & Co., who failed in 1901.

BOYD & Co., founded at Amoy in 1854 by Messrs. Thomas Deas Boyd and Robert Craig, opened a branch at Taipeh in

On **1872**. Mr. Craig's retirement, Mr. Thomas Deas Boyd took as partner Mr. William Snell Orr, and later Mr. Thomas Morgan Boyd. In 1903, Mr. Thomas Morgan Boyd retired, as had Thomas also Mr. Deas Boyd, and Mr. W. S. Orr made Mr. Edward Thomas his partner. Mr. Thomas Deas Boyd died in 1914. Mr. Fergus Graham Kell became a partner in 1912 and died four years later. In 1920, Mr. Robert Boyd Orr came in as a partner of Mr. Edward Thomas. Upon Mr. Edward Thomas' retirement in 1928, Mr. Robert Boyd Orr became senior partner of Boyd & Co., Amoy, and sole partner in Formosa. In 1934, the firm was dissolved and Mr. Robert Boyd Orr became associated with the Taipeh office of the Carter Macy Tea & Coffee Co., which took over the trade previously handled by Boyd & Co.

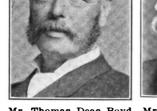
JARDINE, MATHESON & Co., Ltd., another British firm, whose headquarters are at Hong Kong, established a Formosa branch in 1890. This business still continues, the present buyer being Mr. H. Lachlan.

In the meantime, an American firm had entered the Formosa market; this was SMITH, BAKER & Co. of Japan, whose head office was in New York, and who for many years played an important part in the American tea trade with Japan and Formosa. Mr. Albert C. Bryer was the Formosa buyer. In 1915, the business was taken over by Carter, Macy & Co.

Carter, Macy & Co. opened a Formosa branch in 1897. It continues as a branch of Carter Macy Tea & Coffee Co., whose head offices are in New York. Mr. George S. Beebe has been buyer ever since the branch started. In 1934 it took over the business of Boyd & Co.

AVERILL & Co., a New York firm, started an export business in 1899 with Mr. William Hohmeyer as buyer, and they were succeeded three years later by Colburn-HOHMEYER & Co., composed of Messrs. A. Colburn, of Philadelphia, and William Hohmeyer, who went to Formosa as buyer.

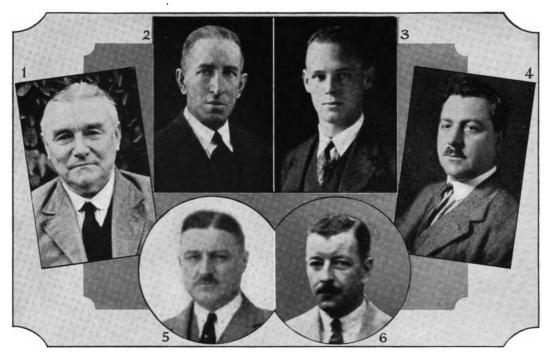








Mr. Thomas Deas Boyd Mr. William Snell Orr Mr. Thomas Morgan THE FOUNDERS OF BOYD & Co.



Some Well-Known Formosa Tea Buyers

H. Lachlan, Jardine, Matheson & Co.;
 George S. Beebe, Carter Macy Tea & Coffee Co.;
 B. G. Cowan, Anglo-American Direct Tea Trading Co.;
 Robert Boyd Orr, Carter Macy Tea & Coffee Co.;
 Francis C. Hogg, Tait & Co.;
 A. L. Pink, Tait & Co.

In January, 1912, Mr. John Culin, who had been with Carter, Macy & Co. for twenty years and more recently in the tea brokerage business at Philadelphia, succeeded Mr. Hohmeyer as buyer, and the style was changed to the A. Colburn Co. Mr. Hohmeyer died in 1918. The firm closed in 1923.

THE FORMOSA MERCANTILE Co., another American organization, entered the Formosa trade in 1906. The late Mr. Russell Bleecker of New York was president, and the late Mr. C. Walter Clifton was Formosa buyer until they closed in 1913.

mosa buyer until they closed in 1913.

In 1906, Mr. H. T. Thompkins, an American, started an export business on his own account. The J. C. Whitney Co., of Chicago, opened a Formosa branch in 1912, with Mr. F. D. Mott as buyer, and in 1927, the Anglo-American Direct Tea Trading Co. entered the market with Mr. John Culin, since retired and previously with Colburn & Co., whom the Anglo-American succeeded, as their buyer. Mr. B. C. Cowan succeeded Mr. Culin in 1931. Since Formosa became a part of the

Japanese Empire several Japanese firms have identified themselves with the Formosa Oolong trade. In 1911, Mitsui & Co., Ltd., and Nosawa & Co., both opened tea departments at Taihoku. Later on, in 1918, the Asano and the Mitsubishi each established a tea department, but both were closed the following year. Mr. Alfred C. Phelan was the first buyer for Mitsui in Formosa. He was followed by Mr. C. Walter Clifton, who had been a buyer in Formosa since 1899. He continued in this position until his death in 1919. Mr. Clifton was succeeded for three years by Mr. John Culin and later by Mr. W. A. Pokorny, who had been with the Mitsui tea department for several years—first at New York and later at Shanghai.

The firms now in the Formosa Oolong trade are Messrs. Carter Macy Tea & Coffee Co.; Jardine, Matheson & Co.; Tait & Co., Ltd., affiliated with Irwin-Harrisons-Whitney, Inc.; Anglo-American Direct Tea Trading Co., Inc.; Mitsui & Co., Ltd.; and Nosawa & Co.

CHAPTER XIV

TEA TRADE IN OTHER LANDS

IRANIAN TEA TRADE—OLD RUSSIAN TEA FIRMS—THE SOVIETS TAKE OVER THE BUSINESS
—VICISSITUDES AND PROGRESS OF THE GERMAN TRADE—LEADING GERMAN FIRMS—THE
TEA TRADE OF POLAND—THE TEA BUSINESS IN FRANCE—PROMINENT FRENCH FIRMS—
PROGRESS OF THE TRADE IN EUROPE'S LESSER TEA-CONSUMING COUNTRIES—NORTHERN
AND SOUTHERN AFRICAN TEA TRADE—SKETCHES OF AFRICAN TEA FIRMS—THE TRADE IN
AUSTRALIA AND NEW ZEALAND

RAN, OR PERSIA, is an important link in the tea trade between the Far and the Near East, as well as carrying on a lively trade within her own borders. The pioneer of the modern tea trade in Persia was the late Prince Mohamad Ali Mirza Chaicar, Kashef-es-Salteneh, who, in 1900, introduced India tea, inaugurated a regular trade with Russia, and established tea cultivation in Iran, then known as Persia.

The principal firms in the tea business in Iran, are: H. M. Ali Ghaissarieh, Serai Ala-ed-Dowleh, Teheran, established 1865; Sherkat Hashemi, Serai Amir, Teheran, established 1910; Haji Seyed Mohammad Reza Kazerooni & Sons, Bushire, established 1886; H. M. H. Amin & Bros., Isfahan, established 1857; Hadji Abdul Nabi Kazerooni, Bazar Vakil, Shiraz, year of founding not stated; Haji Mahmud Herati, Meshed, established 1924; and Abdul Ali Ramazanoff, Serai Malek, Rehst, established 1898.

The Tea Trade of Russia

The overland caravan trade between Northern China and Russia, via Mongolia and Siberia, had its inception after the signing of the Nerchinsk Treaty in 1689; it reached its peak between 1860 and 1880, and began to decline with the opening of a part of the trans-Siberian railway in 1880. It disappeared altogether upon the completion of the railway in 1900. Subsequently, the bulk of the Russian importa-

tions have gone by rail, via the port of Vladivostock.

In addition to the overland teas, Russian tea merchants began in the 'sixties to import small quantities of tea via the Suez Canal to Odessa. These importations were inconsiderable up to the 'nineties, but increased rapidly thereafter. During the same period, Russia frequently imported teas from London.

The largest firms in the pre-revolutionary Russian tea trade, were: C. S. Popoff & Co., Alexis Gubkin & Co., and Wissotsky & Co. At first, the Popoff company had the lion's share of the business, but Wissotsky & Co., a much younger firm, finally took away much of Popoff's trade. Popoff & Co. were doing some buying in China subsequent to the World War, but after the death of Colonel Popoff, the founder, the firm ceased to exist. Wissotsky & Co. are now doing business in Poland, and have a representative in New York.

Alexis Gubkin & Co. became A. Kusnezow & Co. after Mr. Gubkin's death, with its head office at Moscow. Later, this concern became the Trading Company, and later still, The Asiatic Trading Corporation, Ltd., under British registry.

Another old Russian tea firm—now of London, Berlin, etc. was that of P. M. Kousmichoff & Sons, St. Petersburg, founded in 1867 by Mr. Pavel M. Kousmichoff. In 1894, his eldest son, Mr. Viacheslav Kousmichoff, entered the business; and, subsequently, the two other



A PARTIAL VIEW OF THE PORT OF HAMBURG

sons, Mr. Constantin Kousmichoff and Mr. Michail Kousmichoff. Mr. Pavel M. Kousmichoff died in 1910. The sons extended the business, and shops were opened in St. Petersburg, Moscow, and Kiev. In October, 1917, came the Bolshevik Revolution and in a few days, empty stores were all that remained of a business that had taken fifty years to build.

There followed a number of years of chaos in the tea trade of Russia and then, in 1925, the Union of Soviet Socialist Republics began the reorganization of tea buying and selling as a government monopoly through a special bureau known as Chaieupravlenie, or the Tea Trust. This proved to be little more than a gesture, as Chaieupravlenie lacked either capital or credit to supply the teas that were needed. At the end of 1926, Chaieupravlenie ceased to exist and the entire tea business, including the factories, stores, etc., previously nationalized from the old Russian tea firms, passed into the hands of Centrosoyus, Moscow—the central association of consumers' societies, which distributes almost everything in the way of food supplies.

Centrosoyus had a previously established London branch, opened in 1919, which began purchasing teas in the London market at the beginning of 1927. A branch also was established at Hankow, China. However, the propagandist activities of these foreign branches made them short lived.

In the same year, the British Government closed the London office and similar action was taken by the Peiping Government against the Hankow Branch.

Lack of credit has limited the purchasing of tea by Centrosoyus to such an extent that it has been impossible for it to supply more than a fraction of the normal Russian demand, which in the pre-war decade averaged 187,200,000 pounds per year. In the chaos following the Revolution of 1917, the imports fell to ten or twelve million pounds a year; but in 1926, the first year of unified control, they had risen to between thirty-seven and thirty-eight million pounds. The total quantity imported into the Soviet Union in 1932 has been estimated at 35,161,000 pounds, and 42,564,000 pounds in 1933.

The Tea Trade of Germany

In Germany, as in many other countries, tea was sold first by chemists. In 1657, a handful cost 15 gulden [1.70 marks] in Nordhausen; in 1704, according to the Prussian list of prices, one loth [15 grams] was priced at 5 groschen [60 pfennig].

The use of tea spread slowly, except in districts nearest to the sea, like Ostfriesland, northwest of Bremen, where the consumption still is greater than in any other part of Germany. In 1913, tea consumption in the entire empire was 70 grams per

capita [2.4 oz.], while in Ostfriesland it was more than two kilos. However, in no other country of Europe, up to the time of the World War, did the tea trade show steadier growth than in Germany. imports were at their highest pre-war point in 1909, with a grand total of 4,949,-000 kilos. In August of that year, the German Government raised the import duty of 25 pfennig to 50 pfennig per half-kilo, which had the effect of sharply checking the growth of the domestic tea trade, and the beginning of the World War in 1914 finally engulfed the entire commerce of the Empire in chaos. During the war period it was difficult for German dealers to obtain tea, but by 1921 the importations regained their 1909 volume.

Meanwhile, the tea duty had been raised in 1918 to 1.10 marks per half-kilo, and in 1929 there was a further raise to 1.75 marks per half-kilo. The high rate of duty stands in the way of greatly increased tea-consumption.

The oldest of the German tea importing firms is RIQUET & Co., A.G., Leipzig, founded in 1745 by Jean George Riquet, a French emigrant. Next in line is KIRCHNER, FISCHER & Co., Neuer Wandrahm 1, Hamburg, founded in 1793 by Mr. Johann Friedrich Kirchner. G. W. A. WESTPHAL

Sohn & Co., Neuer Wandrahm 5, Hamburg, followed in 1796. The present partners are descendants in the fifth generation from the founder, Mr. G. W. A. Westphal.

THE EAST INDIA TEA HOUSE, Grünestrasse 7, Hamburg, was founded in 1830 by Mr. Ferdinand Marquart. The founder died in 1876 and was succeeded by Mr. Ernest Helm. In 1900, Mr. Hugo Jansen, Sr., succeeded to the business. New factory equipment was added for packing tea and coffee and branches were established. Mr. Hugo Jansen, Jr., has been at the head of the business since 1924.

Hälssen & Lyon, Pickhuben 9, Hamburg, was organized in 1878. Mr. J. C. F. Ellerbrock is the present sole proprietor. There is a London branch under the name of Haelssen & Lyon, Ltd., at 27, Mincing Lane, of which Messrs. C. Ellerbrock, Jr., and Geo. Richards are directors.

GEBRÜDER WOLLENHAUPT, Hamburg, was established in 1881, by Messrs. Herman and August Wollenhaupt. The sole proprietor since April, 1922, has been Mr. Paul Otto Wollenhaupt, son of Herman Wollenhaupt.

W. B. MICHAELSEN & Co., Langenstrasse 86, Bremen, was formed in 1885 by the late Mr. Wilhelm Bernhard Michaelsen and Mr. Johannes Schroder. The late Mr.



TEA-TASTING ROOM IN A HAMBURG TEA IMPORTER'S ESTABLISHMENT



MAIL-ORDER IMPORTER'S WAREHOUSE, BREMEN

Johann Heinrich Rohlwink became a partner in 1886, and the late Mr. Georg Anton Lülmann, in 1894. In 1896, Mr. Wilhelm Heinrich Adelbert Voigt became a partner, and in 1906 the tea firm of J. Fr. Scheibler & Co., Hamburg, was taken over, and Mr. J. Fr. Scheibler joined W. B. Michaelsen & Co. as partner. Mr. W. B. Michaelsen died in 1919, and his son, Mr. Stephan Michaelsen, was made a partner in 1921. Messrs. Georg Meyer, Robert Scheibler, and Wilhelm Voigt, Jr., came into the partnership in 1929.

H. C. Buhle, Alter Wandrahm 12, Hamburg, was established in 1889 by Mr. C. H. G. Buhle. Mr. Buhle died in 1924. The present directors are Messrs. H. R. Buhle and C. J. Jansen, with Mr. Otto Struve as manager.

FRIEDR. WILH. LANGE, Hamburg, was founded in 1890 by the merchant of that name. The present partners are Messrs. Fritz Kaesebier and Hch. I. C. Lienau.

In 1895, Messrs. Ludwig Schwarz and Albert Graaf started the importing firm of Ludwig Schwarz & Co., Alter Wandrahm 12, Hamburg, which has continued unchanged to the present. In the same year, Mr. J. Fr. Scheibler established the firm of J. Fr. Scheibler established the firm of J. Fr. Scheibler established the firm of W. Hamburg. In 1906, Mr. Scheibler became a partner in the Bremen tea firm of W. B. Michaelsen & Co., when they took over his firm. Mr. Scheibler died in 1927, and in 1929 the firm was changed to J. Fr. Scheibler & Co. M. B. H., with his son, Robert Scheibler, as managing director.

In Hamburg and Bremen there are a number of so-called versand firmen that send tea, coffee, and cocoa by direct mail

to families, restaurants, and hotels. The best known of these mail order houses is that of Schilling & Co., Post Box 844, Bremen, founded in 1896 by Mr. Martin Schilling. Mr. Eduard Schilling is the tea buyer. The firm imports its own teas, coffees, and cocoas.

The oldest German tea distributing firm is that of Heinrich Wilhelm Schmidt of Frankfurt, which was started more than 200 years ago. Another old one is Th. Ronnefeldt, which celebrated its centenary in 1925.

Tea firms that have been in the business for fifty years or more, are frequently to be found. Of these the most important are: Seelig & Hille, Dresden; Eduard Messmer, Frankfurt; J. L. Rex, Berlin; Franz Kathreiner Nachfg., Munich; Ordo Tee Co., G.M.B.H., Berlin; Wegmann & Reiser, Freidburg; Carl Schaller, Karlsruhe; Th. Geyer, Stuttgart, Karlsruhe; and J. Propheter, Mannheim.

Germany's multiple shop firms have made remarkable progress. Of those specializing in tea and coffee the one with the greatest number of branches is Kaiser's Kaffeegeschäft, G.M.B.H., general grocers, founded in 1880 at Viersen, Rhineland, under the firm name of Hermann Kaiser. In 1899, the firm was changed into a limited company headed by Councilor of Commerce Josef Kaiser. head office is at Viersen, with branches in Berlin-Spandau, Breslau, Heilbronn, and Dülken. Late in the 'eighties and early 'nineties Kaiser's Kaffeegeschäft opened branch stores in all parts of Germany. They now have about 1600 shops. The present directors are Councilor of Commerce Josef Kaiser and his son, Mr. Walter Kaiser.

EMMERICHER WAREN-EXPEDITION, G.M.B.H., founded in 1872 by Councilor of Commerce Alex van Guelpen at Emmerich, was the first firm in Germany to open multiple shops specializing in tea, coffee, and cocoa. They opened their first branches in 1882 and became a limited company in 1911. The managers of the enterprise since the founder have been: Mr. Johann Brockmeier, 1878–1894; Mr. Wilhelm Schwarzkopf, 1904–07; Mr. Wilhelm Hettenbach, 1908–1933; and Mr. Alex Reinhart van Gülpen.

Other important multiple-shop firms handling tea are: EMIL TENGELMANN,

Muehlheim, Ruhr, with about 1000 branches; Kayser Bros., Düsseldorf, 100 branches; Thams & Garfs, Hamburg, about 800; A. Zunts sel Wwe., Berlin; Ferdinand Fuesers, Dülken; and R. Seelig & Hille, Dresden.

There is a German Tea Trade Association at Hamburg, Der Verband des Deutschen Teehandels, which includes in its membership the leading wholesale tea firms.

The Tea Trade of Poland

The history of the tea trade in Poland is virtually an extension of that of Russia. Among the principal firms that have played important parts in its development are the following Warsaw concerns:

E. W. I. G. COMPANY, Leszno 10; Fels Tea Company, Plac Grzybowski 7; Warzawskie Towarzystwo dla Handlu Herbata, Bracka 23; Japonczyk, Ltd., Orla 4; Krajowa Hurtownia Herbaty, formerly M. Szumilin, Miodowa 25; Lipton, Nowogrodzka 18a; Sair, Plac Zelaznej, Bramy 2; Teapot Co., Ltd., Okopowa 21; Fr. Fuchs & Sons, Miodowa 18.

Poland ranks fourth in volume among the tea importing countries of Europe. The Polish imports are equal to approximately half those of Germany, but are one third greater than the tea imports of France.

The Tea Trade of France

Throughout the early years of the French tea trade China teas, only, were sold, and they were quite expensive; but in 1882 the first retail shop for the sale of India and Ceylon teas at popular prices was opened in Paris. This was the beginning of a gradual shift from China to British Indian and Ceylon teas, and, more recently, a growing importation of Dutch



FIRST SHOP TO POPULARIZE TEA IN PARIS

Indian and French Indo-China teas which are used mostly for blending.

The Indian Tea Association [Calcutta and London] began a propaganda for Indian tea in France during the season 1922-23, and this work was carried on until March 1, 1927, when it was discontinued for the announced reason that the high prices of tea ruling in France prohibited its use by the masses.

The interests of the French tea trade are protected and promoted through an association known as the Syndicate of Tea Importers, which includes in its membership all important tea firms. It maintains offices at 8, Boulevard Sebastopol, Paris.

Among the firms specializing in tea, a few of the more important are mentioned.

THE LIVERPOOL CHINA & INDIA TEA CO., Ltd., Paris branch, opened in 1882 for the sale of India and Ceylon teas at popular prices. There were then only one or two tea concerns in Paris and they retailed China teas at exorbitant prices. China teas were sold also by chemists and herbalists for medicinal purposes. As a beverage, tea was scarcely known and but poorly regarded by French people. The Liverpool China & India Tea Co. opened the first tea rooms in France, and these served to advertise the firm's "Kardomah" brand of teas as well as to cultivate a taste for tea among French patrons. The managing director of the company at Liverpool is Mr. S. Hamilton Vey. Mr. William J. Lumaye is manager of the Paris branch.

COMPAGNIE COLONIALE, 68, Boulevard de la Gare, Paris 13, was founded in 1848 by Mons. Cottan. The company entered the tea trade in 1885. It was changed into a limited company in 1920. Mons. Pierre Vinit is the director.

Société des Thés de l'Elephant at Marseille, with a branch at Le Havre, is successor to the firm of P. L. Digonnet et Cie., dealers in India, China, and Annam teas, founded in 1892 by Messrs. Petrus and Lazare Digonnet. The branch at Le Havre, of which Mr. Rouget de Gourcez is the director, was opened in 1901. Upon the death of Mr. Petrus Digonnet, in 1920, Mr. Lazare Digonnet became the sole owner under the firm name of Laz. Digonnet, Successor to P. L. Digonnet et Cie. On January 1, 1927, the business became a limited company under the name of Société des Thés de l'Elephant. The directors are: Messrs. Lazare Digonnet

[president], Marcel and Robert Digonnet, Gaston Scala, and Rouget de Gourcez. The company specializes in packet teas under the "Elephant" trade mark.

J. QUILLE & FILS, importers of coffees, teas, and cacaos, 20, rue Ferdinand Duval,



Mr. J. Quille Founder of J. Quille & Fils, Paris

Paris, with a branch at Marseille, was founded in 1835 by Mons. J. Quille, but did not start handling tea until 1898. The senior Quille died in 1900 at the age of 92 and was succeeded by his son, who died in 1917. In 1913, the firm was changed into a joint stock company. Mons. R. H. Postal is director, and Mons René

Mourlon manages the tea department. The company's tea brands are "Brahma" [Ceylon] and "Three Tigers" [Indian].

ETABLISSEMENTS EMILE DAMMANN, 8, Boulevard Sebastopol, Paris, with branches at Marseille and Le Havre, a joint stock company, is successor to the established business of P. & P. Derode & Dammann, tea importers.

LESPINASSE, 15, rue d'Hauteville, Paris, was established in 1898 under the name of Formont. The firm specializes in the importation of China, India, and Ceylon teas, which are distributed under the trade marks "Starlight," "Buffalo," and "Mazans."

Société des Produits Maxime, Paris, was founded in 1902 by Mons. Maxime Levy to import and sell Colonial products. Teas from various producing countries are packed under the trade mark of "Maxime's Tea." The present managers are Messrs. Maxime Levy and Georges Ullmann.

Other Paris firms, both French and British, identified with the history of tea trading in France include: Bignon & Andre, 18, avenue Victoria; Compagnie Anglaise, 6, avenue Victor Emanuel III; Etablissements Aussage, 99, rue de Flandre; P. M. Kousmichoff & Sons [branch of London], 11, avenue Victor Hugo; Kitai, 51, rue de Chateaudun; Lipton, Ltd. [branch of London], Faubourg St. Martin; J. Lyons & Co., Ltd. [branch of London], 77, rue du Faubourg

St. Denis; H. Mariage & Cie., 4 rue du Cloitre St. Merri; Marquis, 44, rue Vivienne; A. Milcent, 11, avenue Parmentier; Tea Planters, 90-96, rue du Caire; and Twining & Co., Ltd. [branch of London], 16, rue de la Chaussee d'Antin.

The Scandinavian Tea Trade

Norway, Sweden, and Denmark are heavy consumers of coffee, so tea has made little progress in those countries, although there are a few modern and well-equipped blending and packing establishments that distribute a wide variety of teas in attractive wrappings. Quality blends of Ceylon, India, Java, and China blacks are most in demand. Green teas are not used at all.

A leader in the trade is the firm of JAMES LUNDGREN & Co., St. Eriks Torg 2, Goteborg, Sweden, founded in 1888 by Mr. James Christian Lundgren. Mr. Lundgren died in 1903 leaving a three-year-old son, the present Mr. Douglas Lundgren, who succeeded to the management in 1921. Mrs. Alma Lundgren, widow of the senior Mr. Lundgren, is the sole owner. The firm specializes in blending and packing on a large scale. They sell to the wholesale and retail grocery trade either in the original chests, in their own chests, or in a wide selection of trade-marked packets. Their popular leader, Lundgren's "Frimarks Thé," sells around two and a half million packages a year.

Europe's Lesser Tea Consumers

Among Europe's lesser tea-consuming countries, Czecho-slovakia, Switzerland, and Austria are the only ones with home trades above a million pounds annually; all of the southern European countries and such northern countries as Finland, Estonia, Latvia, and Lithuania have home trades far below this. Belgium, also, falls into the latter category now, with an average annual consumption around 450,000 lbs., whereas, in the pre-war years it had risen as high as 1,200,000 lbs. The Belgian tea trade always has been dependent on the demands of foreign residents and tourists; the native Belgians, unlike the Dutch, are not tea drinkers.

The best-known name in the Austrian trade is Julius Meinl A.G., of Vienna.

Most of Europe's lesser tea-consuming



MODERN RETAIL TEA SHOP IN VIENNA

countries are customers of Holland, Germany, or England rather than direct importers, so their trade histories are merely collateral to those of the principal distributing countries, and their retail trade is reached regularly by the traveling salesmen from wholesale houses in those countries.

Tea in Northern Africa

Nobody knows even approximately when the tea trade of Northern Africa started, but the native population of the countries on the south shore of the Mediterranean are heavy tea drinkers, consuming approximately thirty-four million pounds of tea annually against a scant million and a half absorbed by the inhabitants of countries and portions of countries along the northern shore. This is accounted for, on the one hand, by the Moslem ban on alcoholic drinks and, on the other, by the Latin preference for wine.

The annual tea imports of Northern Africa are distributed roughly as follows: Algeria, two million pounds; Tunis, three million; Morocco, fifteen million; and

Egypt, fourteen million. The bulk of the imports are of green tea.

ALGERIA.—The Arab population buys tea in considerable quantities from grocers, herbalists, and pharmacists; but not to the extent that it buys chocolate and coffee. There are no firms or individuals dealing exclusively in tea. China green teas are well in the lead, and come to Algeria mostly through British merchants; such quantities as they do not handle are sold by French merchants. Small quantities come from Ceylon, British India, Java, and French Indo-China. The packet teas of some of the well-known British and French packers are popular; among these are: Lyons', Lipton's, and Ridgway's, from British sources, and Elephant and Compagnie Coloniale, from the French.

Tunis.—The retail distribution of tea has developed exclusively in the hands of Tunisian shop-keepers, and never has been carried on by producing firms. Following the usual French policy, tea imports have been subjected to considerable customs regulation and heavy duties, followed by even greater consumption taxes; but the trade has progressed despite all obstacles. The firms that have figured principally in supplying Tunisian retailers are: Salada Tea Company of Canada, Ltd., Montreal; J. Lyons & Co., Ltd., Lipton, Ltd., R. O. Mennell & Co., Ridgways, Ltd., Torring & Stockwell, London; and A. Caubert et Fils, brokers [bulk tea]. Marseille.

Fils, brokers [bulk tea], Marseille.

Morocco.—Green tea is the national beverage of Morocco, and long has stood third on the list of imports. Practically all of the tea imported is China tea, and most of it is shipped from Shanghai with transshipment at Marseille. The London market once was the principal source of supply for the Moroccan trade, but began to lose its commanding position during the World War and never has regained it. Sorting and sampling now are generally done at Shanghai.

EGYPT.—A few years before the World War, tea was practically unknown among the Egyptian natives, and at that time it was imported by a few Persian merchants and some European grocers for sale to resident foreigners. During the World War, however, the native Egyptian trade began to show marked interest in tea, and local importers endeavored to extend its sale in rural districts. These efforts yielded good results, particularly after a

considerable number of native soldiers who had acquired the habit of tea-drinking in the army returned to their homes and spread the custom among their people.

GIULIO PADOVA & Co., P. O. Box 457, Cairo, were the leading pioneers who first started to import tea in large quantities. This firm has been in business since 1870. Among the other tea importers at Cairo who have made important contribution to the development of the Egyptian tea trade are: Jacques Hazan Rodosli & Fils, P. O. Box 99; S. D. EKAIREB, P. O. Box 53; E. Agouri & Fils, P. O. Box 676; J. Tasso & Co., P. O. Box 238; SUDAN IMPORT & EXPORT Co., 20 rue Cheikh Abou el Sebaa; I. & J. AGHABABA, P. O. Box Ghouria 18; and Khouri Cousins & Co., 49 rue Neuve. There are no blenders, and only a few packers of small significance.

The South African Tea Trade

The South African tea trade started soon after 1652, when the first white settlement in South Africa was established at Cape Town. Dutch ships, which were the first to carry tea to Europe, made the settlement one of their regular stopping places. China tea held the monopoly of the South African trade until close to the beginning of the present century, after which it gradually yielded to British Indian rivals. Today, practically all the importations are Ceylon and Indian teas.

CAPE OF GOOD HOPE PROVINCE.—The oldest firm in the tea trade at Cape Town is Wm. Spilhaus & Co., Ltd., importing and exporting merchants, 58, Strand Street, founded in 1876.

founded in 1876.

The firm of W. SOUTHALL & Co., retail and wholesale tea and coffee merchants, 94, Plein Street, was established in 1881 by Mr. W. Southall. Originally it dealt only in tea; but later on, in 1894, added coffee. The present partners are W. C. and A. K. Southall, sons of the founder and, since 1898, sole partners.

R. Wilson & Son, wholesalers, commission merchants, and importers of groceries, hardware, confectionery, etc., 20, Burg Street, Cape Town, were established in

1884 by Mr. R. Wilson.

The firm of GARDNER, WILLIAMS & Co., provision and produce merchants, 75, Hout Street, was founded in 1904.

Brown-Lawrence & Co., Ltd., whole-salers and importers of groceries, hardware, etc., were established in 1920.

The business of HAYES, BENNETT & Co., wholesale grocers and merchants, originally was organized in 1923, and reëstablished in 1927.

ROBERT LORD & Co., wholesalers and importers of foodstuffs, Box 22, Cape Town, was founded in 1927.

Other principal firms dealing in tea at Cape Town, and who have contributed to the history and progress of the trade are: Nectar Tea & Coffee Co., Ltd., importers, blenders, and packers; Coffee, Tea & Chocolate Co., Ltd., importers, blenders, and packers; Thornton & Co., wholesale tea and coffee merchants; and Maclean Bros., retail tea and coffee specialists.

The extension of the South African teatrade to Port Elizabeth, on the eastern coast of the Cape Province, occurred coincidentally with the landing of British settlers at Algoa Bay in 1820. From the first, the eastern Cape Province has been strongly British both by settlement and tradition. This accounts for a lively demand for tea which has existed from the first, and now extends to the limits of Port Elizabeth's hinterland.

By far, the greater proportion of the teas sold at Port Elizabeth are packed in Ceylon. They are imported and distributed by large wholesale houses having their own special brands. The quality of the imports is influenced by the fact that the native and Asiatic population out-numbers the Europeans three to one; for this reason the bulk of the teas sold range below the average in quality.

A. Mosenthal & Co., Market Square, P. O. Box 1, established in 1843, is the oldest firm of wholesale merchants handling tea at Port Elizabeth.

MACKIE DUNN & Co., 19, Strand Street, P. O. Box 79, founded in 1850, is another pioneer firm of wholesale merchants.

DREYFUS & Co., Ltd., wholesalers, 12, Strand Street, P. O. Box 41, date from the year 1863.

Other wholesale merchants selling their own brands of tea at Port Elizabeth are: Hirsch Loubser & Co., Ltd., 29, Strand Street, P. O. Box 196, established 1875; Stephen Fraser & Co., 15, Strand Street, P. O. Box, 183, established 1888; and Mazawattee Tea, Ltd., 156-158, Queen Street, P. O. Box 540, established 1926.

NATAL.—A tea trade sprang up in Durban as soon as the town was laid out, in 1835. The history of the business fol-

lowed the same cycles as that of its earlier contemporaries, Cape Town and Port Elizabeth; China tea enjoying a monopoly of the trade until displaced by Britishgrown teas within the last thirty or forty years.

Along about 1880, Durban had the distinction of becoming the primary market for a tea industry that was started in the province in 1850 and supplies an important part of the South African Federation's demands. The highest production was reached in 1903, with a total of 2,681,000 lbs. of manufactured teas. Advancing labor costs caused a decline in the industry. In 1928, the production was approximately 800,000 lbs., while the imports, principally from Ceylon and India, totaled 11,584,000 lbs.

Firms dealing in tea at Durban who have made important contributions to the history of the trade include: Sir J. L. Hulett & Sons, Ltd., 209, West Street; W. R. Hindson & Co., 12-13, Nicol's Court, Smith Street; Geo. Payne & Sons, Ltd., Hermitage Street, branch of London; J. Lyons & Co., Pty. Ltd., Hermitage Street, branch of London; W. Dunn & Co., Commercial Road; Glenton & Mitchell, 40, Smith Street, branch of Johannesburg; T. W. Beckett & Co., Ltd., P. O. Box 52, branch of Pretoria; S. Butcher & Sons, Ltd., West Street; The Commercial Agency, Ltd., 48, Albert Street; and Karl Gundelfinger, Ltd., Smith Street.

Transvaal.—Johannesburg, the commercial center of the Transvaal, has rail connections with the South African seaports, Durban, Port Elizabeth, and Cape Town, and also has shared in tea trade history as a hinterland distributing center for all three. Firms that have contributed to the progress of the tea trade at Johannesburg are:

T. SIMPSON & Co., Commissioner and Polly Streets, sole agents in Southern Africa for Mazawattee Tea, Ltd., was founded by Mr. Thomas Simpson in 1890. There are six branches. Mr. Simpson retired in 1910. Since then the sole partner has been his eldest son, Mr. Montagu Simpson.

The firm of GLENTON & MITCHELL, wholesale tea and coffee merchants, Main and Greene Streets, was founded in Johannesburg, in 1896, by Messrs. F. H. Glenton and W. Mitchell. Mr. Mitchell died in 1921. The present partners are Messrs.

F. H. Glenton, E. J. Porter, A. E. R. Lightfoot, and F. Glenton, Jr.

The Tea Trade of Australia

During the early 'eighties, practically all the tea sold in Australia was China tea; it was not until the late 'eighties that India tea was imported in any quantity, and not until a few years afterward that Ceylon tea made its appearance. In the earlier period, China tea was bought and sold mostly by public auction on arrival. However, in 1880, the agency houses at Calcutta organized a tea syndicate for the purpose of opening new markets for Indian tea. The sale of the first lot of the syndicate tea, 2259 packages, containing 113,689 lbs., was made in October, 1880. From this auspicious beginning British Empire teas gradually won their way, but not without severe opposition from China tea importers at Melbourne and Sydney.

About the middle of the 'eighties, someone conceived the idea of selling tea to farmers in 6, 12, and 24 lb. tins, which were sent to the nearest railway station or to an agent. This departure from the usual methods of distribution was successful for fifteen or twenty years, but finally lost favor. In the same period, there were two other innovations: one was the giftgiving teashop, and the other was the cutprice, or "good-value," teashop chain. The gift-giving shops charged a high price for mediocre tea, and gave a premium that was none too good with every pound, so the public soon lost interest. McIntyre Bros., headed by the late Mr. W. Mc-Intyre, started the cut-price chain idea with a chain of shops where good tea was sold at 1s. 3d. a pound as against prices of 2s. to 3s. at the grocery and gift-giving shops. The firm also imported tea from India and Ceylon in large quantities to compete in the wholesale trade, but the entire experiment was a costly failure.

With the passing of the "good-value" teashops and the gift teashops, which occurred in the late 'nineties and the early present century, came the vogue for the advertised tea packet sold by the grocers. Motor vans now call weekly with a selection of various sizes and grades of advertised packet tea from which each retail grocer can select his requirements.

The firm of Irvine & McEachern Pty., Ltd., Brisbane Street, Launceston, Tasmania, tea and general merchants, was founded in 1847 by Mr. Colin Nichol Campbell. The present directors are Commander T. Eardley-Wilmot and Mr. Allan Ramsay.

The business of John Connell & Co., Ltd., wholesale grocers, 578-584 Bourke Street, Melbourne, was founded in 1850 by the late Mr. John Connell, starting as a retail grocery in Swanston Street. In 1887, a business in Sydney was acquired. The firm has always specialized in packing tea. In addition to their own brand, they pack to order for the trade under the clients' labels. In 1914, the business was converted into a public company. Mr. C. E. Graham of Sydney is the governing director. There are two joint managing directors of the Melbourne headquarters of the company, Messrs. R. M. Moyes and R. P. Mitchell. Mr. A. J. Creaser is in charge of the tea department.

ROLFE & Co., LTD., wholesale grocery company, corner King and Little Lonsdale Streets, Melbourne, another pioneer of the Australian tea trade, was established in 1854. The founders were Mr. George Rolfe, Sr., father of the late Mr. George Rolfe, and Mr. Edward Bailey, trading under the name of Rolfe & Bailey. The late Mr. George Rolfe was taken into partnership in 1858. Mr. Edward Bailey died in 1865 and Mr. George Rolfe in 1919. The firm was known as Rolfe & Co. until changed over into a limited company in 1920.

The firm of J. & W. BATEMAN, LTD., tea merchants in Fremantle, Western Australia, was founded in 1860 by Messrs. John and Walter Bateman. The firm, which has dealt in tea from the start, originally traded under the name of J. & W. Bateman. In 1919, it was converted into a limited company. There are branch offices at Perth and Kalgoorlie.

The firm of Lester Bros., 133, Liverpool Street, Hobart, Tasmania, was founded about 1867 by Mr. Joseph Okines from London. In 1893, Lester Bros. took over the business.

GRIFFITHS BROS., LTD., tea and coffee merchants, 30 Flinders St., Melbourne, was founded in 1879 by Mr. James Griffiths. In 1897, it was changed to a proprietary company, and in 1921 to a public limited company. The present directors are: Messrs. John Moore Griffiths, [Chairman], Wm. Roberts, Lionel Powers, Francis Martin, and Edward M. Steggall.



TEA-TASTING ROOM, DUNEDIN, NEW ZEALAND

The firm of Adams & Co., wholesale tea merchants, 59 William Street, Melbourne, Victoria, was founded in 1880 by Mr. G. H. Adams. The present sole partner is Mr. G. H. Adams.

EDWARDS ENSIGN TEA PTY., LTD., Melbourne, wholesale and retail tea, coffee, and cocoa, was founded in 1880 by the brothers, Messrs. R. C. and T. D. Edwards, who continue as the present directors of the company. Branches have been established at Sydney and Brisbane.

The business of Atcherley & Dawson, tea merchants, Atcherley House, Brisbane, was founded in 1884 in Melbourne by Messrs. Stephen Atcherley and Thomas Carr Dawson. Mr. John Elworthy Linde joined in 1890. The firm conducted a branch office at Sydney from 1885 to 1926, with Mr. Walter Fry as managing partner. The Melbourne office closed in 1904, and the business since then has been conducted in Brisbane. Mr. J. E. Linde is the present proprietor and Mr. F. M. Eyers, the manager.

ROBERT JONES & Co., LTD., tea importers and blenders, Leederville, Western Australia, was founded October, 1897, by Messrs. Arthur Herbert Roberts and Isaac B. Jones. The firm has dealt in tea from the start.

WHOLESALERS LIMITED, wholesale grocers, 577-579 Little Collins Street, Melbourne, C.1, was founded by a number of country merchants in 1912 as the Wholesale & Agency Company, Pty. Ltd. In 1920, Wholesalers Limited was incorporated to take over the business of the Wholesale & Agency Company Pty. Ltd. The present chairman of directors is Mr. George Keast. The manager is Mr. A. C. Lampshire and the sales manager is Mr. A. V. Gray.

Other Australian firms that have contributed to the history of the tea trade are: Henry Berry & Co. Pty., 568 Collins Street, and Peterson & Co. Pty. Ltd., 348 Flanders Street, Melbourne; W. A. Blake Pty. Ltd., 252 City Road, South Melbourne; Randal Woollatt & Co., Ltd., Ranwolla House, Pratt Street, Camden Town; D. Mitchell & Co. Ltd., 153 Clarence Street, and the Robur Tea Co. [James Service & Co., Props.], 360 Kent Street, Sydney, N. S. W.

Tea Trade Progress in New Zealand

As the early New Zealand settlers were mostly British, it is likely that the advent of the tea trade into the Dominion synchronized with the first serious effort at colonization in 1839. Previous to this, the missionaries, sealers, and timber getters who first came to the islands brought their own supplies of tea.

The type that has come to be the favorite in the Dominion is Ceylon, and, although British Indian teas have a considerable sale, the quantity of Ceylon teas imported represents about two-thirds of the teas brought in, as against less than a third imported from other than British possessions. In recent years, the total volume of the New Zealand imports have been averaging about 10½ million pounds.

averaging about 10½ million pounds.

The business of R. Wilson & Co., Ltd., wholesale grocers and tea merchants, with head offices at Bond and Jetty Streets, Dunedin, and a branch office at Timaru, Canterbury, was founded in 1862 by Mr. Robert Wilson. The firm became a limited liability company in 1906. The present directors are Messrs. L. E. Wilson, H. Henderson, G. R. Hutchinson, and L. R. C. Macfarlane.

C. Macfarlane.

The firm of Neill & Co., Limited, wholesale tea and general merchants, Dunedin, Otago, was founded in 1865 by Mr. Percival Clay Neill. The present directors are Messrs. S. D. Neill, son of the founder, and Wm. R. Gordon.

Donald Stuart Limited, merchants and manufacturers agents, 82 Bond Street, Dunedin, was founded in 1875 by Mr. G. L. Denniston, and in 1914 was taken over by

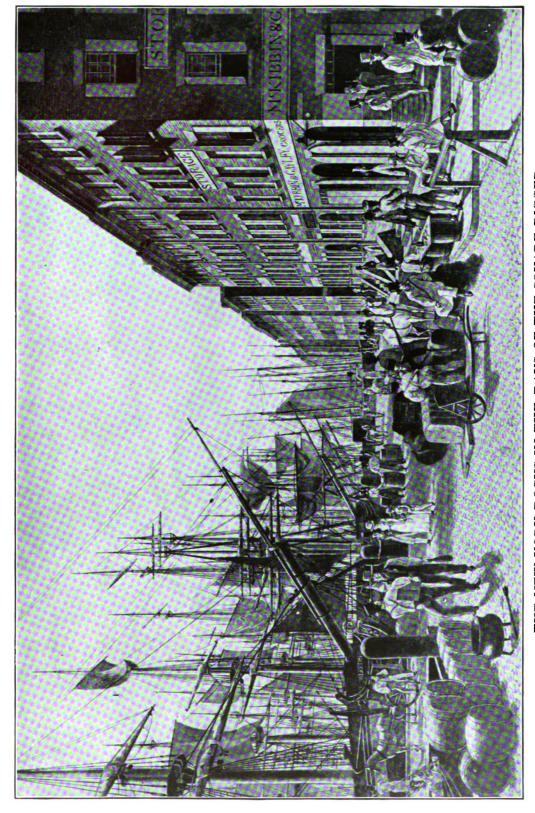
the present company. The sole director is Mr. Donald M. Stuart.

The firm of Fletcher, Humphreys & Co., Limited, wholesale tea importers and general merchants, Cathedral Square, Christchurch, was founded in 1882 by Messrs. John Johnston Fletcher and George Humphreys. In 1922, it was formed into a private limited liability company. The present directors are Messrs. G. E. F. Kingscote and T. B. Boulton. Mr. George Humphreys, the late governing director who died in 1934, was one of the pioneers of the tea packing industry, having added this as a branch of the business in 1889.

THE BELL TEA Co., LTD., wholesale tea dealers, 15, Hope Street, Dunedin, was launched in Dunedin by the late Mr. Norman H. Bell, January, 1905. The present directors of the company are Messrs. Peter Barr [Chairman], James Brown, J. T. Laing, and W. H. Shepherd. The latter is general manager and senior tea expert.

The firm of Maling & Co., Ltd., importing and indenting merchants, Gloucester Street, Christchurch, was founded in 1904 by Mr. G. R. Maling. Tea was the first line taken up, although the company now engages in many other avenues of business. They import Ceylon, Indian, China, Formosa, and Java tea, and have four branches. The directors are Sir Hugh T. Acland and Messrs. A. A. McKellar and G. R. Maling. Mr. V. G. Cameron is supervisor of the tea department.

The business of G. A. GINN & Co., LTD., indenters of tea, produce, and merchandise, with head offices at 13 Grev Street, Wellington, and branches in Auckland, Christchurch, and Dunedin, was established at Wellington in 1919 by the late Mr. George A. Ginn. Tea is the principal line handled. In 1921, the branch at Auckland was opened with Mr. C. A. Cook as director. Mr. Cook also is manager of the firm's tea department for New Zealand. The Christchurch branch was opened in 1924 with Mr. S. C. Crisp as manager. Mr. Ginn died in 1926 and the business was changed into a limited company. In the same year, the Dunedin branch was opened with Mr. F. C. Keene as manager.



Showing a forest of masts, marking shipping from all parts of the world. The period, 1828-1840. From an aquatint in the Stokes Collection, New York Public Library. THE NEW YORK DOCKS IN THE DAYS OF THE SQUARE RIGGER

246

CHAPTER XV

AMERICAN TEA TRADE HISTORY

THE FIRST AMERICAN TEA SHIP—OTHER EARLY VOYAGES IN THE CHINA TRADE—TRADE BARRIERS REMOVED—GREAT FORTUNES FOUNDED IN TEA—STEPHEN GIRARD—THOMAS HANDASYD PERKINS—JOHN JACOB ASTOR—PROGRESS OF THE TRADE IN THE UNITED STATES AND BRIEF HISTORICAL SKETCHES OF THE FIRMS ESTABLISHED DURING THE 'FORTIES, 'FIFTIES, AND 'SIXTIES—THE 'SEVENTIES AND 'EIGHTIES—THE PERIOD SINCE 1890—TEA ASSOCIATIONS—CANADIAN FIRMS

EA was an outcast from American trade during the struggle which preceded the separation from the mother country in 1776; but two unseen influences conspired to establish an entirely new tea trade in the United States, once the struggle was ended. The first of these was the inherited taste of former Dutch and English colonists for tea, and the other was the fact, soon learned by shipmasters in a new commerce that sprang up between America and the Orient, that tea was the only commodity obtainable at Canton in sufficient quantities to fill cargoes.

The First American Tea Ship

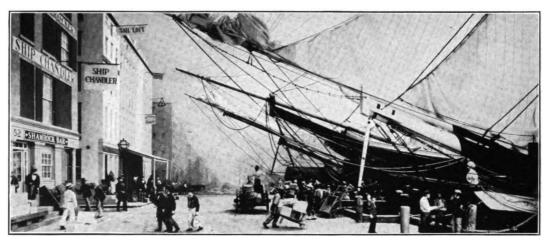
John Ledyard was the first to envision an American trade with China in which ships would go from Atlantic ports by way of Cape Horn to the Pacific Northwest, trade Yankee products for furs there, which in turn would be transported to China and bartered for teas, silks, and spices to be brought back to an Atlantic port of the United States by way of the Cape of Good Hope. Ledyard was a sea-faring adventurer, who had no means of his own, but traveled up and down the north Atlantic seaboard trying to convince merchants and ship owners that a pot of gold lay at the other end of his rainbow. They were deaf to his arguments, however, until 1783 when Robert Morris of Philadelphia at last befriended him, and promised a ship to sail around the Horn to the Northwest, and to Canton.

Robert Morris, joined with Daniel Parker & Co., merchants at the port of New York, in fitting out the promised ship, the "Empress of China," which sailed from New York, February 22, 1784; but went to Canton via the Cape of Good Hope, instead of around Cape Horn. She carried a cargo of ginseng, and brought back a cargo of tea and China produce; the first to reach this country in an American bottom. Captain John Green was master, and Major Samuel Shaw, subsequently the first American consul at Canton, was super-cargo. The total capital investment was \$120,000, and the voyage netted the backers \$30,727, or a little more than 25 per cent.

Other Early Voyages to China

The "Empress of China" made a triumphal return to New York on May 11, 1785, whereupon a syndicate of New York merchants financed a second ship, the sloop "Experiment," which sailed December 26, in the same year. Peter Schermerhorn and John Vanderbilt were among the subscribers to this venture. The master was Captain Stewart Dean, and the profit on the voyage, which occupied two years, was \$10,529 on a capital outlay of twenty thousand dollars. Tea was the principal item in the return cargo.

A short time after this, furs became the mainstay of the tea trade, and made it possible to keep specie at home where it was badly needed.



THE CLIPPER SHIP ERA IN OLD NEW YORK

South Street in the 1850's. Here were moored all the famous tea clippers. From a miniature group by Dwight Franklin in the Museum of the City of New York.

Robert Morris bought from Major Shaw and a Captain Randall the tea cargo of the sloop "Pallas," which they landed from China early in 1786; and in 1787, Morris helped to send out the "Alliance," Captain Thomas Reid, from Philadelphia. The "Alliance" was the first American ship to go to China by way of Australia. She returned in 1788 with a cargo valued at half a million dollars.

By this time, excitement over the newborn tea trade was comparable to a gold rush, and a current historian remarked that every little village on every little creek with a sloop that could hold five Yankees was planning to get into it. However, only New York, Philadelphia, Providence, Salem, and Boston—in the order named—actually sent ships to China.

In 1786, Elias Hasket Derby of Salem sent out the "Grand Turk," which peddled a cargo of Yankee goods along the coast of Africa and islands of the Indian Ocean, acquiring a supply of Spanish silver with which a return cargo of teas, silks, and chinaware was purchased in Canton.

The first Providence ship to go to China was the "General Washington," owned by John Brown, of Brown & Francis. She started in December, 1787, and returned July 4, 1789. In the same year, the United States Government levied a duty of fifteen cents a pound on all black teas, twenty-two cents on Imperial and Gunpowder, and fifty-five cents on Young Hyson.

When success crowned their first ventures, the Americans believed their trade

with Canton susceptible of indefinite expansion. In this they were disappointed, as the market for tea in America was quite limited. Also, it became increasingly difficult to obtain commodities or silver to exchange for cargoes in Canton.

Trade Barriers Removed

About the time the newly created tea trade began to run into difficulties, two entirely unrelated groups of events opened new markets to the Americans. One embraced the European wars following the French Revolution of 1793, and the other was the discovery of new sources of outward cargo. The effect of the first was to sweep away, almost in a day, carefully erected trade barriers, and make American ships common carriers to Europe. The second group of events had to do with the discovery that there was an almost unlimited demand in China for furs, sandalwood, and certain products of the South Sea Islands.

The American fur trade of the Pacific Northwest was in a position to supply its product in ample quantities to furnish a medium of exchange for cargoes of tea. Boston, the last of the North Atlantic seaports to send a ship to China, was the first to make these furs a definite part of the enterprise. In 1787, a syndicate of six Boston merchants subscribed \$50,000 and fitted out the "Columbia" to sail to the Pacific Northwest for furs; thence to Canton, for teas, and back via the Cape of

Good Hope to Boston, where she arrived August 9, 1790. The venture was a great success and established the route for subsequent Boston voyages to and from China. Among the Boston merchants famous in this trade were: James and Thomas H. Perkins, Samuel Cabot, James and Thomas Lamb, John P. Cushing, Thomas T., John M., and Robert B. Forbes, Joseph Peabody, James P. Sturgis, and the firm of Bryant & Sturgis.

Most of the merchants of New York and Philadelphia engaged in the China tea trade. In New York, John Jacob Astor was early in the trade and stayed in it for more than twenty-five years. There were also Oliver Wolcott & Co., and H. Fanning. After the War of 1812, Thomas H. Smith worked up a huge business, but overreached himself and was forced into liquidation in 1827. A more successful firm, after the Smith failure, was Olyphant & Co., founded by D. W. C. Olyphant. Mr. Olyphant had been the Canton buyer for Smith, and started his own firm after the crash.

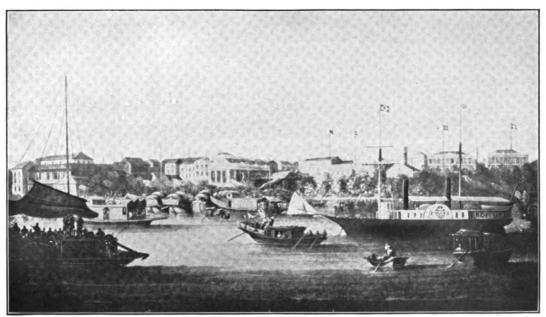
At Philadelphia, Robert Morris, as already mentioned, had important tea interests. Other Philadelphia merchants in the China tea trade were: Eyre & Massey, Charles Wharton, Jones & Clark, John

Clement Stacker, Oakford & Co., John McCrea, and Stephen Girard.

An era of wild speculation, which resulted from the news of early successes, soon was followed by a concentration of the China trade in the hands of a few great merchants like Stephen Girard of Philadelphia, Thomas Handasyd Perkins of Boston, and John Jacob Astor of New York. These men made fortunes in the tea trade, and became the financial giants of their time.

In this period, \$100,000 was considered a great fortune in America, but Girard, Perkins, and Astor became millionaires, in addition to developing profitable trade relations for the well-nigh bankrupt States. They landed the tea at their docks, after advertising the probable time of arrival, and sold it to wholesale grocers, who gave notes due in four to six months.

The merchants in the China Trade were allowed from nine to eighteen months for payment of the duties to the Government, as an encouragement to the trade, and this made it possible for those who engaged in it extensively to pile up what amounted to huge loans from the Government. Astor is reputed to have owed the Government free of interest, in this way, approximately \$5,000,000 for about twenty years.



THE CANTON FACTORIES IN 1852

Left to right the factories are American, French, British, and Danish. American paddle wheel steamer in foreground. From a painting by a Chinese artist.



Mr. John Jacob Astor Mr. Thomas Handasyd Perkins Mr. Stephen Girard
AMERICAN PIONEERS WHO MADE FORTUNES IN THE CHINA TEA TRADE

Stephen Girard

Born near Bordeaux, France, in 1750, Stephen Girard sailed on a merchantman when a mere stripling, and was captain of a ship at the age of twenty-three. His ship was blockaded at Philadelphia in 1776, so he opened a small shop on the waterfront and disposed of his cargo. This was the beginning of his subsequent huge mercantile establishment.

In the years between 1789 and 1812, Girard's fleet of merchant ships carried his flag and the fame of the American metropolis to every part of the globe. His principal activities were in the Philadelphia-Bordeaux and the Philadelphia-East Indian trade; the latter embracing a lively trade in teas from Canton. He amassed a fortune which was colossal in those days, and in his later years became a banker on a large scale. His loans to the Government helped it to win the War of 1812, and he was called upon for assistance by every sort of public and private enterprise. When he died, in 1831, he bequeathed his residuary estate, estimated at \$6,000,000, for the establishment of the now-famous Girard College for orphan boys, at Philadelphia.

Thomas Handasyd Perkins

Another American merchant in the China tea trade who died a millionaire was Thomas Handasyd Perkins of Boston. He was born in that city in 1764; his father and grandfather having been well-to-do merchants in the Massachusetts colony. He began his business career as a West

India merchant, in partnership with his brother James, and was highly successful. The firm had establishments in Boston and San Domingo.

In 1789, young Perkins became interested in a voyage to China, and sailed as supercargo of the ship "Austraea," owned by E. H. Derby of Salem. At Canton, Perkins gathered a great deal of valuable first-hand information in regard to the tea trade, and made the acquaintance of Howqua, one of the hong merchants, with whom he subsequently carried on huge transactions in which written agreements were unknown. Subsequent to this voyage, the ships of the Perkins firm continued to trade to San Domingo for sugar and coffee for export to Europe, but their chief interest was the trade of their ships to the Northwest coast of the United States for furs, and thence to Canton for teas, which they brought to Europe and America.

In 1838, the Perkins firm was dissolved, and Thomas H. retired from business. He died in 1854 at the age of eighty-nine.

John Jacob Astor

The third of the early American millionaires who founded their fortunes in the tea trade was John Jacob Astor, 1763–1848. He was a youth of twenty when he came from Waldorf, Germany, to New York, bringing seven flutes as his first business venture. With the proceeds of the flutes he became a fur buyer, but his first big money came to him when he induced James Livermore, West India merchant of New York, to become his partner in a ven-

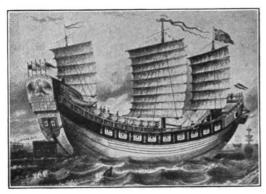
ture in the China trade. Livermore went into the proposition at a time when his ships were kept out of the West Indies by French cruisers and privateers that were preying on American ships trading with the British possessions. Early in 1800, Livermore dispatched his largest ship to Canton loaded with ginseng, lead, scrap iron, and 30,000 Spanish silver dollars. The outcome of the venture for Astor was that a dray from Livermore's wharf drew up at the Astor store, 68 Pine street, and delivered \$55,000 in kegs as his half of the profits.

For the next twenty-seven years Astor carried on an immensely profitable China trade in furs, sandalwood, and tea. One hundred per cent was not an unusual profit on a voyage, and fifty per cent he regarded as only fair. After 1803, he had his own ships, and his flag was a familiar sight in English and American ports.

In 1816, Astor added banking to his other interests. He abandoned the tea business in 1827 and died in 1848, leaving an estate estimated from \$8,000,000 to \$30,000,000.

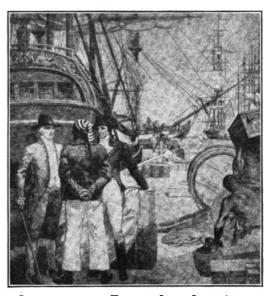
Trade Progress from 1820 to 1840

Twenty-four Philadelphia firms were importing directly from China in 1820, and there were five Philadelphia ships at Canton waiting for cargoes consisting principally of tea in November, 1823. Everything was going well in the thriving young American tea trade when speculators flooded the market and brought on the stagnation of 1826 and following years. The Government, in alarm over



BARNUM'S CHINESE JUNK

One of Barnum's early attractions was the Chinese junk "Keying" which he brought from Canton loaded with "mandarins" and tea in 1841. She visited New York and London.



SHIPPING IN THE TIME OF JOHN JACOB ASTOR

From a mural by Ezra Winter in Bank of the
Manhattan Trust Co., New York.

huge sums owing for deferred duties, attempted to collect payments that were overdue. Thompson & Co., the largest of the Philadelphia tea firms, were unable to pay, and their goods were attached; but Thompson had the order of attachment modified to allow him to withdraw such teas as he could sell, paying the duty on the withdrawals. Driven to dishonest measures by the financial straits in which he was involved, Thompson would pay the duty and obtain a permit for the with-drawal of say one hundred chests; then he would raise the figures to a thousand or even five thousand packages, which he would ship to New York and sell in that market, so as not to arouse the suspicion of the local Collector of Customs. It was only a matter of months until this continued dumping completely demoralized the market and its source became known. Thompson was arrested for fraud, and died in the Philadelphia jail.

Thomas H. Smith of Thomas H. Smith & Co., New York, was the proprietor of a tea store that was one of the marvels of the city at the time the trade hit the breakers. He had built it with the profits on a single cargo of tea, and had paid the Government as high as half a million dollars duty in a single payment, but the crash of the Thompson firm also finished Smith.



FOUNDERS OF SOME EARLY AMERICAN TEA FIRMS

3. Eli Beard, New York. 4. William Boardman, Hartford. 5. Abdiel Abbot Low, New York. New York. 8. James F. Dwinell, Boston. 9. Thomas Murdoch, Chicago. 10. James H. Forbes, J. Sr., Louisville. 13. Benedict Fischer, New York. 14. David G. Evans, St. Louis. 15. S. 17. George W. Lane, New York. 18. Alex. M. Thomson, Chicago. 19. Arthur Benson, New York. Martin Gillet, Baltimore. 2. Joab Scull, Camden, N. J. 3. Ell
 John R. Montgomery, New York. 7. Charles E. Beebe, New J.
 Louis. 11. E. M. Osborn, New York. 12. A Englehard, Sr.,
 W. Gillespie, New York. 16. J. C. Weideman, Cleveland. 17. Ge

Smith owed the Government \$3,000,000 in unpaid duties. Other smaller failures were less disastrous, but quite as complete. Among these, Smith & Nichols, New York, failed owing the Government \$100,000.

So badly disorganized and uncouth did the trade become in the years immediately following that a coterie of "Prime Ministers," as the trade knew them, had to be installed—one at least to each house along in the 'thirties, to meet customers.

They were gentlemen by education, and ultimately brought the atmosphere and manners of the trade back to polished politeness.

Philadelphia and Boston dropped behind in the tea trade, when the Erie Canal, opened in 1825, made the entire northern and Great Lakes regions of the United States tributary commercially to the port of New York.

Tea Firms of the Period 1811-40

Martin Gillet & Co., Inc., tea importing firm, Baltimore, was founded in 1811 by Mr. Martin Gillet. The business was incorporated in 1907. The first package tea sold in this country—cylindrical paper packets—was put up in Japan for this firm in 1874. When the packages arrived, they were dubbed "sausages," by other tea men in this country. The present officers are: Messrs. Alfred W. Jacobsen, President; Eric Jacobsen, Vice President and Treasurer; J. Gill Jacobsen, Secretary.

R. C. WILLIAMS & Co., INC., tea and coffee packers, New York, started as Mott & Williams, in 1811, changing to R. S. Williams & Co., in 1821, and again, in 1851, changing to Williams & Potter only to return, in 1882, to the name adopted in 1821. The tea department is in charge of Mr. W. H. Sinclair.

WM. T. REYNOLDS & Co., INC., whole-sale grocers specializing in teas and coffees, Poughkeepsie, New York, are derived from the business enterprise of Messrs. James Reynolds and Aaron Innes established in 1816, becoming wholesale in character in 1819. In 1837, the name of the firm became W. W. & J. Reynolds, Jr. Following various changes, the business was incorporated under its present style in 1917. Mr. Harry K. Lewis, Vice President, manages the Tea Department, and also is tea buyer for the Independent Grocers' Alliance of Chicago.



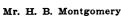
TEA CATALOGUE OF 1841

NASH & HOPKINS, importers, Boston, originated as Hitchcock & Nash in 1829. The firm was dissolved in 1933.

WM. S. Scull Co., tea packing and coffee roasting house, Camden, New Jersey, was founded in 1831 by Mr. Joab Scull, who continued the business under his name until 1858. In the latter year, he was succeeded by his son, Mr. William S. Scull, under whose name the business was conducted until 1871, when the style was changed to Wm. S. Scull & Co. The business was incorporated as the Wm. S. Scull Co. in 1908. Mr. William S. Scull died in 1916. In recent years, the company has acquired by purchase the businesses of Geo. C. Buell & Co., Rochester, and the Canby, Ach & Canby Co., Dayton. Previous to its merger with the Wm. S. Scull Co., the Canby, Ach & Canby Co. had acquired the business of E. R. Webster Co., Cincinnati. The century-old Scull enterprise starts its second cycle with the third generation of the family carrying on the business; Mr. William C. Scull, grandson of the founder, is President. The other officers are: Messrs. J. Carl de la Cour, 1st Vice President; Lot Boardman, 2nd Vice President and General Manager. Mr. William S. Scull, 2nd, is tea buyer.

MARTIN L. HALL COMPANY, tea, coffee,







Mr. Geo. L. Montgomery



Mr. J. M. Montgomery



Mr. E. M. Gillett

ASSOCIATES IN WHAT WAS ONCE THE OLDEST TEA BROKERAGE FIRM IN THE UNITED STATES

and cocoa importers, Boston, originated in 1831 when Mr. Stephen Hall established the firm as Stephen Hall & Co. The company was incorporated in 1908. Mr. Clarence H. Buker is President and Treasurer, and Mr. Devereux Dennis is manager of the tea department.

SAMUEL S. BEARD & Co., INc., tea, coffee, and spice importing house, New York, was founded in 1834 by Messrs. Eli Beard and W. S. Cummings under the name of Beard & Cummings. In 1872, the firm was joined by Mr. S. S. Beard, and the name was changed to Beard & Cottrell. In 1883, Mr. Cottrell retired and the name became Samuel S. Beard & Co. The business was incorporated in the early nineteen hundreds. In 1925, it was purchased by S. A. Schonbrunn & Co., who continue it under the old name.

JAMES & JOHN R. MONTGOMERY & Co., of New York, was the oldest firm of tea brokers in the United States at the time of its dissolution in 1922. The business was founded in 1839 by Mr. James Montgomery, who died in 1889. His brother, John R., joined him six years later and continued actively in the business until his death at the age of eighty-six in 1910. James's two sons, George L. and Henry B., went into the business, and R. M. and James Mortimer, sons of John R., joined the concern about 1870. George L. left in 1872 to represent Jardine, Matheson & Co. in the East and, later, in New York. James Mortimer afterwards went with H. W. Banks & Co., and subsequently formed a tea-importing partnership with Mr. James A. Aull, Jr., known as Montgomery & Aull, which lasted for several years. The old firm of James & John R. Montgomery was reörganized in 1921 and ran for a year with Messrs. Henry B. Montgomery, Elmslie M. Gillet, Charles I. Weaver, and Frederick E. Edwards as partners. Mr. Henry B. Montgomery died in 1927, aged seventysix. Mr. Elmslie M. Gillet had been with the firm since 1888. He retired in 1922, when the firm went out of business.

Mr. James Mortimer Montgomery was born in 1856. He was a descendent of the famous General Montgomery of Quebec Revolutionary fame, and was one of the incorporators of the Sons of the Revolution, of which he was president, 1914–23, and honorary general president, 1923–26. He was also a member of the Cincinnati and other patriotic societies. He had been president of the Tea Association of the United States of America for fourteen years at the time of his death in 1926.

Other Firms of the Period 1811-40

Other prominent concerns with exclusive or extensive interests in tea which were founded in various sections of the United States during the period from 1811 to 1840 were:

NEW YORK.—GRISWOLD, MINTURN & Co.; later Grinnell, Minturn & Co.; G. G. & S. S. Howland, later Howland & Aspinwall; Acker, Merrall & Condit, now Acker, Merrall & Condit Co.; C. J. Gould & Co.; Gillies Coffee Co.; Park & Tilford.

OTHER CITIES.—J. F. HUMPHREYS, Bloomington, Ill., later J. F. HUMPHREYS & Co.; FROMENT & Co., Albany N. Y., later Bacon, Stickney & Co., Inc.; McDonal, Squires & Sherry, Troy, N. Y., later Sherry & Co., Inc.; The Berdan

Co., Toledo, O.; Thornton & Hawkins, Louisville, Ky., later R. J. Thornton & Co.; Huntington & Avery, Springfield, Mass., later Downing, Taylor & Co.; S. S. Pierce Co., Boston.

The 'Forties, 'Fifties, and 'Sixties

The 'forties ushered in the exciting era of the China tea clippers. Mr. Isaac Mc-Kim, a shipping merchant of Baltimore, had the distinction of owning the first of these fast cargo ships. In the period which followed, a number of American shipping firms made history and profits in equally generous portions as their clippers raced to market with cargoes of tea in which the ship owners were often interested either as owners or as consignees. Among the firms operating out of New York were: Howland & Aspinwall; A. A. Low & Brother; Olyphant & Sons; Grinnell, Minturn & Co.; and N. L. & G. Griswold. The last-named were sometimes referred to as "No Loss and Great Gain," on account of the firm's initials. Boston tea-clipper owners included Sampson & Tappen, Mr. Donald McKay, and Mr. George B. Upton. Other owners and merchants operating clippers in the tea trade were Wilson & Sons, Baltimore; Nye, Parkin & Co., American firm in China; and Mr. Warren Delano, also an American.

In the 'sixties, steam began to contest the tea-carrying trade with the clippers, and it triumphed decisively with the opening of the Suez Canal in 1869.

The 'forties, 'fifties, and 'sixties saw a steady growth in the tea trade of New York, where most of the American tea importers were located, and where the growth of the American railway systems tended more and more to concentrate the buying trade of a large part of the country.

Up to the year 1863, the tea cargoes brought to New York were all from China, but early in that year the bark "Benefactor" brought the first cargo of Japan tea, consigned to A. A. Low & Brother. Japan tea rapidly found favor; eventually attaining a proportion of more than 40 per cent of the entire American tea importations.

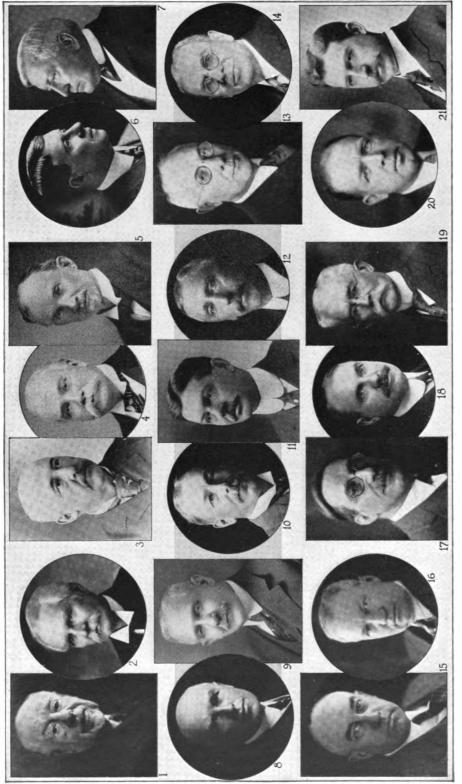
The trade experienced trying times during the period of the Civil War. In addition to the handicap of a war-time duty on tea of twenty-five cents a pound, there were a number of spectacular losses. In February, 1863, the Confederate steam

raider "Florida," Captain John Maffitt commanding, made a prize of the "Jacob Bell," bound for New York with a cargo of tea valued at \$1,500,000. Two months later, the same raider captured the "Oneida," Shanghai to New York, with a million dollar cargo.

Epochal events in the post-war period were the arrival in the New York market of the first sample shipments of Formosa Oolong tea in 1867-68, and the arrival of the first direct shipment of Japan tea from Yokohama at San Francisco in 1868. Practically all of the original New York tea importing firms were still in operation. In the autumn of each year the arrival of the tea ships was the occasion of much activity along South Street, where they occupied most of the piers between Coenties Slip and Peck Slip, convenient to the warehouses of their owners, which were mostly on South Street. To be connected with the trade in this period was considered a great distinction, there being no other line of business that could produce the fortunes that were made in tea.

The establishment of the Pacific Mail steamers between San Francisco, China, and Japan, and the building of the transcontinental railway, opened a new trade route and diverted shipments of tea to the Pacific Mail Line via Panama to New York; thereby reducing the time occupied in transit from the five or six months required by sailing vessels via the Cape to less than sixty days. Later, the opening of the Suez Canal made it possible to obtain low freight rates to Atlantic ports, and with the exception of shipments destined for far-western cities which came overland from the west coast by rail, the tramp steamers via Suez carried the bulk of the tea cargoes.

Until the close of the 1860s, several reasons combined to make New York the exclusive market for tea in this country. In the first place, all sailing vessels and steamers in the far-eastern trade discharged here; then, the war duty of twenty-five cents a pound had to be paid in gold coin, and until the resumption of specie payments, gold had to be bought in Wall Street at the prevailing rate of premium; also, as traveling salesmen had not yet become a feature in the trade, distribution was accomplished mainly through jobbing houses and brokers; buyers generally coming to town several times each year or else



PROMINENT FIGURES IN THE DEVELOPMENT OF THE AMERICAN TEA TRADE

Charles de Cordova, New York.
 Alexander E. Forbes, St. Louis.
 Abraham Hatfield, New York.
 John H. Blake, Denver.
 W. M. McCormick, Baltimore.
 Samuel Lee, New York.
 S. L. Davis, New York.
 Beecker, New York.
 J. Couldon, New York.
 W. D. Loudon, New York.

selecting from samples sent them by mail.

In addition to the distribution through

In addition to the distribution through jobbing houses, there were frequent sales at public auction, conducted by L. M. Hoffman & Son in Hanover Square, and later by John H. Draper & Co. on Front Street. These sales frequently amounted to several thousand half-chests, generally covering a wide assortment of China and Japan teas. They attracted jobbers and grocers not only in New York City, but also from Boston, Philadelphia, Baltimore, and some of the smaller cities.

Meanwhile the continued extension of railway facilities, as well as those of the telegraph and postal services, very materially increased the area of distribution, thus bringing into existence a great number of new firms.

Tea Firms of the Period 1841-69

THE WILLIAM BOARDMAN & SONS Co., coffee roasters and tea importers, Hartford, were established by Mr. William Boardman in 1841. In 1849, he took his son, William F. J., into the business. In 1851, another son, Thomas J., was admitted. Mr. Howard F. Boardman, son of Thomas J., was admitted to the partnership in 1888. The same year the founder died and William F. J., retired. In 1898, the concern was incorporated as The William Boardman & Sons Co. Mr. Thomas J. Boardman died in 1923 at the age of 91. Mr. John Pepion entered the employ of the firm as a young man, and was taken into the company in 1898. The present directors are: Messrs. John Pepion, President; John Pepion, Jr., Vice President and Treasurer; and Gordon B. Pepion, Secretary.

KNICKERBOCKER MILLS COMPANY, tea, coffee, and spice packer, New York, was established as the Knickerbocker Mills in 1842. The business was taken over by A. C. Fitzpatrick & Co. in 1899 and incorporated as the Knickerbocker Mills Company. Mr. Austin C. Fitzpatrick, late president of the corporation, was a pioneer tea packer and coffee roaster. He retired in 1923 and was succeeded by his son, Mr. Irving Fitzpatrick. The senior Mr. Fitzpatrick died in 1928.

DWINELL-WRIGHT COMPANY, tea-packing and coffee roasting firm, Boston, was founded in 1845 by Mr. James F. Dwinell under the style of Dwinell & Co. About

1857, he was joined by Mr. George C. Wright and the concern was known as Dwinell, Hayward & Co. until 1892, when it took the name of Dwinell, Wright & Co. Mr. Dwinell died in 1898, and in 1899 the business was incorporated as Dwinell-Wright Co., with Mr. George C. Wright as president. Mr. Wright died in 1910 and his son, Mr. George S. Wright, became president. Mr. George S. Wright died in 1930 at the age of seventy-three. The third generation of descendants of Mr. George C. Wright now conduct the affairs of the company. Branch establishments are maintained at Portsmouth, Va., and Chicago.

A. A. Low & Brother, New York, former merchant and shipping firm, extensively interested in the China tea trade, was formed in 1845 by Mr. Abdiel Abbot Low. Mr. Low was born at Salem in 1811; educated at public school; started in business as a clerk in 1829; went to China for Russell & Co., and became a member of that firm in 1837; continued as a partner in Russell & Co. until he returned to New York and started his own firm in 1845. After his retirement the business was carried on by his sons Messrs. A. A. Low and Seth Low. The latter was at one time mayor of New York. The elder Mr. A. A. Low, died in 1893; Mr. A. A. Low, the son, died in 1912; and Mr. Seth Low, in 1916.

Louis A. Gillet Co., New York tea brokers, trace their lineage through a succession of firms that have borne the family name since 1845. In that year, the present Mr. Gillet's grandfather, Mr. Lewis Warrington Gillet, started one of the first firms in New York devoted exclusively to the jobbing of tea, under the style of Gill, Gillet & Noyes. In the late 'sixties, Messrs. Joseph Allston Gillet and Sully Gillet started one of the first tea-brokerage houses in the country; the name of the firm in that period being Jos. Allston Gillet & Bros. On the death of the last of the brothers, Mr. Sully Gillet, in 1912, Mr. Louis Allston Gillet succeeded to the He carried it on until 1919, business. when he joined Messrs. Oliver Carter Macy and T. Ridgway Macy in the firm of Macy Bros. & Gillet. This firm was liquidated in 1923, Mr. Gillet continuing at first as Louis A. Gillet and more recently as Louis A. Gillet Co.

BEEBE & BROTHER.—Founded about 1845

by Messrs. William J., Charles E., and Silas R. Beebe, this firm was one of the first exclusive tea jobbing houses in New York. In the 'fifties, the Beebes gave up jobbing and became brokers. At that time, New York tea brokers often handled entire cargoes of tea, and none was imported direct by wholesalers as is done now. In those days, the broker was relied upon for valuations, on the basis of which all transactions were made. About 1861, Mr. Charles W. Beebe became a member of the firm, which continued as Beebe & Brother. Charles W. was a son of Silas R., of the original firm, and the father of Mr. George S. Beebe, the present Formosa buyer for Carter Macy Tea & Coffee Co. Charles W. retired from active business about 1910, and died in 1923. Mr. William H. H. Beebe, at one time a partner in Beebe & Brother, afterward was business manager of A. A. Low & Brother. The firm is no longer in business.

J. A. Folger & Co., coffee and tea packers, San Francisco, were founded in 1850 as Wm. H. Bovee & Co., of which Mr. J. A. Folger, Sr., was a member. Later they were succeeded by Marden & Folger, and sometime in the early 'sixties the name was changed to J. A. Folger & Co. Branch establishments are maintained in Kansas City and Dallas. Mr. Charles B. Platt, who was vice president of the company from 1887 to 1916, was one of the oldest ex-members of the United States Tea Board at the time of his death. Mr. Platt became associated with the company in 1881 and for many years was head of its tea department. In 1916, he resigned as vice president, on account of ill health, but continued to act as a director until his death, in 1919. Mr. J. A. Folger, son of the founder, who entered the business in 1889, died in 1921.

Delano, Potter & Co., Inc., coffee roasters and tea packers, Boston, were established as Hastings & Dana, in 1850. There were a number of changes in the firm name previous to 1920, when the business was incorporated. The present officers are Messrs. Robert G. Potter, President and Treasurer, and Ralph D. Weston, Clerk.

Reid, Murdoch & Co., Chicago wholesale grocery house, originated at Dubuque, Iowa, in 1853. The founders were Messrs. Simon Reid and Thomas Murdoch. 1865, they moved to Chicago, where they

were joined by Mr. Frederick Fischer. The name was then Reid, Murdoch & Fischer. In 1890, it was changed to Reid, Murdoch & Co. In 1892, the Indian Tea Association appointed the company sole agent for the United States and Canada for India tea. During the World's Fair at Chicago, in 1893, the company made a fine showing of this tea. The late Mr. Otis A. Poole was the firm's first tea buyer. He was succeeded by Mr. R. C. Morrison. present tea buyer is Mr. M. F. Brinker. Branch establishments are maintained in New York, Boston, Pittsburgh, Wilkes-Barre, Los Angeles, San Francisco, Jacksonville, Tampa, and Phoenix.

JAS. H. FORBES TEA & COFFEE Co., importers and packers, St. Louis, started in 1853 when Mr. David Nicholson laid the foundation of a tea and coffee business. In 1854, Mr. James H. Forbes purchased the business and was joined in 1857 by his son Alexander E. In 1878, Robert M. joined the business and changed the firm name to its present style. The company has branches in Kansas City and Omaha. On the death of Mr. Robert M. Forbes, in 1928, Mr. James H. Forbes, grandson of the founder, was elected president. Mr. Charles P. Forbes, brother of James H., became vice president. Other officers and directors are: Messrs. A. E. Forbes, Chairman of the Board; F. E. Stillman, Vice President; H. H. Droste, Secretary and Treasurer.

E. M. Osborn Company, tea importing firm, New York, was established in 1855 by Messrs. William Hubbard and Edward M. Osborn as Hubbard & Osborn. Later, the name was changed to E. M. Osborn Company. In the beginning, the company dealt in tea and groceries, but for the past sixty-five years they have specialized exclusively in the importation, packing, and wholesale distribution of tea. Mrs. Elsie Osborn is President and Treasurer, and Mr. Charles H. Pegg is Vice President and General Manager. He served on the United States Board of Tea Experts in

STANDARD BRANDS, INC., WIDLAR PRODucts, Cleveland, is successor to the Widlar Food Products Co., which started in 1855 under the name of Frisby & Stephens, dealers in teas, coffees, and spices. The name changed to A. Stephens & Son in 1860, at which time Mr. Henry A. Stephens became a partner with his father, succeed-





Mr. Thomas Reid

Mr. Julius A. Eppens
President

FOUNDER AND PRESIDENT OF THE EPPENS, SMITH Co.

ing Frisby & Stephens. After the death of the father, in 1873, the firm name was A. Stephens' Sons. In 1881, Mr. Francis Widlar was admitted to partnership, and the firm name was changed to H. A. Stephens & Co. Stephens & Widlar succeeded in 1883. Upon Mr. Stephens' death, in 1897, Messrs. A. L. Somers, H. H. Hewitt, and P. D. Hudson were admitted to the firm and its name was changed to Francis Widlar & Co. In 1899, Mr. Carl W. Brand, a nephew of Mr. Widlar, joined the firm and became president when the business was incorporated as The Widlar Co., in 1909. By a reorganization, in 1928, the company became the Widlar Food Products Co., which, in 1929, was taken over as a unit of Standard Brands, Inc., New York.

EPPENS, SMITH COMPANY, Inc., tea and coffee importers, New York, was established in 1855 by Mr. Thomas Reid. The business continued under his name until 1863, when it was changed to Pupke & Reid. By subsequent changes the name finally became Eppens, Smith Company, in The firm maintains branches in Boston, Philadelphia, and Baltimore. The late Mr. Carl H. Schutter was with this house for twenty-six years, and at one time was manager of its tea department. The present tea-department manager is Mr. H. F. Nockler, who has been with the company since 1925. The officers are: Messrs. Julius A. Eppens, President; T. W. Dennison, Vice President; F. N. Van Horn, Secretary-Treasurer.

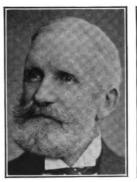
A. ENGLEHARD & Sons Co., tea, coffee, and spice packers, Louisville, were established in 1855 by Mr. A. Englehard, Sr. In 1880, the name was changed from A.

Englehard to A. Englehard & Sons Co. The company started handling tea sometime prior to 1880, but did not pack it until 1901. The business was liquidated in 1928.

THE JONES-THIERBACH COMPANY, tea, coffee, and spice packer, San Francisco, was formed by Messrs. Frank Randal and M. P. Jones in 1856 under the name of Randal & Jones. Mr. Webster Jones, President of the company, is the son of Mr. M. P. Jones. Mr. Charles F. Thierbach entered the business in 1881 and died in 1931. Mr. Norman H. Wear, General Manager, has been with the firm since 1899, and was a member of the United States Board of Tea Experts from 1923 to 1925.

B. FISCHER & Co., INC., tea and coffee packer, New York, was established by Mr. Benedict Fischer in 1856, and eventually evolved into B. Fischer & Co., Inc., having assumed corporate status in 1918. Mr. Charles E. Diefenthaler, who entered the employ of B. Fischer & Co. in 1880, became a partner in 1887, and when the firm was incorporated was its first president. He has since been succeeded in the presidency by his nephew, Mr. G. E. Diefenthaler, but continues as vice president. The company maintains a branch establishment in Buffalo.

MILLIKEN, TOMLINSON Co., wholesale grocery firm, Portland, Maine, was founded in 1857 by and as W. and C. R. Milliken. In 1890, the Milliken, Tomlinson Co. succeeded. They began packing tea in 1898 under the late Mr. William Mann, who left in 1906 to engage in the tea-brokerage business in Boston. Mr. W. H. Woodbury, who for ten years had been in the Boston office of the Eppens, Smith Co., took over the management of the Milliken, Tomlin-





Mr. John H. Catherwood Mr. James W. McBride

FOUNDERS OF TWO PHILADELPHIA TEA FIRMS











Mr. A. P. Irwin Chairman of the Board

Mr. P. C. Irwin

Mr. C. E. Atwood Vice-President

Mr. R. F. Irwin

Mr. R. L. Hecht Secretary

Officers of Irwin-Harrisons-Whitney, Inc.

son tea and coffee department in 1911, and still holds that position. The company has branches in Presque Isle, Ellsworth, and Belfast.

IRWIN-HARRISONS-WHITNEY, Inc., tea importer, a consolidation of several large tea interests, has offices in Philadelphia, New York, Chicago, Boston, San Francisco, Syracuse, Cincinnati, Baltimore, and Milwaukee, in the United States; and buying houses in Shizuoka, Japan; Daitotei, Formosa; Shanghai, Hankow, and Foochow, China; Colombo, Ceylon; Calcutta, India; Batavia, Java; Medan, Sumatra; Rotterdam, Holland; and London. The Company is the successor by merger of a number of former American tea firms. The earliest of these was John H. Catherwood & Co., established at Philadelphia in 1857. The firm of Irwin & McBride was formed by Messrs. A. P. Irwin and James W. Mc-Bride at Philadelphia in 1884, and took over John H. Catherwood & Co. in 1887. At this time Mr. R. F. Irwin joined the firm. The firm name was changed to Irwin-McBride-Catherwood Co. in 1890. Mr. McBride and Mr. Catherwood withdrew in 1904 and the name of the firm was changed to A. P. Irwin & Co. It continued under this name until 1914, when another merger was effected.

In 1907, Mr. Robert L. Hecht became manager of the American branch of Harrisons & Crosfield, Ltd., London, established in New York four years previous as Crosfield, Lampard, Clark & Co. Shortly thereafter Mr. Hecht began negotiations with Harrisons & Crosfield, Ltd., London, which, in 1914, resulted in a merger continuing their mutual interests in the American teatrade under the name of Irwin, Harrisons & Crosfield, Inc.

Meanwhile, the J. C. Whitney Com-

pany, Chicago, was incorporated in 1905 to take over the tea business of J. W. Doane Company, established in 1861. On March 1, 1924, a merger of Irwin, Harrisons & Crosfield, Inc., and the J. C. Whitney Company went into effect, under the corporate name of Irwin-Harrisons-Whitney, Inc. The officers of the company are: Mr. A. P. Irwin, Chairman of the Board; Mr. Pierson C. Irwin, President; Messrs. C. E. Atwood and E. M. Bell, Vice Presidents; Mr. R. F. Irwin, Treasurer; and Mr. R. L. Hecht, Secretary.

Mr. A. P. Irwin has been associated with the American tea trade for fifty years. He was appointed a member of the first United States Board of Tea Experts in 1897 and has been re-appointed every year since, with the exception of the years from 1912 to 1923.

Mr. Joel C. Whitney, the late president of the J. C. Whitney Company, was born at Hudson, Michigan, in 1838. He joined the importing firm of J. W. Doane & Co., Chicago, in 1865, and this firm was succeeded by J. C. Whitney & Co., which later became the J. C. Whitney Company. Mr. Whitney retired about the year 1915 after fifty years in the tea trade. He died in 1918.

Mr. Pierson C. Irwin, president of Irwin-Harrisons-Whitney, Inc., is the son of Mr. R. F. Irwin. Following his graduation from the University of Pennsylvania, Wharton School, in 1911, he made a world tour of the tea-producing countries and then managed the Chicago branch of the business until 1929, when he came to the New York headquarters of the company. He became a director in 1932, and was elected president in 1934.

Mr. Charles E. Atwood was born in Chicago, August 16, 1869. He started his

business career with J. W. Doane & Co., the predecessor of the J. C. Whitney Company, in 1885, and was vice president and president of the Whitney company between 1906 and 1924. In the latter year, he became vice president of Irwin-Harrisons-Whitney, Inc.

Mr. Robert L. Hecht was born in New York, October 20, 1869. He started with the J. H. Labaree Company in Front Street in 1885 at sixteen years of age. In 1901, he went with Fearon, Daniel & Co. as manager of their China-tea department. He resigned this position in 1907 to take over the management of the American branch of Harrisons & Crosfield, Ltd., London, which had been established in New York as Crosfield, Lampard, Clark & Co. in 1903. Mr. Hecht has been active for many years in the work of the Tea Association of the United States. He served as treasurer in 1912-13 and was elected president in 1926. He has been reëlected each year since.

DAVID G. EVANS COFFEE Co., tea and coffee packer, St. Louis, was established by Mr. David G. Evans in 1858. The business was incorporated under its present name in 1917. Several pioneer tea salesmen acquired fame because of their association with this house, among them: Col. W. P. Rickey, who made the Texas territory for over forty years; Mr. J. W. Harvey, in the Middle West; and Mr. James B. Gibson, in the service of the concern over twenty-five years. In 1929, the company purchased the business of the Meyer Bros. Coffee & Spice Co., St. Louis, which was established in 1899 by Mr. Robert Meyer. Mr. Meyer died in 1930.

E. T. SMITH COMPANY, wholesale grocer, Worcester, Mass., was established in 1858 by Mr. Elliott T. Smith. The firm name continued as E. T. Smith & Co., until 1896, when it was incorporated. The company owns as a subsidiary the Edmands Coffee Company, which has tea and coffee packing plants in Boston and Detroit.

THE SMITH-BAKER Co.—This former New York firm in the Japan tea trade was founded at Yokohama in 1858 by Messrs. Elliott R. Smith, Richard B. Smith, Colgate Baker, and William Horace Morse. The headquarters of the company continued at Yokohama until 1906, when the business was incorporated with Mr. John C. Wirtz as vice president and general manager, and the principal office was moved





Mr. George H. Macy Father

Mr. Oliver Carter Macy

Two Well-Known Macys

to New York. In 1916, the business was merged with Carter, Macy & Co., New York.

Mr. John C. Wirtz, who was secretary of the Tea Association of the United States for six years, started with the Smith-Baker firm as a boy and became a stock-holder after its incorporation in 1906. In 1916, he went to Japan, where he represented Carter, Macy & Co. for three years after their absorption of the Smith-Baker Co. He was associated with Irwin, Harrisons & Crosfield from 1919 to 1924. He died in 1930.

CARTER MACY TEA & COFFEE Co., INC., tea importers of New York, with branch offices in Chicago, San Francisco, St. Louis, Hartford, and the principal tea-producing countries, is the successor to a distinguished line of tea firms dating back to 1858, when the business was known as Whitlock & Kellogg. Mr. Oliver S. Carter joined the firm about 1866 and the name was changed to Whitlock, Kellogg & Carter. In 1870, Mr. Henry E. Hawley became a partner and the firm was known as Carter, Hawley & Co. In 1879, Mr. George H. Macy married into the Carter family, and in 1881 was admitted to the firm. About 1886, Mr. Hawley retired and the firm became Carter, Macy & Co.

In 1894, branches were opened in Japan and China, and a few years later in Formosa, Ceylon, India, Java, and London. These branches were organized under the name of George H. Macy & Co. and owned large realty holdings in the East.

In 1916, the business was incorporated as Carter Macy Co. and a half interest was taken by the American International Corporation—a newly organized importing

company. At the same time, Mr. George H. Macy retired and his son, Mr. Oliver Carter Macy, became vice president and general manager. Upon the death of the elder Macy in 1918, the entire Macy interest was taken over by the American International Corporation and Mr. Oliver Carter Macy started a tea business in New York on his own account. Mr. J. F. Hartley, who had been identified with the American International Corporation for several years, became president of Carter Macy Co. and continued in that capacity for five years. A Canadian company was established also in 1918, under the style of Carter Macy Co., Ltd. It absorbed the business of John Duncan Company, direct tea importers, with offices in Montreal, Toronto, Winnipeg, and Vancouver. The Canadian company was liquidated in 1922.

In 1923, the business in the United States was taken over by a new administration organized under the same name, Carter Macy Co., to succeed the former subsidiary of the American International Corporation. The officers of the new company were: Messrs. E. M. Richards, Chairman of the Board; A. N. Derouin, President; W. Bollman, Vice President; W. F. Reynolds, Secretary; R. L. Carpenter, Treasurer. Mr. Derouin resigned the presidency at the end of 1924 and was succeeded by Mr. Richards. The company continued until 1927, when it was taken over with its branches in Formosa and elsewhere by Oliver Carter Macy of New York and Brooke Bond & Co., Ltd., of London, under a partnership corporation as Oliver Carter Macy, Inc. In 1931, Mr. Macy withdrew and the style of the company was changed to Carter Macy Tea & Coffee Co., Inc. The officers are: Messrs. R. A. Mason, President; Walter Bollman, Vice President; Stanley H. Mason, Secre-

tary; and Richard L. Carpenter, Treasurer.
MR. R. A. MASON was for five years
manager of the tea department of Dodwell
& Co., Ltd., New York. He was formerly
with Joseph Tetley & Co., Ltd., of London,
starting as an apprentice with that concern.

Mr. Walter Bollman was for eleven years with the J. C. Whitney Co. and afterwards with Carter Macy & Co. for eight years. He was with Oliver Carter Macy for four years.

Mr. George H. Macy built up one of the largest tea-importing concerns in





Mr. R. A. Mason President

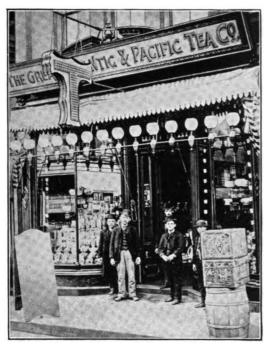
Mr. Walter Bollman Vice-President

OFFICERS OF THE CARTER MACY TEA & COFFEE CO.

America during his thirty-five years in the tea business. In 1894, he went to the Far East where he established direct buying branches. Mr. Macy was one of the organizers of the Tea Association of the United States of America. He retired in 1916 and died two years later.

Mr. Oliver Carter Macy was born in Orange, New Jersey, October 30, 1880. After graduation from St. Paul's School, New York, he entered the tea business under his father's tutelage, visiting the Far East in 1902. In 1903, he was admitted to the firm and in 1910 took over the general direction of the business, owing to his father's ill health. When the Macy interests were acquired by the American International Corporation in 1918, Mr. Macy planned to retire; but the lure of the tea business was too strong, so in 1919 we find him organizing, on an unprecedented scale, the tea brokerage firm of Macy Bros. & Gillett. This firm was liquidated in 1923 when Mr. Macy organized Oliver Carter Macy, Inc., to engage in the tea-import business with branches in Ceylon and Java. In 1925, he joined the business with that of Brooke Bond & Co., Ltd., continuing under the style of Oliver Carter Macy, Inc., until 1931, when he resigned to devote all his time to the Tao Tea Co.

THE GREAT ATLANTIC & PACIFIC TEA COMPANY OF AMERICA, the largest chainstore organization in the world, having its headquarters at 420 Lexington Avenue, New York, and 15,700 retail branches distributed through thirty-five states of the United States and two Canadian provinces, was founded by two New Englanders, Messrs. George F. Gilman and George H. Hartford, in 1859. The original company,



AN A & P STORE OF THE GAS-LIGHT ERA

now a subsidiary, was known as the Great American Tea Company. The founders conceived the idea of buying tea, coffee, and spices in large quantities and building up a profitable business through a large volume of sales direct to consumers at less than the prevailing prices. Advertisements were run in church and rural papers, setting forth the object of the enterprise. Goods were shipped to self-nominated agents who made up "club," or group, orders, and then delivered them, for a premium or other compensation.

Coincident with the opening of the first transcontinental railway, in 1869, Messrs. Gilman and Hartford started a second company to operate a chain of stores, naming it The Great Atlantic & Pacific Tea Company. The separate organization was created in order to segregate the store business, which required a different type of management, from the original mail-order enterprise and the wagon-route business that grew out of it. Both proved great successes, but the store business far outgrew the parent company. To-day the A & P sells approximately 14,000,000 lbs. of tea annually, which is one-sixth of all the tea consumed in the United States.

A policy, long familiar to Americans, of painting the A & P store-fronts a

uniform red, trimmed with gold, was adopted. At the same time, modern ideas of store-front illumination were anticipated, even in those days of gas-lighting, by a row of white-globed lights and a huge gas-lighted "T," hung over the sidewalk in front of the entrance.

Mr. Gilman died in 1909, and later in the same year the business was incorporated under the laws of New Jersey as The Great Atlantic & Pacific Tea Company. This company was succeeded in 1916 by the Great Atlantic & Pacific Tea Company, Inc., organized under New York State laws. The present Great Atlantic & Pacific Tea Company of America was incorporated in Maryland in 1925. It is controlled by the Great Atlantic & Pacific Tea Company, Inc. [New York], and was organized to take over all of the investment of the New York company of 1916, including the following subsidiaries: The Great Atlantic & Pacific Tea Companies of New Jersey, Arizona, and Nevada; The Great Atlantic & Pacific Tea Company, Ltd. [Canada]; The Great American Tea Company; Quaker Maid, Inc.; The Quaker Maid Company, Inc.; Nakat Package Corporation; Felton Package & Manufacturing Co.; Packers' Supply Co.; American Coffee Corporation; Atlantic Commission Co.; Atlantic Warehouses, Inc.; Whitehouse Milk Co., Inc.; and the Yukon Club Co.

The present officers are: Messrs. George L. Hartford, Chairman of the Board; John A. Hartford, President; Arthur G. Hoffman, William G. Wrightson, Robert B. Smith, E. W. Haskins, Vice Presidents; George D. Clews, Treasurer; Ralph W. Burger, Secretary; J. B. Breckenridge, Assistant Secretary; J. D. Ehrgott, Comptroller.

THE GREAT AMERICAN TEA COMPANY, which was a mail-order business in its early years, gradually evolved into a wagon-route organization; and after the Great Atlantic & Pacific Tea Company expanded widely as a chain-store enterprise, the Great American Tea Company became the wagon route auxiliary of the A & P. About 1923, however, the two businesses were separated, and since then the Great American Tea Company has been operated independently, but under the ownership of the A & P. The head offices are located at 102 Warren Street, New York, and there are branch establishments in forty cities of the United States, dis-



A TYPICAL A & P COMBINATION STORE OF TODAY

tributing teas and coffees to 200,000 families. Mr. F. C. Habel is general manager.

Mr. George F. Gilman, the senior partner in the "Great American" enterprise, was a tea jobber who became a millionaire because he created newer and bigger outlets for his teas than were afforded through the regular wholesale trade. The office of the Great American Tea Company at 129 Front Street, New York, where Mr. Gilman also did a tea jobbing business through the 'seventies, is well remembered by tea men still living. It is related of him that, in 1879, when there was a money shortage, he loaded \$200,000 in specie into his victoria and had his liveried coachman drive him to the Bank of North America, where he deposited it in a timely, if spectacular, gesture of helpfulness. He established a magnificent home at Black Rock, near Bridgeport, Connecticut, where he entertained on a lavish scale and indulged such eccentricities as not allowing a mirror, clock, nor telephone on the place. Also, after he retired in the 'eighties, he required that the first dollar taken in by each store manager be mailed to him daily at Black Rock. When he died in 1903, his partner, Mr. George H. Hartford, claimed an equal interest in the business, which then included some 200 stores; but in settlement of numerous court actions that were started by claimants to the Gilman estate, a compromise was reached whereby the Gilman interest was conceded to be 60 per cent. Mr. Hartford and the heirs thereupon incorporated the business at a capital value of \$2,100,000, the heirs taking for their share \$1,250,000 of common stock, and Mr. Hartford taking \$700,000 worth of preferred stock and \$150,000 of common.

Mr. George H. Hartford came from Maine to New York with an inborn talent for mercantile organization and management. In association with Mr. George F. Gilman he helped to build up a club-order business in teas, coffees, and spices under the ægis of the Great American Tea Company. After the club-order business had been expanded through advertising, some of the out-of-town agents established wagon routes, working from their own stores. This was the basis of the branch-store business launched under the name of The Great Atlantic & Pacific Tea Company in 1869. The first A & P store was located in Vesey Street, where Mr. Hartford presided over every detail of the businessincluding buying, selling, and bookkeeping. It was a dream of the founders to bridge the continent with their tea stores. George H. Hartford laid the foundation on which his sons, George L. and John A. Hartford, built one of the few billion dollar businesses in this country, and the only one in the retail merchandising field. Mr. Hartford, senior, was in active control of the company's affairs until his death at the age of eighty-four, in 1917.

MESSRS. GEORGE L. AND JOHN A. HART-FORD, Chairman of the Board and President, respectively, of The Great Atlantic & Pacific Tea Company, are typical of the modern American school of efficient and successful merchandisers. They won this distinction by making nearly 16,000 stores flourish where only 400 grew 18 years be-

fore. In 1930, they realized the ultimate dream of the founders by establishing the first A & P store on the Pacific Coast.

Mr. George L. Hartford came into the business in 1877. His first job was firing a boiler. John A. graduated from high school in 1888 and began working up through the organization from a start as office boy. Their father believed that hard work develops character. To-day, George L. is the counselor and financial adviser of the clever group of executives with whom he and his brother have surrounded themselves, while John A., as chief executive, practices a precept of his father's that confidence in men, and helping them to make good, is a prime requisite in any leader of big business. Enthusiastic teamwork among 40,000 employees is the outward and visible result of this policy of individual responsibility.

Mr. Charles J. Hensley, who, by reason of his connection with the Great Atlantic & Pacific Tea Company is the fore-



Mr. C. J. Hensley

most American tea buyer, was born June 7, 1873, in Montreal. In 1892, he came to New York and started his business career with Edward A. Willard & Co., tea brokers, who bought all the tea for the A & P. Mr. Willard died in 1905, at which time his company was liquidated and Mr.

Hensley entered the employ of the A & P in the capacity he still fills. He opened a separate tea-buying office for the company, under his own name, at 82 Beaver Street, New York, in 1929.

S. W. GILLESPIE & Co., former tea brokers in New York, were successors, in 1860, to the business originally established by Mr. Gillespie, which later became Olendorf, Case & Gillespie. Mr. Gillespie, who was known as the dean of the tea brokers, was one of the first to sell Japan teas in the New York market. He died in 1912, aged eighty-eight, and was succeeded by his son, Mr. Samuel Gillespie, who carried on the business until 1918, when he died.

THE WEIDEMAN COMPANY, wholesale grocery firm, Cleveland, had its inception in 1861, when Mr. J. C. Weideman estab-

lished the business. In 1864, he was joined by Mr. H. Tiedemann in the firm of Weideman & Tiedemann. After a number of changes, the partnership was incorporated under its present name in 1889. The first managers of the tea department were Messrs. O. G. Kent and C. T. Hasbrouch. They were followed by Messrs. George W. Barnes, E. J. Siller, Jr., H. C. Hoeger, and John Brahney. The company purchased the Blodgett-Beckley Co., Toledo, in 1934.

HEWLETT & Co., New York tea importing firm, was established about 1866 by Mr. James Augustus Hewlett as Hewlett & Torrance. Mr. Hewlett died in 1890, and in 1891 the name was changed to Hewlett & Lee, with Messrs. George Hewlett, son of the founder, and Samuel Lee as partners. Mr. Lee retired in 1928, and the name was changed to Hewlett & Co.

Mr. George Hewlett was born in Brooklyn, New York, November 28, 1866; attended Brooklyn Collegiate and Polytechnic Institute; and started his business career in 1884 as a clerk in the office of Hewlett & Torrance. He became a partner under the style of Hewlett & Lee in 1891 and was a member of the United States Board of Tea Experts for thirteen successive years, from 1899 to 1911.

SPRAGUE, WARNER & COMPANY, wholesale grocery concern, Chicago, was founded in 1862 by Messrs. A. A. Sprague and Z. B. Stetson as Sprague & Stetson. A year later Mr. Stetson retired, Mr. E. J. Warner was admitted, and the firm became Sprague & Warner. In 1864, Mr. O. S. A. Sprague, a brother of the senior partner, joined and the name was changed to Sprague, Warner & Company. Mr. A. A. Sprague, the president and founder, died in 1915. The late Mr. Abel P. Upham was in charge of the company's tea department for many years. His successor is Mr. R. T. Metzger. The present officers are: Messrs. William D. Dean, President and Treasurer; Jay D. Miller, Thomas C. Dennehy, Jr., and Charles E. Wilcox, Vice Presidents; Mark H. Levey, Assistant Treasurer; and John H. Willott, Auditor.

Steele-Wedles Company, wholesale grocer, Chicago, is the successor to a partnership organized in 1862 by Messrs. Max Steele and Isaac Wedeles. The business was incorporated in 1885. Mr. Henry B. Steele, who started as a messenger and worked up to the presidency of the com-

pany, died in 1909. The tea department manager is Mr. Wallace Gill. The officers are: Messrs. Samuel B. Steele, President; Sigmund Wedeles and Leo M. Steele, Vice Presidents; Edward M. Steele, Secretary; Edward L. Wedeles, Treasurer; and Henry M. Steele, Assistant Treasurer.

Austin, Nichols & Co., Inc., wholesale grocery house, New York, was established in 1862 by Messrs. Friend P. Fitts and Robert F. Austin under the style of Fitts & Austin. In January, 1879, when Mr. Fitts retired and Mr. J. E. Nichols entered as a partner, the firm name became Austin, Nichols & Co. The personnel of the new firm included: Messrs. Robert F. Austin, James E. Nichols, Thomas M. McCarthy, Louis Schott, George Macvey, and D. W. Austin. Mr. Thomas W. Ormiston was admitted to partnership in 1879, upon the retirement of Mr. D. W. Austin. In 1885, Mr. Austin died and Mr. James E. Nichols succeeded as the firm's head. In 1886, Mr. Macvey died, reducing the partnership to four members. Messrs. W. S. Buchanan and Walter B. Timms came into the firm in 1890, and in 1900, when Messrs. Buchanan and Schott retired, Mr. Lewis Wallace, formerly a partner of Francis H. Leggett & Co., joined the firm. In 1879, Mr. McCarthy took charge of the company's tea department, continuing until 1914, when he gave up the active buying to Mr. George Mahler. Mr. Mahler retained the post until 1923, when Mr. Charles H. Pegg of Chicago became head of the department. Mr. Pegg resigned in 1925, and was succeeded by Mr. Charles Reith, the present manager, who is assisted by Mr. Mahler. In 1913, the firm of Clark, Chapin & Bushnell, Inc., established in New York in 1845, was consolidated with Austin, Nichols & Co. The present officers are: Messrs. Thomas F. McCarthy, President; J. D. Brown, Vice President; Fred Walter, Treasurer; and Carl Ehlermann, Secretary.

Mr. Thomas M. McCarthy started at the age of nineteen with Fitts & Austin. He soon became tea and coffee buyer. When the firm was changed to Austin, Nichols & Co., he acquired an interest and was manager of the tea, coffee, and spice department. Later, when it became necessary to segregate the tea, coffee, and spice departments, Mr. McCarthy retained the management of the tea. He was made treasurer and director when the company was incorporated in 1909; was prominent

also in movements for the advancement of all trades represented in his department of the business; was one of the organizers of the New York Tea Association, the National Tea Association, and the American Spice Trade Association. He died in 1926.

GEO. W. LANE & Co., New York teaimporting house, composed of Mr. George W. Lane and Messrs. Crain and Woodruff, was formed in 1864. Mr. Lane not only attained eminence for his firm, which was one of the first to deal in tea exclusively, but his administration of the office of City Chamberlain was equally successful. About the year 1883, Geo. W. Lane & Co. absorbed the tea firm of John M. White & Co., of which Mr. Thomas A. Phelan was the sole surviving partner. Mr. Phelan had the western trade and Mr. Lane had the eastern, so the combination was mutually advantageous. In 1904, when the firm of Irwin-McBride-Catherwood Co. was dissolved, Mr. James Mc-Bride, one of the partners, joined the firm of Geo. W. Lane & Co. He retired in 1910, and the company, of which Mr. Phelan then was the head, closed its business in 1912.

Mr. Thomas A. Phelan, after graduating from college, entered the employ of E. W. Tiers & Co. He became a partner at the age of twenty-four. Mr. E. W. Tiers retired from the firm about 1875, and the style was changed to John M. White & Co. The other partners died previous to 1883, leaving Mr. Phelan the sole possessor of the business, which he consolidated with Geo. W. Lane & Co.

In 1895, Mr. Phelan started working among tea men and Congressmen in the eastern states for a law that would stop the importation of impure teas into the United States. The Tea Law of 1897 resulted, and Mr. Phelan was appointed chairman of the Government Board of Tea Experts which selected the standards in that year and the year following. When the National Tea Association was organized in 1903, he was chosen president and was twice reëlected. He retired from business in 1912 and died in 1914.

STANDARD BRANDS, INC., CHASE & SANBORN PRODUCTS, Boston, is the successor to Chase & Sanborn, tea packers and coffee roasters, established in 1864 by Mr. Caleb Chase, under the style of Carr, Chase & Raymond. In 1871, the name was changed to Chase, Raymond & Ayer. In 1878, Mr.





Mr. Caleb Chase Mr. James S. Sanborn
FOUNDERS OF CHASE & SANBORN

James S. Sanborn, previously in the coffee and spice business at Lewiston, with a branch in Boston, combined with Mr. Caleb Chase to form Chase & Sanborn. In 1882, Mr. Charles D. Sias was admitted as a partner, and from that time until his death, in 1913, Mr. Sias was a great constructive force in building up the business. In 1880, a branch was established in Chicago, and a Montreal office was opened in 1882. Mr. Charles E. Sanborn, son of James S., was taken into the business as a partner in 1888. Mr. James S. Sanborn died in 1903 and Charles E. passed away two years after. Later partners were: Messrs. John Moir, William T. Rich, Frederick A. Flood, Harry L. Jones, F. Warren Kimball, and Charles R. Butler, with Mr. Henry T. Brown as resident partner in Chicago, and Mr. John Anderson, resident partner in Montreal. In 1929, the Chase & Sanborn business became a unit of Standard Brands. Inc., New York. Mr. Joseph Wilshire is President, and Mr. Traver Smith, Vice President. Mr. Robert A. Lewis is manager of the tea department.

Mr. Robert A. Lewis was born in Boston, July 2, 1883, and following a public school education started his business career in the office of Chase & Sanborn as a tea boy, in 1899. During his thirty years with the same concern he advanced step by step to the management of the tea department. He was appointed a member of the United States Board of Tea Experts in 1930, and became its chairman in 1931.

PAXTON AND GALLAGHER Co., wholesale grocers, Omaha, succeeded Paxton & Gallagher, founded in 1864 by Messrs. Ben Gallagher and William A. Paxton. The firm has branches at Lincoln, Des Moines, Sioux City, Cedar Rapids, Waterloo, Den-

ver, Cheyenne, Casper, Deadwood, and Sioux Falls. Mr. Thomas J. Prettyman is the tea buyer. The present officers are: Messrs. Paul C. Gallagher, President and Treasurer; F. E. Pearce and R. K. Gallagher, Vice Presidents; T. J. Jenkins, Secretary and Assistant Treasurer.

McCord-Brady Co., wholesale grocery firm, Omaha, was founded in 1864 by Messrs. W. H. McCord and John S. Brady, with capital supplied by Mr. James McCord of St. Joseph. Branches were established at Hastings, Lead, Cheyenne, Casper, Rock Springs, and Sheridan. The business was liquidated in 1934.

Wadhams & Co., Inc., wholesale grocery house, Portland, Ore., was founded in 1865 by Mr. William Wadhams, who continued as the active head of the business for about thirty years. The firm's tea and coffee importing and packing department was started in 1906, under the direction of Mr. F. D. Stephenson. The present officers are: Mr. Henry Hahn, President; Mr. J. Durkheimer, Vice President; and Mr. S. F. Durkheimer, Secretary.

THOMSON & TAYLOR Co., tea, coffee, and spice packer, Chicago, was established in 1865 by Mr. Alexander M. Thomson. Mr. Thomson, who came from Paisley, Scotland, retired from business in 1901 and died in 1914. The present officers are: Messrs. John D. Warfield, President and Treasurer; William Herbert Avery and John D. Warfield, Jr., Vice Presidents; W. S. Warfield III, Secretary.

ARTHUR C. BENSON & Co., New York tea brokers, were established as Jackson, Anderson & Benson in 1865. The firm dissolved in 1868 and Mr. Arthur Benson [Senior], one of the original partners, continued the business as Goodrich & Benson until 1874, and from then until 1906 as Hatfield & Benson. Mr. Abraham Hatfield, who was a partner in the latter firm, had been associated at one time with James & John R. Montgomery & Co. Mr. Hatfield retired from the firm of Hatfield & Benson in 1906 and the business was continued under the name of Arthur C. Benson & Co. In 1911, the senior Mr. Benson died, and his son, Mr. Arthur C. Benson, junior, became his successor as head of the firm.

JEWETT & SHERMAN Co., wholesale grocers, Milwaukee, were founded by Messrs. William Sherman, Milo P. Jewett, and S.S. Sherman in 1867. The firm began to



A TEA STORE OF THE 'SIXTIES

The Oriental Tea Company's Store, Boston, 1868.

handle tea in 1888, and later went into the business of packing it. A branch has been established in Kansas City. Mr. John Horter, secretary of the company since 1900, became its president in 1931, succeeding Mr. Lewis Sherman, who is chairman of the Board.

THE ORIENTAL TEA COMPANY, of Boston, was established in 1868 by Messrs. Frank A. and Stillman B. Allen. It has a whole-sale establishment at 50-60 India Street and a retail store at 29 Brattle Street. The present owners are: Messrs. William H. North, E. Waldo Reed, Howard M. North, and Charles H. Bucek, former employees of the founders.

THE HEEKIN COMPANY, wholesale tea, coffee, and spices, Cincinnati, saw its inception in 1869, when Mr. James Heekin founded the original firm, known as James Heekin & Company. Mr. Heekin died in 1904. He was succeeded by the late Mr. Charles Lewis, who died in 1930 after fifty-five years of activity in the tea and coffee trade. Mr. James J. Heekin, who has been in the tea business since 1883, is chairman, and Mr. Robert E. Heekin, president.

Other firms and individuals established in the period from 1841 to 1869 were:

NEW YORK.—AYMER & CO.; SAMUEL BARBER; WARREN BEEBE & CO.; BOOTH & EDGAR; BUCKLIN & CRAIN; CAREY & CO; JOHN CASWELL & CO.; W. L. GRISWOLD & CO.; E. T. NICOLL & CO.; OLYPHANT & SONS; SMITH, ARCHER & CO.; E. W. TIERS & CO.; JAMES WALTER & CO.; ALFRED WARDELL; WETMORE, CRYDER & CO.; JAMES WHEELOCK & CO.; WOOD & GRANT.

OTHER CITIES.—SHANNON TEA CO. and A. COLBURN CO., Philadelphia; S. H. TYLER & SON, San Francisco; W. F. McLaughlin & Co., Chicago; Henry Horner & Co., Chicago, now Durand-McNeil-Horner Co.; Smith & Espenschied, St. Louis; Ridenour-Baker Grocery Co., Kansas City; Mokaska Mills, St. Joseph; S. Hamil Company, Keokuk; Griffin & Hoxie, Utica; C. A. Weston Co., Portland, Me.; Twitchell Bros. & Champlin, Portland, Me., now The Twitchell-Champlin Co.; Jacob Johnson, Newark, now Theo. F. Johnson & Co.

The 'Seventies and 'Eighties

Formosa Oolongs came into popular favor in the 'seventies, especially with consumers in New England. These new teas arrived in assortments of 500 to 600 half-chests and boxes. Japan teas also were coming to this country in ever increasing bulk, but China teas continued to be the mainstay of the trade. The grocery and retail buyers almost invariably made their purchases in person and were regular in their attendance at the brokers' offices.

With the growth and improvement of transportation facilities and the more general use of telegraph and cable, New York began to lose its virtual monopoly of the trade, and San Francisco, Chicago, and Boston also became distributing centers. As a result of this loss of supremacy by the New York trade, most of the old-time jobbing houses gradually dropped out of existence, until at the present time there are but two or three of the forty-odd that flourished during the early 'seventies.

During the 'eighties, large quantities of highly colored and grossly adulterated teas were shipped from Shanghai to New York and Boston. The volume of these shipments dumped on the market threatened the disruption of the legitimate trade. To put an end to such irregularities, an appeal was made to Congress to enact a law prohibiting the importation of teas that were either adulterated or unfit for consumption.

The advocates of pure tea encountered many difficulties, chiefly from those who were doing a lucrative business in adulterated teas, and it was only after these had been overcome that the first United States Tea Law was passed. This was the Act of 1883, entitled "An Act to Prevent the Importation of Adulterated and Spurious Teas." It was merely a makeshift, however, as there was no provision for a standard, but merely for the appointment of examiners, each of whom must base his decisions on his personal opinion as to what constituted adulterated or "unfit" tea. Mr. James R. Davies of Brooklyn was the first tea inspector appointed under the act. He held the position eighteen months and later was with James & John R. Montgomery & Co. for many years. He died in 1903.

Firms of the Period 1870-89

NASH-SMITH TEA & COFFEE Co., St. Louis, was established about 1870 by Messrs. George Nash, Michael E. Smith, and Charles Espenscheid under the firm name of Nash, Smith & Espenscheid, which in turn purchased from Mr. Matthew Hunt the business known as the Eagle Spice Mills. Mr. Espenscheid retired from the firm about 1878, and the business continued as Nash-Smith & Co. until 1888, when it was incorporated as the Nash-Smith Tea & Coffee Co. In 1890, they opened a branch establishment—Nash Coffee and Spice Co.—in Denver, under the management of Mr. Nash and his son, George A. The establishment in St. Louis continued under the management of Mr. Smith until his death in 1925. He was succeeded by his son, Mr. Walter M. Smith.

Franklin MacVeagh & Co., wholesale grocers, Chicago, started in 1870. The founder, the late Franklin MacVeagh, was Secretary of the United States Treasury during the administration of President Taft. The business became a corporation in 1909. In 1932, Mr. MacVeagh withdrew and the business was taken over by Albert F. Bridges & Co., another Chicago wholesale grocery firm, who acquired the assets of the MacVeagh concern and took its name as well, continuing the consolidated business as Franklin MacVeagh & Co.

Francis H. Leggett & Co., wholesale importing and distributing house, New York, was founded by Mr. Francis H. Leggett in 1870. Branches have been established across the country from Meriden to San Francisco. Mr. Leggett died in 1909. The present officers and directors are: Messrs. Theodore W. Whitmarsh, Chairman of the Board; Charles T. Ward, President;

Francis L. Whitmarsh, Vice President and Treasurer; Hampton Robb, Vice President; Henry J. Lahey, Secretary; Henry Brunie, Thomas S. Vallette, P. C. Staib, Arthur Ehrenfeld, Henry J. Miller, and Alexander Robertson, Directors.

Mr. Charles de Cordova, New York tea broker, started in the tea-brokerage business in 1870 with his father, Mr. R. J. de Cordova, and brother, Julian, as De Cordova & Sons. In 1878, Mr. John Ollendorf became a partner and the name was changed to De Cordova, Ollendorf & Co. The staff included a number of rising tea men who, with young De Cordova, later became leaders in the American tea trade. The list included: Messrs. George C. Cholwell, Benjamin Palmer, Chauncey Belnap, Ernest Nathan, and George Murray. In 1882, Mr. Russell Bleecker joined the firm, which thereupon became De Cordova Sons & Co. Since 1884, Mr. Charles de Cordova has been the sole proprietor. He was one of the first to join in the agitation which preceded the passing of the National Tea Law in 1897. Mr. de Cordova was born in London, August 29, 1854.

C. D. Kenny & Co., chain-store distributing concern, Baltimore, was founded in 1870 by Mr. C. D. Kenny. Since then, eighty branch stores have been opened in the principal cities of the United States. The company packs tea under its own brands, and was incorporated in 1900. It specialized in tea from the start.

G. T. MATTHEWS & Co., tea importers, New York, were established in 1871 by the late Mr. George T. Matthews who conducted the business under his own name until 1897, when the style was changed to G. T. Matthews & Co. Mr. Matthews, a native of Wales, was the dean of the N. Y. tea trade at the time of his death in 1932. The present sole partner is his son, Mr. G. T. Matthews, Jr.

ROBINSON & WOODWORTH, INC., tea importing house, Boston, was founded in 1872 by Messrs. Josiah S. Robinson and Alfred S. Woodworth. A branch is maintained in New York. In 1882, Mr. Woodworth's son, Mr. Herbert G. Woodworth, joined the staff and was admitted to partnership in 1886. He succeeded his father as head of the concern upon the latter's retirement in 1906, and in 1911 the senior Mr. Woodworth died. Mr. Herbert G. Woodworth was the first secretary of the United States Board of Tea Experts, and in that capacity

wrote most of the tea regulations. Later, he was chairman of the Board for many years. Upon Mr. Woodworth's retirement from business, he was succeeded by Mr. George F. Edgett, who became president of the company. Mr. Edgett was active in business from 1890 until his death in 1928. The firm became a division of Stanley W. Ferguson, Inc., in 1926, but continues to operate under its own name. Mr. Walter R. Champney became president of Robinson & Woodworth, Inc., in 1928. He died in 1934.

THE GRAND UNION COMPANY, with general offices and warehouse at 134th Street and Third Avenue and executive offices in the Woolworth Building, New York, had its inception as the Grand Union Tea Company, founded by Messrs. Frank S. and Cyrus D. Jones at Scranton, Pennsylvania, in 1872. The Grand Union Company was incorporated in May, 1892, to combine through stock ownership the Jones Brothers Tea Company and its subsidiaries—which were principally the Grand Union Tea Company and the Grand Union Grocery Stores-and the Oneida County Creamery Company. Subsequently it acquired the King Coffee Company, the Minnesota Tea Company, Japan Tea Company, and the Royal Importing Company. The combined companies operate approximately 545 cash-and-carry stores in the states of New York, New Jersey, Pennsylvania, Massachusetts, Connecticut, and Vermont. The company has approximately 1000 men operating wagon routes which serve rural and city districts. The combined store and wagon-route business of the company covers thirty-eight states.

In 1917, the Messrs. Jones formed the Jones Brothers Tea Company, which operated the Grand Union Tea Company and also established cash-and-carry stores under the name of the Grand Union Grocery Stores. Mr. Frank S. Jones died in 1927, and Mr. Cyrus D. Jones died two years later. At present the Grand Union Co., Inc., has three main divisions: the Jones Brothers Tea Company, which handles tea, coffee, and spices in a wholesale and jobbing trade; the Grand Union Tea Company-including the acquired companieswhich carries on wagon routes specializing in tea, coffee, spices, baking powder, extracts, etc. with premiums; and the Grand Union Grocery Company, which operates chain grocery stores carrying nationally



DURING THE 'EIGHTIES IN MILWAUKEE

Members of the firm of Roundy, Peckham &
Dexter Co. Left to right—Messrs. Sidney Hauxhurst, J. A. Roundy, C. J. Dexter, and W. S.
Peckham.

advertised brands of foodstuffs as well as the company's proprietary brands. The company is under the operating control of Mr. J. Spencer Weed, President, who has been identified with this and one of the predecessor companies since 1924. The other officers are: Messrs. L. P. Shield, L. C. Wadmond, and O. B. Westphal, Vice Presidents; W. C. McFeely, Secretary; Samuel Winokur, Treasurer; T. C. Butler and H. H. Dalrymple, Assistant Secretaries.

ROUNDY, PECKHAM & DEXTER Co., wholesale grocery and importing house, Milwaukee, was founded in 1872 under the firm name of Smith, Roundy & Company, by the then Governor, William Smith, and Messrs. J. A. Roundy and Sidney Hauxhurst; the latter being the tea buyer. In 1878, when Governor Smith retired, the firm name was changed to Roundy, Peckham & Co.; the partners being Messrs. J. A. Roundy, W. S. Peckham, Sidney Hauxhurst, and C. J. Dexter. The firm was incorporated in 1903 under the style name of Roundy, Peckham & Dexter Co. Mr. Hauxhurst died in 1902. Mr. Dexter, who is now President, succeeded Mr. Hauxhurst as tea buyer until Mr. F. G. Suits took charge in 1904. Since 1908, Mr. F. A. Stevens, formerly associated with Williams & Hall, Boston, and Smith, Baker & Co., of Japan, has been in charge.

HELLYER & Co., tea importing firm, Chicago, was established about 1874 by the late Mr. Frederick Hellyer in Nagasaki and Kobe, and later in Yokohama and Shizuoka. In 1888, Mr. Hellyer opened

dale.

an office in Chicago which subsequently became the firm's headquarters. He was a prominent figure in the Japan tea trade and was a member of the United States Board of Tea Experts from 1899 until his death in 1915. After the death of the founder, the business was conducted by his three sons, Messrs. Arthur T., Walter, and Harold J. Hellyer. The latter died in 1925, since which time the business—the oldest of the surviving foreign firms buying tea in Japan—has been carried on by Arthur T. and Walter Hellyer, both being members of the Japan Tea Promotion Committee. Mr. Arthur Hellyer was a member of the United States Board of Tea Experts, 1916-30, and Mr. Walter Hellyer in 1935.

E. A. Schoyer & Co., former Chicago tea importing firm, was established by Mr. E. A. Schoyer in 1875 under the name of Schoyer & Howland. It passed out of existence after the death of Mr. Schoyer in 1909.

Mr. E. A. Schoyer came to Chicago and established himself in the tea importing business after ten years' residence in Japan. In association with Mr. Thomas A. Phelan, whom he succeeded as president of the National Tea Association, he was instrumental in securing the passage of the Tea Act of 1897, which prevents the importation of impure teas into the United States. He was a member of the United States Board of Tea Experts for many years and was president of the National Tea Association.

Russell & Co., New York tea, coffee, and sugar jobbing firm, was established in 1875 by Mr. Robert S. Russell in partnership with Mr. Frank Smith. Mr. Russell was on the committee that secured the repeal of the tea duty; was a member of the New York Tea Association; and of the Tea Association of the United States. In 1897, the late Mr. Samuel L. Davis became a partner. Mr. Frank C. Russell, son of the senior partner, was admitted in 1900. Mr. Robert S. Russell, the founder, died in 1904, after which Messrs. S. L. Davis and F. C. Russell were the surviving partners. Mr. Russell became the sole proprietor following Mr. Davis' death in 1929.

MR. S. LIVINGSTON DAVIS started in 1878 as an errand boy for R. M. Thompson & Co., tea brokers. The next year he became sample clerk with Labaree & Steers. In 1880, he left the firm, then J. H. Labaree & Co., to join Merritt & Ronald-

son. In 1891, he started in the tea-brokerage business for himself; in 1893, returned to Merritt & Ronaldson with an interest in the business; and in 1894, joined Russell & Co. as a partner. Mr. Davis was a director of the National Tea Association and the New York Tea Association. In 1911, he was vice president of the latter organization. He was vice president of the Tea Association of the United States for the last ten years of his life, and from 1914 to 1917 he conducted "The Practical Tea Man" department in the Tea & Coffee Trade Journal. He died in 1929, after fifty-one years in the trade.

Thomas Martindale & Co., grocers, Philadelphia, originated as Martindale & Johnston in 1875, and in 1898 became Thomas Martindale & Co. Mr. Martindale worked with the late Dr. Harvey H. Wiley to raise the tea standards in the United States, and did much to help popularize India and Ceylon teas in America. He died on a hunting expedition to the Yukon in 1916. Since the death of Mr. Martindale, senior, the business is carried on by his son, Mr. Thomas C. Martin-

THE UNION PACIFIC TEA Co., New York, one of the first wagon-route tea companies, was founded in 1875 by Mr. R. P. Mc-Latterly, the wagon routes were abandoned, and stores were opened. There were over 200 of these at one time. Mr. Patrick J. Kavanaugh, a well-known sugar man, who started with the C. D. Kenny Co., Baltimore, joined the Union Pacific Tea Co. in 1908 and finally became its president. Owned by the estate of George H. Macy, it was sold to Mr. W. Kingsland Macy in 1920. He operated it for two years, afterwards selling the stores in various cities to the Jones Bros. Tea Co., and Charles M. Decker & Brothers. Mr. Kavanaugh died in 1917.

WM. P. ROOME & Co., New York, was preceded by another firm of the same name founded in 1876 by Col. William P. Roome and Mr. T. L. Vickers. In 1903, the concern was taken over by the Westin Coffee Co., Inc., of New York. The present firm, which specializes in individual tea balls, was established in 1923. Col. Roome died in 1925, at the age of eighty-five.

GEORGE C. CHOLWELL & Co., New York, one of the largest tea-brokerage firms in the United States, and agent for Balmer, Lawrie & Co., Ltd., Calcutta, and Alex-





Mr. Ernest A. Nathan Mr. H. E. Lawrence Partners in Geo. C. Cholwell & Co.

ander Lawrie & Co., Ltd., London, was established by Mr. George C. Cholwell under his own name in 1876. In the following year he organized the firm of Hamilton & Cholwell, which in 1898, was reorganized as Cholwell, Hamilton & Co. The partners were Messrs. George C. Cholwell, John F. Hamilton, and Ernest A. Nathan. This partnership was succeeded later by George C. Cholwell & Co., composed of Mr. Cholwell and Mr. Nathan. The present partners are Messrs. Ernest A. Nathan and H. E. Lawrence.

Mr. George C. Cholwell was born in 1849 and began his business career with Stanton, Sheldon & Co., New York, in 1868. Eight years later, he started his own business, becoming a leader in trade and association activities. He was a director of the Tea Association of the United States, of the Lower Wall Street Association, and other trade organizations. He died in 1918.

Mr. Ernest A. Nathan, senior partner in Geo. C. Cholwell & Co., entered the employ of Hamilton & Cholwell, as the firm then was known, in 1876. In 1890, Mr. Nathan was admitted to partnership in Geo. C. Cholwell & Co. In 1904, he was selected, as the foremost American tea expert, to judge the teas exhibited at the St. Louis Exposition; his commission having been brought about on petition of the leading India, Ceylon, Japan, and China tea exhibitors. After the Exposition, Mr. Nathan was awarded a diploma and gold medal in recognition of his services.

GEORGE C. CHASE & Co., former wholesale tea firm, was founded in 1876 by George C. Chase, who was a prominent figure among the earlier tea merchants of New York City. The company went out of business in 1900. Mr. L. S. Cooper, who was in the employ of the firm, afterwards established L. S. Cooper & Co., tea importers and jobbers, which was affiliated with the coffee firm of Ross W. Weir & Co. L. S. Cooper & Co. ceased operations in 1920

ARNOLD & ABORN, coffee roasters and tea packers, New York, were founded in 1878 by Messrs. Benjamin Aborn and Thomas L. Arnold. Messrs. Edward and Albert C. Aborn, brothers of Benjamin, were admitted to partnership in 1907, after some years as members of the staff. In 1929, the firm purchased the tea and coffee packing business of Ross W. Weir & Co., New York. Mr. Edward Aborn, who was a well-known coffee expert and tea buyer, died in 1930, and Mr. Benjamin Aborn, in 1934. present partners are Messrs. Albert C. Aborn and Edward Aborn, being the second generation to come into control. Mr. Mark Hoffman, previously manager of the Ross W. Weir & Company's tea department, now occupies the same position with Arnold & Aborn.

Berry, Dodge & Co., coffee roasters and tea packers, Boston, acquired by merger the business of Thomas Wood Co., which was founded by Mr. Thomas Wood of Boston in 1879. Berry, Dodge & Co., was established originally at Newburyport in 1901 by Messrs. LeRoy Berry and Herbert E. Dodge, and moved to Boston in 1912 when the merger was effected. A branch establishment was opened at St. Petersburg, Florida, in 1925.

A. SCHILLING & COMPANY, San Francisco tea, coffee and spice firm, was established in 1881 by Messrs. August Schilling and George F. Volkmann. The earthquake and fire in 1906 destroyed the company's fac-





Mr. August Schilling Mr. George F. Volkmann FOUNDERS OF A. SCHILLING & COMPANY

tory and office buildings, which were immediately rebuilt. A four-story tea warehouse is entirely separate from the coffee and spice units. Stocks are carried at fourteen warehouse points. The directors are: Messrs. George F. Volkmann, Rudolf Schilling, Wm. G. Volkmann, and Daniel G. Volkmann.

Mr. August Schilling was born in Bremen, Germany, February 5, 1854. He went to San Francisco in 1871 and began his business career as office boy for J. A. Folger & Co. In 1875, he was made a partner. He left Folger & Co. to form his own company in 1881, and from the first the business was highly successful. He was one of the first to exploit teas packed in vacuum tins, and his company is the only one that ever imported tea-refiring machinery and set up a refiring plant in the United States. Under his management the company bought raw leaf in Japan and refired it at San Francisco for a time. Mr. Schilling was a wide advertiser, a writer of books for salesmen, and an incorrigible altruist. He died in 1934.

JAMES VAN DYK Co., tea importers, coffee roasters, and chain store organization, with headquarters in New York, began handling tea in 1881. The business, however, was organized over a century before. In 1760, Mr. Nicholas Van Dyk operated a chocolate mill and mustard works in the vicinity of the present city of Newark, New Jersey. When his son, John, succeeded to the business, he added coffee and butter. Early in 1800, John Van Dyk moved to Brooklyn. The company was incorporated in 1902. In 1915, the head offices were moved to New York, where a tea and lunch room business has been developed. The company also has forty retail branches in New York State and the states adjoining, together with numerous agencies that sell the company's teas and coffees. The business was reorganized under the same name in 1934 with Mr. Edward J. Hirsch, president and treasurer, and Mr. John Flem, vice president and secretary.

M. J. B. Co., coffee and tea importing house, San Francisco, was founded in 1881 by Messrs. Max J. Brandenstein and J. C. Siegfried under the name of Siegfried & Brandenstein. In 1890, Mr. Brandenstein bought Mr. Siegfried's interest and the name was changed to M. J. Brandenstein & Co. As the business grew, Mr. Branden-

stein's brothers, Edward and Manfred, were taken into partnership and Mr. Alfred Alden was placed in charge of the New York office. The firm began the direct importation of tea in 1884, and in 1893 established its own buying office in Japan, which it has operated continuously ever since; at the same time importing tea from all the other producing countries. Mr. Max J. Brandenstein died in 1925, and in the following year the business was incorporated under the present style. Division offices are maintained in Los Angeles, Seattle, Portland, Salt Lake City, Denver, Kansas City, Minneapolis, and New York. The Western Can Co. is a subsidiary. The officers of M. J. B. Co. are: Messrs. Edward Bransten, President; H. U. Brandenstein, Vice President; Joseph Bransten, Secretary and Treasurer; C. H. Kaul, Assistant Secretary and Treasurer.

Mr. Edward Bransten was born in San Francisco, November 10, 1870, and after completing his education at the University of California, started his business career in the employ of M. J. Brandenstein & Co. Later he became a partner and when the firm was incorporated, in 1926, he was elected to the presidency. Mr. Bransten was appointed a member of the United States Board of Tea Experts in 1910 and 1911. Following an interval of fifteen years, he was again appointed to the board in 1926, and has been reappointed each year since.

J. H. LABAREE & Co., former New York tea firm, was established in 1881 by the late Messrs. J. H. Labaree and Seymour S. Smith, both of whom were well known in the trade. The firm had quite a following, and served as a school for several growing young tea men who later attained prominence. Mr. Robert L. Hecht, who now is of Irwin-Harrisons-Whitney, secretary Inc., is one of the graduates of the Labaree business. The late Mr. Samuel L. Davis and the late Mr. Charles Lewis The partnership served under Labaree. was dissolved in 1894, when Mr. Smith withdrew and, in partnership with Mr. Henry J. Bradley, founded his own teabrokerage firm under the name of Seymour S. Smith & Co. Mr. Smith died in 1919 and the firm has since gone out of business.

JARDINE, MATHESON & Co., LTD., tea department, New York, was a branch of the Hong Kong merchant-shipping firm,



TYPICAL STORE OF THE KROGER GROCERY & BAKING CO.

ment.

opened in 1881 by the late Mr. George L. Montgomery. At first, only China, Formosa, and Japan teas were handled; but in 1917 Ceylons, Indias, and Javas were added. Mr. Montgomery, who managed the tea department from 1881 until his death in 1906, was previously a member of the tea-brokerage firm of James & John R. Montgomery & Co., and at one time was president of the New York Tea Association. He was succeeded as manager by Mr. J. H. Swenarton, who joined the company in 1892. Mr. Oliver H. P. Noyes, another well-known New York tea man, was with Jardine, Matheson & Co., Ltd., for many years. He died in 1930. In 1932, Jardine, Matheson & Co., Ltd., discontinued their New York branch and appointed Balfour, Guthrie & Co., Ltd., their American agents, with Mr. J. H. Swenarton continuing as tea department manager.

Mr. J. H. Swenarton has been engaged in the tea-importing business for over forty years. He was born in Bayonne, New Jersey, April 3, 1877; has been active in the work of the Tea Association of the United States; and became its vice president in 1930. In 1931, he was appointed a member of the United States Board of Tea Experts, and has been reappointed each year since.

Mr. A. E. Nicholson, formerly a tea broker in New York, came over from England about the year 1881 and pioneered in the introduction of India and Ceylon teas. He represented Balmer, Lawrie & Co., Ltd., Calcutta, and Alexander Lawrie & Co., Ltd., London. After thirty years in Front Street, he was lost April 15, 1912, in the "Titanic" disaster.

THE WOOLSON SPICE COMPANY, coffee, tea, and spices, Toledo, was established in

1882 by Mr. A. M. Woolson. The concern began handling tea in 1909. Mr. R. F. Brucksieker is manager of the tea department. Mr. Woolson retired from the company in 1896, and died in 1925. The business was sold, in 1897, to the American Sugar Refining Company, who transferred it, in 1909, to the late Mr. Hermann Sielcken, who in turn sold it to the present company, in 1917. Mr. J. W. Koehrman is president.

GRIGGS, COOPER & COMPANY, wholesale grocery house, St. Paul, was founded in 1882 by Col. C. W. Griggs, under the name of Glidden, Griggs & Company. He gave an interest in the firm to his eldest son, Mr. C. Milton Griggs. At the end of the first year, there was an amalgamation with Yanz & Howes, also established in 1882. Mr. J. W. Cooper came into the firm in 1890, and the name was changed to Griggs, Cooper & Company. In 1900, the business was incorporated. In the early 'nineties, Mr. C. E. Wyman, became manager of the tea department, succeeding Mr. T. C. White. Mr. Wyman was a member of the United States Board of Tea Experts from 1913 to 1921, inclusive, and again in 1924. He died in 1931. Mr. E. G. Griggs is chairman of the board, and Mr. M. W. Griggs is president. Mr. B. G. Griggs, Vice President, is in charge of the tea depart-

KROGER GROCERY & BAKING Co., with headquarters in Cincinnati, was founded in 1882 by Mr. B. H. Kroger. The company packs its own tea brands, and has grown to be the second largest retail grocery-chain organization in the United States. It operates 5500 stores. Mr. Albert H. Morrill is president. The tea buyer is Mr. John Heron.

THE MOREY MERCANTILE Co., Denver, was established by Mr. C. S. Morey in 1884, under the name of the C. S. Morey Mercantile Co., to take over the Denver branch of Sprague, Warner & Co., which he had managed since its opening in 1881. In 1910, the firm name was changed to its present form. Mr. Morey retired in 1912 and died in 1922. Mr. William L. Myatt is the present manager of the tea department. Mr. John W. Morey, son of the founder, is president of the company.

GEO. W. CASWELL COMPANY, tea and coffee packer, San Francisco, was originally a retail tea and coffee business, founded by Mr. George W. Caswell under his own name in 1884. It was incorporated in 1901, and in 1902 took over the old tea and coffee establishment of Lievre, Frick & Co. Messrs. Joseph F. Quinn, G. H. de Mamiel, and H. S. Foote have figured in the development of the firm's tea business. Mr. George W. Caswell is president.

Mr. George W. Caswell was born in San Francisco, June 11, 1864, and following a public school and academy education started the tea and coffee business which bears his name. Mr. Caswell was a member of the United States Board of Tea Experts for two periods, 1907-09 and 1916-22—both inclusive.

S. H. Greening's Sons, New York tea brokers, were established in 1884 by Mr. Samuel H. Greening. He was joined, later, by his sons, Messrs. John H. and E. H. Greening, and after the death of the founder, in 1925, the name of the firm was changed to its present form.

CROOKS, THOMAS & Co., New York teajobbing firm, was founded by Messrs. Samuel Crooks, J. Gumperz, and John Kretzmer in 1885. The name of the business was Samuel Crooks & Co. until 1905, when it became Crooks, Thomas & Co. In 1912, the concern was taken over by Messrs. James Barkley and Oliffe W. Thomas. Mr. Barkley retired in 1922, leaving Mr. Thomas sole owner.

WEDDLE TEA COMPANY, INC., tea importing and packing firm, New York, was established in 1886 by Mr. Harold Weddle. Mr. Weddle conducted the business for thirty years, dying in 1917. His estate was left to his wife who continued the business for a year and then sold it to Mr. Charles W. Wood. Eleven years later, in 1928, Mr. Wood sold the entire

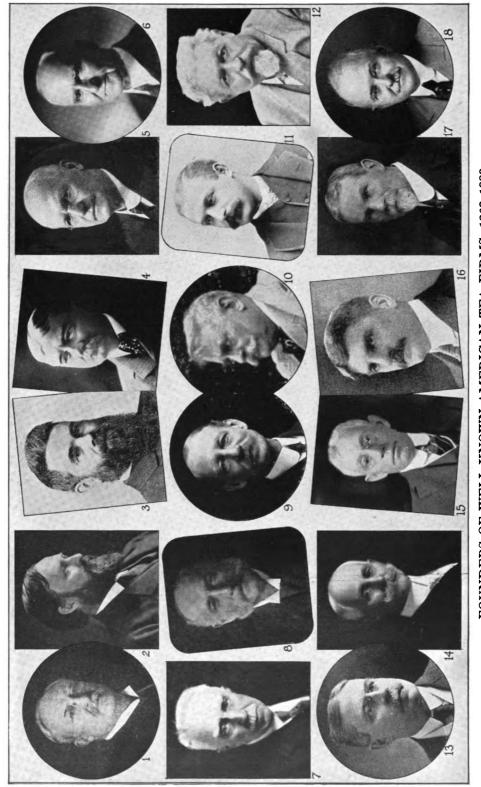
capital stock to Mr. D. H. Smith. When Mr. Smith joined S. A. Schonbrunn & Co. in 1932, the Weddle Tea Co. was turned over to G. T. Matthews & Co., New York, who have since conducted the business as an affiliated company.

SEEMAN BROTHERS, Inc., packers of tea, coffee, and food products, New York, were established in 1886 by Messrs. Joseph Seeman, Sigel W. Seeman, and George W. Doremus under the firm name of Seeman Brothers & Doremus. In 1889, the name was changed to Seeman Brothers. Messrs. Carl Seeman and Sylvan L. Stix were taken into the firm in 1896, and, later, in 1919, the late Mr. Frederick R. Seeman was admitted. The business was incorporated in 1921. Mr. Sigel W. Seeman died in 1931. The present officers are: Messrs. Joseph Seeman, President; Sylvan L. Stix, Vice President; Carl Seeman, Treasurer; and Max L. Masius, Secretary.

Mr. Sylvan L. Stix, Vice President and head of the tea department of Seeman Bros., Inc., was born in New York, May 28, 1871; was educated at the Boston Institute of Technology; entered the employ of the firm as a clerk in 1891; became a partner in 1896; and was elected second vice president, sales and advertising manager, in 1921, when the firm was incorporated. He has always been interested in association affairs; was president of the New York State Grocers' Association, 1916-18; has served on important committees of the National Grocers' Association; and was its treasurer, 1920-27. More recently, he has been active in the Tea Club and the Tea Association of the United States.

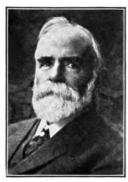
Joseph Tetley & Company, Inc., New York—the American branch of Joseph Tetley & Company, Ltd., London tea packers—was established in New York in 1888, and was incorporated as a separate unit in 1913. Branch establishments are located in Philadelphia, Pittsburgh, Boston, and Atlanta. The directors of the American company are: Messrs. J. Graham Wright, President and Treasurer; William Tetley Jones, Vice President; J. P. Graham, Secretary; James H. Shea and P. K. Read.

N. Gottlieb, former tea importer, Chicago and Shizuoka, went into the teabrokerage business at Chicago in 1888 as Todd & Gottlieb. He continued under his own name after 1898 until 1903, when he formed a partnership with Mr. T. Mizu-



FOUNDERS OF WELL-KNOWN AMERICAN TEA FIRMS, 1868-1889

1. Frank A. Allen, Boston. 2. Stillman B. Allen, Boston. 3. James Heekin, Cincinnati. 4. C. D. Kenny, Baltimore. 5. Frank S. Jones, New York. 6. Cyrus D. Jones, New York. 7. George T. Matthews, New York. 8. A. Schoyer, Chicago. 9. Col. Wm. P. Roome, New York. 10. George C. Cholwell, New York. 11. M. J. Brandenstein, San Francisco. 12. John C. Siegfried, Chicago. 13. Seymour S. Smith, New York. 14. A. M. Woolson, Toledo. 15. B. H. Kroger, Cincinnati. 16. Geo. W. Caswell, San Francisco. 17. Samuel Crooks, New York. 18. C. F. Blanke, St. Louis.





Mr. William J. Wright Mr. J. Graham Wright FOUNDER AND PRESIDENT OF JOSEPH TETLEY & Co.

tany as Gottlieb, Mizutany & Co. The firm went into liquidation in 1908, and in 1909 Mr. Gottlieb started the firm of Gottlieb, Peterson & Co. A year later, the name changed to the Gottlieb Company, continuing until 1912, after which the business was conducted once more under the name of N. Gottlieb until his death in 1929.

CRESCENT MANUFACTURING Co., tea, coffee, and spice packing concern, Seattle, was incorporated in 1888 by Messrs. A. M. Brooks, A. B. Stewart, C. H. Hanford, H. F. Whitney, and Robert Bodden. The company began handling tea in 1890, and packs its own trade-mark brands. The manager of the tea department is Mr. J. W. Vaux, who has been a member of the United States Board of Tea Experts since 1932. Mr. W. J. Kahle is president, and Mr. E. Rex Smith is secretary and treasurer.

L. H. PARKE COMPANY, tea, coffee, and spice firm, Philadelphia, was founded in 1889 by Messrs. William P. M. Irwin and L. H. Parke. In 1912, the business was incorporated. The company packs its teas in a warehouse which is entirely segregated from the coffee and spice mills. In 1897, a branch establishment was opened in Pittsburgh. In 1899, Messrs. Samuel F. Irwin and John M. Irwin were admitted to The officers of the company the firm. are: Messrs. William P. M. Irwin, President; Donald Irwin, Vice President; John M. Irwin, Secretary; Samuel F. Irwin, Treasurer; and Miss Bertha Bennett, Assistant Secretary and Treasurer.

W. S. Quinby Company, tea and coffee importing and packing house, Boston, was established shortly after Mr. Winfield S. Quinby bought out the dairy business of

M. A. Parker & Co. in 1889. The W. S. Quinby Company came into existence with Messrs. W. S. Quinby and G. B. Lehy as partners, and since 1901 has devoted its exclusive attention to tea and coffee. The company later was incorporated. In 1908, the old Chicago house of H. W. Dudley & Company was taken over and eventually was incorporated as the W. S. Quinby Coffee Company. In 1923, the New York plant was established and incorporated as the W. S. Quinby Company of New York, Mr. Quinby, the founder, died in 1929; Mr. Lehy, in 1917. Mr. A. U. Bird is now president of the company, and Mr. R. G. Potter is in charge of the tea department.

McCormick & Co., Inc., spices, teas, extracts, and drug specialties, Baltimore, came into existence in 1889 under the guidance of Mr. Willoughby M. McCormick, whose activities in the American tea trade made him one of its outstanding figures. The company first put its own trademarked teas on the market in 1905, and since that time the tea department has grown to be one of the most important units of the business. It is managed by Mr. J. G. Luttrell, who joined the Mc-Cormick company in 1908. Associated with Mr. Luttrell is Mr. E. Vere Powers, formerly with the tea importing house of Hazen, Powers & Co., New York. Mc-Cormick & Co. was incorporated in 1915. The officers of the company are: Mr. Charles P. McCormick, President; Messrs. Roberdeau A. McCormick, G. M. Armor, and Hugh P. McCormick, Vice Presidents; and Mr. W. L. Bean, Secretary-Treasurer.

Mr. WILLOUHGBY M. McCormick was born in Dover, Virginia, July 12, 1864. He organized the Flavoring Extract Manufacturers Association of the United States; the Spice Trade Association; the Tea Club; was active in the Tea Association of the United States; and was one of the organizers of the American Specialty Manufacturers Association. He died in 1932.

THE BLODGETT-BECKLEY Co., tea and coffee packing house, Toledo, was founded by Mr. J. M. Bour in 1889. The business was incorporated in 1893 under the name of the J. M. Bour Company. In 1909, Mr. Bour retired, and Mr. Albro Blodgett took over the active management. In 1921, the name was changed to Blodgett-Beckley Co. In 1934 the business was purchased by the Weideman Co., Cleveland.

COMMERCIAL IMPORTING Co., INC., importer and wholesale dealer in tea and coffee, Seattle, was established in 1889, and was incorporated ten years later. It packs its own tea and coffee brands. Mr. J. N. Shaw, the president, was a member of the United States Board of Tea Experts, 1927–31. The secretary is Mrs. G. M. Shaw, and Mr. E. H. Fagan is the manager.

C. F. Blanke Tea & Coffee Co., importing and jobbing house, St. Louis, was formed in 1889 by Messrs. C. F. Blanke, R. H. Blanke, A. J. Vogler, and Ed Jerralds. In 1894, Mr. William Fisher joined the company, taking charge of the tea and coffee department. Mr. Fisher previously had been a partner in the brokerage firm of D. F. Leavitt & Company. The officers of the company are: Messrs. Cyrus F. Blanke, President; Richard H. Blanke, Treasurer; William Fisher, Vice President; Alfred F. Burch, Second Vice President; Marc J. Mueller, Secretary; and Fred C. Blanke, Assistant Secretary and Treasurer.

Mr. S. C. Davidson, later Sir Samuel, founder of Davidson & Co., Ltd., teamachinery manufacturers, Belfast, Ireland, opened a retail tea store in New York in 1889. Mr. R. B. Arthur, a former teaplanter, was in charge. The store, which was not a success, was fitted in oriental style, and was designed to push India tea. Sir Samuel, before this, had promoted a successful multiple-shop organization for the sale of tea in Belfast.

THE ASSOCIATED TEA PLANTERS, LTD., was formed in London and opened an office in New York in 1889 in charge of Mr. W. Macgregor, who had been engaged for some time in introducing India teas in America. The object of the enterprise, which was backed by a group of prominent London citizens, was to establish markets for India and Ceylon teas in the United States and Canada. The company pioneered for a short time, but met with little success and finally went into voluntary liquidation.

Other individuals and firms established in the period from 1870 to 1889 were:

NEW YORK—PENFOLD, CHATFIELD & Co.; MERRITT & RONALDSON; FARRINGTON HANFORD; JOHN CALLAHAN; GARRETTSON & Co.; ANDREW DAVEY, INC.; ALBERT EHLERS,

Inc.; H. C. Bohack; Jos. H. Lester & Co. Boston.—Albert H. Macomber; Thos. H. Wood & Co.

CHICAGO.—SHERMAN BROS. & CO.; FITCH & HOWLAND; E. B. MILLAR & CO.; JOHN SEXTON & CO.

OTHER CITIES.—H. JEVNE CO., Los Angeles; CLOSSET & DEVERS, PORTLAND, ORC.; ALBERT KOPPEL, New Orleans; C. W. ANTRIM & SONS, Richmond; BOHEA IMPORTING CO., Baltimore; CANBY, ACH & CO., Dayton; YOUNG, MAHOOD & CO., Pittsburgh; FISHBACK & CO., Indianapolis; McFadden Coffee & Spice Co., Dubuque; FREEMAN BROKERAGE CO., Grand Rapids; R. L. GERHART & CO., Lancaster, Pa.; JOHN COYKENDALL, Newark; T. R. SAVAGE & CO. and Thurston & Kingsbury Co., Bangor; FIELD & STREET, UTICA; BROWNELL, FIELD & CO., Providence; CROSS, ABBOTT CO., White River Junction; E. Le Prohon, Portland, Me.

The Trade Since 1890

The period since 1890 brought radical changes to the tea trade in the United States because of a shift from green to black teas in many of the more thickly populated areas. This followed the introduction of British-grown blacks, which were backed by a vigorous propaganda of advertising and demonstration and cut heavily into the consumption of China and Japan greens. The growing popularity of these new teas also induced the importation of Netherlands Indian black teas, which now constitute approximately onethird of the East Indian importations; Ceylon and India account for the other two-thirds. At the same time, certain native Japanese firms began to displace American firms in the Japan tea trade and many London and Amsterdam firms established agencies or branches in the New York market. This caused the elimination of local importers and jobbers to an extent that has virtually placed the New York market in foreign hands.

Casting back for a more detailed review of the events of the period under discussion, we find Mr. William Mackenzie, the Ceylon tea commissioner, reporting to his principals, in 1895, that the Americans were at that time green-tea drinkers; but India and Ceylon had started their joint advertising campaign in the United States two years before that, and there

was an increasing demand for their black teas.

Meanwhile, there was constant bickering between importers and tea examiners over the admissibility of certain green teas under the provisions of the Act of 1883. There being no tea association to take the matter in hand, the late Mr. Thomas A. Phelan, assisted by Mr. Charles de Cordova and Mr. Alfred P. Sloan, started in 1895 an agitation for a tea law. Funds were raised for the necessary expenses and an appeal was made to Congress by a petition signed by forty-five leading tea firms. This finally resulted in the Tea Law of 1897, which was carefully worked out through the joint efforts of the Treasury Department and the importers. It provided, among other things, that the Secretary of the Treasury should appoint annually a Board of Tea Experts whose duty it is to "fix and establish uniform standards of purity, quality, and fitness for consumption of all kinds of teas imported into the United States." Later, in 1920, an amendment to the Act transferred the administration of the Tea Law from the Secretary of the Treasury to the Secretary of Agriculture, but the law has not been changed otherwise. The portraits of some who have served on the Board of Tea Experts are contained in the group on page 280.

In 1898, the Government found it necessary to impose a war duty of ten cents a pound on tea and to continue the tax several years. Because of the handicap which this placed upon the tea trade, forty-six representative tea importers and wholesale grocers of New York formed the Tea Duty Repeal Association in 1901 to work for the repeal of the tea duty. Mr. G. Waldo Smith, of Smith & Sills, was president, and Mr. Alfred P. Sloan, of Bennett, Sloan & Co., was chairman of the executive committee. Congress finally repealed the duty January 1, 1903.

The year 1906 is memorable in the history of the American tea trade because of the San Francisco Fire, which raged unchecked for three days, and wiped out practically every tea establishment in the city. This setback had only a temporary effect, however, due to the resourcefulness of the San Franciscan tea merchants, who secured new supplies of tea and had their businesses in operation again in a few weeks.

In 1912, the post of Supervising Tea Ex-

aminer of the United States was created in order to correlate the work of the district examiners. Mr. George F. Mitchell was appointed to the position, which he filled successfully until his resignation in 1929 to become the tea-department man-



The First Vacuum-Packed Tea, 1900

ager of Maxwell House Products. After Mr. Mitchell's resignation, the post of Supervising Examiner was discontinued.

The World War, 1914-18, disrupted shipping and interfered seriously with the tea trade, in common with all other business. During this period it became necessary, on account of block-

ades and U-boat activities, to import via Japan and the Pacific Coast of the United States many of the teas that normally come to the eastern seaboard via the Suez Canal.

The invasion of the American market by Netherlands Indies tea began in 1917, when Mr. H. J. Edwards, tea expert and propagandist of the Tea Expert Bureau of Batavia, brought an introductory consignment of 10,000 chests of Java tea. He came again in 1920, and a propaganda for Java tea was begun in 1922–23. Sumatra teas followed Java teas in due course, completing the group of all the principal tea producing countries which now find a ready market for their growths in the United States.

As a result of an inquiry started by the United States Department of Agriculture in 1933, as to whether the use of lead foil for tea containers was injurious, several scientific investigations were started in America; also in India by the Indian Tea Association. These investigations have developed that the quantities of metal found in tea packed in lead-lined chests were infinitesimal and harmless. Lead tannate is insoluble in water, hence, lead is not present in appreciable quantity in a tea infusion. Although minute quantities have been detected, these are probably present as lead in a suspended form and not as a salt. Comparatively little tea sold at retail is wrapped or packed in lead today; alumi-



TRADE WHO HAVE SERVED ON THE UNITED STATES BOARD OF TEA EXPERTS Charles B. Platt, San Francisco.
 George Hewlett, New York.
 Edward Bransten, San Francisco.
 Charles H. Pegg, New York.
 Alexander M. Scott, Pittsburgh.
 Woodworth, Boston.
 E. R. Rogers, Tacoma.
 C. E. Wyman, St. Paul.
 John N. Shaw, Seattle.
 Harry L. Jones, Boston.
 Robert A. Lewis, Boston.
 Mornana, New York.
 Robert A. Lewis, Boston.
 Cheris F. Huichinson, New York.
 E. D. Stillman, Chicago.
 J. H. Swenarton, New York.
 Seattle. SOME MEMBERS OF THE

num, grease-proof parchment, and transparent paper having taken its place.

In 1934 the tea trade of the United States adopted a code of fair competition, which was approved and put into operation by General Hugh S. Johnson, U. S. Code Administrator under the National Recovery Act—commonly referred to as the NRA. The code, like those adopted for all other lines of business in the U. S., specifies maximum hours of work, minimum wages, trade practices, and methods of administration.

Tea Firms Established Since 1890

Mr. J. McCombie Murray, retired from tea planting in Ceylon about the year 1890 and established himself in the retail tea business in Philadelphia with the object of introducing Ceylon tea into American homes. He was in partnership with Mr. R. E. Pineo, another former planter, during the first year and a half, in which time they sent 2800 two-ounce samples to leading families of the city and otherwise pushed their "Kootee" brand of Cevlon tea. Subsequently, Mr. Murray carried on for another year, with the old Shannon Tea Store as headquarters, and after living in retirement in New York during the closing years of his life, died there in 1928.

New Orleans Coffee Company, Ltd., packers of coffee, tea, etc., New Orleans, started in 1890 with Messrs. W. T. Jones and J. W. Hearn as organizers. Tea was handled as a separate department for about ten years, after which it was discontinued. In 1929, however, the department was again established. In 1934, the business was sold to the American Coffee Company.

C. K. Reid & Co., coffee roasters and tea packers, Philadelphia, were established in 1891 by Mr. Charles Ker Reid. Mr. Reid had previously engaged actively in the tea and coffee trade in Australia and London. He died in 1927, and his sons are carrying on the business.

THOMAS J. LIPTON, INC., tea packing company, with headquarters and factory in the Hoboken Terminal, at Hoboken, New Jersey, had its origin in 1893 under the style of Thomas J. Lipton, Tea Planter, Ceylon. Some years prior to that date, Mr. Lipton [later Sir Thomas] had purchased several tea estates in Ceylon, and the exhibit of tea from these properties at the Chicago World's Fair marked the

introduction of Lipton's tea to the United States. In 1895, a tea blending and packing plant was established in New York City. Previous to this time Lipton tea, packed in tins, had been imported from London. After a few years, the growth of the business taxed the capacity of the building, and the headquarters and factory



Lord Inverforth President of Thos. J. Lipton, Inc.

were moved to more commodious quarters in the city. In 1919, more factory space was found necessary to meet the continued growth, and this brought about the removal of the plant and offices from New York to Hoboken, across the from lower river New York. The present name of the

company was adopted when it was incorporated in 1915, with Sir Thomas as president. The Rt. Hon. Lord Inverforth, P. C., London, became president, succeeding Sir Thomas, following the latter's death in 1931. The other directors are Col. Duncan C. F. Neil, Messrs. Sheldon Clark, John Niven, and W. U. Taylor. Mr. W. W. Shannon is general manager, and Mr. E. H. Feasey is in charge of the tea department. Besides its Hoboken plant, the company has branches at Chicago, San Francisco, New Orleans, and Toronto.

Consolidated Tea Company, Inc., importing and packing company, New York, was founded in 1895 by Mr. Samuel Zechnowitz under his own name. Mr. Zechnowitz later changed the style to the Columbia Tea Company and, in 1911, organized the Consolidated Tea Company, Inc., to take over the business. The officers are: Messrs. Samuel Zechnowitz, Sr., President; Samuel Zechnowitz, Jr., Vice President; Jacob Zechnowitz, Secretary and Treasurer.

THOMAS J. WEBB COMPANY, tea and coffee packing concern, Chicago, was founded in 1896 by Messrs. John Puhl and Thomas J. Webb. The name, which was Puhl-Webb Company at first, was changed in 1922 to the present style. Mr. Webb died in 1934. The officers are: Mrs. Mary F. Webb, President; J. E. Carney, Vice Presi-

dent and Treasurer; Aplin Anderson, Secretary; C. H. Zimmerman, Asst. Secretary.

BLEECKER & SIMMONS, INC., tea and coffee importing and packing company, New York, was established in 1896 by Messrs. T. Bache Bleecker and Harriman N. Simmons. Mr. Simmons died in 1927, and in the same year the business was incorporated. Mr. T. Bache Bleecker is president; Helena N. Simmons, Vice President; and F. Raymond Lefferts, Secretary.

SALADA TEA COMPANY, Inc., Boston, is the headquarters of the Salada organization in the United States. Salada teas are packed at Toronto, Montreal, and Boston. The first United States branch was established at Buffalo in 1896, followed by a branch at Boston in 1897. The two branches were operated by P. C. Larkin & Co. of Toronto, trading as the Salada Tea Co. in the United States until 1916, when the Salada Tea Company, Inc., was in-The Canadian business was corporated. incorporated in 1920 as the Salada Tea Company of Canada, Ltd. The late Hon. Peter C. Larkin was the first president of the United States company—Salada Tea Company, Inc. Branch offices have been established in New York, Buffalo, Cleveland, Detroit, Pittsburgh, Chicago, Philadelphia, Washington, and Omaha. The present officers are: Messrs. Gerald R. Larkin, President; Edgar B. Pinto, Vice President; William J. Nolan, Secretary; T. Newell Lane, Treasurer. Mr. Max Tito is manager of the tea department.

MAXWELL HOUSE PRODUCTS COMPANY, Inc., tea department, New York, a subsidiary of the General Food Corporation, had its genesis at Nashville in 1897, when Mr. J. O. Cheek established the coffeepacking firm of Cheek & Norton. name was changed to Cheek, Norton & Neal in 1902, and to Cheek-Neal Coffee Company in 1905. The Postum Company acquired the business in 1928, from which year the Check-Neal enterprise has been styled the Maxwell House Products Company, Inc. In 1929, the Postum Company became the General Food Corporation. It was not until about 1924 that the Cheek-Neal Coffee Company began to handle and pack its own brand of tea. In the early part of 1929, Mr. George F. Mitchell became manager of the tea department of the Maxwell House Products Company, Inc.

Mr. George F. Mitchell was born in Mt. Pleasant, S.C., December 3, 1881;

graduated with B.S. degree from Clemson Agricultural College in 1902; for a year, was assistant in charge of field experiments at Florida University; entered the Department of Agriculture in 1903 as specialist in tea study; spent some time each season at the "Pinehurst" experimental tea gardens, Summerville, S.C.; became a member of the United States Board of Tea Experts in 1912, and was appointed United States Supervising Tea Examiner the same year. Mr. Mitchell continued in the latter position until 1929, when he resigned to become manager of the Maxwell House tea department.

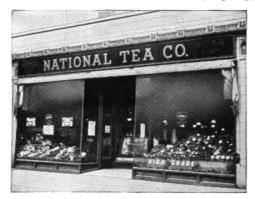
PEEK Bros. & WINCH [AMERICA], INC.—In 1898, an American branch of Peek Bros. & Winch, London, was established in New York, with an office also in Philadelphia. Mr. Arthur Spencer was the American agent and he was assisted in his New York headquarters by Mr. L. Beling, former tea expert of the Ceylon Tea Commission in the U.S.A. Later, Mr. Beling became managing director, resigning in 1917. The New York warehouse was closed in 1914, and the office in 1928.

HALL & LOUDON, New York tea brokers, were established in 1898 by Messrs. George E. Hall and Winfield D. Loudon. The firm has developed one of the largest teabrokerage businesses in the country, covering territory in the Eastern States. The partnership remains unchanged.

Mr. George E. Hall was born in Auburn, New York, August 14, 1870. Following his schooling in Auburn and, later, in Brooklyn, he started his business career, in 1887, as office boy for Edgar Quackenbush, tea broker. Mr. Hall is active in the Tea Association of the United States, and is a former director.

Mr. Winfield D. Loudon was born in New York June 10, 1872. He first entered business in the employ of James & John R. Montgomery & Co., New York tea brokers, and remained with them until he formed the partnership with Mr. George E. Hall in 1898.

Ennis-Hanly-Blackburn Coffee Co., tea and coffee packers, Kansas City, succeeded the Gordon Coffee & Spice Co., which was formed in 1898 by Messrs. Frank Ennis, E. D. Hanly, and G. S. Gordon. The officers of the firm are: Messrs. Frank Ennis, President; George A. Ennis, Vice President; and F. Robert Ennis, Secretary.



TYPICAL NATIONAL TEA CO. STORE

Thos. Dunne Co., tea importer, New York, was successor to Whittall & Co. of Ceylon, Inc., established by Mr. Richard Blechynden, in 1899, to act as the New York agency for Whittall & Co. of Colombo. In 1903, Mr. Blechynden was succeeded by Mr. Alfred H. Ayden, who, in 1904, was succeeded by Mr. Thomas Dunne. Thos. Dunne Co. was formed in 1928 and continued the business until Mr. Dunne's death in 1932. Mr. Dunne was treasurer of the Tea Association of the United States from 1916 until 1932.

Western Wholesale Grocer Mills of Marshalltown, Iowa, packers and distributers of teas, coffees, and groceries, were incorporated in 1899 under the name of the Spencer-Letts Coffee Company. The tea department was established in 1905, and in 1909 the name was changed to Western Wholesale Grocer Mills. A chain of branch wholesale houses has been built up in twelve cities of Iowa, Kansas, and Minnesota. The manager is Mr. J. A. Hise.

S. A. Schonbrunn & Co., Inc., coffee roasters and tea packers, New York, were established in 1899 by Mr. S. A. Schonbrunn, who still directs the affairs of the company. It was not until about 1907 that his company began to deal in tea, later branching into tea packing. Mr. D. H. Smith is manager of the tea department.

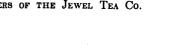
NATIONAL TEA COMPANY, INC., grocery-chain organization, with headquarters in Chicago, was founded by Mr. George Rasmussen in 1899. Starting originally as premium-giving tea, coffee, and butter stores and wagon routes, delivering direct to consumers' homes, the stores have become complete chain-groceries. During the latter part of 1928, the company took over the Great American Stores Company and the Consumers' Wholesale Grocery

Company. The company packs its own brand of tea. Retail stores to the number of 1300 and 55 wagon routes are maintained in seven states. The wagon routes are operated by the India Tea Co., a subsidiary corporation. Branch warehouses are located in Des Moines, Kansas City, Minneapolis, Milwaukee, and Rockford. The officers are: Messrs. George Rasmussen, President; F. H. Massmann, Vice President; Thorwald Rasmussen, Secretary and Treasurer; Burt J. Dickens, Assistant Secretary and Treasurer; W. E. Russell, Comptroller.

JEWEL TEA Co., Inc., nation-wide houseto-house organization, distributing groceries and premiums direct to consumers from autos, and having its head offices and warehouse at Barrington, Ill.—a suburb of Chicago—was founded by Mr. Frank V. Mr. Skiff was joined by Skiff in 1899. Mr. Frank P. Ross in 1901, when the name of the firm became "Jewel Tea Co., Skiff & Ross, Proprietors." The close of 1915 saw the company with 850 routes and 500,000 customers. Early in 1916 the present company was incorporated and Mr. Skiff retired. He died in 1933. In 1919, the business was reorganized; Mr. Ross becoming a member of the Board of Directors, and Mr. Raymond E. Durham, Chicago banker, being elected president. In the same year, Mr. John M. Hancock came with the company as vice president and treasurer. Previous to joining Jewel Tea Co., Inc., Mr. Hancock had been in charge of the purchases of the Navy Department. In 1922, Mr. Durham resigned from the presidency and was succeeded by Mr. Hancock. In 1923, Mr. M. H. Karker, previously with the Supply Corps of the Navy, joined the company as vice president



Mr. Frank P. Ross Mr. Frank V. Skiff FOUNDERS OF THE JEWEL TEA CO.



Digitized by Google



THE FIRST JEWEL TEA CO. STORE

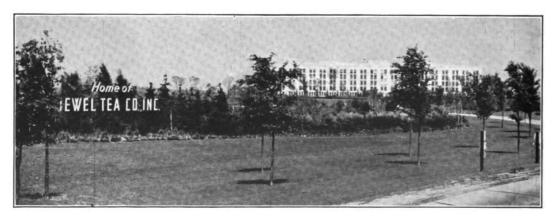
in charge of administration, and when Mr. Hancock resigned as president, in 1924, to become a partner in the banking firm of Lehman Bros., Mr. Karker was elected president. Mr. Hancock continues his active interest in the company as Chairman of the Board.

The Jewel Tea Company, Inc., blends and packs tea, processes coffee, and manufactures and packages several other grocery articles at its new home in Barrington, Illinois, into which it moved early in 1930. The processing and packaging of these items was formerly done in Hoboken and Chicago, where the company maintained large distributing plants. A section of the Hoboken plant is still retained for the warehousing of green coffee. In 1934, there were eighty-one branch warehouses, 1417 routes servicing approximately 900, 000 families, and 87 retail stores.

The officers are: Messrs. John M. Hancock, Chairman of the Board; Maurice H. Karker, President; W. D. Smith, Robert Hilton, F. M. Kasch, C. W. Kaylor, Vice Presidents; J. M. Friedlander, Treasurer; A. U. Hunt, Controller; R. W. Muir, Secretary; F. J. Lunding, Assistant Secretary. Mr. J. M. O'Connor is in charge of the tea department.

SIEGFRIED AND COMPANY, tea importing and packing firm, Chicago, was founded by Mr. John C. Siegfried about 1899 as John C. Siegfried & Co. In 1915, Mr. Siegfried died. In 1917, Messrs. Walter H. Siegfried, Ernest Schmidt, Carl E. Grahn, and John Siegfried reorganized the concern under the name of Siegfried-Schmidt Co. Mr. Schmidt retired from the company in 1934 and the firm name was changed to its present style. The officers are: Messrs. Walter H. Siegfried, President; John Siegfried, Vice President; and Carl E. Grahn, Secretary-Treasurer. Mr. Walter Siegfried has been a member of the Japan Tea Promotion Committee for a number of years.

Furuya & Co., former Japan tea importing firm in New York, was established by the late Mr. Takenosuke Furuya, about the year 1902, to represent native Japanese tea exporters. In 1907, Mr. Furuya tried to bring all the Japanese refiring houses into a single organization, or "trust," to control the Japan tea industry. However, the plan never came to fruition, as too much opposition developed. In 1918, Mr. Furuya organized the Murai Trading Company, New York, which did a general importing business, including tea. He dropped tea in 1920 and died in Japan in 1923.



THE JEWEL TEA COMPANY'S HEADQUARTERS BUILDING AT BARRINGTON, ILL.

Formosa Mercantile Company, a former New York tea-importing corporation, with a branch office in Daitotei and representatives in Shizuoka and Shanghai, was formed in 1903 by Mr. Russell Bleecker, manager of the New York office of the Japan firm of Mourilyan, Heimann & Co., from 1891 to its liquidation in 1902. The Formosa Mercantile Company business was closed in 1913 and Mr. Bleecker died in 1934.

Frank Paul, tea brokerage business; San Francisco, was founded by Messrs. Robert B. Bain, Jr., and Frank Paul in 1903, under the firm name of Bain & Paul. In 1904, Mr. Paul purchased the interest of Mr. Bain, and since that time the business has been conducted under the present

style.

WM. B. REILY & Co., INC., tea and coffee packing house, New Orleans, was founded in 1903 by Mr. William Boatner Reily. In 1906 the name was changed to the Reily Taylor Co., Inc.; and in 1919, to Wm. B. Reily & Co., Inc. Mr. William B. Reily, the founder, is president of the company. Associated with him are his two sons; one of whom, Mr. William B. Reily, Jr., is vice president, and the other, Mr. James W. Reily, is secretary.

GEO. F. WIEMANN Co., INC., New York tea and coffee packing firm, was established in 1905, having branched from the former Eppens, Smith & Wiemann Co. The present officers and directors are: Messrs. George F. Wiemann, President and Treasurer; George Eiles and C. C. Jolliffe, Vice Presidents; J. J. Culleton, Secretary; A. B. and F. J. Wiemann, George M. Harte, and

John H. Schroder, Directors.

THE CONWAY-REAGAN COMPANY, tea brokers and importers, Boston, succeeded the William Mann Company, which was founded in 1906 by the late Mr. William Mann. Mr. Mann, who was widely known in the trade, is credited with having been instrumental in establishing the practice of importing teas from Ceylon and India on type standards. After Mr. Mann's death, in 1924, the tea business was continued under the management of Messrs. Oliver J. Conway and John V. Reagan, who took it over under the present name in Mr. Conway had been with the Mann company from 1912. Mr. Reagan's previous connections were with the J. C. Whitney Company and J. P. Harding & Co., in Boston.

ALICE FOOTE MACDOUGALL & SONS, INC., tea and coffee packing company, New York, was founded by Mrs. Alice Foote MacDougall in 1907. The first branch was started as a tea and coffee shop in 1920 and subsequently developed into a restaurant business. Six shops have been opened in New York which sell all the Alice Foote MacDougall teas and coffees, but are primarily restaurants. There is a second corporation, the Alice Foote MacDougall Coffee Shops, which operates the restaurants.

W. A. COURTNEY & Co., LTD., former New York firm, importing India and Ceylon teas direct, was formed in 1908 by Mr. W. A. Courtney following his incumbency as Ceylon tea commissioner in the United States. Mr. Courtney was president, and Mr. Buckner W. Anderson was secretary and treasurer. Mr. L. Beling, who had been connected with the Ceylon tea commission, joined the enterprise; as did Mr. William Havill, previously of Russell & Co. Mr. Courtney withdrew from the company after a few months, being succeeded by Mr. E. F. Gallagher. The firm became Anderson, Gallagher & Co. and continued until 1911, after which it was liquidated.

GERTRUDE H. FORD TEA CO., INC., New York, was founded in 1910 by Miss Gertrude H. Ford, who has built up an extensive business in packing and supplying tea in tea bags to hotel, restaurant, and club trade. Miss Ford was a former society girl of Cincinnati who came to New York, where she began baking home-made cakes to sell to hotels, etc. In order to increase her earnings, she decided to take up some staple that could be sold in greater volume, and having been Canadian born, with a liking for fine teas, her choice fell upon that line. She incorporated her business in 1918, and in 1928 established a Pacific Coast branch in Los Angeles.

MITSUI & Co., LTD., tea department, New York, branch of the widely-established Japanese mercantile concern, was opened in New York with Mr. S. Sakai as manager, in 1911. Mr. K. Kambayashi is the present executive in charge, with Mr. W. Pokorny as assistant. The company does its own tea-buying in Japan; also it is a producer of Formosa teas on a large scale. Coincident with the commencement of black-tea manufacture in Formosa, the New York branch added to







Mr. W. Pokorny
Assistant Manager

MITSUI & Co. EXECUTIVES

its staff, in 1929, Mr. Ernest A. Shalders, a black-tea expert previously with Thos. J. Lipton, Inc. Mr. Shalders left in 1933 to engage in the tea brokerage business in London on his own account. Mitsui branches have been established in Seattle, Portland, and San Francisco.

THE ANGLO-AMERICAN DIRECT TRADING COMPANY, Inc., importers, New York, came into existence in 1912 and represent in the United States the tea interests of James Finlay & Co., Ltd., Glasgow, The business previously had Scotland. been an agency; first under the direction of Mr. A. R. Robertson, and then under Mr. Harold A. Lambe. The company has connections throughout the United States and in all tea producing countries. The original officers were Messrs. James Scott, Toronto, President; Harold A. Lambe, Vice President; Henry P. Thomson, Secretary and Treasurer. Upon the death of Mr. Lambe in April, 1915, Mr. Walter H. Green of Toronto, became Vice President. Mr. Scott resigned in June, 1918, and was succeeded by Mr. Green as President,

Henry P. Thomson becoming Vice President and Frank J. Hussey, Secretary and Treasurer. Mr. Green died in December, 1919, and was succeeded by Thomas Mr. K. Wade of Toronto as President, the other officers remaining the same.

MR. THOMAS K. WADE was born in Toronto, April,



Mr. Thomas K. Wade



Mr. H. P. Thomson Vice President

1883, and is a graduate of The Toronto Church School. He started his business career in the employ of The Anglo-American Direct Tea Co., Ltd., Toronto, in 1900. He succeeded to the management of the Canadian Company in December, 1919, and was elected president of The Anglo-American Direct Tea Trading Co., Inc., New York, in May, 1920.

Mr. Henry P. Thomson was born in Toronto, December 14, 1886. Following a public and private school education, he started his business career in the employ of the Anglo-American Direct Tea Co., Ltd., Toronto, in 1902. He was transferred to the New York office in 1912. Mr. Thomson was secretary of the Tea Association of the United States from 1918 to 1935, when he was elected to the presidency.

Mr. Frank J. Hussey was born May 1, 1889, and his first job was with Hall & Loudon, tea brokers. After four years with this company he joined Mr. Harold A. Lambe, the then agent in New York for the Anglo-American Direct Tea Trading Co. In 1919, Mr. Hussey was elected secretary-treasurer of the Anglo Company, which office he still holds.

Japan Tea Buying Agency, New York, was established in 1912 by Mr. Kenzo Ikeda under the name of K. Ikeda & Company. The name was changed to Japan Tea Buying Agency in 1924. Mr. Ikeda is the sole owner, and has a branch office in Shizuoka.

National Urn Bag Co., Inc., New York, was formed in 1912 by Messrs. Louis and Benjamin Hirschhorn under the name of the National Urn Bag Co. The business was incorporated in 1923. The company manufactures coffee urn-bags and packs teas in aluminum-ring individual tea bags



Mr. Frank J. Hussey Secretary-Treasurer

OFFICERS OF THE ANGLO-AMERICAN DIRECT TEA TRADING COMPANY





Mr. O. M. Poole General Manager

Mr. Robert Compton Manager, Tea Department

Dodwell & Co. Executives

for the jobbing trade; the jobbers furnishing the tea. Mr. Benjamin Hirschhorn is president. Mr. George N. Witt is sales manager.

DODWELL & Co., LTD., New York, the American branch of the London importing house of the same name, was established in 1913. The branch manager is Mr. O. M. Poole. Mr. William C. Arnoldi was manager of the tea department for ten years previous to his death in 1925. Mr. Arnoldi was succeeded by Mr. D. H. Smith, who had been associated with the New York office of Irwin-Harrisons-Whitney. Inc. Mr. Smith resigned and bought out the Weddle Tea Co., in 1928, being succeeded by Mr. R. A. Mason, who resigned in 1931 to become president of the Carter Macy Tea & Coffee Co., Inc., New York. Mr. Robert Compton, the present manager of the Dodwell tea department, who succeeded Mr. Mason, was manager of the company's tea department at Colombo from 1924 to 1931, before coming to New York. Other branches of the firm are located in Boston, Seattle, San Francisco, Los Angeles, and Vancouver.

Stewart & Ashby Coffee Co., Chicago, was formed in 1913 by Mr. William A. Stewart under the name of Stewart & Ashby. The business was confined exclusively to tea at first, but coffee was added later. The company specializes in packing individual tea bags through an affiliated concern, known as the Chicago Tea Bag Company. The Stewart & Ashby business was incorporated in 1925. The officers are: Messrs. William A. Stewart, President; William E. Waldschmidt, Vice President and General Manager; J. K. Murphy, Secretary. Mr. F. D. Stillman, Vice Presi-

dent and tea buyer of the Chicago Tea Bag Company, is a former member of the United States Board of Tea Experts.

AMERICAN STORES COMPANY, grocery-chain organization, with general offices at 424 North 19th Street, Philadelphia, was incorporated in 1917 to acquire the businesses and assets of Robinson & Crawford, the Bell Company, Childs Company, and George M. Dunlap Company. Control also was acquired of the Acme Tea Company. The company sells teas, coffees, spices, groceries, and meats. Later acquisitions include: the Mullison Economy Stores, Wilkes-Barre; Fred J. Bell Stores Company, Philadelphia; Endicott Johnson Corporation stores in Endicott and Johnson City; Old Dutch Market stores, Washington; over 300 stores of the United States Stores Corporation in Northern New Jersey; and some sixty-odd stores of the Cupp Grocery Chain in the Johnstown district.

The company owns and directs the following subsidiaries: Stores Realty Company, American Stores, Inc., and American Stores Dairy Company. It owns and operates nine bakeries, ten warehouses, one canning plant, and one milk-evaporating plant. There are 16,000 employees.

The officers are: Messrs. Samuel Robinson, President; Robert H. Crawford, Vice President; James K. Robinson, Vice President and General Manager; E. J. Flanigan, Secretary; Wm. M. M. Robinson, Vice President and Treasurer; William Gould, Assistant Treasurer; J. V. Keers, Assistant Secretary. Mr. W. A. Kelly is manager of the tea department.

Mr. W. A. Kelly was born in New York, July 11, 1878. After a high school education, he entered the employ of F. C. Jen-



AN AMERICAN STORES Co. WINDOW DISPLAY



TYPICAL FIRST NATIONAL STORE

nings & Co., tea importers and predecessors of W. J. Buttfield, New York. Subsequently he was with Gugy Ae Irving & Co., New York, and W. S. Quinby Co., Boston. In 1911, he joined the staff of the Acme Tea Company, Philadelphia, which company later became the American Stores Company.

FIRST NATIONAL STORES, INC., New Enggrocery-chain organization, with general offices at 5 Middlesex Avenue, Somerville, Massachusetts, was incorporated in 1917 as the Ginter Company. The name was changed to First National Stores Inc., December 28, 1925, at which time the company took over all the assets of John T. Connor Company and O'Keeffe's Inc. Since 1925, numerous grocery-chain organizations have been absorbed. These include such concerns as: The Mayflower Stores, Providence, R.I.; Economy Grocery Company, East Hartford, Conn.; Nicholson-Thackray Company, Providence and Pawtucket; Davey Brothers Company, Bridgeport, Conn.; etc. The officers are: Messrs. Arthur O'Keeffe, President; James C. Duane, Vice President; John L. Mac-Neil, Vice President; Bernard McGold-rick, Vice President; Morris Joseloff, Vice President; Charles F. Adams, Treasurer; Ralph F. Burkard, Assistant Treasurer. The tea buyer is Mr. Gerald O'Keeffe.

JOHN H. BLAKE, Denver tea broker, established himself in 1918. Prior to that time he had been identified with the tea trade since 1883. Mr. Blake is the author of the book, Tea Hints for Retailers.

of the book, Tea Hints for Retailers.

Cooper Tea Packet Co., Inc., Brooklyn,
New York, was founded by Mr. Simon
Cooper in 1920, and in the following year
the business was incorporated under the

present name. The company manufactures individual tea bags and packs them for the trade.

J. Aron & Company, Inc., green coffee importers, New York, handled tea from 1920 until 1923; operating from both the New York and the New Orleans offices of the firm. Mr. C. H. Pegg was in charge of the tea department, and Mr. Dudley Warner was buyer in Shanghai.

HAZEN, POWERS & Co., former New York tea-importing firm, was founded in 1922 by Messrs. Edward J. Hazen, W. George Powers, and Charles S. Martin. The firm was the American representative of Brooke Bond & Co., Ltd., London. Mr. Hazen died in 1924. In the following year, Mr. Powers died, and the business was closed.

TAO TEA CO., INC., tea-ball manufacturing and packing concern, New York, was incorporated in 1922 by Messrs. P. H. Smart, G. A. Ogilvie, and K. C. Kirkland. Its packing plant is located at Bethel, Connecticut. Tao tea balls are distributed through wholesale connections and chain stores. The officers are: Messrs. Oliver Carter Macy, President; E. Elliott, Vice President; H. V. Cunningham, Treasurer.

O. W. Bowen, tea importer, New York, former manager of W. R. Grace & Co.'s tea department [discontinued, 1921], established the firm of O. W. Bowen & Son in 1925. For a time the firm represented the Asiatic Trading Corporation, Ltd., of London. In 1931, Mr. Bowen became manager of the Tea Department of Gravenhorst & Co., agents in New York for Snelling, Absoloms & Lampard, Ltd., London.

Nosawa & Co., Japanese exporting and Importing house, New York, opened a tea department and began the direct importation and sale of Japan teas in 1925. This is a branch of the merchant firm of the same name having its headquarters in Tokyo. The company exported teas to the United States for several years previous to 1920, selling them through an agency which was discontinued in that year. They were out of the American tea market from 1920 to 1925, resuming with a tea department of their own in the latter year.

GENERAL GROCERY COMPANY, INC., Portland, Oregon, is a merger, effected in 1928, of Allen & Lewis, Lang & Company, and Mason, Ehrman & Co., together with the purchase of T. W. Jenkins & Co., also of Portland. The constituent houses were

old established wholesale grocery firms that had been competing for approximately sixty years. They also were packers of tea, which branch of the business is continued by the General Grocery Company, Inc., under the management of Mr. K. D. Emmrich. The officers are: J. W. Stuchell, President; Wm. Heller Ehrman, Vice President; S. Mason Ehrman, Vice President; and H. F. Bragg, Secretary-Treasurer.

Mr. John J. McNamara, tea-buying agent for chain stores, New York, established himself in business on his own account in 1929. He was born in New York City, April 25, 1876, and, following a high school education and a scientific course at Cooper Union, began his business career in 1888 with Beebe & Bro., tea brokers, New York. In 1898, he became tea buyer for Smith & Sills, wholesale grocers, New York; in 1900, he opened a tea-brokerage office; in 1902 and three years thereafter, was with the New York office of T. Furuya & Co.; became tea buyer for Jones Bros. Tea Co., New York, in 1905; became vice president and general manager of Oliver Carter Macy, Inc., in 1926; and established his present business three years later. Mr. McNamara was a member of the United States Board of Tea Experts for seventeen years and its chairman from 1927 to 1930.

THE FOOD DISTRIBUTORS' ASSOCIATION, INC., New York, was organized in 1934 to combine the buying of five large grocery chains said to control 14,640 food stores in the United States. The chains were the Kroger Grocery & Baking Co., Safeway Stores, First National Stores, National Tea Co., and the American Stores Co. The officers of the Association are Messrs. F. H. Massman, President; William Park and John McNeil, Vice Presidents; Edward G. Yonker, Treasurer; Gordon P. Mougey, Secretary; and C. H. Riedel, Business Manager.

Other firms and individuals established in the period since 1890 were:

NEW YORK.—JOHN R. STEVENS; FRANK G. SHATTUCK COMPANY; DANIEL REEVES, INC.; GEORGE F. CREGO; GEORGE H. MURRAY, JR.; EDWARDS & VAN DE WATER, later OSCAR VAN DE WATER; FREDERICK F. EDWARDS; MACY BROTHERS & GILLET; RENOUF & COMPANY, INC.; FORTNUM & MASON, INC.; RIDGWAYS, INC.; HANDELMAATSHAPPY TRANSMARINA, INC. [closed, 1921]; JAMES BUTLER GROCERY CO.

BOSTON.—ALEXANDER H. BILL & Co.; WILLIAM T. ABBOTT & Co.; ECONOMY GROCERY STORES; STANLEY W. FERGUSON, INC.; J. MELVILLE LOBB; BATES & ABBOTT.

PHILADELPHIA.—GRANDA & RAWLINS; JAMES P. HARDING & Co.

CHICAGO.—ARBUCKLE BROS.; CALUMET TEA & COFFEE CO.

MILWAUKEE.—CLARK & HOST COM-PANY; ROBERT J. THOMPSON; CHAS. L. W. CROSBY, INC.

SAN FRANCISCO.—H. C. FISHER & Co.; G. S. HALY COMPANY.

OTHER CITIES.—PORTLAND COFFEE Co., Portland, Ore.; Ariss, Campbell & Gault, Portland and Tacoma; THE ROGERS Co., Tacoma; L. L. RAYMER & Co., Inc., Seattle; C. S. Nutt, Los Angeles; Smith Bros. Brokerage Co., Denver; The McClin-TOCK-TRUNKEY COMPANY, Spokane; THE DERN COMPANY, Colorado Springs; GAL-VESTON COFFEE & SPICE MILLS, Galveston; HOFFMAN-HAYMAN COFFEE Co. and Fen-NELL COFFEE COMPANY, San Antonio: C. H. Kroneberger & Co. and The Levering Coffee Co., Baltimore; Kampien & Co. and S. H. Holstad Coffee Co., Minneapolis; Blackhawk Coffee & Spice Co., Waterloo; NATIONAL GROCER COMPANY. Detroit; MERRILL-RANFFT Co., Toledo; THE JANSZEN COMPANY, Cincinnati; THE HOLMES BROKERAGE Co., Pittsburgh; Hol-BROOK GROCERY Co., Keene, N.H.; HILTON, GIBSON & MILLER, Newburgh, N.Y.; WM. C. Saunders, Rochester, N.Y.; M. & J. B. Kellam Co., Binghamton, N.Y.

The Tea Association of New York

On January 5, 1899, the Tea Association of New York, later the Tea Association of the United States of America, was incorporated by the following representative tea men: Messrs. George L. Montgomery, W. J. Buttfield, Joseph H. Lester, Russell Bleecker, Thomas A. Phelan, George C. Cholwell, Frank S. Thomas, James W. Mc-Bride, and Thomas M. McCarthy. The stated object was:

to foster the trade and commerce of those having a common interest in the importation and traffic in teas; to reform abuses relative thereto; to secure freedom from unjust or unlawful exactions; to diffuse accurate and reliable information as to the standing of merchants and other matters connected with the tea trade, and to procure uniformity and certainty in the customs and usages of said trade and commerce; to settle differences between members of the association; and to promote a more enlarged



Fairchild Levial Surveys Inc.
AIR VIEW OF LOWER NEW YORK, SHOWING THE LOCATION OF THE TEA AND COFFEE DISTRICT At the lower right, Wall Street, with the cross streets, Front, Water, and Pearl, where there are many tea firms.

and friendly intercourse among business men connected with the trade.

Among the major activities of the Tea Association of New York, mention should be made of: the recommendation, in 1899, for the appointment of a chief inspector to have supervision over all shipments of tea arriving in the United States; a sum of money [\$1036.75] sent to China and Japan, in 1900, to insure the sending of statistical cables, and a resolution to uphold and assist in every possible manner the administration of the Tea Law; successful negotiations with the agents of steamship lines, in 1902, to secure correction of the practice of storing tea in close proximity with injurious cargo; protests, in 1904, against the unloading of tea at remote piers in Brooklyn and against a growing practice of packing dust and small leaf in Formosa Oolong teas; conferences with steamship companies, in 1905, regarding the unloading of tea and for the removal of certain objectionable clauses in bills of lading.

In 1912, the name of the association was changed to the Tea Association of the United States of America, in order to widen its usefulness. The officers of the organization from its inception in 1899 to 1912, when the name was changed, were: Mr. George L. Montgomery, President, 1899 until 1906; Mr. W. J. Buttfield, Vice President, 1899 until 1906, and President, 1906 until May, 1912; Mr. George H. Macy, Vice President, 1906 until 1911; Mr. Samuel L. Davis, Vice President, 1911; Mr. J. M. Montgomery, Vice President, January until May, 1912; Mr. Joseph H. Lester, Treasurer, 1899 until 1912; Mr. Robert L. Hecht, Treasurer, January until May, 1912; Mr. Russell Bleecker, Secretary, 1899 until 1903; Mr. Gugy Irving, Secretary, 1903 until 1912; Mr. John C. Wirtz, Secretary, January until May, 1912. W. C. Stout was elected Assistant Secretary, to preside over the headquarters of the association, in 1900, and continued in that capacity throughout the existence of the New York Tea Association.

The next tea association, chronologically, was the National Tea Association, which arose as the champion and defender of the law against the importation of adulterated and spurious teas, and which declined and passed out of existence when such defense was no longer necessary.

The National Tea Association

The National Tea Association was formed early in 1903 as a result of some informal conferences in 1902 between representatives of leading tea importers and wholesale grocers, many of whom had previously united their efforts informally; first, to secure the passage of the Tea Law of 1897 and, later, to secure competent legal talent for the defense of the suits—eleven in all—brought by importers of sophisticated teas, with a view to defeating the Tea Law or having it declared unconstitutional.

The object of the organization, as set forth in the form of acceptance signed by the members, was to promote the consumption of tea and to safeguard its interests by the maintenance of the law against impure, and trashy tea. The organization committee included: Hellver & Co.. Japan; Boyd & Co., China; J. W. Doane & Co., Chicago; Franklin MacVeagh & Co., Chicago; Reid, Murdoch & Co., Chicago; Robinson & Woodworth, Boston; Chase & Sanborn, Boston; Francis Widlar & Co., Cleveland; Paxton & Gallagher Co., Omaha; J. A. Folger & Co., San Francisco; Hewlett & Lee, New York; Bennett, Sloan & Co., New York; Austin, Nichols & Co., New York; George W. Lane & Co., New York.

The membership was composed of 160 tea importers and wholesale grocers in the large cities of the United States. The first officers were: president, Mr. Thomas A. Phelan, of George W. Lane & Co., New York; vice presidents, Messrs. J. C. Whitney, of J. W. Doane & Co., Chicago, Charles B. Platt, of J. A. Folger & Co., San Francisco, George Hewlett, of Hewlett & Lee, New York, H. G. Woodworth, of Robinson & Woodworth, Boston; treasurer, Mr. Alfred P. Sloan, of Bennett, Sloan & Co., New York; secretary, Mr. John Foord, New York.

The same officers continued through 1904-05. In 1906, it was decided to establish the headquarters in Chicago, and the following officers were elected: president, Mr. E. A. Schoyer, Chicago; vice presidents, Messrs. Thomas A. Phelan, New York, J. C. Whitney, Chicago, Charles B. Platt, San Francisco, H. G. Woodworth, Boston; treasurer, Mr. K. S. Walbank, Chicago. Mr. Schoyer, who was a leader among the western tea men, died in 1909,

and some time previous to this the association passed out of existence.

The Tea Association of the U.S.A.

At a meeting of the Tea Association of New York held on May 28, 1912, it was decided to change the name to the Tea Association of the United States of America, enabling the organization to solicit the coöperation of the trade throughout the country. Mr. J. M. Montgomery, of New York, former vice president of the association, was elected president in place of Mr. W. J. Buttfield, who resigned, and Mr. R. F. Irwin, of A. P. Irwin & Co., of New York and Philadelphia, was elected vice president. Mr. John C. Wirtz, of Smith, Baker & Co., of New York, was reëlected secretary; and Mr. Robert L. Hecht, of Harrisons & Crosfield, New York, treasurer.

The subsequent activities of the association have included: recommendation to the finance committees of Congress, in 1913, that an ad valorem duty of 10 per cent be applied to teas imported from non tea-producing countries, such as Canada; in 1916, rendered a decision that brokerages are earned when sales are consummated; through the efforts of the Board of Directors, in 1918, all war-time restrictions imposed by the Government on exports of tea were removed; in 1919, the Board of Directors took successful action to have tea included in the United States Army rations, and steps were taken to interest growers, shippers, merchants, and brokers in a national campaign of tea advertising in the United States; in 1920, recommended to association members and the trade in general that brokerage on tea sales be paid on gross amount of sales; in 1921, adopted a resolution and sent it to the Attorney General at Washington, protesting against any modification of the Packers' Consent Decree which would permit the meat packers to pack teas, coffees, and other food products unrelated to the meat industry; in 1923, raised a fund of \$7000 for the relief of earthquake sufferers in Japan; gave a luncheon, in 1924, to celebrate the 150th anniversary of the New York Tea Party.

At present there are forty members of the association, divided as follows: fifteen importing companies; twelve packers; two tea bag concerns; five brokers; three exporters in producing countries [China, Formosa, and Japan]; two tea associations [Japan]; and one bureau of propaganda [India]

The officers have been as follows: Mr. J. M. Montgomery, tea importer, New York, was president from May 28, 1912, until his death in June, 1926. Mr. R. F. Irwin, of New York and Philadelphia, was vice president throughout Mr. Montgomery's incumbency. Mr. Robert L. Hecht, of Irwin-Harrisons-Whitney, Inc., New York, was elected to the presidency following the death of Mr. Montgomery, and served until 1935, when Mr. H. P. Thomson succeeded him. Mr. Samuel L. Davis, of Russell & Co., New York, was vice president from 1926 until his death in November, 1929. Mr. Davis was succeeded in the vice presidency by Mr. J. H. Swenarton, of Jardine, Matheson & Co., Ltd., New York. The treasurers have been: Messrs. Robert L. Hecht, 1912; Herbert Osborn, 1913 to 1916; Thomas Dunne, 1916 to 1932; and George Hewlett since 1932. Mr. John C. Wirtz was secretary 1912-18, and Mr. H. P. Thomson 1918-35, when he was succeeded by Mr. Robert Compton. Mr. W. C. Stout, who was the assistant secretary of the New York Tea Association from its beginning, has served in a like capacity for the Tea Association of the U.S.A. since 1912, when it succeeded the former association.

Included among its other activities, the association has figures collected in the different countries of production by representatives of member-firms without charge, and these each member is entitled to receive for his dues, which are \$50 per year.

Canadian Tea Firms

BLUE RIBBON, LIMITED, successor to G. F. and J. Galt, Ltd., tea importing company, Winnipeg, was established in 1882 by Messrs. G. F. and J. Galt. Branch officers are maintained in Vancouver, Calgary, and Edmonton. The business was incorporated in 1919.

Braid, Tuck & Company, Ltd., tea and coffee concern, Vancouver, was founded by the late Mr. William Braid, who died in 1926. The present company is an amalgamation of the firms of M. A. Tuck & Co., Ltd., and William Braid & Co., Ltd. Mr. M. A. Tuck is president and general manager, and Mr. F. T. Orchard is sales manager.

ORCHARDSON & Co., LTD., Vancouver tea and produce brokers, representing Brooke Bond & Co. in Western Canada, were established in 1922 by Mr. Thomas H. Orchardson. The directors are Messrs. T. H. Orchardson and C. B. Freeman. The manager of the tea and coffee department is Mr. A. K. Preston, formerly of London.

SALADA TEA COMPANY OF CANADA, LIMITED, Toronto and Montreal, was founded at Toronto in 1892 by the late Hon. Peter C. Larkin. The business, then styled P. C. Larkin & Co., progressed rapidly. Branches were opened in Buffalo and Boston in 1896 and 1897, respectively. The business in the United States was incorporated separately under the presidency of Mr. Larkin in 1916, and in 1920 the Canadian business was incorporated with its present title and with Mr. Gerald Larkin, son of the founder, as president and executive head.

HON. PETER C. LARKIN was born in Montreal in 1856. Starting as a grocery clerk



Hon. Peter C. Larkin

at an early age, he became convinced housewives that would welcome an opportunity to buy tea put up in sealed packets, instead of in bulk. In 1892, he founded the firm of P. C. Larkin & Co. and started the production and sale of his packet teas. Ceylon made an arrangement with Mr.

Larkin to introduce Ceylon teas into Canada, which was followed shortly by a similar arrangement with India for the introduction of Indian teas, both of which gave the Larkin business big boosts. As his trade broadened, Mr. Larkin invaded the States, and here, backed by well-directed advertising, he developed the most profitable part of his business. In 1922, he was appointed High Commissioner for Canada in England, and thereupon moved to London, where he resided until his death in 1930.

T. H. EASTABROOKS Co., Ltd., tea firm, St. John, N.B., was founded in 1894 by Mr. Theodore H. Eastabrooks. Branch

offices have been established in Toronto, Winnipeg, St. Johns, and Montreal. Mr. Eastabrooks is president.

R. B. HAYHOE & Co., wholesale tea firm, Toronto, was established by Mr. Robert B. Hayhoe in 1894. In later years, two brothers of the founder, Messrs. Ralph J. and J. Cecil Hayhoe, were admitted as equal partners.

Canada Tea Co., Ltd., Toronto, was established in 1912. There are branches in Brantford, Peterboro, and Woodstock, and an office in London. The officers are: Messrs. C. J. Scandrett, President; J. H. Scandrett, Vice President; J. Hobson, Secretary and Treasurer.

Other present-day firms and individuals specializing in tea that have figured in the tea-trade history of the Dominion include:

GUELPH.—J. L. FIELDING & Co.

HALIFAX.—BLUE BIRD TEA Co., LTD.; BRYANT & McDonald, LTD.; J. E. Morse & Co.; John Tobin & Co.

HAMILTON.—IMPERIAL BLEND TEA Co.; BALFOUR'S, LTD.; LUMSDEN BROTHERS.

KINGSTON.—GEO. ROBERTSON & SON, LTD.

MONTREAL.—N. BRAULT & CO.; CASTLE BLEND TEA CO., LTD.; KEARNEY BROS., LTD.; J. E. LABELLE & CO.; J. B. MITCHELL; JAS. RUTHERFORD & CO.; STANWAY-HUTCHINS, LTD.; W. D. STROUD SONS; HUDSON-HERBERT-CHAPUT, LTD.; LAPORT MARTIN, LTD.

ST. JOHN.—ANGLO-AMERICAN DIRECT TEA CO., LTD.; GEORGE S. DE FOREST & SON; GEO. E. BARBOUR CO.

TORONTO.—ANGLO-AMERICAN DIRECT TEA CO., LTD.; PURE GOLD MANUFACTURING CO., LTD.; NATIONAL GROCERS CO., LTD.; HAYTER & SCANDRETT; T. J. LIPTON LTD.; GEORGE MUSSON & CO.; R. D. ROSS; N. M. SQUIRE CO.; G. STANWAY & CO.; JAMES LUMBERS CO., LTD.; DONALD NICHOLSON.

VANCOUVER.—J. W. BERRY, LTD.; ORIENT TEA CO.; F. PUMPHREY; OVER-WAITEA, LTD.

WINNIPEG.—WHITE STAR MFG. Co.; WESTERN GROCERS, LTD.; H. L. MACKINNON Co., LTD.

TEA PROPAGANDA BY GARWAY IN THE 17TH CENTURY

An Exact Description of the Groveth, Quality and Vertues of the Leaf TEA

Thomas Garway in Exchange-Alley near the Royal Exchange in London, Tobacconift, and Seller and Retailer of TEA and COFFEE.



EA is generally brought from Choss, and groweth thereupon little Shrubs or Buffeet, the Branches whereof are well garnified with white Flowers that are yellow within, of the biguets and fathion of fuere Brice, but in finell unlike, bearing thin green leaves about the biguets of Sew disson, Adortic, or Samuet, and is judged to be a kind of samuet. This Plant hath been reported to grow wild only, but doth not, for they plant is in their Gardens about lour foot diffance, and it groweth about four foot high, and of the Seeds they maintain and increasfe their Stock. Of all places in Choss this Plant groweth in greater pleasy in the Province of Monsing near the City of Ludden, there is likewife of the growth of Samue, Social China, the Island de Ludenser and Jepas, and is called Cos. Of this famous Leaf there are divers fortas there is likewife of the growth of Samue, Social China, the Island de Ludenser and Jepas, and is called Cos. Of this famous Leaf there are divers fortas there is likewife of hape, for much better than other, the upper Leaves excelling the other in finencis, a property almost in all Plants, which Leaves they gather every day, and drying them in the flade. Or in Iron pans over a gentle fire till the humidity be exhaulted, then put up close in Leaden post, preferve them for their Dinic Ta, which is used as Advals, and upon all Visits and Entertainment in private Families, and in the Palaces of of Grandees: And it is averted by a Peake of Assess Native of Japas, that the belt Tra ought not to be gathered but by Virgins who are deflued to this work, and fach, Quantidation Medicine propagation of the Dinic requestive plant containing the propagation of the Dinic requestive plants of Lambous for Antiquity. Knowledge and Wildom, do frequently fell it among themselves to vivice its weight in Silver, and the high ellimation of the Dinic made therewith hath occasioned an inquiry into the nature thereof among the molt intelligent persons of all Nations that have travelled in those parts, who after exact Tr

The Quality is moderately bot, proper for Winter or Summer.

The Drink is declared to be most wholesome, preserving in perfect health untillextreme Old Age. .

The particular Vertues are thefe.

they, and Alexander de Rhoder in his Voyage and Millions in a large discourse of the ordering of this agen, marries many characteristics. The fact of the root of

FINIS.

Advertisement.

That Mitheles Breek, living at the Sign of the Principes in St. Tubes-freet against the Church, is the only known man for making of Mills for grinding of Coffee powder. which Mills are by him fold from 40. to 45. fhillings the Mill.

British Museum

FIRST BROADSIDE ADVERTISEMENT OF TEA IN ENGLAND, 1660

This unique broadside is one of the best specimens of its kind preserved in the British Museum. It measures 11 x 15 inches and in point of type arrangement, display, and general excellence it compares favorably with the first advertisement for coffee—Pasqua Rosee's handbill issued in 1652.

CHAPTER XVI

HISTORY OF TEA ADVERTISING

THE CH'A CHING, THE FIRST ADVERTISEMENT OF TEA—EARLY ENGLISH ADVERTISEMENTS—PROPAGANDA THROUGH BOOKS—PIONEER TEA ADVERTISING IN AMERICA—
LATER TEA BOOK ADVERTISING—NOTABLE TEA PROPAGANDAS—ADVERTISING JAPAN AND
FORMOSA TEAS—CEYLON'S COÖPERATIVE CAMPAIGNS—INDIA'S TEA PROPAGANDA—ADVERTISING CHINA AND JAVA TEAS—MERCHANT COÖPERATIVE CAMPAIGNS—PRESENT
DAY ADVERTISING—TEA ADVERTISING EFFICIENCY

EW products can claim as early an advertising beginning as tea, which has been advertised for over 1100 years. In that period every known media has been used, from books and broadsheets to radio and aeroplanes. There have been propagandas by countries and coöperative campaigns by merchants. All these have combined in swelling the total of tea consumed in the world to over 1,800,000,000 pounds annually.

The First Tea Advertisements

The earliest-known advertisement for tea was in the form of a book, the Ch'a Ching, or "Memoir on Tea," written by Lu Yu about A. D. 780. The tea merchants of China needed someone who could put together the fragmentary knowledge of their growing industry. Lu Yu did it so well that later on, when the Chinese merchants became close-lipped in an endeavor to preserve their secrets of tea making, the "foreign devils" were able to piece out enough information from the Ch'a Ching to enable them to imitate the Chinese.

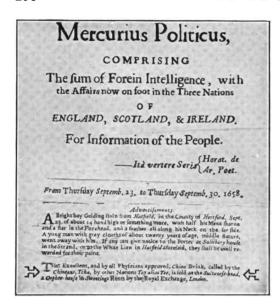
The next book written which served as an excellent advertisement for tea was Kitcha Yojoki, or the "Book of Tea Sanitation," written in Japan by the Buddhist abbot Yeisai in 1214. Yeisai emphasized the medicinal use of tea, characterizing it as "a sacred remedy and an infallible means of longevity."

It was not until 1658 that the first news-

paper advertisement of tea appeared in the London Mercurius Politicus for the week of September 23–30. Following an advertisement offering a reward for the apprehension of a horse thief, the notice ran, "That Excellent, and by all Physitians approved, China Drink, called by the Chineans, Tcha, by other Nations Tay alias Tee, is sold at the Sultaness-head, a Cophee-house in Sweetings Rents by the Royal Exchange, London."

One of the most famous of the early tea advertisements was issued in the form of a broadside by Thomas Garway, "To-bacconist and Seller and Retailer of Tea and Coffee," about 1660. In approximately 1300 words it told practically all that was known about tea. It was informative and educational. It was good advertising because it tried to tell the story simply and to create a favorable impression on possible customers. True, some of the virtues attributed to the drink have since been disallowed; but Garway believed them to be true. Few in those days knew the facts about tea.

Other London coffee house keepers selling tea began advertising the fact. In the Kingdom's Intelligencer, a weekly, published in 1662, an advertisement appeared for the coffee house in Exchange Alley, at which, in addition to coffee, chocolate, and sherbet, the reader was advised he might have "Tea according to its goodness." It was from this coffee house that the only



FIRST NEWSPAPER ADVERTISEMENT OF Tea, 1658
The arrows point to the tea advertisement.

coffee house keeper's token bearing the word "tea" was issued.

Soon, tea dealers began to advertise in the newspapers. Thus, in the London Gazette, giving the news "from Monday, December 13 to Thursday, December 16, 1680," the following advertisement appears: "These are to give notice to Persons of quality, That a small parcel of most excellent Tea, is by accident fallen into the hands of a private person, to be sold: But that none may be disappointed, the lowest price is 30s a pound, and not any to be sold under a pound weight; for which they are desired to bring a convenient Box. Inquire at Mr. Tho. Eagle's at the King's Head in St. James's Market."

In the Tatler of October 19, 1710, appeared the following advertisment: "Mr. Favy's 16s Bohea tea, not much inferior in goodness to the best foreign Bohea tea, is sold by himself at the 'Bell,' in Grace-church Street."

Propaganda Through Books

In 1722, Mr. Humphrey Broadbent, tea and coffee merchant of London, issued a pamphlet entitled "The Domestic Coffee Man," explaining the correct way to brew tea, coffee, chocolate, and other drinks, and enumerating many "virtues" under the head of "Tea."

The first European work devoted exclu-

sively to coffee, tea, and chocolate was the De l'Usage du Café, du Thé, et du Chocolat, by Philippe Sylvestre Dufour, published at Lyons, France, in 1671. Again, at Lyons, in 1684, Dufour published his more complete work, Traitez nouveaux et du curieux du Café, du Thé et du Chocolat. This was generally regarded as innocent propaganda for the beverages, and, indeed, it proved an excellent advertisement, being quickly translated into English and several other languages.

In 1679, Dr. Cornelis Decker, a Dutch physician, writing under the nom de plume of Doctor Cornelis Bontekoe, published his Tractat van Het Excellente Cruyt Thee at the Hague. Decker is credited with having done more to promote the general adoption of tea in Europe than any other

protagonist.

In 1785, The Tea Purchaser's Guide, by an anonymous member of the East India Company's tea department, was published in London. Its purpose as stated on its quaint title page was: "The Tea Purchaser's Guide of the Lady and Gentlemen's Tea Table; Useful Companion in the Knowledge and Choice of Teas. To which is Added The Art of Mixing one Quality with Another As Practiced by A Tea Dealer, by A Friend to the Public who has been Many Years in the East India Company's Service, Particularly in their Tea Department, London, 1785." The Preface adds that the book was "Published without Mercenary Views at One Shilling."

Directly or indirectly, the English East India Company was the inspirational source of most of the literature on tea published in the eighteenth century. Their principal job in those days was to sell the British people a new national drink de-

At the Royal-Exchange Tea-Warehouse,

Up Stairs on the North-Side, facing Rartholomew-Lane,

ARE SOLD

ALL SORTS of FINE TEA'S,

vis..

Superfine Wire-Leaf Hyfon Tea,
at 17 s. per Pound.
Fine ditto, from 15 s. to 13 s.

Superfine Bloom, at 13 s.

With Variety of other Sort of Green Tea, and all Sorts of Behes,
fresh roaffed Coffee, and fine Chocolate all neat fresh and genuine, at
the very lowest Prices, with Encouragement for Chapmen.

"WITH ENCOURAGEMENT FOR CHAPMEN"

A London tea advertisement of 1754. Chapmen were hawkers or peddlers, usually of trifles or cheap wares.



Abbertifements.

N Monday the 17th Inflint was left out of a Calafa on the Road between Charlifown and Lewiffes at Lynn, a hand-fome clouded Cane, the Joynt about a yard long, a plain Nure bead, with a black Ribband. Wheever took up the fone, and brings or fends it to the Post-Office in Boston fault bave Five Shillings Reward.

A Choice Percal of Fresh Coffee, and very fine green Tax, the best for Colour and Thife, Gerlichs, Bogg Hollands, Ozimbrigs, Stearch, and Spices of all Serts field and good, to be Sold by Mr. Lebund Mile at his House near the Orengo-Tree, at the corner of Sudbury-Steet Boston.

Radeform of all Serts, and very likely Boys. lately arriv'd in a Ship from Briftol, all whose time is to be disposed off by Mr. Thomas Mifast in Merchants-Row Bollon.

N. Y. Historical Society

EARLY AMERICAN TEA AND COFFEE ADVERTISEMENT

From the Boston News Letter, May 24, 1714.

signed to take the place of coffee, and history records they did it very well.

Pioneer Advertising in America

No published notices of tea appeared in America until the beginning of the eighteenth century. In the year 1712, "Green and Bohea" and "Green and Ordinary" teas were advertised for sale at retail by Zabdiel Boylston, an apothecary in Boston. Two years later, on May 24, 1714, Edward Mills, another Bostonian, announced in the News Letter of that city, "very fine Green Tea for sale at his house near the Orange Tree."

The newspaper advertisements of tea during the pre-Revolutionary period were straight "readers." When it came to handbills, however, display was employed to capture attention. A well printed bill of this sort, published at Newburyport, Mass., in 1784, announced that there had been, "Just imported and to be sold by Joseph Greenough, Jun., at his Cheapshop, a little below the Ferry-way, Newbury-Port, Hyson, Souchong, and Bohea Teas of Finest Quality only."

Following the birth of the American China trade, the New York Evening Post announced on November 21, 1803: "205 Chests of Hyson Tea of Superior Quality. Ellis Kane & Co., 182 Water Street." This tea may or may not have been part of a cargo of tea imported from Canton about this time by James Livermore and John Jacob Astor in a joint fur and tea trading enterprise which marked Astor's first entry into the tea business. However, Astor's store and wharf were both nearby, and by 1816, when that worthy had become a

national figure and the principal American tea importer, it was common to see in the New York newspapers such notices as:

AUCTION

The cargo of Mr. John Jacob Astor's ship "Beaver," arrived this past week, with 2500 chests of prime teas, produced last season from the best Bohea and Sung-lo fields; the sale to be conducted by Mr. John Hone, the Auctioneer, by open bidding, on Mr. Astor's wharf, foot of Liberty Street.

In the days before the railroads gave the supremacy to New York, Philadelphia was the chief American city. Occasional tea advertisements are to be found in the Philadelphia papers of this period. There is one in the *Public Ledger* of March 25, 1836, occupying a "preferred" position directly following the marriage and death notices. It reads:

Teas—Of the most favorite chops; Young Hyson, Gunpowder and Imperial, in various sized packages. Also, a good assortment of fair Teas, of all descriptions, received on consignment, and for sale by

SAMUEL M. KEMPTON, 13 South Front St.

Later Tea Book Advertising

With few exceptions, and those mainly text books for planters, the works on tea in all countries have had a distinct advertising character. The more notable contributions by the trade in the nineteenth and twentieth centuries follow.

In 1819, the London Genuine Tea Company published in London, A History of the Tea Plant, "from the sowing of the seed to its package for the European market."

A tea dealer of England—one Smith—published in London, about 1827, a book





BRITISH TEA ADVERTISING, 1800



A VICTORIAN HANDBILL OF 1899

called Tsiology; a discourse on tea. This was "an account of that exotic of the East India Company, etc."

In 1843, J. G. Houssaye published in Paris his *Monographie du thé*, a well-written book with illustrations. Houssaye was a dealer in tea and other merchandise from China and the Indies.

Samuel Phillips Day published in London, in 1878, his book, Tea: its Mystery and History. The Introduction was written in Chinese by Lo Fong Loh, Secretary to the Chinese Educational Mission in Europe. An English translation shows it to be largely a boost for Messrs. Horniman's tea establishment.

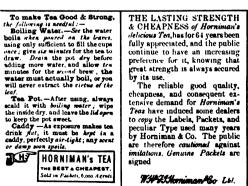
Henry Turner, a London draper and tea merchant, published, in 1880, his Treatise on Tea, Historical, Statistical and Commercial. The author wrote entertainingly, albeit his predictions were somewhat awry. He foresaw the early downfall of the cooperative stores, railed against advertising, and condemned present giving. In 1882, W. B. Whittingham & Co. published in London The Art of Tea Blending, another trade advertisement.

In 1890, I. L. Hauser, a tea merchant of Chicago, who had lived in India, wrote a

book called Tea: Its Origin, Cultivation, Manufacture, and Use. Two years later, a Philadelphia tea man, Joseph M. Walsh, published his book, Tea: Its History and Mystery. Walsh also wrote Tea-Blending as a Fine Art, in 1896. Both books were designed for retailers. In 1894, a member of the firm of Lewis & Co., London tea merchants, published Tea and Tea Blending. In 1903, Mr. John Henry Blake, an American tea broker, brought out his Tea Hints for Retailers. In 1905, the Anti-Tea-Duty League in London published Herbert Compton's Come to Tea With Us. About the same time, the National Tea Association of the United States of America published in New York Some Secrets of Tea, by Thomas A. Phelan, president of the association. This was revised and republished as The Book of Tea Secrets, in 1910, by the Ajax Publishing Co., New

In 1907-8, E. A. Schoyer, tea merchant of Chicago, one-time member of the United States Board of Tea Experts and president of the National Tea Association of the United States, published in booklet form a series of *Tea Studies*. These were serious works, although designed to make tea selling easier for Schoyer & Company's salesmen.

In 1910, the Indian Tea Association [London] published Sir James Buckingham's A Few Facts About Tea. In 1919, the Whitney Tea Talks were published by J. C. Whitney & Co., Chicago. In 1924, Otto Schleinkofer, a tea and coffee merchant of Munich, published, in German, Der Tee. Tea: An Historical Sketch, by R. O. Mennell, a London tea merchant was published in 1926. Tea and Tea Dealing,



IN THE DAYS OF THE SECOND BREW British newspaper advertisements of 1890.



TYPICAL TEA LITHOGRAPH OF THE 1900 PERIOD The colored lithograph was a great favorite.

by F. W. F. Staveacre, another London tea merchant, appeared in 1929. In 1933, Dr. C. R. Harler, published in London *The* Cultivation and Marketing of Tea. In 1935, Irwin-Harrisons-Whitney, Inc., published, in the United States, The Romance of Tea.

Notable Tea Propagandas

The principal tea producing countries, with the exception of China, which has always fought shy of any attempt to organize its tea intelligentsia, have all, at some time or other in the past fifty years, engaged in various forms of coöperative propaganda in behalf of tea in the leading consuming countries. Some of these efforts have been wisely directed and brought definite results.

The Japan tea interests have advertised Japan teas intermittently, and mostly in the United States, since 1876. The approximate total expenditures in all countries, 1898-1934 inclusive, was Yen 2,790,000 [\$1,395,000].

Formosa has advertised its tea in England, the United States, and other countries, and has spent Yen 2,500,000 [\$1,250,000] in its propaganda over a period of twenty-five years.

Ceylon has spent for tea advertising in various countries of Europe and America Rs. 5,335,577 [\$1,920,786] in twenty-three years of propaganda. Of this sum ap-

proximately \$1,000,000 has been spent in publicity for Ceylon tea in America.

India has spent over £1,000,000 [say \$5,000,000] in advertising its teas in many countries of the old and new world during the forty-odd years in which it has been extending its wide-flung kingdom. Of this sum over \$2,000,000 has been expended in the United States in the past twenty-five years.

Netherlands-Indian tea interests have spent fl. 125,000 [\$50,000] for advertising Netherlands-Indian teas in Holland and in the United States over a ten-year period. Approximately \$20,000 has been spent in the United States.

Advertising Japan and Formosa Teas

Japan tea advertising had its start in 1876. It consisted of exhibits sent to the Centennial Exposition at Philadelphia.

Following this a number of competitive tea exhibitions were held in Tokyo, Yokohama, and Kobe between 1877 and 1883, to stimulate the production of better-grade teas. In 1883, the Japan Central Tea Association was formed, composed of tea growers and tea merchants, and operating under Government subsidy. In addition to improving production, this organization conducted propaganda abroad, notably at the Chicago World's Fair, in 1893; Antwerp Exposition, 1894; Omaha, 1898; St. Louis, 1904; Liege and Portland, 1905; Seattle, 1909; London, 1910; Dresden, and Turin, 1911; San Francisco and San Diego, 1915; Philadelphia, 1926; and Chicago,



BRITISH TEA ADVERTISEMENT OF THE 'NINETIES

New vigor for the afternoon's work



When you relax this way

· · · at luncheon

When you've had quite enough plunch today, knock off the serious business of taking in nourishment and lisspr over a cup or two of Japan Green Tea.

Business will wait the extra ten minutes. In fact, it will welcome the property of the pr

Business will wait the extra ten flavor-laden juices of the fresh minutes. In fact, it will welcome you twice as cheerfully when you do come back. For it will find you fore mesh assorning—ready for another full day swork before five o'clock.

No afternoon fatigue for you.

No dreary drooping at the end of by the day. This restful noorday drink you only a fraction of a cent a cup.

Today — at noon

JAPAN TEA The drink for relaxation



At noon — each day IAPAN TEA The drink for relaxation

After a leisurely luncheon, rest back in your chair—and enjoy a steaming cup of JAPAN
Green Tea. Drink it slowly—linger over it
—and let tense nerves relax under its gentle stimulation. Then note how its tonic quality keeps you fresh and fit all afternoon.

JAPAN Green Tea is tea at its best. It is the natural leaf, uncolored and unfermented, with all the flavor-laden juices of the fresh leaves preserved by immediate sterilization.

JAPAN Green Tea is put up for the home in pack ander various well-known broad manus; in se grades and prices. The hist you can bey well you only a fraction of a orne per cup



Avoid nerve strain and fatigue with JAPAN TEA

The drink for relaxation

It's like starting the day all over again when you get back from lunch—after a leisurely cup or t vo of Japan Green Tea. You're bright and fresh as the morning after a good night's sleep. Japan Green Tea gives you new pep and energy because it gives you nerves a rest. It relieves strain, blots out fatigue. It's tea at its beat, the natural leaf, uncolored and unfermented, with all the fragrant piuces of the fresh leaves preserved by immediate sterilization.

JAPAN Green Tea is put up for the hume in pack-agis under nations well-hanne brand names in several grades and prices. The best you can buy will cost you only a fraction of a cent per cap.

At noon — each day

At noon—try this



Then note how fresh and fit you feel all afternoon

forget to watch the clock and take it easy over a cup or two of Japan Green Tea after funcheon.

Don't gulp it down. Lieger over it. Each mouthful is a separate pleasure. Get it all the way down before you start the next. Feel its freshing influence over your entire pervous system. Specify JAPAN Green Tea when the prevous system. Specify JAPAN Green Tea when the prevous system of the property of the prevous system. The property of the prevous system of the p

For just a few minutes—at noon noon's work. No worn-out feeling at four o'clock, lake it easy over a cup or two of Japan Green Tea after luncheon.

Don't gulp it down. Linger over it. Each mouthful is a separate it. Each mouthful is a separate pleasure. Get it all the way down before you start the next. Feel its Specify JAPAN Green Tea when refersibles in figures own to see the second of the

At noon — each day

JAPAN TEA The drink for relaxation

NEWSPAPER COPY USED IN THE JAPAN TEA CAMPAIGN OF 1926

Because of its non-controversial character, advertising men generally preferred the "relaxation" appeal to the "Vitamin C" argument which succeeded it.



Japan Tea Diorama at the Sesquicentennial Exhibition, Philadelphia, 1926

1933. At these expositions, the propaganda took the form of tea demonstrations in specially constructed Japanese pavilions and gardens, with waitresses in native costumes.

At Chicago, in 1893, Mr. Tetsunosuke Yamaguchi was the commissioner, assisted by Mr. Hikonojo Komada. The Japanese Tea Garden at San Francisco was in charge of Mr. Iwao Nishi, who also directed the Sesquicentennial Exhibit at Philadelphia in 1926. The commissioner at Chicago in 1933 was Mr. S. Mitsuhashi, and he was assisted by Mr. K. E. Jingu.

Japan became alarmed at the advertising activities of her British rivals early in the 'nineties and, in 1896, Messrs. Kahei Otani and Kihei Aizawa secured for the Japan Central Tea Association an annual subsidy from the government of Yen 70,000 [\$35,000], for seven years, to be spent in advertising Japan teas in the United States and Russia.

The sums expended by the association in the United States and Canada, during this first protective campaign, were spread over a period of nine years, from 1898 to 1906 inclusive, and amounted to a total of Yen 190,000 [\$95,000].

In 1898, two branch offices of the association were opened; one in New York in charge of Mr. Takenosuke Furuya, and the other in Chicago with Mr. Tomotsune Midzutany as commissioner. Their activities were continuous until 1907, when the branch offices were closed and all promotional activities ceased.

In 1911, Mr. Iwao Nishi was appointed by the association as commissioner to the United States and Canada to conduct an advertising campaign.

Scientists discover health-giving power in simple Japan Tea

A precious food element, belieted to be a safeguard against several common ailments, found in our old favorite drink

— Japan green tea

FOR those who suffer from "rheumatic" pains—

For those who have a sallow complexion—

For those who are 'run down' and easily tired out-

For many of us—there is deep interest in the recent startling discoveries about Japan tea. In pleasant cups of Japan green tea, scientists have found an invaluable food element, a wonderful, health-giving property that is entirely absent from many of the foods we eat.

It is now believed that countless men and women may be missing the joys of perfect health just because their three meals a day give them too little of this all-important food element—Vitamin C.

"Observations during the World War," writes one of the country's foremost scientists, "and my recollection of specific cases, all combine to suggest that much of the so-called rehamatism which offlicts such a large part of our people is due, at least in large part, to the use of a diet too poor in Vitamin C. The symptoms are a sallow, maddy complexion, loss of energy, flecting pains in the limbs, unally mistaken for rheumatism."

A rich source of this precious element

Only a small number of foods, aside from Japan green tea—spinach and a few fruits and vegetables—contain this wonderful food element.

The amazing fact today established by science is the richness in this precious Vitamin C., of our old favorite drink, Japan green tea. The leaves of Japan tea which we buy at the grocery store bring us in abundance this health-giving food element.

For that "tired feeling" which takes the pleasure out of life, for those so-called "rheumatic" twinges that spoil many a day, for the sallow skin you hate to see in the mirror, try this simple thing. Drink fragrant cups of Japan green tea regularly at lunch, at supper, in the



afternoon. Take advantage of their rich supply of the precious food element, Vitamin C. It is probable that they will build new vitality for you—that you will both feel and look more vigorous after a few weeks. Start this delightful, health-giving habit—now. Begin today drinking Japan green tea. American-Japanese Tea Committee, 781 Wrigley Building, Chicago.

MAGAZINE COPY USED IN THE JAPAN TEA CAMPAIGN OF 1927

In 1911, the imports of Japan tea into the countries of North America reached a peak at which they remained stationary until a changing taste from green to black tea on the part of American consumers caused a decline in Japan tea imports. The



COLORED STORE CARD ADVERTISING JAPAN TEA

progress made by India and Ceylon blacks caused renewed uneasiness among Japan tea men, and it was decided to reopen the propaganda for Japan tea in America.

In 1912, the second protective campaign was launched. The propaganda was under Mr. Nishi's charge and lasted for ten years, up to the time of his resignation in 1922. The total expenditure during the period was Yen 246,000 [\$123,200].

Pavilion demonstrations and free sample distributions were employed in three of the earlier years of Mr. Nishi's incumbency—1912, 1913, and 1915; subsequently, the American campaign was concentrated on newspaper and magazine advertising, up to and including the year 1921, when it terminated after a sensational drop in the American importations of Japan tea from 22,800,000 pounds in 1920 to 16,500,000 in 1921—the lowest point in fifty years.

There was an interim of four years of declining exports, from 1922 to 1925 inclusive, during which the promotion of Japan teas in foreign markets was handled direct from the offices of the Japan Central Tea Association in Japan, with a total expenditure of a little more than Yen 105,000 [\$52,500].

The third American campaign was

launched in 1926. The work was under the supervision of the Japan Tea Promotion Committee, subject to joint control by the Japan Central Tea Association and the Shizuoka Tea Association. The committee had its headquarters in the office of the Shizuoka Tea Guild at Shizuoka. At a meeting of home and foreign exporters held at Shizuoka in May, 1925, an export cess, or tax, of forty sen per half chest was adopted, to become part of a promotional fund of Yen 300,000 annually; the balance being raised by a uniform tax on all teas produced in Japan. The cess became effective from May 23, 1925.

When the Japan Tea Promotion Committee was organized July 11, 1925, with its sixteen members appointed by the Japan Central Tea Association and the Shizuoka Tea Association, the Hon. Kahei Otani, Member of the House of Peers and president of the Japan Central Tea Association, became its first president, and the Hon. Yenichiro Nakamura, Member of the House of Peers and president of the Shizuoka Tea Guild, was its first chairman. The other members were all Japanese with the exception of Messrs. Fred A. Grow, of Irwin-Harrisons-Whitney, Inc.; N. Gott-lieb; W. H. Siegfried, of the Siegfried-Schmidt Co.; and W. Hellyer, of Hellyer & Co., American tea exporters. Messrs. Yuichiro Miyamoto, director of the Shizuoka Tea Guild, and Seiichi Ishii, director of the Fuji Company, Shizuoka, were made directors.

Messrs. Miyamoto and Ishii sailed to America in January 1926, and with the American members of the committee arranged a campaign of newspaper publicity in Chicago, Des Moines, Detroit, Minneapolis, St. Paul, Omaha, Toledo, and Milwaukee. The cost was \$87,000.

There were a few changes in the Tea Promotion Committee in 1927, because of the retirement of Mr. Otani as president of the association. Mr. Gohei Matsuura became president and continued until his death in 1931. In 1927 the policy of the American campaign was changed from newspaper to magazine advertising. The cost was \$130,000 and this was increased to \$137,000 for the year beginning April 1st, 1928. The 1928–29 advertising was confined to a more restricted list of magazines. Copy was based on the discovery, said to have been made, that Ja-

pan tea contains a "precious food element, Vitamin C." The appropriation was approximately \$100,000. A poster campaign followed in 1930. The total expenditures for Japan advertising in the U.S.A. and elsewhere since 1930 have been as follows: 1930, Yen 232,000; 1931, Yen 142,000; 1932, Yen 340,000; 1933, Yen 171,250; 1934, Yen 240,000; and 1935, Yen 125,000.

In 1886, aided by the government, the Japan Central Tea Traders' Association sent Mr. Magoichiro Yokoyama into Russia and Siberia to investigate market possibilities, but it was not until 1897 that it was decided to advertise in Russia. Several commissioners were sent to Russia between 1907 and 1919 to promote sales of Japan black brick tea. Among these, Mr. Shozo Saigo made two visits, and was successful in laying the foundation for a large tea business with Russia.

In 1898, propaganda for Japan tea was begun in Russia, and was continuous thereafter, except the years 1905, 1909, and 1916, up to and including the year 1921. The total expenditure for the 24 year period was Yen 93,600 [\$46,800].

In 1905, a free distribution of Japan teasamples was financed by the association in Australia to the extent of Yen 1500 [\$750] and, in the same year, a small newspaper campaign was tried tentatively in France at a cost of Yen 284 [\$142].

The latest propaganda campaign launched by the Japan Tea Promotion Committee has been started at home in Japan. Some Yen 105,000 was spent for this purpose in 1934.

The Japan Tea Promotion Committee is constituted as follows: Mr. Yenichiro Nakamura, Chairman; and Messrs. Kanekichi Nakajima, of The M. J. B. Co.; Gisaburo Homma, of the Japan Tea Direct Exporting Corporation; Toyoji Takakuwa, of Mitsui & Co., Ltd.; Gensaku Harasaki, of Fuji Co.; Uichi Nakagawa, of the Mitsubishi Trading Co.; Shigeki Kageyama, tea manufacturer; Masao Yoshikai and Torao Hagiwara, both of the Shizuoka Prefecture Office; W. H. Siegfried, of Siegfried & Co.; A. T. Hellyer, of Hellyer & Co.; D. J. Mackenzie, of Irwin-Harrisons-Whitney, Inc.; Yuichiro Miyamoto, Seiichi Ishii, and Shiroji Mitsuhashi; the last three committeemen being also directors.

Between 1906 and 1925, the Formosan Government spent Yen 2,052,000 [\$1,000,-

000] advertising Formosa teas, chiefly at exhibitions in the United States, England, France, Java, North China, and Russia; and for free samples, tea rooms, newspaper and magazine advertising in England and America; also demonstrations and free sam-



ARTISTIC CAR CARD ADVERTISING FORMOSA TEA

ples in Australia, South America, and the other countries named. Since then the publicity has been confined principally to America. The appropriations for the United States have ranged from \$15,000 to \$50,000 yearly. The approximate total for all countries since 1898, when the first American campaign started, was over Yen 2,790,000 [\$1,395,000]. The practice has been to send commissioners to make propaganda for other Formosan products, such as camphor, etc., in addition to tea.

Ceylon's Coöperative Campaigns

Propaganda for Ceylon tea started in the 'seventies and extended over forty years. Recently it has been resumed.

The first organized effort at cooperative publicity was made by the Ceylon planters in 1879, when they appointed Mr. A. M. Ferguson, editor of the Ceylon Observer, commissioner to the International Exhibition at Melbourne in 1880-81. Following this, Mr. John Capper, editor of the Ceylon Times, was made commissioner to the Calcutta Exhibition of 1883. Tea was featured at both places.

In 1886, the Government tardily lent a helping hand with Rs. 5000 [\$1800] to be added to the planters' fund of Rs. 5742 [\$2067] to advertise Ceylon produce at the Colonial and Indian Exhibition [the "Colinderies"] at South Kensington, London. Mr. J. L. Loudoun-Shand was commissioner and organized a Ceylon section to which 167 estates sent tea samples.



WELL-KNOWN BRITISH PACKET TEA BRANDS

That same year, Mr. H. K. Rutherford initiated the Ceylon Tea Syndicate Fund for collecting and distributing tea samples; over 67,000 pounds being contributed. At his own expense, Mr. J. L. Loudoun-Shand promoted a Ceylon exhibit at the Liverpool Exhibition of 1887, where tea was demonstrated and sold. In 1887, the Planters' Association of Ceylon adopted Mr. Rutherford's suggestion for a Ceylon Tea Fund, which was a voluntary agreement among estate owners and agents to pay into the association, beginning January



IN THE 'NINETIES THE LONDON HORSE-DRAWN BUS WAS A GOOD ADVERTISING MEDIUM

1, 1888, twenty-five Ceylon cents per 1000 pounds of tea plucked on their estates during the preceding six months. The Tea Syndicate Fund was merged into the new Tea Fund.

Contributions to the Ceylon Tea Fund, at 25 cents per 1000 pounds from 1887 to 1891 and at 10 cents per 1000 pounds from 1892 to 1894 amounted to Rs. 146,874 [\$52,875].

In 1888, Ceylon tea was well represented under the ægis of the Tea Fund at the Glasgow International Exhibition, where Mr. J. L. Loudoun-Shand was commissioner; at the Melbourne Centennial Exhibition, where Mr. Hugh Mackenzie was commissioner; and at the Brussels Exhibition, the arrangements for which were supervised by Sir Graeme H. D. Elphinstone and Messrs. J. L. Loudoun-Shand, Lee Bapty, and R. C. Haldane. The Ceylon Government contributed Rs. 2000 to the expenses of the exhibitions.

A beginning was made in 1888 with the policy, which was vigorously pursued thereafter, of granting to individuals and firms, willing to push the sale of Ceylon tea in foreign countries, a certain amount of tea for distribution among consumers. The first grant of this sort was of 2840 pounds to Mr.

J. McCombie Murray, of the Ceylon Pure Tea & Coffee Co., North 13th St., Philadelphia. Mr. Murray was a former coffee and tea planter in Ceylon. Other grants of tea were made during the year for distribution in New Zealand and Argentina.

At the Paris Universal Exhibition of 1889, and at the New Zealand and South Seas Exhibition in Dunedin in 1889-90, Ceylon tea was well represented. Messrs. J. L. Loudoun-Shand, James Whittall, and W. Martin Leake took an active interest in the organization of the Ceylon Tea House at the first-named exhibition, and Mr. Kenneth S. Begg was appointed salaried representative at the latter.

Mr. R. E. Pineo, a Ceylon planter, who had formed the Ceylon-American Tea Co. upon the suggestion of Mr. S. Elwood May, a New York merchant, changed the name to the Ceylon Planters' American Tea Co., in 1889, and Mr. [later Sir] John Joseph Grinlinton became managing director. This company was designed to promote Ceylon tea in the United States, trading under the auspices of the Planters' Association of Ceylon.

The policy of granting tea for free distribution was extended, during 1889, to South Ireland, Russia, Vienna, and Constantinople. The Duke and Duchess of



AN EFFECTIVE FRENCH POSTER DESIGN

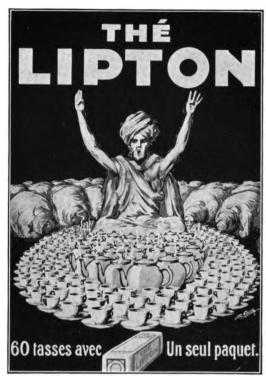
Fife, visitors to Ceylon, were presented with ornamental boxes of Ceylon tea, and thus was begun the committee's policy of presenting members of royal families and other distinguished people with gifts of Ceylon tea; among them, in later years, the Queen of Italy, Grand Duke Nicholas of Russia, the Emperor of Germany, and the Emperor of Austria.

The year 1890 brought the inauguration of the important Russian campaign, conducted for many years by Mr. Maurice Rogivue, a Swiss member of Stevenson & Sons,

The Tea Fund Committee, in 1890, granted tea and money—the latter to the extent of one-third the amount expended



SOME WELL-KNOWN CONTINENTAL PACKET TEA BRANDS



TEA POSTER IN THE MODERN FRENCH MANNER

Executed in red, yellow, and blue, this was a
most striking advertisement.

in advertising—to firms in Tasmania, Sweden, Germany, Canada, and Russia. In 1891, Rs. 15,150 was expended in building the Ceylon Tea Kiosk near the passenger jetty, for selling tea in the packet and the cup to visitors to Colombo. The committee, however, immediately found that it could not carry on trade, and surmounted this difficulty by handing over the kiosk the following year to the Ceylon Tea Co., operating under the patronage of the Planters' Association.

To the end of 1894, the Tea Fund Committee continued expending money on Mr. Rogivue's campaign in Russia and granting tea for distributing and advertising subsidies in many countries—Australia, Perak, Hungary, Rumania, Serbia, California, and British Columbia. Rs. 2300 also were expended in making provision for the sale of Ceylon tea at the Imperial Institute in London.

The promise of a contribution of Rs. 50,000 from the Government enabled Ceylon to prepare for the World's Fair at Chicago, in 1893. In January, 1892, Mr. [later Sir]

John Joseph Grinlinton was appointed Ceylon commissioner, and paid a visit to Chicago. The Planters' Association of Ceylon approved a motion proposed by Mr. Rutherford suggesting the imposition of an export levy on tea; the proceeds to go toward the cost of a Ceylon Court at Chicago. In consequence, Ordinance No. 15 of 1892 passed the Legislative Council in October, and the first export duty at the rate of 10 cents per 100 pounds came into operation on January 1, 1893.

Six million people visited the picturesque Ceylon Court, built under the direction of Mr. Pole-Fletcher, the assistant commissioner, and 4,596,490 cups and 1,061,623 packets of tea were sold. The Ceylon expenditure on the exposition amounted to Rs. 319.964.64 [\$115.187].

amounted to Rs. 319,964.64 [\$115,187].

Mr. Grinlinton established "The Chicago
Tea Store," at 12 State St., Chicago, stocking it with 26,000 pounds of tea, but this
venture proved a failure. The Ceylon commissioner was knighted in 1894, for over
forty-six years meritorious services to the



TEA POSTER IN THE MODERN BRITISH MANNER



FOUR-COLOR DESIGN FOR A TWENTY-FOUR SHEET POSTER OR A POSTCARD

The moon is yellow; sky, blue; sea, green; tea tree, crimson; mountains and elephant are gray.

Government in the Crimea and in Ceylon. He died in 1912.

On recommendation of the Chamber of Commerce and the Planters' Association, Ordinance No. 4 of 1894 was passed in August, continuing the tea cess from November 1, 1894, at the increased rate of 20 cents per 100 pounds. A committee of thirty members, six from the Chamber of Commerce and twenty-four from the association, had been appointed in anticipation of the continuance of the export duty, and at the end of the year it took over the receipts of Rs. 57,277.37½, which was the excess collected in two years over the amount required for the Chicago Fair. The payments made to the fund from the tea duty are shown in a table on page 310.

Adding to this total the amount received by the old Tea Fund Committee, contributions from the Government, the money for the Chicago Fair, and bank interest, Ceylon expended some Rs. 5,307,740, or \$1,910,786, in tea advertising over a period of about twenty years [1888–1908].



A CHINESE JUNK TEA POSTER, VIENNA



TEA POSTER IN THE MODERN AMERICAN MANNER

From 1894 to 1908, the main branches of expenditure on the part of the Thirty Committee were campaigns in America conducted by their special commissioners, subsidizing certain tea importers as recommended by Sir John Grinlinton, and a campaign on the Continent, excluding Russia, under the supervision of the Ceylon commissioner. Support of Mr. Rogivue's efforts in Russia continued, and he received £1500 in 1895-96, bringing his total monetary support up to £2830. He distributed five million packets of tea, published many newspaper advertisements, issued pamphlets, and engaged in exhibition work at the Nijni Novgorod Fairs.

During 1896, £200 were paid to Tetley & Co. for advertising Ceylon tea in a chalet

erected at the Geneva Exhibition and grants of tea were made for free distribution in Norway, Belgium, and Holland.

tion in Norway, Belgium, and Holland.

In 1897, Mr. Rogivue's business was converted into a limited liability company, called Rogivue, Ltd. Mr. Rogivue joined forces with Sir John Muir and received £20,000 of shares in the new company for the capital and goodwill of the old business.

Support of Mr. Rogivue practically ceased at this time, the policy of assisting exporting firms being adopted instead. Crosfield & Lampard received £1000 for pushing Ceylon tea in Russia, and Cooper, Cooper Ltd. a series of grants.

The late Mr. William Mackenzie, one of Ceylon's pioneer tea planters, was appointed commissioner in America and went thither in February, 1895, returning after a preliminary visit of investigation, and suggesting, as Mr. Pole-Fletcher had done in the preceding year, that Ceylon should make an effort to capture the American market with green teas. The per-capita consumption of tea in the U.S.A. was about one pound as compared with nine pounds of coffee; and nine-tenths of the tea drunk was green. This led to the adoption of the policy of granting a bonus on the export of



RECENT EXAMPLES OF AMERICAN STREET RAILWAY AND SUBWAY CARD ADVERTISING



INDIA-CEYLON COMMISSIONERS, FAIR EXECUTIVES, AND TEA MEN AT St. LOUIS, 1904

Front Row—The two left-hand figures are Mr. H. Homa and Mr. (later Sir) Stanley Bois. The second figure from the right is Mr. R. Blechynden. Second Row—The two left-hand figures are the late Mr. Fred Williams, advertising agent, and the late Mr. A. E. Nicholson, the well-known tea man who went down on the "Titanic." In this same row, second from the right, Mr. E. A. Nathan, tea expert, upon whose recommendations the tea awards were made.

Ceylon green tea. The bonus, which began in 1898, was first paid at the rate of 10 cents a pound, but this was reduced to $1\frac{1}{2}$ cents, in 1902, and was 3 cents when the bonus stopped in 1904; Rs. 993,051 [\$357,498.36] having been paid on 24,653,172 pounds of green tea exported in six years.

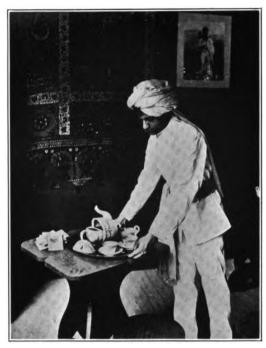
Mr. William Mackenzie's commissionership in America extended over eleven years till the end of 1905, when he retired. He died in 1916. During his term of office he expended Rs. 1,415,185 [\$509,466] on propaganda, advertising in newspapers, giving names of grocers supplying Ceylon tea, issuing pamphlets, conducting demonstrations, and subsidizing firms that advertised Ceylon tea.

In 1888, Mr. H. K. Rutherford had suggested Ceylon's joining forces with India in an American campaign, and Sir John Muir of the Indian Tea Association suggested, in 1894, the appointment of a joint resident agent in America. This proposal fell through, and Mr. R. Blechynden proceeded to America to further the sale of India tea. Mr. Mackenzie's letter of instructions, however, gave him scope to

unite with India, if he thought this would be beneficial to Ceylon tea, and in February, 1896, he wrote to the effect that he was coöperating with Mr. Blechynden, and a joint advertisement appeared in twenty-eight different journals during this year.

After the World's Fair in St. Louis, 1904, at which Mr. [later Sir] Stanley Bois was the commissioner, the subject of joint action with India took more definite shape, one reason for this being that a compulsory tea cess of 20 cents per 100 pounds had been introduced in India as from April 1, 1903. In March, 1905, a committee was appointed to carry out the scheme, and the services of Mr. Blechynden, who was then employed in London by the Indian Tea Association, were secured for the joint commissionership in St. Louis and district, which lasted for three years. Features of the joint propaganda were newspaper advertising, supplying of window show cards, the postcarding of consumers, and distribution of samples. Rs. 175,500 was expended by Ceylon on the joint scheme.

Mr. W. A. Courtney, a Ceylon tea



IN THE CEYLON TEA TOTAM AT WANAMAKER'S PHILADELPHIA STORE, 1907

The feature of this demonstration was the first use in America of the S.Y.P. teapot, "that tilts over on its back."

planter, succeeded Mr. Mackenzie as Ceylon commissioner in America, but his term extended only from January, 1906, to March 1, 1908. He was, however, eminently successful, and instituted much intelligent propaganda. He ceased the subsidizing of firms who advertised Ceylon teas, and found that other firms took up propaganda work when all received similar treatment. He engaged an assistant, Mr. T. P. Welsh of New York, to engage the interest of leading firms in Ceylon tea; also a tea expert, Mr. L. Beling, formerly of Ceylon, to give advice on blending; and the services of a traveler to visit institutions and introduce Ceylon tea. Mr. Beling had come to America as secretary to Mr. John Joseph Grinlinton, in 1893, and subsequently engaged in the tea business on his own account. Mr. William H. Ukers, editor of The Tca and Coffee Trade Journal, acted in an advisory capacity to the commission.

The committee continued advertising in Europe. Mr. J. H. Renton, pioneer coffee planter and agent for Bosanquet & Co., was appointed representative for the Paris Exhibition of 1900, and continued as per-

manent commissioner in Europe. Mr. R. V. Webster acted as Mr. Renton's assistant at Paris. Mr. Renton's work concerned press advertising, arranging for Ceylon tea to be used in restaurants, and subsidizing firms to the extent of one-third of their advertising expenses. Mr. Renton acted as salaried commissioner for eleven years, but remained in Europe for a few years after 1911, to wind up the campaign affairs and continue minor grants. He died in 1920.

The year 1906 practically brought about the collapse of the tea cess. There was considerable opposition, mostly emanating from London, and the Thirty Committee in September, 1906, recommended the reduction of the cess to 20 cents per 100 pounds as from January 1, 1907, when the propaganda work began to be wound up. Mr. W. A. Courtney, in America, handed over to Col. R. Wayne Wilson, of the New York *Tribune*, the supervision of advertising in trade journals, which was continued till the end of 1909.

MR. WALTER ALLAN COURTNEY, eldest surviving son of the late Right Rev. Frederick Courtney, former Bishop of Nova Scotia, was born at Bridge of Allan, Scotland, January 7, 1873. He was educated at St. Paul's School, Concord, New Hampshire, and King's College, Windsor, Nova Scotia. He went to Ceylon as a "creeper" in 1899, and at the time of his appointment as Ceylon Tea Commissioner he was superintendent of Eltofts, Bogawantalawa. After the close of the American campaign in 1907, he engaged in the tea business in New York as W. A. Courtney & Co., Ltd.

CEYLON TEA CESS COLLECTIONS

Year	Exports	Cess Collections	Duty per 100 lbs.
	Pounds	Rupees	Cents
1894		57,277.8 7	10 and 20
1895	89.954.215	179.908.43	20
1896	108.182.395	216.364.79	
1897	115,520,365	231.040.73	**
1898	120,587,000	241.074.00	**
1899	127.846.750	255.693.50	••
1900	147,070,000	294.140.00	**
1901	146,271,145	292.542.29	**
1902	149,250,907	146.604.14	44
		227.846.51	30*
1908	146,434,400	439.303.20	- (4
1904	155.318.453	465.955.36	••
1905	170,361,417	511.084.25	••
1906	170.841.258	512.523.76	44
1907	186,091,060	372.182.12	20
1908	178,310,135	356,620.27	•
	Total	Rs. 4.800.160.72	

* From July 1, 1902.



Poster Advertising Tea in Brazil.

On the Avenida Rio Branco, Rio de Janeiro.

He withdrew when the firm was changed to Anderson, Gallagher & Co., in 1909, and subsequently became associated with the American Bank Note Co.

In 1908, the Thirty Committee contributed Rs. 388 for an anti-China-tea campaign in Great Britain, for which £2000 had been earmarked for 1909 only.

Rs. 285,338.74 was in the hands of the Thirty Committee during 1909, and this gradually dwindled away in various expenditures. Mr. F. Crosbie Roles, editor of the *Times of Ceylon*, was Ceylon repre-

sentative at the New York Rubber Exhibition in 1912, where Ceylon tea was advertised. When the World War began, the committee still had funds in hand and desired to expend them primarily in a patriotic manner, with propaganda as a secondary interest. An ordinance was passed to allow this, and Rs. 75,000 were donated to war charities, which included Rs. 15,000 for buying tea for the Russian troops. In 1916, it was decided to devote the balance of funds to purchasing tea for distribution in packets among Australian and New Zealand troops passing through Colombo, and the funds were thereby exhausted by the end of 1919.

A second tea kiosk on the Colombo jetty, to advertise tea to the traveling public, was erected in 1929. It is managed by the Ceylon Tea Propaganda Board.

A voluntary cess plan, known as the "Lampard Scheme," named after Mr. A. S. Lampard, to provide funds for advertising Ceylon tea abroad, was started in 1929 by a joint committee of the Planters' Association of Ceylon, the Ceylon Estates Proprietary Association, the Ceylon Chamber of Commerce, and the Colombo Tea Traders' Association. The plan comprehended a voluntary cess of 8 Ceylon cents per cultivated tea acre owned by subscribers, and was to run for three years. The initial undertaking was the appropriation of \$10,000 toward an advertising campaign inaugurated by the Tea Association of the United States of America in 1929-30, but throughout the life of the plan there were numerous objectors to the inequity of a voluntary cess, not shared by all planters. This agitation led to the passage, by the



Mr. William Mackenzie
United States
1895-1905



Mr. W. A. Courtney United States 1906-1908



Mr. Gervas Huxley Chief Commissioner 1933-1935



Mr. F. E. B. Gourlay *Canada* 1933-1935

PAST AND PRESENT COMMISSIONERS ASSOCIATED WITH CEYLON TEA PROPAGANDA



SOME WELL-KNOWN AMERICAN PACKAGE TEA BRANDS

Ceylon State Council, June 24, 1932, of an ordinance imposing a propaganda duty or cess "not to exceed Rs. 100 per 100 lbs." on all teas exported from Ceylon, and creating the Ceylon Tea Propaganda Board to advertise Ceylon tea at home and abroad. The ordinance also provided that estimates of expenditure be approved by the State Council.

Mr. E. C. Villiers was the sponsor and most active protagonist of the measure in the State Council, which fixed 50 Ceylon cents per cwt. of tea exported as the initial levy, providing an annual income of Rs. 1,200,000 [£90,000].

The Tea Propaganda Board's first chairman was Mr. G. K. Stewart, who represented the Ceylon Estates Proprietary Association.

Mr. G. Huxley, formerly the chief publicity officer of the Empire Marketing Board in London, was appointed chief commissioner. He sailed to Ceylon and conferred with the Board in January, 1933, after which plans were announced for the inauguration of preliminary campaigns at home in Ceylon, and in England, South Africa, Canada, Australia, and New Zealand.

Mr. F. E. B. Gourlay, a Ceylon tea planter, was appointed resident commissioner for Canada; Mr. Leslie Dow, commissioner for South Africa; and Mr. R. L. Barnes, formerly of the Australian Trade Publicity Department in London, was appointed resident commissioner for Australia and New Zealand.

For the United Kingdom, the Propaganda Board decided on a joint campaign with the India tea associations under the aegis of the "Empire Tea Growers," organized in December, 1933. The joint commissioners were Mr. John Harpur, for the Indian Tea Cess Committee, and Mr. Roy Williams, for the Ceylon Tea Propaganda Board. It was provided that during the first two years the campaign was to be supported by £10,000 annually from the Indian Tea Cess Committee and £15,000 a year from the Ceylon Tea Propaganda Board.

Preliminary to the opening of active propaganda in Canada and South Africa, Mr. Huxley visited both countries and announced the intention to advertise "Empire tea" rather than Ceylon tea, and to stress quality. Mr. Gourlay, the resident commissioner for Canada, established head-

quarters in Montreal after a transcontinental tour of the Dominion. Cockfield, Brown & Co., Montreal, were selected as the advertising agents for the Dominion campaign, which started in March, 1934, using magazine, newspaper, and farm-publication advertising, and tea lecturers from England. Counter, store, and window displays were provided for retailers, and electros and matrices for use in dealers' advertising. It is reported that somewhere around £50,000 per annum will be allocated for the propaganda in Canada.

The South African campaign headquarters was established in Cape Town in 1933, and Mr. Dow started newspaper advertising after a preliminary survey. The bulk of the population is native and reputedly prefers to drink coffee. Ceylon tea already comprises the bulk of the South African tea imports, so the Board felt it would be folly not to take steps to maintain and improve that position.

The home campaign, directed principally at the native population of Ceylon, to teach them how to make and drink tea, was started in 1933 by a fleet of three motor lorries, or caravans, especially equipped for tea propaganda work, and manned by demonstrators. Each caravan was provided with illuminated signs in Tamil and Sinhalese, dynamo, wireless receiving set and amplifier for addressing

large crowds, tea demonstration equipment, and housing—with some auxiliary canvas—for a crew of eight.

India's Coöperative Campaigns

The earliest cooperative effort to advertise India tea came when Mr. John E.



was appointed Indian Tea commissioner at the Brussels Exhibition of 1888. Mr. Harington, born at Plymouth, in 1860, had been a coffee planter in Java. He opened a stall at the Exhibition, wrote and distributed many booklets on India tea.

Musgrave Harington

Mr. J. E. M. Harington

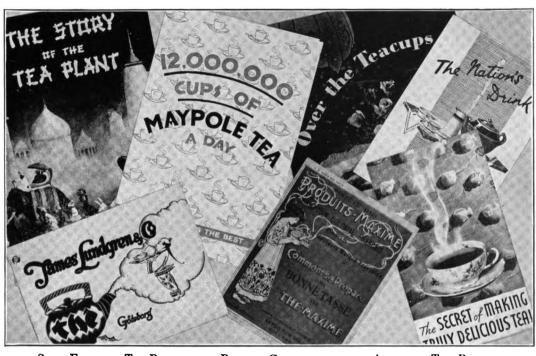
and translated them from English into

four other languages. At the conclusion of the Exhibition, he returned to England and



NEWSPAPER ADVERTISEMENTS OF TEA FROM FIVE COUNTRIES

Top row includes specimens of American, German, and British publicity, and second row, British and French. Centre section, American, Chinese, and British. Bottom row, American, British, and Japanese copy.



SOME EFFECTIVE TEA BOOKLETS BY BRITISH, CONTINENTAL, AND AMERICAN TEA PACKERS

settled down to tea trading on his own account.

The first organized campaign to advertise India tea in America was in connection with the Chicago World's Fair of 1893. A group of public-spirited men raised a fund of Rs. 150,000. This was the beginning of the Voluntary Foreign Market Fund, subsequently collected and administered by the Indian Tea Association. All tea proprietors were invited to subscribe upon the basis of four annas per acre of tea in bearing and half an anna per maund of tea manufactured. This levy was responded to in a varying degree year by year, from 1894 to 1902 inclusive; but in no years did estate proprietors owning more than 70 per cent of the total tea area subscribe. The total amount collected between 1893 and 1903 was Rs. 757.378. Practically the whole of this money was spent in the United States.

The management of the first fund of Rs. 150,000 was assigned to a committee of the Indian Tea Association, Calcutta, which invited the coöperation of the Indian Tea Association [London]. Mr. Richard Blechynden, at that time connected with the Royal Botanical Garden in Calcutta, was appointed by the Calcutta

committee as their commissioner to the Chicago Fair. Mr. Blechynden prevailed upon the Government of India to erect a suitable building at the Chicago Fair where Indian products could be displayed and sold, and tea demonstrated. At the close of the Fair, Mr. Blechynden returned to India, with a balance of Rs. 25,000, which formed the nucleus of the Voluntary Foreign Market Fund.

The Chicago experience so encouraged the Calcutta Committee that, within a few weeks, Mr. Blechynden was commissioned to return to the United States to start operations in New York. In those days, the idea of producers organizing to advertise their product was quite new. The trade in America expected the commissioner to extend favors in the way of prices, or territories in return for support. Subsidies were in vogue, and straight advertising was used but little.

The tea wholesalers in the United States knew little about India tea, but there were retail grocers who came here from Great Britain who knew its merits, recognizing it under the name of "Assam tea." By going directly to such men and through them to consumers, by demonstrations, by illustrated lectures, by establishing tea



How India Tea Was Advertised in 1897

Back cover page advertisement which appeared in the Ladies' Home Journal for October, 1897.

rooms, and by similar methods, a foothold was finally obtained. In the meantime, India tea shippers had established American agencies. They, too, first went direct to the retail trade.

In 1894, Sir John Muir, of Finlay, Muir & Co., arrived in Colombo from Calcutta to urge that Ceylon and India planters form a combination to push the sales of their tea in America. This idea had been approved by the Indian Tea Association, Calcutta, and also met with favor in Ceylon.

In 1896, the late Mr. William Mackenzie arrived in the United States as Ceylon commissioner and found Mr. Blechynden in charge of the India tea propaganda. For three years—until 1899—this joint propaganda was carried on under Messrs. Mackenzie and Blechynden.

Meanwhile, the India Voluntary Foreign Market Fund was meeting with less and less support. Agitation, begun about 1897, was being carried on in favor of a Government cess. In 1899, India withdrew all propaganda in America with the exception of a small sum contributed to the Ceylon Fund to maintain some general advertising of India tea with that of Ceylon in the newspapers. Mr. Blechynden was engaged by Whittall & Co., of Ceylon, as their agent in North America. Mr. Mackenzie carried on as Ceylon commissioner, and from 1899 to 1904, operations for both countries in America were controlled by him.

Opinion in India was gradually crystallizing in favor of a levy to be collected, compulsorily, by law. In 1902, the General Committee of the Indian Tea Association, Calcutta, presented to the Viceroy a memorial, praying for the imposition of a cess at the rate of one-fourth of a pie [\$.0019] per pound on all tea exported. The memorial was signed by, or on behalf of, 366 tea proprietors or companies, representing 416,140 acres of tea land, or rather more than 80 per cent of the total area then under tea cultivation in India. It was favorably received by Lord Curzon. However, because of his strong views about the possibility of inducing the people of India to drink tea, he changed the wording of the memorial from "pushing the sale and increasing the consumption of Indian tea in countries other than the United Kingdom," to read "for promoting the sale and increasing the consumption in India and elsewhere of teas produced in India."

A bill, providing for the levy of the cess at the rate suggested, was introduced into the Imperial Legislative Council by Sir Montague Turner, the then Mercantile Member, on January 30, 1903. Before the passing of the Act, the General Com-



Using the Dealer's Window to Advertise a Package Tea in Canada



SPECIMENS OF AMERICAN BILL-BOARD PUBLICITY FOR TEA

mittee of the Indian Tea Association had framed, at the instance of the Government. a scheme for the administration of the fund. It provided for the formation of an administrative committee consisting of twenty-one members representing the tea growers and the general commercial community. To-day the representatives of the tea growers are nominated by the following associations:-Indian Tea Association, Calcutta, [seven]; Assam Branch, Indian Tea Association [two]; Surma Branch, Indian Tea Association [two]; Darjeeling Planters' Association and Terai Planters' Association, jointly [one]; Dooars Planters' Association [one]; Indian Tea Planters' Association, Jalpaiguri [two]; Kangra Valley Planters' Association [one]; and the United Planters' Association of Southern India [one]. The representatives of the general commercial community are four in number; three are nominated by the Bengal Chamber of Commerce and one by the Madras Chamber of Commerce.

On March 30, 1903, Act IX of 1903, known as the India Tea Cess Act, was passed by the Governor General of India in Council. The act, coming into operation on April 1, 1903, was for a period of five years. In 1908, when the five years' period came to an end, it was agreed that the cess should continue for a further five years. Similar action was taken in 1913,

1918, 1923, 1928, and 1933. The current period expires on March 31, 1938.

The cess was levied at the very low rate of one-fourth pie [about one-twentieth of a cent, U.S.A., or one-twelfth of a farthing] per pound of tea exported from 1903 until 1921. Early in that year the Legislative Assembly passed, at the instance of the Cess Committee, an Act so amending the Act of 1903 as to enable the cess to be levied at a maximum rate of eight annas per 100 pounds, or, roughly, one pie [about one-fifth of a cent, U.S.A.,



An Austrian Folder Which Tells How to Brew Tea Properly



TYPICAL MAGAZINE COPY FOR THE U.S.A. BY THE INDIA TEA BUREAU

or one-twelfth of a penny] per pound of tea exported. However, the maximum rate was not then levied, for it was considered that a rate of four annas per 100 pounds about one-half pie per pound—would be sufficient.

From May 1st, 1921, until April 20, 1923,

INDIA TEA CESS COLLECTIONS

Year	Rate	Rupees
1903-04	at ¼ pie per lb.	2,66,894
1904-05		2,75,490
1905-06	"	2,76,762
1906-07		3,04,753
1907-08	"	2,94,482
1908-09	"	3.02.095
1909-10	"	3.23.794
1910-11	"	3,31,253
1911-12		2,37,414
1912-13	"	3,61,727
1913-14	••	3,75,616
1914-15		3,89,285
1915-16	"	4,36,256
1916-17		3.81.662
1917-18	"	4,59,863
1918-19	"	4,31,687
1919-20		4.87.108
1920-21	44	3.66.439
1921-22	4 annas per 100 lbs.	7,44,834
1922-23	" Too Ibu	7,28,052
1923-24	6 annas per 100 lbs.	12,66,12
1924-25		12,83,392
1925-26	"	12,28,520
1926-27	- "	13,14,64
1927-28	"	13.74.26
1928-29	"	13,58,993
1929-30		14,19,000
1930-31	••	13,41,885
1931-32		12,95,137

the cess was collected at this rate. On the latter date, the rate was raised, at the instigation of the Cess Committee, to six annas per 100 pounds. This was done to enable the committee to undertake an advertising campaign in the United States. The rate remained at 6 annas per 100 pounds until September, 1933, when it was raised to 8 annas.

The cess is collected by the Customs Department and the proceeds are made over by the Department to the Committee. The collections since the inception of the Cess Act are shown in the accompanying table.

The Hon. Mr. E. Cable was the first chairman of the Tea Cess Committee and since then the following have served as chairmen: Messrs. Alex. Tocher, H. S. Ashton, W. Brown, Lockhart Smith, Gerald Kingsley, W. Warrington, R. Graham, W. M. Fraser, F. G. Clarke, Samuel J. Best, Carl Reid, T. C. Crawford, J. Ross, A. B. Hannay, A. D. Gordon, J. A. Milligan, and J. Jones.

Meanwhile, in 1900, Mr. Harington was summoned by the Indian Tea Association of London, and made a tour of the Continent, reporting on prospects for increasing the sales of Indian tea. In 1905, he was chosen by the Calcutta Association to be their first permanent tea commissioner in Europe. Mr. Harington opened an office In 1906, he proceeded to in Antwerp. Hanover, later visiting all parts of Germany. He opened tea rooms; gave away samples; served tea at demonstrations in department stores and fairs; and distributed pamphlets. The World War put an end to this work. Propaganda during the war consisted in supplying gifts of tea to refugees and to the troops of the allied armies. Some £14,000 were expended in this way between 1914 and 1918.

Nothing more was done in the way of



TYPICAL NEWSPAPER COPY FOR THE U.S.A. BY THE INDIA TEA BUREAU



COMBINATION HOT AND COLD TEA POSTER BY THE INDIA TEA BUREAU

propaganda for India tea on the Continent until 1922-23, when £10,000 was allotted for work in France. This work was carried on until March 1, 1927. The total sum allotted for the years 1923-27 was £67,000.

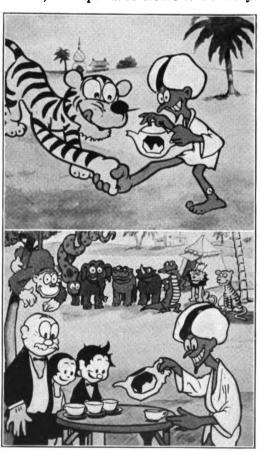
Mr. Harold W. Newby, who had been

Mr. Harold W. Newby, who had been in the tea business in London and Calcutta, and who for six years had been conducting the Committee's campaign to increase tea consumption in India, was selected as principal commissioner of the Tea Cess Committee to inaugurate the French campaign. He retired to go into the tea share brokerage business in 1924, being succeeded by Mr. H. W. Taylor, who had been working under him. Mr. Taylor carried on until March 1, 1927, when the propaganda ceased.

The work in France consisted principally in demonstrations. The commissioner issued an official stamp reading, Ce Melange Contient du Thé des Indes, or "This Mixture Contains India Tea," upon which was affixed the seal of the Administration pour la France of the Indian Tea Cess Committee. This stamp was given to packers who used India tea and whose blend was tested and approved by the commissioner. The propaganda in France was stopped because, "owing to the high prices ruling for tea in that country, the poorer classes are not in a position to purchase this commodity except in small quantities, and it is considered that further expenditure, meantime, would not serve any useful purpose."

At the close of the propaganda in France, £10,000 was set aside for work in Germany subject to preliminary investigation. Mr. J. E. M. Harington was again called in, and made a trip through Germany to ex-

amine into the advisability of renewing the work there. Upon his return, he rendered a report to the Tea Cess Committee, but nothing was done until 1928, when it was decided to spend £10,000 a year for two years in cultivating the Continental market, with special reference to Germany.



STILLS FROM THE INDIA TEA BUREAU'S ANIMATED FILM, "SUITED TO A "T" "



TEA PACKAGES DESIGNED BY THE INDIA TEA BUREAU

The same funds were voted for a third year. It was at first proposed to put out, through a London firm of tea importers, several brands of pure India tea at popular prices, but this was subsequently modified and the plan adopted of lending advertising aid and encouragement to firms in the German trade that agreed to put out 100 per cent India tea brands.

Propaganda for India tea in the United Kingdom began in 1904-05 under Mr. Herbert Compton, and continued later under Mr. Stuart R. Cope. The money expended in 1904-07 [£4000] was used chiefly in helping the Anti-Tea-Duty League. This League was formed with the object of securing a reduction in the heavy British import duty, and its vigorous efforts contributed largely to a reduction of 2d per pound.

Following a short hiatus, India tea propaganda was resumed, in 1908, in the United Kingdom under the late Mr. A. E. Duchesne. He continued in charge of the work until its termination in 1918. At the start of the campaign it was designed to counter the propaganda then being carried on for China tea. The money expended during this ten-year period amounted to £39,750 [\$193,000]. This ended the campaign except for £4000 spent, in 1923–25, at the British Empire Exhibition at Wembley.

By 1931, the sales of foreign teas in London reached such alarming proportions—they had nearly trebled in nine years—that the Indian Tea Association [London], the Ceylon Association in London, and the South Indian Association in London launched a movement which resulted in the "Buy British" tea campaign of 1931–33 and the reimposition of the British preferential tea duty. The Indian Tea Cess

Committee coöperated by sending its then commissioner of tea for India, Mr. John Harpur, to be tea commissioner for the United Kingdom, and allocated £10,000 annually for the support of the campaign. Ceylon, it was promised, would contribute substantially if and when a propaganda cess passed the State Council.

As finally organized the following bodies cooperated in the campaign: the Indian Tea Cess Committee, the Indian Tea Association [London], the Ceylon Association in London, the South Indian Association in London, the Empire Marketing Board, the Trade Commissioner for India, the Chief Commissioner for H. M. East African Dependencies, and a majority of the important English tea blending and packing firms.

The methods used in the "Buy British" tea campaign included the work of canvassers, distribution of display material, newspaper advertising, posters, tea leaflets, lectures, and broadcasts.

When the campaign began, no concern in the United Kingdom specialized in the sale of Empire teas nor was there any consumer inquiry for them. But when the campaign ended, in 1933, Commissioner Harpur reported that some fifty thousand British grocers and tea dealers were making displays, while the housewife inquiry was al-Where not a single most universal. special packet of India tea was put out by wholesalers at the beginning of the campaign, nearly seven hundred were reported as being marketed at the end of two years. Also, some fifteen hundred municipalities had adopted a rule of specifying Empire growths when advertising for tenders of tea for public institutions.

In December, 1933, the propaganda for Empire-grown teas was reorganized under the name of the Empire Tea Growers. In 1935 the name was changed to the Empire Tea Market-Expansion Board.

In 1934, a new joint Empire tea propaganda campaign was launched in the British Isles by the Empire Tea Growers. The main objectives announced were to maintain the consumption of tea in the British Isles and to induce the consumption of better tea. An outstanding difference between this and the preceding "Buy British" campaign was the elimination of any discrimination between Empire and foreign teas.

The London Press Exchange, Ltd., and Messrs. Charles Baker & Sons, Ltd., were



COOKING SCHOOL SET-UP FOR INDIA TEA

appointed joint advertising agents for the campaign, and a comprehensive market survey preceded the actual start of the advertising in September-October, 1934.

This survey led to the adoption of three slogans as the foundation for the advertising: (1) "What you need is a cup of good tea"; (2) "Tea at 11 a.m."; and (3) "Tea is the safe pick-me-up." Also, an eye-capturing figure, known as "Mr. T. Pott," was evolved for use as a tie-up for all the advertising and to drive home the campaign slogans [see page 331].

In addition to the Indian Tea Cess Committee's allocation of £10,000 in 1934 for the Empire tea campaign in the United Kingdom, an appropriation of £1,000 also was made to cover the expense of an attractive exhibit at the Ideal Home Exhibition, at Olympia, London, to celebrate the centenary of the introduction of tea culture into British India.

To return to the work in America, where the India tea propaganda ceased in 1899, with the exception of a small sum contributed to the Ceylon fund: After the adoption of the India Tea Cess in 1903. Mr. Blechynden was again engaged by the Cess Committee as their commissioner to arrange an exhibit at the St. Louis World Fair in 1904, and to prepare a regular program for work thereafter in the Middle West. Mr. Mackenzie's health failed and he retired, bringing to an end the joint propaganda of India and Cevlon. country had separate buildings at the St. Louis Fair. There India followed the line adopted at Chicago ten years before, with many Indian exhibits and Indian waiters to serve tea. At the same time the St. Louis territory was worked in coöperation with the wholesale tea trade.

This latter line of work was continued after the close of the Fair. Newspaper advertising, samples, picture post cards, and show cards were used. A tea salesman was engaged to go out day after day with different salesmen from the wholesale houses and push India tea. Mr. Blechynden carried on in this way until the war put an end to the propaganda, the last allotment being £5000 for the year 1917–18.

In 1911-12, the sum of £1000 was granted by the Cess Committee for "a report by Mr. R. Blechynden on the prospects of opening a campaign in South America for India tea." Mr. Blechynden visited several of the countries and reported thereon, but no funds were voted for propaganda.

In 1922-23, the Cess Committee again looked toward America, voting £1000 for an investigation of the possibilities of propaganda. Mr. Harold W. Newby, then carrying on the work in France, came to the United States, in February, 1923, made a tour of the principal cities of the East and Middle West, and returned to England in April, with a recommendation that newspaper advertising was the best way to make propaganda for India tea in America. The Cess Committee accordingly voted £20,-000 for this purpose in 1923-24, and the work was intrusted to the advertising agency of C. F. Higham Ltd., London. In 1924, the allotment was doubled. Charles Higham visited the United States several times in connection with this campaign, once with Mr. Gerald Kingsley, chairman of the Indian Tea Association [London]. The Wm. H. Rankin Co. handled the publicity here for the Higham agency for two years, after which the latter placed the business direct. The Cess Committee allotted £40,000 for the year 1925-26, and the same for 1926-27, with an additional £10,500 for a tea demonstration at Philadelphia's Sesquicentennial.

The campaign developed an amazing amount of publicity for Sir Charles Higham, who made good newspaper "copy," and not a little for India tea. Newspapers in the larger cities of the country were used in rotation; an essay contest was promoted on "Why I Like India Tea," the





Sir Charles Higham

Mr. L. Beling

RECENT INDIAN TEA COMMISSIONERS TO THE UNITED STATES

first prize being won by a New York advertising solicitor, Mr. Carlton Short; and Mr. Hector Fuller, then with the Wm. H. Rankin Co., gave a radio talk on tea. Toward the close, packers' brand names were published as part of the copy, urging the consumer to "use India tea or a blend containing India tea."

The exhibit at the Sesquicentennial was in charge of Mr. Coleman Goodman. It was lodged in the Indian Pavilion. The work here consisted in serving free tea and in selling India tea "highballs" made of tea, fruit juice, and ginger ale. Tea "cocktails" of tea and fruit juice also were sold. Many American tea packets were on display.

At a meeting of the Cess Committee held in March, 1927, the sum of £35,000 was voted for propaganda in America for the year 1927-28. In April, Major Norman McLeod, vice chairman of the Indian Tea Association [London], arrived in the United States to examine into the campaign. He called upon the trade in several cities. Upon his return to England in May, he made the following recommendations: (1) continue newspaper advertising, but modified, intensified, and curtailed; (2) advertise in magazines to a limited extent; (3) adopt an official emblem to distinguish all India tea advertising; (4) establish a Trade Bureau or Trade Director with a good technical knowledge of India tea to work in cooperation with the advertising agent; and (5) employ a reliable fiscal agent or treasurer to handle funds and generally look after the campaign.

On January 7, 1928, Sir Charles Higham

telephoned from England the first advertisement to be thus transmitted over the Atlantic. It was for India tea.

As a result of Major McLeod's report, the Tea Cess Committee, in December, 1927, appointed Mr. Leopold Beling as its tea commissioner in the United States, with Mr. Leonard M. Holden as treasurer or fiscal agent. Mr. Beling was born in Ceylon, and first came to the United States in 1893, when he was associated with Ceylon's exhibit at the Chicago World's Fair. His official connection with Ceylon tea was again revived when the last Ceylon commissioner, Mr. W. A. Courtney, engaged him as tea expert in 1906. Beling also had been associated with several New York tea firms. Mr. Holden was for several years manager of the American branch of McLeod & Co., of Calcutta. Latterly, he acted as export representative for several American manufacturers.

Messrs. Beling and Holden opened an office in New York, under the name of the India Tea Bureau. Here they spent the 1928–29 allotment of £40,000 in working out the first stages of a plan to secure dealer coöperation by means of a package emblem. The subsequent allocations for the United States were £50,000 each year from 1929 to 1934, inclusive, except 1932, when the allocation was £44,000.

A special contribution of \$8,000 was made for the publicity enterprise sponsored by the Tea Association of the United States in 1929. The New York agency-firm of Paris & Peart prepared the advertising copy and placed the business.

In 1928, the newspaper and magazine copy was focused on a silhouette-map-of-India emblem granted to packers of blends containing at least 50 per cent of India tea. The names of brands available were featured. A trial was made of a free afternoon-tea plan in which the Bureau encouraged the custom of afternoon-tea in offices, by supplying free tea to drug stores or soda fountains located in office buildings, in the hope that, after being served free tea several times, the recipients would be willing to pay for it. Demonstrations in cooking schools, under the auspices of newspapers carrying India tea advertising, followed in 1928-29.

In April, 1929, tea packers using the India emblem were guests of the India Tea Bureau at a New York conference where interesting addresses were made by well-

known tea men. About this time the Bureau launched a newspaper campaign against the use of the words "Orange Pekoe" as synonymous with tea quality. It also began the publication of *India Tea Tips*, designed to supply tea distributors with detailed accounts of activities in behalf of India tea. A teaball-tag contest was staged in connection with soda fountains during 1929–30. Moncy prizes were awarded soda-fountain clerks according to the number of teaball tags turned in. The idea was to promote the sale of tea at these popular quick lunch institutions.

The 1930-34 campaigns called for trade and daily newspaper and magazine advertising, plus cooking school demonstrations on a nation-wide scale. About 2,000,000 women attended these sessions each year. Radio was used to a limited extent and talking motion pictures were added. One of these, an animated cartoon, entitled "Suited to a T," was shown in twenty-three cities throughout the United States to an estimated 650,000 theatre-goers within a few weeks. Subsequently the film was enjoyed by large audiences in other cities.

An outstanding development of the American campaign in recent years has been the employment, by the Bureau, of The Home Makers' Educational Service, to extend the work to domestic science classes in the public high schools. This organization assists teachers of domestic science classes by supplying prepared lessons in text book form, and by supplementing the lessons with the distribution of informative leaflets on correct tea brewing, etc. Only factual, scientific material has been issued, and this probably accounts for a widespread demand for the educa-

tional matter. Wide sampling also has been done, whereby teachers have been enabled to make and serve India tea in their classrooms. Through its school plan the Bureau has contacted over 16,000 teachers in some 7,000 cities and towns in the United States.

On the dealer side the Bureau has systematically supplemented newspaper advertising with trade aids such as window strips, posters, etc. The cooking schools aided in this work by sending out letters to the leading grocers urging them to stock and display India tea. The trade also has been assisted by the Bureau in the creation of blends, modern packet designs, and such collaboration as the formulation of sales plans, window displays, etc.

In 1934, the Bureau inaugurated a drive among hotels, tea rooms, and restaurants to secure more attention for tea and its correct service. This resulted in India tea being placed on the menus of over one hundred hotels in fifty leading cities. A weekly "Good Tea" contest on the radio also was inaugurated in 1934, to educate consumers in the proper method of making tea. In addition, some important scientific research was started to ascertain the truth about the physiological effects of tea drinking and a new carbonated tea beverage was perfected.

The idea of inducing the Indians in India to drink tea dates back to the inception of the tea cess. During the years 1903-15, the Cess Committee spent small sums in India on experimental operations, the total amount being less than Rs. 75,000. For the year 1915-16, however, Mr. Harold W. Newby was selected as commissioner for India and the sum of £4500 was allotted by the Cess Committee. This was



Mr. Harold Newby



Mr. John Harpur 1922-1930



Mr. E. W. Christie



Mr. W. H. Miles Present Incumbent

COMMISSIONERS ASSOCIATED WITH THE PROPAGANDA FOR TEA IN BRITISH INDIA



Teaching the Native Indians to Drink Tea

Tea stalls at Lahore Station—Hindu to left, Mohammedan to right.

increased to £11,000 for 1916-17. With twenty-eight representatives spread out over India, Mr. Newby's idea was to get people to open tea shops in which the beverage was sold. Attention was drawn to these shops by means of cinema entertainments, native bands, singing, games, handbills, posters, and sandwich boards. Demonstrations were put on in factories, at cattle fairs, exhibitions, and religious gatherings.

As the work progressed, attention was directed toward the collieries and the Indian troops. Arrangements were made for supplying tea to third class passengers on some of the large Indian railway systems. The tea shops became self-supporting. Gramophones and vernacular records were added, among them being a speech on "The Benefits of Drinking Tea" and a "Hot-Tea Song."

The Cess Committee voted £22,000 for propaganda in India in 1917-18, and £23,-333 in 1918-19. Mr. John Harpur was appointed chief assistant to Mr. Newby. Small envelopes of tea were distributed free, bearing the legend, "Empty the contents of the packet into an earthenware

teapot and pour on enough water for six cups of tea. Leave on for eight minutes and pour out; add milk and sugar to taste." Pice packet shops had been opened in 1918, and proved most successful. The packets were sold for one pice [1/2 cent U.S.] each. Since then the propaganda has concerned itself mostly with demonstrations in the bazaars, on railways, at schools, factories, and other large gatherings.

In 1919–20, the amount allotted by the Cess Committee for the work in India was increased to £30,000, and, with the exception of 1921–22, when it was reduced to £26,666, it remained at £30,000 until 1925–26. In 1926–27, the allotment was £33,750; in 1927–28, £37,500; and in 1928–29, £39,375. In 1929–30, it was increased to £50,625, and in 1930–31, including a special allotment for Burma, the allocation amounted to £58,125. For 1931–32, the appropriation was reduced to £54,375. In 1932–33 it was £45,000; in 1933–34, £45,000; and in 1934–35, £56,250.

In 1922, Mr. Newby took up the work in France and Mr. Harpur was made cess commissioner for India, a work he car-





EARLY PACKET TEA ADVERTISEMENTS IN HOLLAND

ried on until ill health compelled his retirement in 1930. Mr. Harpur estimated the annual consumption of tea in India as over 68,000,000 pounds, an increase of more than 50,000,000 pounds since the start

of the propaganda.

Mr. E. W. Christie was appointed acting commissioner for India in 1931, and in that year the work entered a new phase. While still continuing the tea shop and railway work previously undertaken, a fleet of Tea Cess motor lorries was sent out with demonstration parties to inculcate the teadrinking habit in remote towns and villages where tea was previously unknown. The demonstrators offered to the villagers cups of well-made tea and lectured on the advantages and merits of the beverage. Gramaphones helped to collect crowds and in the evening lantern slides depicted the tea industry in all its stages. Tea in suitable sized packets was offered at a low price. Mr. Christie resigned in 1933.

Under a reorganization of the work to secure results more in harmony with the sums spent on propaganda in India, Mr. W. H. Miles was appointed acting commissioner for India late in 1933. The renewed activities covered in part propaganda in jute mills, with tea supplied to the workers, demonstrations in Northern and Southern India, a traveling cinema, liquid tea shops, tea supplies for railways, sugar factories, etc.

Advertising Java Teas

The first cooperative attempt to create new markets for Java tea was the shipment, in 1909, of 2300 chests to Australia, where the consignment was sold by Mr. H. Lambe, the tea expert in charge, at public auction and private tender.

In America, a similar attempt to advertise Java tea was made in 1917, under the direction of Mr. H. J. Edwards, Mr. Lambe's successor as tea expert of the Tea Expert Bureau, Batavia, which organized and financed the Australian and American ventures. The latter cost ft. 16,000 [\$6400]. The 10,000 chests of tea which Mr. Edwards brought with him were distributed through Irwin-Harrisons and Crosfield, Inc. In 1921, Mr. Edwards again visited the United States to make a further study of the market for Java tea. The cost to the Tea Expert Bureau this time was fl.



PROPAGANDA BOOKLETS DESIGNED TO TELL ALL EUROPE THE STORY OF JAVA TEA



POSTER BY THE TEA ASSOCIATION OF CHINA

11,000 [\$4400]. Between 1923 and 1930, the Tea Expert Bureau advertised the merits of Java tea in the trade press and, in 1929, contributed \$4000 to the coöperative tea campaign of the Tea Association of the United States.

A tea propaganda fund, to which the majority of the members of the Tea Expert Bureau made voluntary contributions, was started in 1922 for the purpose of advertising Java and Sumatra teas at home and abroad. Members of the Bureau contributed about five chests of propaganda tea annually for distribution among the native population of Java, and in this way from 50,000 to 150,000 lbs. have been distributed in typical recent years. In 1931-32, a fleet of four gaily painted motor lorries was purchased and specially equipped for teaching the villagers how to make and serve tea. Gramaphones and loud speakers attracted the crowds, after which the propagandists demonstrated tea making, and the listeners were given a drink of properly drawn tea, with sugar gratis. At the same time they were offered an opportunity to buy tea at a low price. Originally the natives were presented with tea, but this was stopped as it was not appreciated, and now all of the propaganda tea is used either in demonstration or sold out-

The Thee Expert Bureau hopes to increase tea consumption in the Netherlands Indies to about 40,000,000 lbs. and has expressed its belief that this can be done by

raising the consumption gradually through its propaganda.

Some effective propaganda has been made for the teas of Netherlands India in Holland and abroad, since 1921, by the Propaganda Bureau of the Vereeniging voor de Theecultuur in Nederlandsch Indië, of which Mr. A. E. Reynst became chief in the latter part of 1922. This work has included newspaper advertisements, illustrated lectures, booklets, and the cinema; also demonstrations and distribution of samples, with rules for proper brewing, at foreign and home exhibitions, fairs, etc. The Propaganda Bureau has a yearly budget of between \$10,000 and \$12,000.

One per cent of the yield of all tea sold in the Amsterdam market is collected for the tea propaganda fund, to foster sales in Holland and adjacent countries. This amounts to about fl. 126,000, or say, \$50,000 U.S.A., in a typical year.

Advertising China Tea

Coöperative effort to advertise China tea had its inception among the British tea firms in China and their London offices when the China Tea Association was organized in 1907. The London committee was composed of Messrs. Charles Schlee [chairman], H. Bluhm, and F. E. Theodor. Local China committee members included Messrs. Alexander Campbell, Edward White, James N. Jameson, and H. Macray.

The advertising was designed to protect the English market from the India-Ceylon menace, and concerned itself mainly with promoting the idea that black China tea was less injurious, because not so astringent as British-grown teas. Mr. C. Delaroy Lawrence was the first secretary of the Association, and, under his direction, quite an aggressive campaign was waged in the newspapers and by means of posters. It was generally disapproved by the India-Cevlon interests, who objected to the emphasis put on the medical aspects of the question based on Sir Andrew Clark's advice to his students, "If you want, either for your patients or yourselves, tea which will not injure and will refresh, get China black tea."

Mr. Charles Watney, of Watney & Powell, London, Parliamentary agents and publicity consultants, succeeded Mr. Lawrence as secretary, but the Association has not been active in recent years. Funds were



CHINA TEA ASSOCIATION POSTER, LONDON, 1912

supplied by the merchant members. No assistance has been received from the various Chinese governments although some of the Chinese tea merchants have contributed to phases of the propaganda associated with the activities of the China Tea Association, Shanghai, of which Mr. W. S. King is chairman.

Merchant Cooperative Campaigns

Tea advertising by groups of tea merchants has been tried in several consuming countries. In England, the most notable effort was the Fine Tea Campaign of 1909, promoted by a group of forty-odd blenders, wholesalers, and retailers. It was designed to counteract a campaign advertising cheap tea. It lasted five years and was directed by Mr. Arthur J. Giles, secretary of the Federation of Grocers' Associations of the United Kingdom.

In America the cooperative idea took the form of a national advertising campaign for tea in general. It was actively promoted by Mr. J. F. Hartley, president of Carter, Macy & Co., in 1919. It was proposed to solicit contributions from tea producers, importers, jobbers, and distributors. Several meetings were held, a ways and means committee was appointed, and the formation of a Tea Promotion Council considered. Subsequently, the by-laws of the Tea Association of the United States were changed to permit of its carrying out the program as outlined by the ways and means committee, because the larger tea-importing interests felt that any such campaign should be directed by the Tea Association. Sub-committees were appointed to secure contributions from tea exporters in the producing countries on a basis of one-fifth of one cent, gold, per pound on all shipments to the United States. In addition the tea growers were to be asked to contribute a like sum. In this way, it was thought that a fund of approximately \$400,000 a year might be raised.

In 1920, Mr. Robert L. Hecht, of the Irwin-Harrisons-Crosfield organization, who had assumed the chairmanship of the propaganda committee, made a tour of the principal tea-producing countries but found them apathetic to the Association's proposed plan for a coöperative campaign. A fund was raised in the United States to advertise to the trade the idea of coördinating all promotional work for tea in America, and to secure new members. The copy was excellent but the results were

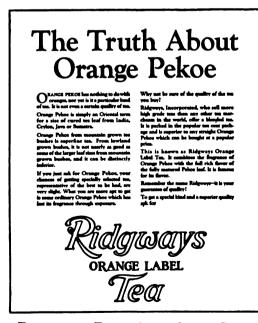


COPY USED IN A BRITISH FINE-TEA CAMPAIGN



EFFECTIVE POSTERS DISTRIBUTED BY THE EMPIRE MARKETING BOARD IN THE UNITED KINGDOM

disappointing. After several years of effort to interest the tea producers in the scheme, it was abandoned.



TELLING THE TRUTH ABOUT ORANGE PEKOE

In 1924, the Tea and Coffee Trade Journal started a National Tea Symposium to examine into the causes for the falling off in tea consumption, to find a practicable plan to induce Americans to drink more tea and to promote an intelligently-directed propaganda among the trade and consumers in behalf of tea in general. In connection with this Symposium the editor made a tour of the tea producing countries and reported certain findings.

In 1928, a group of tea packers led by Mr. Willoughby M. McCormick, of Baltimore, organized the "Tea Club" to discuss packer problems. Acting on the initiative of this group, \$16,000 was raised by The Tea Association of the United States to employ a publicity agent to distribute press notices, or "readers," on tea and tea drinking. Subsequently, the Tea Association's plan to solicit funds from the tea growers was revived. Contributions amounting to \$34,000 from five tea-producing countries were expended in 1929-30 in radio publicity and booklets, in addition to the press notices, concerning which there had been some criticism, as free-publicity agencies are not looked upon as ethical by the American Newspaper Publishers Association, the National Editorial Association, and other organizations among publishers and regular advertising agents. The tea countries contributing to the enterprise and the amounts were as follows: Ceylon, \$10,000; India, \$8000; Japan, \$8000; Formosa, \$4000; Java, \$4000.

It has been suggested that a Joint Tea Trade Committee, patterned after the Joint Coffee Trade Publicity Committee, and having on it representatives of all classes of tea distributors, could most effectively handle a coöperative campaign for tea in America.

International Tea Propaganda

When the International Tea Committee came into being in 1933, in addition to administering the international tea regulation scheme, it was provided by the memorandum of recommendations that it should undertake ways and means for increasing tea consumption throughout the world. Pending the time when some decision could be reached as to what form these ways and means should take, it was recommended that the activities of the contracting parties be allocated as follows: Ceylon to make propaganda in South Africa, New



POPULAR SENTIMENTAL COPY BY MAZAWATTER

Zealand, Australia, and Canada, and to join with India in a campaign in the United Kingdom; India to continue her work in the United States, associating the name of India with her publicity and using the Map of India emblem for the purpose; Netherlands Indies to campaign in Holland, Belgium, Luxembourg, Germany, France, Switzerland, Denmark, Italy, and Sweden. Broadly speaking, the publicity was to be for tea in general, and it was agreed that the three countries should refrain from any propaganda calculated to damage or antagonize the other interests.

Late in 1934, a commission of inquiry



A WINDOW DISPLAY BY LYONS SUPPLIED FREE TO THEIR AGENTS







Mr. J. A. Milligan for British India

Mr. D. Lageman for Netherlands Indies

MEMBERS OF 1934 COMMISSION OF INQUIRY

consisting of Mr. J. A. Milligan, for India; Mr. Gervas Huxley, for Ceylon; and Mr. D. Lageman, for the Netherlands Indies, was sent to the United States to recommend the best course to follow for increasing tea consumption in America.

The Governor-General of the Netherlands Indies decreed the amount to be contributed by the tea industry of the Netherlands Indies toward the International Tea Propaganda for the year 1934 as 39 Dutch cents per 100 kilos of estate leaf and 19½ cents per 100 kilos of native-grown leaf purchased. Ceylon's propaganda cess was 50 Ceylon cents, and India's 8 annas per 100 lbs. of tea exported in 1934, when the campaign began.

On Present-Day Advertising

Tea advertising in Europe seems content to follow the beaten path which leads to stereotyped copy in newspapers and magazines, on hoardings, and in electric displays. This is largely true, also, of the United States, where, although the wireless, or radio, and the talking picture have been employed, tea publicity has, for the most part, lacked distinction.

Generally speaking, the European tea package is more artistic, and so possessed of greater advertising value; but some attractive designs, showing originality, recently have been produced in America.

The demonstration is a favorite form of tea advertising. Nowhere has it been brought to such a high efficiency as in America where, in recent years, the domestic-science or cooking-school lecture has become an advertising business in itself. As an adjunct to a campaign of

newspaper publicity, it has been employed successfully by several tea packers and by the director of India's tea propaganda.

In the United States, opinion is divided as to whether the radio or the talking picture is the best of the newest advertising mediums.

Over the Columbia Broadcasting System, the basic net work of twenty-two radio stations in the East and Midwest costs \$5600 per hour in the evening and \$2806 in the daytime. Station WABC, New York, is worth \$950 per evening hour and \$475 by day. A complete national hook-up using the "Blue" network of the National



AN ARTISTIC PERMANENT BOOTH, TORONTO

Broadcasting Company costs \$13,520 per hour. The "Red" network of the same company on a similar hook-up, costs \$235 a minute—\$3.92 per second—or a total of \$14,120 per hour excluding program cost. The orchestral program of the Great Atlantic & Pacific Tea Company's "Gypsies" alone costs \$3000 weekly.



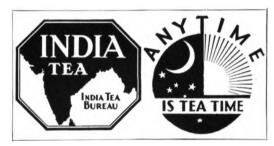
A LYONS CARNIVAL ADVERTISEMENT

The nippies are local girls who collect for the hospitals. Anyone contributing to the hospital box receives a free sample of tea.

For commercial motion-pictures the cost depends upon the nature of the preparation and the circulation. The latest development in this field is the sponsored talking picture. An eight- to ten-minute advertising talking picture costs from \$5000 to \$10,000 to produce. Added to this is a fee of \$5.00 per thousand of circulation based on box office receipts. The average circulation per change of program for a coast-to-coast showing is five million.

Tea Advertising Efficiency

As in the case of coffee, there has been so much misinformation published, that the advertiser should be careful to avoid controversial questions and make his copy positive, not negative. His appeal should be educational in character, and based upon facts arranged in their right order. Tea, like coffee, and good wine, "needs no bush." It is an ancient and honorable beverage, and has long since "arrived."



The India Tea Map Emblem

Slogan by the Ceylon Tea Bureau

Advertising Designs Used by the India and Ceylon Tea Bureaus

Whether it is Government or association propaganda or advertising for a private brand, the right approach requires an intelligent analysis of the market before anything is done. After that, no matter what media are indicated or methods em-



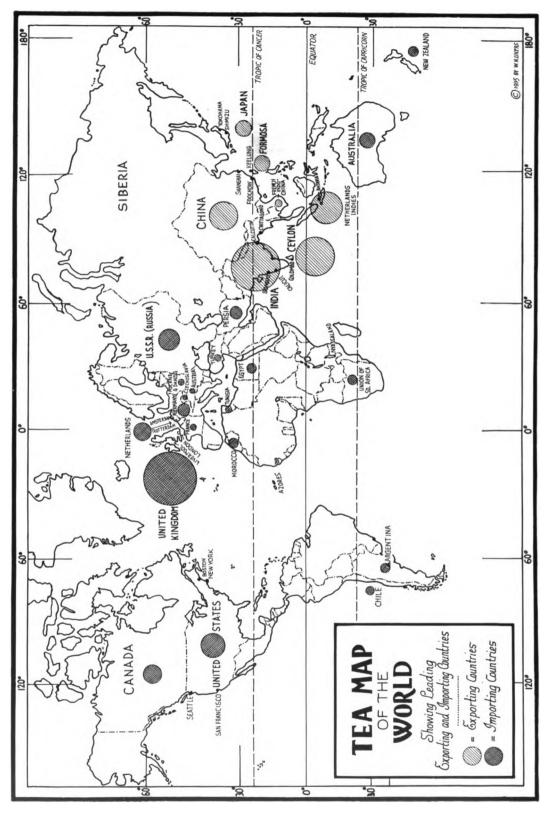
EMPIRE TEA GROWERS' BRITISH NEWSPAPER COPY ployed, the things which need stressing are these:

1. The intrinsic desirability of tea—the actual pleasure to be derived from the act of partaking of it.

2. That it is a delightful medium for social intercourse—part of the essential equipment for an intimate chat or a more general assembly of friends.

3. That its proper service is a badge of social distinction—the mark of a successful hostess.

These three thoughts should be woven into the fabric of all tea advertising; but first, last, and always, the educational note must be sounded.



CHAPTER XVII

PRODUCTION AND CONSUMPTION

GENERAL DISCUSSION OF PRODUCTION—ITS TREND AS INDICATED BY WORLD EXPORTS—PRODUCTION AND EXPORTS OF THE PRINCIPAL TEA-GROWING COUNTRIES—DETAILS OF PRODUCTION, EXPORTS, ACREAGE, ESTATES, IMPORTS, REËXPORTS, ETC.—CONSUMPTION IN PRODUCING COUNTRIES FOR WHICH FIGURES ARE AVAILABLE—CONSUMPTION IN THE PRINCIPAL CONSUMING COUNTRIES OR AREAS—REVIEW AND DISCUSSION OF THE RECENT PLAN OF TEA EXPORT REGULATION

HE world's production of tea amounts to nearly 2,000,000,000 lbs. L annually. This is from an area of perhaps 4,000,000 acres. More than 4,000,000 laborers are engaged in its cultivation, plucking, and manufacture. No one knows with accuracy how much tea China, the greatest producing country, contributes to swell the world total, and naturally this element of uncertainty is a handicap in determining the entire tea yield. Authorities, however, place China's crop at around 900,000,000 lbs. Official statistics for all other areas combined show approximately an equivalent amount. The world total was 1,831,000,000 lbs. in 1931, and it was 1,886,000,000 lbs. in 1932.

This enormous quantity of tea considered in terms of chests would be sufficient to construct an imaginary building about two-and-one-half times the size of the world's loftiest structure, the Empire State Building, which contains 37,000,000 cubic feet. This amount of tea also provides nearly one pound for every person in the world, or about 200 cups of the beverage annually. If the liquid were poured into one huge teacup, it could easily float the world's greatest ocean liner.

While the total yield at best is an approximation, the amount actually placed on the world markets is obtainable from official reports of the various countries. According to these reports, the quantity marketed in 1932 was 973,034,000 lbs., or about half of the amount produced, the other half being retained for consumption

in the producing countries, principally in China. These export figures are a better guide to the trend in world conditions, for they are available over many years. Taking 1900 as a starting point, the world's tea trade in that year totaled 605,801,000 lbs.; the four years following revealed some variation, and the annual average in 1900-04 was 624,842,000 lbs. The years 1905 to 1908 reflected a steady increase and the average in the pre-war period 1909-13 amounted to 769,328,000 lbs. The upward trend extended into the war period, the average in 1914-18 being 857,972,000 The post-war rehabilitation years, with chaotic conditions and lowered purchasing power and accumulated stocks, however, witnessed a decline in world movement and in 1920-24, the annual average was 723,249,000 lbs., which was the lowest since 1900-04. Then the movement took a tremendous stride forward and averaged 926,391,000 lbs. annually in the eight years 1925-32. Apparently 1929 was the record year, in which exports totaled 989,393,000 lbs. This was approached by the 1932 exports, which totaled 973,034,000 lbs. As regards 1933, figures for exports from Formosa and French Indo-China and from British India by land are not available, but estimating their exports at about the same as in 1932, and using official figures for all other countries, the world total was approximately 862,000,000 lbs. The great decrease was directly attributable to the new export-restriction policy.

PRODUCTION AND CONSUMPTION TABLE NO. 1 World Exports of Tea

By calendar years in 1000 pounds

Year	British ¹ India	Ceylon	Netherlands East Indies	China	Japan	Formosa	French Indo-China	Total Including "All Other"
1900	192,301	149,265	16,830	184,576	42.646	19.756	427	605.801
1901	182,594	144.276	17,299	154,399	43,980	19,926	851	562,825
1902	183,711	150.830	15,637	202,561	43,333	21,892	360	618.324
1903	209,552	149,227	21,333	223,670	47.857	23,949	870	675,958
1904	214,300	157,929	26.011	193,499	47.108	21,735	721	661.303
1905	216,770	170,184	26.144	182,573	88,566	23,779	498	658,509
1906	236,090	170.527	26.516	187.217	39,711	23,018	724	683,807
1907	228,188	179,843	80,241	214,683	40,588	22,975	812	717.916
1908	235,089	179,398	84.724	210,151	85,269	23,357	674	718,940
1909	250,521	192,887	85,956	199,792	40,664	24,028	717	744,738
1910	256,489	182,070	83.813	208,106	43,581	24,972	1,168	750.273
1911	263,516	186,594	88.469	195,040	42,577	27,039	1,283	754,586
1912	281,815	192,020	66.610	197,559	89,536	25,066	961	803,637
1913	291,715	191,509	58,527	192,281	33,760	24,668	821	793,407
1914	802,557	198,584	70.344	199,489	39,168	24,932	1.080	831,441
1915	340,488	215,633	105.305	237,646	44,958	27,473	2,122	974.032
1916	292,594	203,256	103.747	205,684	50,719	27,460	2,025	885.937
1917	360,632	195,232	83,796	150,071	66.364	28,433	1,900	886,618
1918	826,646	181,068	67.135	53,895	51.020	29,027	2,290	711,832
1919	382.034	208,720	121,431	92,020	30,689	24,073	1.991	862,094
1920	287,525	184.873	102,008	40,787	26,228	15,170	787	657.922
1921	817,567	161,681	79.065	57,377	15.737	20,696	844	652,698
1922	294,700	171,808	91,605	76,810	28.915	20,352	1.121	686,300
1923	844.774	181,940	106.072	106.855	27.142	22,153	1,936	791,986
1924	848,476	204,980	123.287	102,124	23,845	21,995	1.668	827,388
1925	337,315	209,791	110.648	111.067	27.819	21,727	2,282	821,810
1926	859,140	217.184	157.299	111.909	28,775	22,927	2,530	896,068
1927	867,387	227,038	167.102	116.290	23,301	22,818	1.711	926,977
1928	864,826	236,719	176.544	123,469	23,814	19,598	2.065	948,593
1929	882,595	251,588	182,494	126,364	23,659	18,554	2.232	989,393
1930	362,094	243,107	180,478	92,540	20,319	18.541	1.206	921.070
1931	348,316	243,970	197,938	93,761	25.414	18,414	1.294	934,184
1932	385,395	252.824	197.311	87,141	29,539	15.259	1,364	973,034
1988	828,2072	216,061	179,666	92,501	29,487	10,200	_,004	862,0003

- ¹ Fiscal year ending March 31 [of the calendar year following the one named].
 ² Includes estimated exports by land.
 ³ Includes estimates of Formosa and Indo-China exports, and land exports of India.

These trends are shown in Tables No. 1 and No. 2.

The bulk of the world's tea is grown in Asiatic countries, and China is unquestionably the largest producer, being the source of almost one-half of the total, considered on an average of five years. India supplies about 22 per cent of the total yield, Ceylon 13 per cent, the Netherlands East Indies 9 per cent, Japan 5 per cent, Formosa 1 per cent, and all other areas less than 1 per cent. On an exporting basis, however, the order of the countries is somewhat different. India takes the lead, with about 39 per cent; Ceylon follows with 26 per cent, the Netherlands East Indies 20 per cent, China with only 11 per cent, Japan 3 per cent, Formosa 2 per cent, and all other sources with less than 1 per cent.

Table No. 3 shows the percentage of the world's production and exports furnished by each of the various countries.

Tea is grown in twenty-three countries, but those listed in the foregoing paragraphs and Table 3 together with French Indo-China and Nyasaland which are grouped in "all other" are the commercially-important sources.

PRODUCTION AND CONSUMPTION TABLE NO. 2 Annual Average of Tea Exports in Five-Year Periods

In 1000 pounds

Annual Average in Five-Year Periods	British India	Ceylon	Netherlands East Indies	China	Japan	Formosa	French Indo-China	Total Including "All Other"
1900-04	196,492	150,305	19,422	191,741	44,985	21,452	446	624,842
1909-13	268,801	189,016	46,675	198,556	40,024	25,155	980	769,328
1918-22	321,694	181,630	92,249	64,178	30,518	21,864	1,307	714,169
1923-27	351,418	208,177	132,882	109,649	25,176	22,324	2,025	852,836
1928-32	368,645	245,642	186,952	104,655	24,549	18,072	1,632	953,255



PRODUCTION AND CONSUMPTION TABLE NO. 3

World Production and Exports of Tea

PRODUCTION Annual Average in Period 1928-1932	EXPORTS Annual Average in Period 1928–1932
Per Cent of	Per Cent of
World Total	World Total
China	India 38.7
India	Ceylon 25.8
Ceylon 13.4	Netherlands
Netherlands East	East Indies 19.6
Indies 9.2	China 11.0
Japan 4.7	Japan 2.6
Formosa 1.2	Formosa 1.9
All other 0.3	All other 0.4
Total	Total100.0

The world map shows the location of the centers of tea production.

China, the Greatest Producer

China, the ancient birthplace of tea, unfortunately is without statistics on the amount of tea produced. Perhaps one-tenth of the yield is exported, the remainder being consumed within the Republic. At one time, China was not only the greatest producer of tea, but also the

greatest exporting country. The export trade reached its peak in the latter part of the 'eighties. In 1880, the total export was 279,616,000 lbs.; ten years later it had fallen to 222,053,000 lbs., and in still another decade to 184,576,000 lbs. Since the beginning of this century there have been certain years when exports showed a gain over 1890 and 1900, particularly in the years prior to the world war, but black teas from India, Ceylon, and Java have been making steady inroads on China's share of the world trade. The contributory causes for this shift have been China's inability to compete with modern methods of manufacture employed on estates in these countries as contrasted with her century-old methods, heavy taxation, and lack of organization and advertising.

The principal classification of teas exported from China are: blacks and greens, including both leaf and bricks, leaf unfired, scented, siftings, dust, and stalk. Table No. 4 shows the present trade in these teas, and the principal destinations of exports.

A more complete classification by kinds includes black, green, Oolong, scented, brick, tablet, ball, and faggot teas.

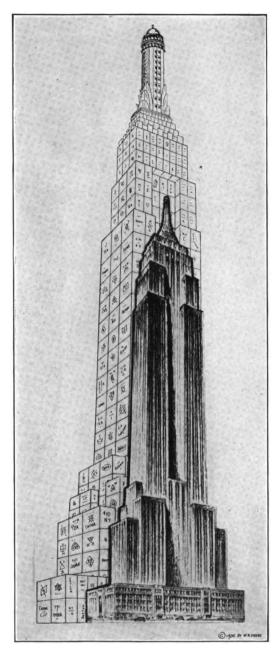
PRODUCTION AND CONSUMPTION TABLE NO. 4 Exports of Tea from China by Principal Classifications

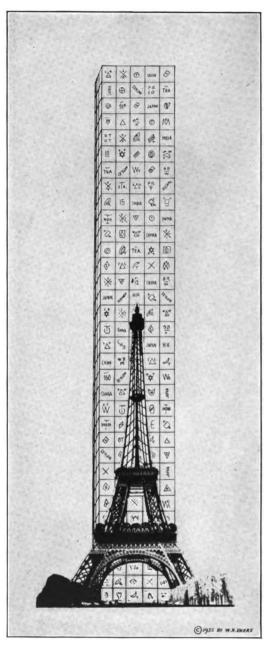
Calendar years in 1000 pounds

Year	Leaf Black	Leaf Green	Brick	Leaf, Unfired	Scented	Dust	All Other Including Siftings and Stalk	Total
1925	43,927	42,827	18,922	1,924	97	2,192	1,178	111,067
1926	39,004 33,181	43,893 44,429	18,916 23,086	5,285 11,851	312 159	2,780 1.639	1,719 1,945	111,909 116,290
1928	35,949	40,902	34,228	9,997	208	320	1,865	123,469
1929	39,275	46,674	32,357 24.318	6,040 3,731	169	669	1,180	126,364
1930	28,677 22,862	33,304 39,137	22,219	7.116	193 229	1,182 1,170	1,135 1,028	92,540 93.761
1932	19,609	36,628	28,224	854	300	606	920	87,141
1933	21,646	38,466	25,786	630	782	3,508	1,683	92,501

Exports of Tea from China by Principal Destinations; Imports; Reëxports Calendar years in 1000 pounds

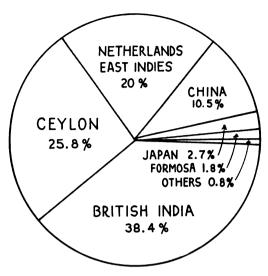
Year		l <u>.</u> .						
	Hong Kong	Russia*	United Kingdom	United States	All Other	Total	Imports	Reëxports
1925 1926 1927 1928 1929 1930 1931 1932	12,513 12,637 15,678 16,423 15,252 12,365 12,037 10,831 6,694	36,602 30,265 40,132 47,566 49,771 29,624 82,110 80,702 81,512	6,394 14,310 11,814 8,018 8,377 8,790 7,525 4,628 7,860	14,520 12,640 11,816 10,146 7,718 8,411 8,794 6,861 8,586	41,038 42,057 36,850 41,316 45,246 33,350 33,295 34,119 37,849	111,067 111,909 116,290 123,469 126,364 92,540 93,761 87,141 92,501	7,024 11,062 9,376 13,315 5,050 3,058 3,358 3,356 720	3,813 52 567 285 40 29 2 2





THE WORLD'S ANNUAL TEA SUPPLY COMPARED WITH THE EIFFEL TOWER AND THE EMPIRE STATE BUILDING

The Empire State Building, the world's loftiest office structure, is 1248 feet high from street to the top of the tower; its main section is 1048 feet from street to the roof of the 85th floor, with a tower 200 feet higher. Its contents equal a total of 37,000,000 cubic feet. But a tower made of a year's supply of tea in chests would equal 95,000,000 cubic feet, or more than 2½ times the bulk of the Empire State Building. In the same proportions it would rise to a height of 1716 feet. Its dimensions would be ¾ greater than those of the Empire State Building in every direction, the difference in height being some 468 feet. The Eiffel Tower, reaching up 1000 feet toward the sky would be lost in a tower made of a year's supply of tea in chests. On a base area of 230 feet square, the size of the base of the Eiffel Tower, such a tower would stand 1800 feet high, a difference of 800 feet.



WORLD TEA EXPORTS, FIVE-YEAR AVERAGE, 1929-33
INCLUSIVE

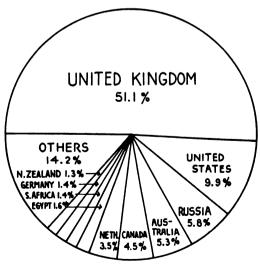
Hong Kong is not a final destination for Chinese tea, but is rather a transshipment point from which the tea is forwarded to the ultimate consumers. European and Asiatic Russia is the principal market for China tea, taking at the present time slightly more than one-third, but in prewar years about two-thirds of China's tea went to Russia. The United Kingdom and Russia are important markets for China's black tea and a considerable quantity goes to the United States, although in decreasing amounts compared with pre-war years. Continental Europe and scattering markets in the Orient absorb most of the remainder. Green tea is shipped in greatest quantities to Russia, the United States, Algeria, Morocco, and neighboring countries. Green tea is increasingly popular in North Africa. The brick tea is practically all taken by Russia. Before the war, as much as 80,000,000 lbs. of brick tea went to Russia, and the demand was more or less maintained until 1918, when only about 10,000,000 lbs. went to that market. There was some improvement in 1919, but from then until 1925, when 19,000,000 lbs. were exported, the trade scarcely amounted to more than 3,000,000 lbs. In 1930 about 24,000,000 lbs. were shipped, compared with 32,000,000 in 1929, and 34,000,000 in 1928. More recently the totals have been somewhat lower, the 1931 trade amounting to about 22,000,000 lbs., that of 1932 to 28,000,000 lbs., and 1933, 24,000,000 lbs.

China ordinarily imports several million pounds of tea annually from such producing countries as India, Japan, and the Netherlands East Indies. In the early part of this century, the imports amounted to around 20,000,000 lbs., but much of this quantity was for the reëxport trade. The last five years have witnessed a decided falling off in the import trade, and nearly all of it has been retained for home consumption,

India, the Leading Exporting Country

One of the outstanding developments in the world's tea industry is the rapid growth of production in India, which is the leading exporting country and the second in point of volume of production. The area under cultivation in 1885-89 averaged 310,595 acres annually; in 1932, it was 807.720 acres or 160 per cent more. Production in the former period was 90,602,205 lbs. and in 1932 it had reached the enormous amount of 433,669,289 lbs., nearly five times the former volume. The progress is due undoubtedly to the employment of the most modern methods of organization and marketing combined with scientific skill in production. The industry has absorbed a capital of £41,037,000 and employed 859,713 persons in 1932, of which only 61,032 were temporarily employed. The great bulk of Indian tea is black.

The United Kingdom is the largest purchaser of Indian tea. Of the total quantity



Principal Tea Importing Countries, Five-Year Average, 1928–32

shipped to that market, however, a considerable portion usually is sent on to other foreign destinations; the shipments ranged from 41,566,000 to 54,888,000 lbs. in the period 1925–32. Correspondingly, the amounts indicated in the accompanying Table No. 5 as destined to the United States and Canada are not entirely correct, because of the fact that at least 4,000,000 to 7,000,000 lbs. are reëxported from the United Kingdom to the United States and almost as much to Canada.

Between three and eight million pounds of Indian tea are being sold annually direct to Russia. In the year ending March 31, 1933, 2,857,000 lbs. were recorded to Russia and 614,000 lbs. to Georgia, but this is scarcely one-ninth of the pre-war trade. In the five years before the war Russia's direct importation of tea from India amounted to an annual average of 29,614,000 lbs. Also 5,472,000 lbs. of Indian tea were reëxported to Russia from the United Kingdom in 1932, about the same as the pre-war average. Egypt, East Africa, and South Africa are good markets and have shown large increases over the pre-war years.

Of the tea imported into India, the greater part comes from China in the form of green tea. The balance is nearly all from Java, Sumatra, Japan, and Ceylon. A negligible reëxportation is made to Persia, Iraq, and sundry places.

The premier tea exporting port is Calcutta, followed by Chittagong. Only about 13 per cent of the tea leaves by South Indian ports.

Ceylon, Where Tea Succeeded Coffee

From 1837 to 1882 Ceylon was a coffee country, but when disease hopelessly destroyed the coffee trees, growers turned to the tea plant, which was already known in the Island. In 1880, there were 14,266 acres under tea cultivation, and in ten years' time the acreage reached 235,794. In ten more years, further expansion took place, so that in 1900 the area cultivated amounted to 405,000 acres. Tea is now one of the most important products, and the area devoted to its growing approximates 457,000 acres. As in India, Ceylon's tea is produced principally on estates, which number about 1,230. These are

PRODUCTION AND CONSUMPTION TABLE NO. 5 Number of Plantations, Acreage, and Production of Tea in India

Calendar years; 1000s omitted except for plantations

Year	Number of Acreage		Production—1000 Pounds				
	Plantations	1000 Acres	Black	Green	Total		
925	4,338	728	358,864	4,643	363,507		
926	4,048	739	887,970	4,963	892,988		
927	4,289	756	386,892	4,028	390.920		
928	4,623	776	400,247	3,906	404,158		
929	4,714	788	428,995	3,847	432.842		
930	4,743	804	385,852	5.229	391,081		
931	4.840	807	390,687	3,396	394,083		
932	4.848	808	430.221	8.448	433,669		

Exports of Tea from India* by Principal Destinations; Imports; Reëxports Years ended March 31, in 1000 pounds

Year	United Kingdom	Canada	United States	All Other	Total Exports	Imports	Reëxports
1925-26 1926-27 1927-28 1928-29 1929-30 1930-31 1931-32 1932-33 1933-34†	280,573 292,501 307,246 298,861 317,522 299,437 292,004 331,532 276,542	7,951 11,528 9,286 11,208 12,353 10,176 14,133 16,695 15,096	4,902 7,620 8,799 7,828 8,446 9,899 9,797 11,137 8,262	43,889 47,491 42,056 46,929 44,274 42,582 32,382 26,031 17,944	337,315 359,140 367,387 364,826 382,595 362,094 348,316 385,395 317,844	7,833 7,634 7,994 9,506 10,240 6,648 6,969 5,769 4,716	322 140 127 81 80 65 26 10

Note (*) British and Indian Provinces and States. Seaborne and land trade. In other words, total India. †Exclusive of exports by land, and also of exports from the native state of Travancore. Land exports for the previous five years were officially estimated as follows: 1932-33, 5,567,000 lbs.: 1931-32, 5,931,000 lbs.: 1930-31, 5,176,000 lbs.: 1929-30,5,453,000 lbs.: 1928-29, 5,041,000 lbs. Travancore tea exports amounted to 991,000 lbs. in 1932-33, chiefy to the United Kingdom.

PRODUCTION AND CONSUMPTION TABLE NO. 6 Acreage, Exports,* and Imports of Tea in Ceylon

Calendar years; in 1000s

		Exports—1000 Pounds									
Year	Acreage 1000 Acres	United Kingdom	Australia	United States	New Zealand	All Other	Total	Black	Green	1000 Pounds	
1925	440	134.163	15.345	15,837	7,017	37,429	209.791	208,465	1,326	1	
1926	442	141.681	16,089	15,391	8,612	35,411	217,184	215,820	1,364	Ī	
1927	450	144,906	18,063	13,783	8,438	41,848	227,038	225,046	1,992	l ģ	
1928	457	139,715	19,745	15,462	9,728	52,069	236,719	234,891	1,828	ī	
1929	457	155.304	22.020	16,765	10,271	47.228	251.588	250,431	1,157	l î	
1930	457	153,876	21,182	16,809	8.356	42.884	243,107	240,913	2,194	l ī	
1931	457	160,509	11,607	15,531	10,888	45,435	243,970	242,505	1,465	l i	
1932	457	172,222	15,278	15,775	8,391	41,158	252.824	252,361	463	l î	
1933	452	149.494	11.839	12,003	8,694	34,031	216,061	215.883	178	1 7	

controlled for the most part by limited companies. More than 500,000 Indian and Ceylon Tamils and 50,000 Sinhalese, Moors, and Malays are employed in the cultivation and manufacture of tea.

About 99 per cent of Ceylon's tea is black, the small remainder being green. There are no production figures, but since the local consumption is more or less stationary, the exports are a satisfactory guide to the yield.

From a total of 149,265,000 lbs. exported in 1900, the high figure of 252,824,000 lbs. was reached in 1932. Nearly two-thirds of the total is shipped to the United Kingdom for consumption there and reëxportation. Australia and the United States follow, but far behind, and New Zealand is next in rank. The tea for these countries is practically all black; only a negligible quantity of green tea goes to the United Kingdom and none at all to Australia and New Zealand. From 1925 to 1930, shipments of green tea to the United States ranged between 201,000 and 595,000 lbs. yearly. In 1931 and 1932 they fell to practically nothing, but in 1933 shipments of 30,000 lbs. were recorded. Russia formerly took a larger portion; in 1927 and 1930, over 1,000,000 lbs. of green tea went to that market. But in 1931 shipments fell to 806,000 lbs., in 1932 to 256,000 lbs., and in 1933 to nothing at all. Strangely enough, Ceylon sends green and black tea to India to the extent of from 1,000,000 to 2,500,000 lbs. annually. Black tea finds its way to many countries other than those mentioned, among them South Africa, Canada, and Egypt.

Ceylon imports a small amount of tea, most of which is from India. Occasionally some of this is reëxported, but in the past five or six years no reëxports were recorded.

The Netherlands East Indies

The tea industry of the Netherlands East Indies has shown remarkable gain. Production in 1932 totaled 180,638,000 lbs. from estates, including purchases of tea from native gardens. The acreage devoted to tea, including native tillage and tea interplanted with other crops, is placed at 432,000 acres. This is more than half of the acreage reported for British India. There has been a steady climb in yield, which is reflected in exports as well.

Tea has been cultivated in Java for more than 100 years, but in Sumatra the development is of recent date, beginning about 1910. Nine-tenths of the plantations are located in Java, especially in the western part of the Island. Of the 325 estates listed in 1932, 285 were in Java and 40 were in the Outer Possessions.

Tea from these islands is practically all black, which classes Java and Sumatra along with India and Ceylon as the principal source of the world's black tea. The official export returns divide the types of tea exported into "leaf" and "dust." The total amount of tea exported in 1900 was 16,830,000 lbs.; in 1910, 33,813,000 lbs. and by 1920, the quantity reached 102,008,000 lbs. This latter figure, moreover, had been exceeded in 1915, 1916, and 1919; but the war influence was seen in these shipments. The highest figure reached was in 1931, when 197,938,000 lbs. were exported, although this figure was practically equaled by that of 1932, which was 197,311,000 lbs. [These are gross-weight figures. On

PRODUCTION AND CONSUMPTION TABLE NO. 7

Estates, Acreage, and Production of Tea in the Netherlands East Indies.

Calendar years

	Europe	ean	Native	Total Acreage	Production Including
Year	Number of Estates	Acreage 1000 Acres	Acreage 1000 Acres	1000 Acres	Purchases from Natives 1000 Pounds
1925 1926 1927 1928 1929 1930 1931 1931	295 320 316 323	241 255 269 285 297 314 325 335	64 69 75 86 91 102 103 97	305 324 344 371 388 416 428 432	116,143 138,713 143,471 160,632 166,630 158,711 179,254 180,638

Exports of Tea from Netherlands East Indies by Principal Destinations *

Calendar years; 1000 pounds; net weight

Year	Netherlands	Netherlands for orders	United Kingdom	United Kingdom for orders	Australia	All Other	Total
1926.	29,742	8,921	55,908	1,699	24,028	15,726	136,024
1927.	30,842	6,084	62,586	4,237	22,209	18,714	144,672
1928.	30,573	6,300	58,903	5,862	24,567	27,361	153,566
1929.	29,273	6,660	72,466	8,230	19,415	23,678	159,722
1930.	28,271	11,079	67,444	5,846	23,091	23,041	158,772
1931.	30,244	11,306	68,175	7,135	25,449	31,285	173,594
1982.	28,540	11,232	59,847	5,568	30,716	37,740	173,648
1933†	28,211	10,797	47,324	5,669	28,007	38,441	158,449

Exports of Tea from Netherlands East Indies by Kinds; Imports *

Calendar years; 1000 pounds; net weight

		Java		C	. .		
Year	Leaf	Dust	Total	Leaf	Dust	Total	Imports
1926. 1927. 1928. 1929. 1930. 1981. 1981. 1982.	104,962 111,791 118,118 119,863 116,835 127,081 125,750 116,641	14,007 15,152 16,289 16,878 18,564 18,245 15,753 14,306	118,969 126,943 134,407 136,741 135,399 145,326 141,503	15,212 15,502 16,918 20,067 20,738 25,014 28,506 24,417	1,843 2,227 2,241 2,914 2,635 3,254 3,634 3,085	17,055 17,729 19,159 22,981 23,373 28,268 32,140 27,502	7,778 7,995 9,339 9,123 8,472 6,965 4,200 2,186

*Import and export figures in the present table are in terms of net weight. They accordingly differ from the export figures in Table 1, which, as applied to the Netherlands East Indies, represent gross weight. In earlier years only gross-weight statistics were published, and in Table 1 they have been continued throughout later years in order to show the long-term trend of Netherlands East Indies exports.

†Preliminary.

the basis of net weight, shipments in 1932 were slightly above those of 1931. Export statistics of the Netherlands East Indies were formerly given only in gross weight, which included the weight of all containers. In recent years the net weights of tea shipments have been included. All figures given in the present paragraph and in Table 1 are gross-weight figures, while those in Table 7 represent net-weight exports.] The United Kingdom is the principal market, followed by the Netherlands. Large amounts of tea are shipped to these markets for orders, and further dispatch. The

United Kingdom also is the principal market for the tea dust shipped from these islands. For example, of the 21,930,000 lbs. of tea dust exported in 1932, 11,564,000 lbs. were recorded as going to that market. Australia is an important market for Netherlands East Indian tea, as a review of the accompanying Table No. 7 will determine. These teas also are shipped to many other good markets in the Orient, Africa, America, and Europe.

Between 4,000,000 and 10,000,000 lbs., net weight, of tea have been imported into these islands in the past five years,



THE WORLD'S TEACUP AND THE WORLD'S LARGEST SHIP

Statisticians talk of nearly 1,900,000,000 lbs. of tea that the world drinks every year; but how many really visualize the meaning of this huge figure? For example, computing only 160 cups of beverage to the pound, which is very conservative, there are more than 304 billion cups drunk annually, or enough to fill a gigantic cup 7000 feet in diameter and 42½ feet deep, on which the "Normandie" would appear approximately as shown above.

strange as this may seem; most of it was imported from Formosa into Java.

In Japan

The growing of tea in Japan is done on a small scale, as a subsidiary crop. The cultivation extends more or less all over the islands with the exception of two northern prefectures. The gardens on the hillsides and upland country are an integral part of the beautiful scenery for which Japan is noted. In 1932, there were 1,132,089 producers growing tea on an area of 93,946 acres with a yield of 89,008,102 lbs. A comparison with the pre-war acreage shows a decrease of about 25,000 acres, but this may be due to different methods of esti-

mating, as much as to an actual decline, for the number of producers has increased by more than 60,000. The production of tea in Japan proper averaged approximately 86,000,000 lbs. annually for the five years 1928–32, which is more than in any other five years since the beginning of the twentieth century. More than half of the crop comes from Shizuoka Prefecture, the city of that name being the business center. Years ago, Yokohama and Kobe were the principal exporting ports, but now Shimizu is the chief point of exit from the country. Although production has been increasing in volume, according to official statistics, exports, on the other hand, have been scaling downward in comparison with early years at the beginning of the cen-

PRODUCTION AND CONSUMPTION TABLE NO. 8

Acreage, Manufacturers, Production of Tea by Kinds in Japan Years ended June 30: in 1000s

	Acres	Manufac- turers			Production-	-1000 Pounds		
Year	(1000)	(Number) (1000)	Gyokuro (Green)	Sencha (Green)	Bancha (Green)	Black	Others	Total
925	108	1,107	566	64,802	17,184	12	1,918	84,482
926	109 106	1,148 1,147	584 557	62,069 64,137	16,460 16,236	50 37	699 529	79,862 81,496
28	106	1,154	589	68,482	16,646	46	409	86,172
929	105	1,137	534	68,680	17,186	22	423	86,845
930	93	1,120	626	68,198	15,899	26	452	85,201
981	93	1,126	592	67,928	15,496	26	406	84,448
932	94	1,132	590	71,542	16,507	58	391	89,088

Exports of Domestic Tea from Japan by Principal Destinations; Imports; Reëxports

Calendar years; 1000 pounds

•-				Exports					
Year	United States Canada Russia* All Other Total Green				Green	All Other*	Imports	Reëxports	
1925	21,267	2.986	516	3,050	27,819	23,823	3,996	771	10
1926	18,762	3,129	401	1,483	23,775	22,619	1,156	1,106	i t
1927	17,774	3,456	1,010	1,061	23,301	22,535	766	882	2
1928	18.289	3,332	1,436	757	23,814	23,444	370	1,027	2
1929	15,980	8,506	3,317	856	23,659	23,156	503	1,244	l †
1930	15.119	2,412	2,074	711	20,316	19,839	477	1,152	l t
1931	16.188	2,637	4,799	1,790	25,414	24,237	1,177	1,233	l t
1932	16.122	2,643	5,779	4,995	29,539	28,238	1,301	888	l †
1933	16,888	2,736	6,866	2,997	29,487	28,563	924	746	l †

tury. For example, the annual average in 1900-04 amounted to 44,985,000 lbs.; the pre-war average was 40,024,000 lbs.; average in 1920-24, 24,373,000; and in 1925-29, 24,474,000. In the last three years, however, exports have been somewhat heavier, the average for the three years 1930-33 being 28,147,000 lbs. The decrease in exportation in the years immediately following the war may be accounted for as being the result of heavy shipments during war years; for instance, 66,364,000 lbs. in 1917. But in more recent years the totals have reflected the drop in the shipments to the principal consuming market; namely, the United States, in which the consumers are developing a preference for black tea. Most of the teas produced in Japan are green, but the manufacture of black tea is increasing each year, as Table No. 8 will suffice to show. It will be clearly apparent also that about 60 per cent of Japan's tea goes to United States consumers. Canada and Russia are next in order. More than 100,000 lbs. annually are shipped to Hawaii, which are not included in the United States statistics. The United Kingdom, which figures so importantly in the tea trade of India and Ceylon, shows little interest in the green tea from Japan.

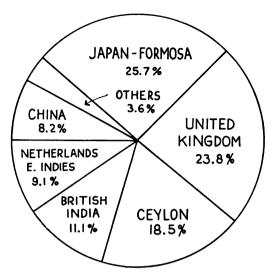
Notwithstanding the fact that Japan produces a surplus of tea for export, imports approximate a million pounds annually; these originate in China and British India. The home consumption is steadily increasing and will be discussed later in this chapter.

In Formosa [Taiwan]

The area under tea in Formosa [Taiwan] is something over 100,000 acres, the reported total in 1932 being 109,000. This is nearly twice as much land under tea as the acreage returned for 1900. From 66,000 acres in 1900 to 89,000 acres in 1913, it is obvious that there was a steady increase which continued until 1919, when a total of 115,000 acres was reached. A comparison of the present acreage shows a slight decline. The yearly average of production now is about 2,750,000 lbs. less than in 1901–05; in other words, the yield

per acre now is less than at the beginning of the century, or even through 1919, assuming that available figures for both acreage and output are approximately correct. The present yield per acre is about 190 lbs. contrasted with 370 in 1909–13 and 380 in 1901–05. During the last decade the total annual production has been steadily declining.

The famous Oolong and scented Pouchong are the principal teas produced and Approximately 45 per cent of the total exports represent Oolong, and 45 to 50 per cent Pouchong, with the remainder made up of black, coarse [Bancha], dust, stalk, and green. It is only in latter years that Pouchong has out-weighed Oolong in the volume of exports; in fact for the first time in 1920, and not again until the year 1926. In 1909-13 Oolong formed about 70 per cent of the total exports and was nearly two and three-fourths times as heavy in volume as Pouchong. In recent years the Oolong trade has felt the effects of keen competition from Ceylon, India, and Java in the markets of the United States, which always have been the best consumers of Formosa Oolong. Pouchong,



Sources of Tea Imports into the U.S.A., Five-Year Average, 1929-33

the jasmine and gardenia scented tea, finds its main markets in the Netherlands East Indies and Hong Kong. Black tea manufacture is receiving some encouragement. A number of firms in Formosa are attempting to switch their product from Oolong to

PRODUCTION AND CONSUMPTION TABLE NO. 9 Acreage, Production, and Exports of Formosan Tea by Kinds Calendar years; in 1000s

	Acreage	Production		Exports—	1000 Pounds	
Year	1000 Acres	1000 Pounds	Oolong	Pouchong	All Other*	Total
925	114 113 111 105 114 113 110	26,686 26,316 26,192 24,264 24,379 23,025 21,214 19,450	10,644 10,560 10,603 9,117 7,419 7,009 7,674 8,424	10,451 11,880 11,581 9,823 10,260 10,200 8,577 4,841	632 487 634 658 875 1,332 2,163 1,994	21,727 22,927 22,818 19,598 18,554 18,541 18,414

^{*} Including black, coarse, dust, stalk, green.
Exports include shipments to Japan and Japanese possessions.

Exports of Formosan Tea by Principal Destinations; Imports Calendar years; in 1000 pounds

•	Exports						
Year	United States	Netherlands East Indies	Hong Kong	United Kingdom	All Other	Total	Imports
925 926 927 928 929 930	9,663 9,321 9,011 7,905 6,186 5,459 7,089	6,529 6,963 6,750 7,516 7,471 6,716 5,826	1,070 2,133 2,810 1,608 2,029 1,786 1,199	1,018 1,197 1,727 1,180 1,338 2,200 1,987	3,447 8,313 2,520 1,394 1,530 2,380 2,313	21,727 22,927 22,818 19,598 18,554 18,541	29 57 83 71 92 86 95

Exports include shipments to Japan and Japanese possessions.

PRODUCTION AND CONSUMPTION TABLE NO. 10

Exports of Domestic Tea from French Indo-China; Imports

Calendar years—1000 pounds

Year	France and Colonies	Foreign Countries	Total	Imports
1925	1,971	355	2,326	4,060
1926	0.004	829	2,580	5,459
1927	1.461	258	1,719	5,121
1928	1,761	310	2,071	5,098
1929	1,670	569	2,239	4,313
1930	756	450	1,206	3,430
1931	723	571	1,294	8,164
1932	897	467	1,364	1,669

black; this tea is going chiefly to the United Kingdom and Japan, with smaller quantities to several other destinations, including South American countries and the United States. The coarse and stalk teas go chiefly to China and Hong Kong.

The Formosa teas are grown in the northern part of the Island, and exports

are generally from Keelung.

A small amount of foreign tea is shipped to Formosa, mainly from China; and of this there are occasional quantities reexported which amount to only a few hundred pounds, barring the year 1920, in which 27,096 lbs. were shipped out again.

In French Indo-China

Despite the fact that tea is grown in French Indo-China, a considerable quantity is imported for local consumption and exportation. Imports in the period 1925 to 1932 ranged between 1,669,000 and 5,459,000 lbs. Over the last thirty years there has been a tendency toward greater imports, which was especially obvious in the decade after the war. But they have been smaller in the last three years. China tea is the principal kind imported.

No official figures are available as to the area of tea under cultivation and the yield, but figures from unofficial sources indicate that the area totals from 40,000 to 50,000 acres or more. Tea is often produced in a most desultory fashion, and, moreover, the tree is found growing wild in certain regions of Annam and Tonkin. The yield of wild tea is mixed to some extent with the cultivated. In 1926, it was roughly

estimated that some 3,000,000 lbs. of homegrown tea were consumed in French Indo-China. The principal tea-growing district is Annam, followed by Tonkin, and to a lesser degree by Cochin-China. In 1932, exports from Annam amounted to 725,000 lbs.; from Tonkin to 637,000; and from Cochin-China only about 200 lbs., although in 1931 they were about 8,800 lbs. Exports of domestic tea have fallen off in the last three years. Since 1926 they have ranged from 1,206,000 to 2,530,000 lbs. About sixty per cent of the total goes direct to France and her colonies, and nearly all the rest goes to Hong Kong. Exports are mostly through the ports of Haiphong and Tourane, and imports are distributed through Saigon.

British South Africa-Natal

Tea is grown in the Union of South Africa, but not on a scale sufficient to supply the requirements of the Union. The cultivation is confined almost entirely to the Natal Province. The first crop of some 30 lbs. was marketed in 1880. In the following years the industry advanced, but restrictions placed on Indian immigration into Natal by the Government of India in 1911 curtailed the supply of labor, causing a retrogression in the industry. The present area under cultivation is placed at about 2,000 acres.

The exports are chiefly to the United Kingdom, but more of Natal's tea goes to Cape Colony than to foreign markets.

PRODUCTION AND CONSUMPTION TABLE NO. 11

Acreage and Production of Tea in Natal

Season		nd Production in Natal	Exports of Domestic Tea! from Union of South Africa		
DOM:	Acres	Pounds	Calendar Year	Pounds	
1910-11 1915-16 1920-21 1925-26 1926-27 1927-28 1928-29 1929-30 1930-31	4,457 4,512 3,497 3,177 3,177 8,422 8,357 8,530 2,823 1,975	1,740,824 1,822,026 913,751 1,034,830 990,673 851,622 690,814 676,806 665,607	1911 1916 1921 1926 1927 1928 1929 1930 1931 1932 1933	76,176 52,161 50,574 125,154 160,141 128,767 147,325 8,805 5,286 80,371	

PRODUCTION AND CONSUMPTION TABLE NO. 12

Acreage, Production, and Exports of Tea in Nyasaland

Year	Acres	Production Pounds	Exports Pounds
1904	260 516 2,593 5,093 8,866 9,682	1,200 5,600 174,720 1,119,000 1,742,720 1,896,000	Not Reported Not Reported 43,876 1,058,504 1,755,419 1,939,756
1931	11,414 12,595	2,193,296 2,699,984	1,963,452 2,573,871 8,276,477

British East Africa

NYASALAND.—At the present time Nyasaland is producing more tea than the other protectorates in British East Africa. The area under tea in 1904 amounted to only 260 acres in bearing, with an estimated yield of 1,200 lbs. By 1911 the area had been increased to 2,593 acres, yielding 174,720 lbs.; and again in 1932, to 12,595 acres, with a crop of 2,700,000 lbs. Exports have kept pace with production. In 1911 exports amounted to 43,876 lbs., and they exceeded a million pounds for the first time in 1924. Since then, more than a million pounds have been exported annually, with an upward trend in volume which is reflected by 3,276,477 lbs. shipped to for-eign markets in 1933. The United Kingdom absorbed 94.6 per cent of Nyasaland's tea exports in 1933; the neighboring provinces and territories in Africa consumed most of the remainder, although 53,000 lbs. were sent to Germany, and small trial lots were shipped to Canada and Palestine.

Kenya Colony.—The cultivation of tea in Kenya Colony has been given serious consideration only in recent years. There were some 382 acres under tea in 1925, and during that year 1,341 lbs. of tea were produced and marketed locally. From this small beginning, 8,331 acres and 577,847 lbs. were returned in the agricultural census of 1930. In 1933, according to excise returns, 3,212,084 lbs. were produced. The area planted to tea was estimated at 12,000 acres or more. Factory-prepared tea was produced for the first time in 1928; this totaled 33,403 lbs. Tea was first exported—784 lbs. to the United Kingdom—in 1927. The year 1930, however, wit-

nessed an exportation of 160,608 lbs., practically all to the parent country, and in 1933 Kenya exports had risen to 3,212,084 lbs.

UGANDA.—In 1925, Uganda had 268 acres of tea in the producing stage. In 1929, this had increased to 321 acres, and in 1933 to 750 acres. Some 224 lbs. were exported in 1927, 1,344 lbs. in 1929, and 30,128 lbs. in 1933.

TANGANYIKA.—The growing of tea has been undertaken recently. The first shipment from a tea plantation was made in October, 1930. The planted area in 1933 was given as 500 acres, and production as 41.157 lbs.

Soviet Union—Transcaucasia [Georgia]

In 1905, in the region of Chakva, Georgia, 1,047 acres were in tea; this acreage was increased to 2,265 acres in 1915; 3,273 acres in 1925; and 19,367 acres in 1929. In twenty-five years the tea acreage increased eighteenfold. In 1929-30, 16,603 acres additional were planted, and on January 1, 1931, the total tea area stood at 35,244 acres. In 1931 it rose to 54,691 acres, in 1932 to 79,554 acres and in 1933 to 84.504 acres. The second Five-Year Plan calls for an area of 100,000 hectares, or 247,000 acres, by the end of the period in 1937. Of the present total, collective farms account for about 68 per cent and state farms 27 per cent.

The quantity of tea produced in 1929 amounted to 529,104 lbs. Soviet sources give the 1931 production as 1,373 metric tons, or 3,027,000 lbs., of green tea

PRODUCTION AND CONSUMPTION TABLE NO. 13

Acreage, Production, and Exports of Tea in Kenya and Uganda

	Kenya Colony			Uganda				
Year	Acres	Produc- tion Pounds	Exports Pounds	Acres	Produc- tion Pounds	Exports Pounds		
1925	882	1,841						
1926	1,689	3.176	l	l <i></i> .		<i>.</i>		
1927	3.156	8.700	784	239		224		
1928	4.809	88,408	10.192	297		112		
1929	5.598	152,813	7,952	821		1.344		
1930	8.881	577.847	160,608			1.008		
1931		1.500.226*	856,6081	640*	1	_,,,,,		
1982		2.421.019*		721*	1	1		
1933		3.212.084	1.955.744	750	65,608	80,128		

leaves, and that of 1932 as 2,407 tons, or 5,306,000 lbs. The average yield, it is stated, was 600 kilos per hectare [about 535 lbs. per acre], only a fraction of the yield in Ceylon and Japan. While the professed aim of the Russian authorities is an ultimate production sufficient to satisfy the needs of the country, it seems unlikely that such goal will be achieved for many years, if ever.

The Gilan Province of Persia

Several hundred acres [an unofficial figure for 1931 is 570 acres] are planted to tea in the Gilan Province of Persia. Accurate production figures do not exist, but the estimated production in the year ended March 20, 1927, was 80,320 lbs.; 1928, 99,281 lbs.; 1929, 120,000 lbs.; 1930, 177,000 lbs.; 1931, 196,000 lbs.; and 1932, 250,000 lbs. These figures are to be taken as only broad estimates. An American consular report, for example, gives the official government estimate for production in 1932 as 161,000 lbs. In recent years encouragement by the government has resulted in an increase in acreage planted.

The production is consumed locally and is not sufficient for the demand. Consequently tea is brought in, principally from British India. From 1904 to 1930 [years ending March 20] imports showed a gain of nearly 10,000,000 lbs., rising from 6,922,000 lbs. to 16,280,000 lbs. In 1931 they were 14,476,000 lbs.; in 1932, 9,943,000 lbs.; and in 1933, 9,639,000 lbs. Exports and reëxports, which were 317,000 lbs. in 1930, were only 131,000 lbs. in 1931, 10,000 lbs. in 1932, and practically none in 1933.

The Azores [Portuguese]

Since the introduction of tea growing into the Island of St. Michael's, in the Azores, private estates have made continuous importation of varieties suited to the climatic conditions of the Island, and while the acreage devoted to the cultivation is small, yet from the several estates engaged in the production, the local needs of the Azores are supplied and shipments are made to Portugal. Both green and black tea are produced.

Mozambique, Portuguese East Africa

In Mozambique, Portuguese East Africa, some tea is grown along the river forming

the boundary between Nyasaland and Mozambique. The production in Mozambique in the year ended September 30, 1931, according to figures from the local agricultural department of Lourenco Marques, amounted to 200,619 lbs. About 750 acres are given over to tea in the colony.

The "Miang" Tea of Siam

The tea plant is indigenous to Northern Siam, and is also cultivated. A small amount of dried tea is prepared, but most of the harvest goes to the preparation of miang which is made for chewing purposes. There are no official statistics of the amount of miang produced.

Brazil

Among the South American countries, small amounts of tea are grown in Brazil and Peru. Tea was first cultivated in Brazil as an exotic plant in the Botanical Gardens of Ouro Preto, Minas Geraes. Some tea is still grown, but not in commercial quantities. In 1929, imports amounted to 612,275 lbs. of tea, most of which was from the United Kingdom and very little direct from the tea producing countries. In 1931 total imports were 306,000 lbs.

Peru

Tea is not grown commercially in Peru. Imports amount to well over a million pounds annually, and come from secondary sources in the main. In 1933, the total imports amounted to 1,367,000 lbs. and of these 386,000 were from British India, 385,700 from China, 181,000 from Hong Kong, 124,000 from Ceylon, and 116,000 from Java.

British Malaya

In the Malayan Department of Agriculture's annual report for 1930, the estimated area planted to tea was 1,244 acres in the Federated Malay States; none in Straits Settlements and 700 acres in the Unfederated Malay State of Kedah, or a total of 1,944 acres. By the end of 1932 this total had increased to 2,281 acres, 649 acres of which were situated in the Cameron Highlands. Per capita consumption in

Malaya is about 2 lbs., which is comparatively high. In 1932 tea was produced commercially on three estates, and on numerous small holdings by Chinese.

The Island of Mauritius

In the past few years some interest has been revived in Mauritius in the cultivation of tea. Only small quantities are produced, however [30,000 to 45,000 lbs. yearly], and imports exceed domestic exports. The imports have averaged nearly 400,000 lbs. annually, the greater part coming from Ceylon.

Fiji Islands

Tea is grown in Fiji in variable amounts, but in the absence of recent official statistics on area or crops the quantity is not definitely known. The production is consumed locally.

Tea Consumption in Producing Countries

From the foregoing discussion of countries responsible for the world's tea crops. the interest naturally passes to the question of how much tea these countries drink annually. Tea drinking in the Orient is a social ceremony in which great care is observed in the making and serving of the beverage. Indeed, certain ceremonial teasare set apart from the teas of commerce by special methods of growing and prepara-Figures for consumption in these countries where tea is grown and where no complete records of yield are tabulated are of doubtful accuracy. Yet, from available data, it would appear that the per capita consumption is considerably less than in certain importing countries such as the United Kingdom, Australia, New Zealand, and Canada.

China, however, consumes a greater total amount of tea than does any other country in the world. Here, as for production, no definite figures are available, but probably about 800,000,000 lbs. are retained for the local needs in normal years. The consumption is placed by authorities at about two pounds of tea for every individual. No doubt the actual consumption for the tea-drinking portion of the Chinese population is heavier. Although tea is drunk universally in tea districts and cities, yet in many parts of China where the circum-

stances of the people restrict their purchasing power, the per capita would necessarily be under that of the more prosperous and conveniently located districts. Incidentally, this would be equally true of other countries. In Japan, the average annual consumption at the present time appears to be slightly less than one pound per capita, based on an average annual amount of about 60,000,000 lbs. The spread between production and exportation has been widening during the years, a fact which would be taken to mean a larger domestic consumption. In the fiveyear period preceding the world war the actual amount was only .61 of a pound. In Formosa, on the other hand, the consumption by individuals has dropped from 1.75 pounds in 1909-13, on an annual average, to 0.96 pounds at the present time [1928-32] based on 4,393,000 lbs. retained in the Island. Unquestionably the best figures for India are those published in supplements to the Indian Trade Journal which give the amount retained in India in 1932-33 as 63,000,000 lbs.; the annual average for the past five years is 59,000,000 lbs., or a per capita of about .18 of a pound. For the other two principal countries, namely Ceylon and the Netherlands East Indies, no figures are available as to consumption.

Review of Restriction

During 1928 and 1929, stocks of tea were gradually accumulating in the London market, and at the end of the year 1929 stocks in the amount of 260,427,000 lbs. were reported to be in the warehouses of the Tea Brokers' Association of London, which handles about 90 per cent of the imports into the United Kingdom, in comparison with 220,523,000 and 213,025,000 lbs. at the close of 1928 and 1927, respectively. The market was thus obviously over-supplied, despite increasing consumption. A decline in prices began in 1928 and continued on a more pronounced scale in 1929. The tea trade was unpleasantly reminded of the similar experience in 1920, which had been brought about by increased supplies resultant from coarse plucking and curtailed markets, the removal of war-time controls, and restricted shipping facilities.

In 1929, as in the 1920 tea depression, producers decided to restrict their crops.

An agreement was reached in February, 1930, by a committee representing the growers in India, Ceylon, and the Netherlands East Indies, which called for a reduction of 57,500,000 lbs. for the 1930 crop. The quotas were: Northern India, 32,500,-000 lbs; Southern India, 4,000,000 lbs.; Ceylon, 11,500,000 lbs.; and the Netherlands East Indies 9,500,000 lbs. It was hoped that in the latter area the leaf bought from the native gardens would be primarily restricted to help relieve the markets of the commoner teas. scheme assisted by climatic conditions reduced the output in India by 48,000,000 lbs.; in Ceylon by 8,000,000 lbs. and in the Netherlands East Indies by 1,000,000 to 2,000,000 lbs. In the Netherlands East Indies the European estates restricted their output, but the restriction stimulated the "bought" leaf trade from native gardens which offset the reduced yield from the estates. Despite the reduction in the 1930 crop, the prices of common and medium teas remained on a low level and stocks of tea in London at the close of 1930 were 261,601,000 lbs., or more than one million pounds greater than those of 1929. stocks of Indian and Ceylon teas, it is true, were under those of 1929, but heavier supplies of Java and Sumatra teas counterbalanced the reduction.

The restriction scheme was considered not entirely a failure, since it had probably prevented large increases in exports. But it had not accomplished its chief object of maintaining prices, and for the

time being it was abandoned.

Prices, however, continued on a downward trend, and further efforts to put an effective restriction scheme into practice were made. They resulted finally in the adoption, early in 1933, of a comprehensive plan for restricting exports instead of production. It went into operation April 1, 1933, and was intended to run for five years. The necessary supporting legislation was passed in India, Ceylon, and the Netherlands East Indies later in that year. The plan, known as the International Tea Agreement, is now in full effect.

It provides that the basis for regulation shall be the maximum exports from each country in any of the three years 1929, 1930, or 1931. This "standard" has been set at 382,594,779 lbs. for India, 251,522,617 lbs. for Ceylon, and 173,597,000 lbs. for the Netherlands East Indies, a

total of 807,714,396 lbs. For the first year 85 per cent of this standard exportation was permitted. After that the percentage was to be determined at the end of each calendar year by a committee made up of representatives of each producing country. As of December 31, 1933, the percentage was fixed by the board at 871/2 per cent. Areas planted to tea were not to be increased while the plan was in operation, except in special cases where the existence of an estate would otherwise be imperilled: no further areas were to be sold or leased for tea cultivation; no tea must be planted on land then in other crops; and in no case should new planting exceed one-half of one per cent of existing tea areas.

During the first year of its operation the results of the plan were to be seen especially in lowered export figures and, doubtless as a direct result, in a substantial increase in prices. Visible stocks in the United Kingdom were reduced, and the total invisible stock of consuming countries was probably also lowered. As given in the report of the International Tea Committee, total gross exports from the three regulating countries, exclusive of land exports from India, were 651,000,000 lbs. in the twelve months ended March 31, 1934, which represented a decrease of 171,000,000 lbs. from the previous twelve months. On the other hand exports from other producing countries gained 9,000,000 lbs., leaving a net decrease in world exports of 162,000,-Stocks in bonded warehouses in the United Kingdom, as of March 31, dropped from 294,000,000 lbs. in 1933 to 276,000,000 lbs. in 1934, and it was estimated that quantities affoat had been reduced by 49,000,000 lbs., making a total decrease in "visible" world stocks of 67,-000,000 lbs. There is no way of estimating definitely the decrease in invisible stocks.

Amounts actually exported from the regulating countries fell short of permissible exports by 31,000,000 lbs., and under the plan export rights for that amount could be carried forward into the following year.

The danger always attending restriction plans of this kind, namely, that production and exports will be stimulated in producing countries outside of the agreement, has been fully taken into account. The Committee has taken steps to induce Japan, Formosa, and French Indo-China to co-

PRODUCTION AND CONSUMPTION TABLE NO. 14 Consumption of Tea in the Principal Tea Importing Countries

Total net imports, annual average in five-year periods, 1000 pounds; per capita in pounds

		1909–13 Annual Average	1920–24 Annual Average	1925–29 Annual Average	1980	1981	1982	1933
EUROPE United Kingdom,	total	293,006	899,240	429,507	452,768	445,426	487.721	422,662
U.S.S.R. (Soviet Russia),	per capita total	6.5 157,691	8.7	9.5 49,148	9.8 53,277	9.7 43,182	10.6 34,887	9.2 42,387
Netherlands,	per capita total per capita	.9 11,888 1.9	27,110 3.8	26,115	29,494	.26 81,097	36,039	25,851
Germany,	totalper capita	8,941	7,244	3.4 11,037 .2	18,320 18,320	3.9 11,672	10,577	10,841
Poland and Danzig,	totalper capita	• • • • • • • • • • • • • • • • • • • •	4,167	4,412 .1	4,526	4,468	3,954	4,141
France,	totalper capita	2,745	3,001	8,874 .1	3,240	8,495	8,266	4,097
Czechoslovakia,	totalper capita		1,098	1,489	1,364	1,807	1,691	681
Austria,	totalper capita	3,421 .1	1,065	1,285 .2	1,148 .2	1,842	1,038	
ARIA	por supriu	••						
Iran [Persia],	totalper capita	8,659 1.0	8,082 .9	18,410 1.3	15,774 1.5	14,345 1.4	9,933	9,689
Turkey,	total	4,912 .2	·····	2,138 .2	1,898 .1	1,965	1,661	
AMERICA	per capital			••	•••	1	·-	
United States (continental),	totalper capita	98,424 1.0	89,869 .8	91,813 .8	88,773 .68	85,809 .69	93,858 .75	95,708 .76
Canada,*	total	82,634 4.5	85,628 4.0	87,085 8.9	50,165 4.9	32,437 3.1	39,935 3.8	38,958 3.7
Chile,	total	8,443 1.0	3,850 1.0	5,148 1.2	4,843 1.1	5,054 1.2	4,244 1.0	2,716
Argentina,	totalper capita	8,842 .5	8,527 .4	8,867	3,874 .3	3,950 .3	3,984	4,182
Aprica	per capital	, .0		•••	.0		.0	
Union of South Africa.	total	7.168	8.279	11.345	12.267	14.118	10.438	12.845
(European)	per capita	5.5	5.8	6.7	6.8	7.7	5.6	6.8
(Total)	per capita	1.2	1.2	1.5	1.5	i.7	1.3	1.5
Morocco,	total		8,418	11,765	12.688	13,835	18.212	1
	per capita		1.7	2.8	2.4	2.6	3.4	
Egypt,	totalper capita	1,906 .2	5,496 .4	10,805 .8	12,272 .8	15,448 1.0	16,578 1.1	13,917
	total	466	1,593	2,621 1.2	8,052 1.3	8,108 1.3	2,765 1.1	
Australia and New Zeland	por capita		''	1.0	1.0	1.0	1.1	
Australia,†	totalper capita	88,546 7.2	48,305 7.9	46,850 7.7	49,089 7.8	45,567 7.1	48,591 6.7	47,479 7.2
New Zealand,	totalper capita	7,480 7.8	9,589 7.7	11,082 8.1	10,062 7.0	12,028 8.2	10,817	11,504 7.6

*1980-33, calender years. Others are fiscal years ending March 31.

†Fiscal years ending June 30.

operate in restricting exports, and governments in Africa and elsewhere in restricting new plantings.

Consumption in Importing Countries

About half of the world's tea crop finds its way every year to importing countries and is consumed there, barring the stocks held in their principal markets, the most important of which is London. The importing countries consuming tea in greatest bulk are the United Kingdom, the United States, Australia, and Soviet Russia, in the order named. In pre-war years, however, Russia stood second in order. The accompanying Table No. 14 shows the approximate tea consumption in the principal importing countries.

The United Kingdom

The United Kingdom alone retains nearly 50 per cent of the world's tea exports; in the five years 1929-1933 the amount averaged 454,500,000 lbs. annually in the average world total exportation of 936,000,000 This enormous tea supply gives a per capita consumption of 9 to 10 lbs., in comparison with 6 lbs. at the beginning of the century. A review of the annual figures shows a steady climb up to the present high figure. [See Table No. 15.] Of the three beverages coffee, cocoa, and tea, the latter is consumed in far greater quantity; nearly ten times as much tea as coffee is used, and more than three times as much tea as cocoa.

Approximately four-fifths of this tea

PRODUCTION AND CONSUMPTION TABLE NO. 15

Tea Imports into the United Kingdom Retained for Home Consumption *

Period	Imports for Home Consumption 1,000 pounds	Per capita consumptio pounds			
1840-44	37.588	1.39			
1845-49	47.201	1.70			
1850-54	56.124	2.04			
1855-59	69.068	2.45			
1860-64	81.464	2.79			
1865-69	105.940	3.83			
1870-74	127,555	4.01			
1875-79	152.675	4.56			
1880-84	165.834	4.71			
1885-89	183.153	5.00			
1890-94	205,138	5.37			
1895-99	231.728	5.79			
1900-04	254,354	6.06			
1905-09	272,122	6.22			
1910-14	299.677	6.58			
1915-19	818,995	7.18†			
1920-24	899,240	8.64			
1925-29	400,864	9.23			
1980-881	452,143	9.83			

*Prior to April 1, 1923, figures relate to consumption in the British Isles as a whole, after that date to Great Britain and Northern Ireland. †Based on civilian population only.

iFour-year average.

originates within the British Empire, India being the chief source and Ceylon the second. China tea is no longer a rival in this market, but in recent years teas from Java and Sumatra have arrived in larger quantities, and the percentage of the British Empire tea has changed accordingly. The bulk of teas from the Netherlands East Indies is used in the cheaper blends, and is mostly in competition with the Indian Cachar and Sylhet teas, some Ceylon, and some African.

Aside from the millions of pounds consumed in the United Kingdom 75,000,000

to 95,000,000 lbs. are reëxported annually to American and Continental markets. In the past five years [1928-32] the Irish Free State, the United States, Canada, and Soviet Russia were the most important countries of destination. More than half of the reëxported tea is of Indian origin.

London is the great tea city; approximately 90 per cent of the tea traded in in the United Kingdom passes through its warehouses, and is recorded in stock by the London Tea Brokers' Association. accompanying Table No. 16 shows the gross imports, reëxports, net imports, and stocks of the United Kingdom for the years 1925-33 inclusive, the figures for 1925 and 1926 being for bonded warehouse stocks and those for later years stocks in London.

Irish Free State

Until April 1, 1923, trade statistics for the Irish Free State were included in the customs returns for the United Kingdom, so it is not possible to obtain independent figures for that consumption. The present average per capita consumption is 7.9 lbs. annually, as shown by the following figures for the eight-year period 1925-32, inclusive:

1925																			. 7	.6	Pound
1926																			. 7	.9	44
1927	i		į	į	į	į	i	į	į	į	i	į	ì	i	i	į	Ī	i	. 8	Ò.	64
1928		Ī	Ī	Ī	Ċ	ĺ	Ĭ	Ī	Ī	Ĭ	i	Ì	Ì	Ì	i	ĺ	Ī	Ī	.7	.7	**
1929			Ī	Ī	Ī	Ī	i	Ī	Ĭ	Ī	Ì	i	Ī	i	i	Ì	Ī	Ī	. 8	Ŏ.	**
1980			Ī	Ī	Ī	Ī	Ī	Ī	Ī	i	Ī	Ì	Ī	Ī	Ī	Ī	Ī	Ī	. 8	.0	**
1931		Ť	•	Ī	·	Ī	•	·	·	Ī	•	Ī	Ī	·	·	·	·	Ī	8	.8	**
1932																					**
				_	v	_	_	_	_	_	_	_	_		-	_			. 7	•	

Heavy reëxports of tea proceed from the United Kingdom to the markets of the Irish Free State. Total imports from all

PRODUCTION AND CONSUMPTION TABLE NO. 16

Tea Imports into the United Kingdom; Reëxports; Net Imports; Stocks

Calendar years; 1000 pounds; Stocks at end of year

Year		Import	s by Principal C		Net			
	British India	Ceylon	Netherlands East Indies	Other	Total	Reëxports	Imports	Stocks
1925 1926	291,155 270,458	132,540 140,408	58,582 64,501	13,290 17,049	490,567 492,416	88,410 81,429	402,157 410,987	198,900 202,700
1927	303,545 288,820	142,513 139,281	74,792 71,222	16,152 9,534	537,002 508,857	85,587 90,026	451,415 418.831	213,000 220,500
1929	306,735 290,183	153,095 152,097	85,404 84,600	13,934 14,158	559,168 541,038	95,023 88,275	464,145 452,763	260,400 261,600
1931	276,967 311.964	158,918 172,017	85,840 73,476	13,726 8.505	535,446 565,962	90,020 78,241	452,763 445,426 487,721	244,657 285,793
1933*	279,004	148,167	62,988	14,552	504,711	82,049	422,662	269,794

*Preliminary.

PRODUCTION AND CONSUMPTION TABLE NO. 17

Net Imports of Tea into Continental United States

1		
Year or period	Net Imports 1,000 pounds	Per capita consumption
1830	6,878	0.54
1840	16.883	0.99
1850	28,200	1.21
1851-60	21.028	0.76
1861-70	32,394	0.91
1871-80	59.536	1.32
1881-90	76.534	1.84
891-95	89.675	1.84
896-1900	86.217	1.17
901-05	95.814	1.18
906-10	93,595	1.05
911–15	95,199	0.99
916-20*	106.988	1.08
921-25	92,202	0.83
926-30	88.655	0.74
981	85,809	0.69
982	93,859	0.75
1988	96,186	0.77

*Average for period July 1, 1915, to Dec. 31, 1920.

sources are 23,000,000 to 24,000,000 lbs. annually.

Soviet Union [Russia]

Soviet Union, one of the world's great tea-consuming countries, is attempting to develop an independent source of tea supplies within its own borders. It is still dependent, however, upon importations. The total quantity of tea imported into the Soviet Union in 1933 is estimated at 42,564,000 lbs., of which black tea made up 23,199,000 lbs. and green tea 18,042,000 lbs. In 1932 imports were 35,161,000 lbs. The domestic production of tea is still but a small fraction of the total consumption. The present day consumption, despite the improvement in imports which began in

1923-24 after a period in which tea almost disappeared from the markets, is in marked contrast to that of pre-war years when 132,276,000 lbs. were consumed in what was equivalent to the area of today. The per capita in 1933 amounted to one-fourth of a pound compared with nine-tenths of a pound before the war. No doubt the consumption of fluid tea is greater than the per capita would lead one to believe, since the tea leaves or brick tea are used sparingly in the preparation of the beverage.

After tea became well-established in the daily habits of the people years ago, a great import industry was built up, principally with China. India, Ceylon, Japan, and Netherlands East Indies also sent tea to Russia. Conditions resulting from the world war and revolution practically closed the Russian markets to these countries and the tea that ordinarily went to Russia was thrown on the rest of the world. In 1923-24, however, imports into Soviet Union had reached 13,228,000 lbs. and by 1928-29 had risen to 65,177,000 lbs., but were still only about one-half of the pre-war amount, considering equivalent areas. In the next three years the trade rapidly declined but revived somewhat in 1933. What the future will bring with the rapidly growing yield in Transcaucasia and the effect of this yield on imports can not be predicted.

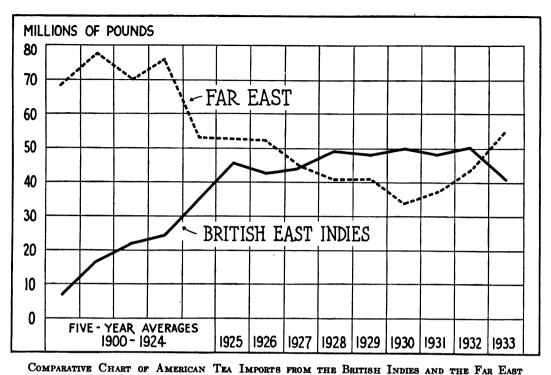
United States of America

Nowadays the United States holds the second place among tea importing countries. The net annual average of 89,787,000 lbs. in the 1930-33 period, is about one-fifth of the United Kingdom's, and the per capita is .72 lb. compared with 9.8 lbs. in the United Kingdom. One hundred years ago imports totaled 16,275,000 lbs., and net

PRODUCTION AND CONSUMPTION TABLE NO. 18 United States Imports of Tea

Calendar Years; 1,000 pounds

Year	China	Japan	British India	Ceylon	United Kingdom ¹	Netherlands East Indies	Netherlands	All other countries	Total
1925 1 926	12,116	29,582	5,137	18,328	24,771	7,570	1,815 1,019	1,643 1,465	100,962 95,930
1927	12,415 10,149	28,292 26,403	6,530 8,776	16,968 15,138	19,865 19,922	9,376 6,021	1,542	1,218	89,169
1928 1929	8,672 8,741	23,422 24,538	8,348 8,788	17,662 17,535	28,094 21,923	5,293 5,051	2,259 1,611	1,074 1,186	89,824 89,373
1930 1931	5,675 7,630	20,948 21,417	9,506 9,765	17,986 16,084	22,830 22,860	4,766 6,111	1,838 1,751	1,377 1,115	84,926 86,733
1932 1933	6,398 8,672	24,594 24,881	11,303 11,059	17,925 14,270	21,709 18,827	9,666 15,420	2,393 3,054	738 899	94,726 96,582
l	•	1 .	t from the Iri	1	1 1	10,420	3,034	355	30,302



Showing the United States imports from the Far East, including China, Japan, and Netherlands Indies, with transshipment through the Netherlands and Great Britain, and from the British East Indies, with transshipment through Great Britain.

imports 13,194,000 lbs. with a per capita of .91 lb. Table No. 17 shows the advance of imports and the changes in per capita consumption in the last 100 years. China was once the source of 99 per cent of the tea brought to the United States, but for the past five years China has sent only 8 per cent, roughly, of the total. British India and Ceylon now furnish considerably more than half of the tea, and of the two Ceylon continues to supply the greater quantity. Black teas at present form 68 per cent of the total, green teas 24, Oolong and mixed teas the remaining 8 per cent.

Much of the Indian and Ceylon teareaches the United States from the United Kingdom. The accompanying Table No. 18 shows the chief sources of the United States imports. Tea from Java and other Dutch possessions in the East Indies has been advancing rapidly in recent years. In the three-year period 1931–33 these imports averaged 10,400,000 lbs. Imports from Japan and Formosa normally average about 24,700,000 lbs.

An interesting development in the teatrade is the arrival of Formosa black tea. According to the report of the Food and

Drug Administration, Department of Agriculture, 197,416 lbs. of this tea were admitted into the country in the year ended June 30, 1934.

New York firms handle about 55 per cent of the tea imported, Boston about 20 per cent, and Seattle and San Francisco each 10 per cent.

Australia and New Zealand

Australia is one of the major tea-consuming countries in the importing group. It now ranks third on total quantity imported and also has a high per capita consumption; an average net importation annually of 46,431,000 lbs. and a per capita consumption of 7.2 lbs. The total amount of tea retained for consumption is nearly 80 per cent greater than early in the century, but only 7 per cent greater than in 1920-24. In other words, while there is still an increase, it is more or less in line with growing population and consequently no remarkable development in per capita has taken place. Australian markets are supplied chiefly by the Netherlands East Indies and Ceylon; 60 to 65 per cent coming from the former and 30 to 35 per cent from the latter. Virtually all of the reexported tea, which amounts to 500,000 to 1,500,000 lbs., goes to New Zealand and other Pacific islands.

New Zealand is likewise a big consumer of tea, not in the total amount retained for consumption, which averages only about 10,978,000 lbs. annually, but on the basis of the per capita consumption, which is around 7.4 lbs. This country is taking twice as much tea as at the beginning of the century, and the per capita is 1½ lbs. greater now. The bulk of the tea comes from Ceylon, through the ports of Dunedin, Auckland, Lyttelton, and Wellington. A small reëxport trade exists with Fiji and other islands.

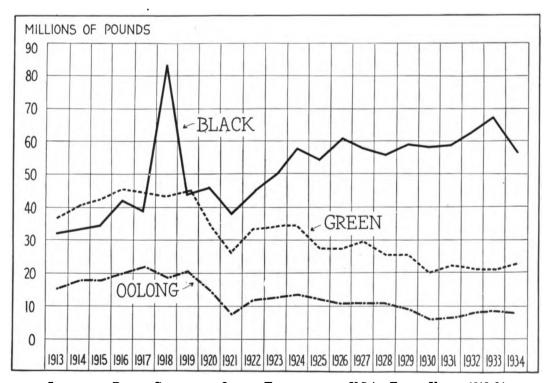
Union of South Africa

The Union of South Africa consumes an amount of tea somewhat greater than that of New Zealand; an annual average of 12,400,000 lbs. based on tea retained for consumption, besides the South African crop. Unlike New Zealand, it has a domestic production from which to draw, the estates in Natal producing roughly 600,000

to 700,000 lbs. of manufactured tea annually, most of which is retained in the Union. The local production, however, has been decreasing steadily, and at the same time imports have, in general, been going up. The chief tea consumers are the 1,700,000 Europeans, although some of the Bantus, Asiatic, and other elements of the population drink tea. The per capita on the basis of European population is 6.7 lbs., and on the total population, 1.5 lbs. Tea is a popular beverage in the Union and is served several times a day. Over 75 per cent of the imports arrive from Ceylon, with smaller percentages from India, Netherlands East Indies, and China. The product usually is brought in in bulk rather than in packaged form.

The Dominion of Canada and Newfoundland

Canada is one of the important teaimporting countries. The annual net amount retained for consumption is about 40,374,000 lbs. This equals a per-capita consumption of 3.9 lbs. Net imports in the last 15 or 20 years have shown a gain, but only in proportion to the rate of in-



IMPORTS OF BLACK, GREEN, AND OOLONG TEAS INTO THE U.S.A., FISCAL YEARS, 1913-34

ANALYTICAL TABLE OF TEAS ADMITTED TO THE UNITED STATES For a Period of Five Fiscal Years From July 1, 1929, to June 30, 1934

BLACK TEAS	1929-30 <i>Pounds</i>	1930-31 Pounds	1931-32 Pounds	1932-33 Pounds	1933-34 <i>Pounds</i>	1933-34 Per- centage	Loss cr Gain 1933-34 over 1929-30 Pounds	
Ceylon India Blended C. & I. Java Sumatra Congou Africa	27,846,565 19,463,862 531,882 7,028,380 199,537 2,350,578 12,989	27,279,238 21,822,090 571,781 7,311,619 213,780 1,703,937 3,141	26,810,300 21,665,057 660,633 9,368,939 642,330 2,453,024 6,975	22,490,544 22,463,511 658,130 15,877,599 2,981,481 2,043,731 11,648	18,569,019 16,646,030 995,840 11,359,892 5,572,842 2,675,266 13,016	21.68 19.44 1.16 13.26 6.51 3.12 .02	9,277,546 2,817,832 463,958 4,331,512 5,373,305 324,688 27	Loss Loss Gain Gain Gain Gain
Formosa Lapseng Souchong Other Blacks	10,371 4,317	60,791 20,538 8,147	340,075 13,622 102,785	45,211 9,906 53,706	197,416 18,347 77,881	.23 .02 .09	197,416 7,976 73,564	Gain Gain Gain
TOTAL BLACKS	57,448,481	58,995,062	62,063,740	66,635,467	56,125,549	65.53	1,322,932	Loss
GREEN TEAS Japan Japan Dust Ping Suey Country Green India Ceylon	14,452,675 1,237,132 3,206,112 582,526 490,680	14,408,998 1,760,970 4,527,056 361,666 117,898 396,750	13,713,797 2,073,975 4,422,803 475,755 119,113 1,046	13,631,780 2,994,600 3,880,533 279,001	14,203,627 3,014,735 3,704,630 371,639 181,145	16.59 3.52 4.33 .43	249.048 1.777.603 498.518 210,887	Loss Gain Gain Loss Loss
TOTAL GREENS	19,969,125	21,573,338	20,806,489	20,354,412	21,475,776	25.08	1,506,651	Gain
Oolongs Formosa Canton Foochow	6,216,650 277,999	5,675,679 207,860	6,980,250 163,095 59,136	7,720,995 144,521	7,246,323 160,852	8.46 .19	1,029,673 117,147	Gain Loss
Total Oolongs	6,494,649 517,922	5,883,539 598,891	7,202,481 406,207	7,865,516 433,688	7,407,175 629,948	8.65 .74	912,526 112,026	Gain Gain
GRAND TOTALS	84,430,177	87,050,830	90,478,917	95,789,083	85,638,448	100.00	1,208,271	Gain

crease in population, and the per-capita consumption barely has held its place. It has even dropped a little in comparison with that in the 1909–13 period. It is interesting to note that Canadians also consume nearly 3 lbs. of coffee a head. In 1933, 11,810,000 lbs. of the total tea imports, or 30 per cent, reached the Canadian market via the United Kingdom, although India and Ceylon sent direct about 16,873,000 lbs. and 7,482,000 lbs. respectively. The volume of Japanese tea was 2,722,000 lbs. Reëxports of tea from Canada average about 585,000 lbs. and go mainly to the United States and Newfoundland.

In Newfoundland tea is very popular and the consumption exceeds that of coffee. Tea per capita is 5.6 lbs., while coffee is only .3 lb., based on a net importation for home consumption of 1,543,000 lbs. of tea and 81,000 lbs. of coffee in the fiscal year 1933. The countries supplying the tea are Ceylon, United Kingdom, Canada, and the Netherlands East Indies.

Germany

In the European Continental group Germany is one of the chief tea-importing

countries; it ranks next to the Netherlands in the total quantity imported for consumption, although Germany's volume is less than half that of the Netherlands. Changes brought about by the war make pre-war and present day comparisons especially difficult for European countries. Considering the best available statistics, however, Germany's per-capita consumption of .2 lb. is perhaps a trifle larger now than in 1909-13, and the trend in imports is fairly keeping pace with that in population. In 1933 about 50 per cent of the tea came from the Netherlands East Indies, 24 per cent from British India, 20 per cent from Ceylon and 8 per cent from China. While Germany offers a good market for tea, it is primarily a coffee nation and stands third among the world's coffeeconsuming countries in the total volume imported for consumption; it has a coffee per-capita consumption of 4 to 5 lbs.

Poland [including Danzig]

Tea is imported into Poland direct from the producing countries and from the United Kingdom and the Netherlands. In 1933 about 35 per cent came from Ceylon,



23 per cent from the Netherlands East Indies, and 21 per cent from the British East Indies. Poland ranks next to Germany in the volume of tea imported for consumption; the annual average in 1930-33 was 4,272,000 lbs., with a per capita of .1 lb.

The Netherlands

The Netherlands is one of the great teaconsuming and reëxporting countries of the world. One-third to one-half of the imports are reëxported to other countries. Most of the tea arriving at Amsterdam and Rotterdam, the harbors of the Netherlands. comes from Java and Sumatra, which supply 80 per cent or more of the total im-Tea consumption has shown a steady increase from the beginning of the century and net imports have trebled. The following annual averages on five-year periods furnish an interesting comparison: 1900-04, 8,038,000 lbs.; 1909-13, 11,338,000 lbs.; 1920-24, 27,110,000 lbs.; 1925-29, 26,115,000 lbs.; 1930–33, 30,495,000 lbs. Per-capita consumption, despite the fact that coffee consumption is around 10 lbs., has increased from 1.5 lbs. in 1900-04 to 3.8 lbs. in 1920-24, 3.4 lbs. in 1925-29, and 3.8 lbs. in 1930-33.

France

France, a nation consuming over 350,-000,000 lbs. of coffee annually, retains only 3,525,000 lbs. of tea yearly, with a percapita consumption of tea estimated at .1 lb. Tea is received mainly from England, India, China, and French Indo-China. Teadrinking occurs late in the afternoon and generally is confined to the middle and upper classes, the English, American, and Russian colonies.

Czechoslovakia

Czechoslovakia had a net importation of an average of 1,386,000 lbs. annually, in the four years 1930–33, and a per-capita consumption of .1 lb. Most of the tea comes from the secondary markets of Germany, the Netherlands, and the United Kingdom.

Turkey, Asiatic and European

Unofficial figures, the only ones available, show average net imports of tea into Tur-

key in 1930-32 amounting to about 1,841,-000 lbs. This would give the country a percapita consumption of about 0.1 lb.

Austria

As in the case of other European countries, pre-war and post-war figures are not strictly comparable. On the present-day area and population of Austria, the net importation of tea was 1,235,000 lbs. annually in the 1925-29 period, with a per capita of .2 lb. Placing this per capita against that of 1920-24, very little change is noted. In recent years imports have averaged about 1,176,000 lbs. annually, enough to maintain the per-capita figure at .2 lb. Chinese and Indian teas are imported principally.

Greece

Very little tea is imported into Greece; net imports amount to about 600,000 lbs., which gives a per capita of .1 lb. Most of the tea reaches Greece via European countries rather than direct from the tea-growing countries.

Spain

Spain imports still less tea than does Greece; in fact, about half the amount, and the per capita is only .02 lb. The tea comes from China, India, and Indo-China originally. Tea is not widely consumed by the general population, and for this reason, which also is true of many countries, the actual per capita is higher than indicated by the usual methods of computation. The consumption is largely in social circles, or by those Spaniards who have travelled abroad.

Iran [Persia]

Tea is cultivated to some extent in Persia, but the yield is very small and the demand for tea is supplied by a large import trade. Net imports in the last four years have averaged 12,423,000 lbs. They were greater by 4,300,000 lbs. than in 1920-24. Per capita has increased also, from .9 lb. in that period to 1.2 lbs. in recent years. By far the greater portion of the tea is from India. China, however, sends a small amount. There is a reëxport trade largely to Afghanistan and Soviet Russia.

Latin-American Countries

Latin-American countries are not heavy consumers of tea; these countries, furnishing nearly 90 per cent of the world's annual exportation of coffee, have a preference for coffee. In general, it may be said that the imported tea is consumed chiefly by the urban population, including of course English and American colonies in the cities For this reason actual per-capita consumption is higher than indicated by dividing total population into net imports.

In this group of countries Chile and Argentina take more tea than do the others. net imports averaging 4,214,000 lbs. for the former and 3,985,000 lbs. for the latter. These two nations incidentally produce no tea; yerba maté, however, is a popular beverage in Argentina as well as in southern Chile. The per-capita consumption of tea in Chile is about 1 lb. compared with about .4 lb. in Argentina. The greater part of the tea is from the United Kingdom and British possessions in Asia, although Java is usually the largest single source of Chile's imports, and both countries also receive some shipments from other Far Eastern countries. Very little tea is consumed in Colombia, tea drinking prevailing only among the foreign colonies and well-to-do Colombians. Imports in 1932 totaled 54,000 lbs. The United Kingdom and the United States are the secondary sources of the imported tea. The Venezuelan markets are also supplied mainly by these secondary

sources. The total amount taken averages about 60,000 lbs. a year but was only 37,000 lbs. in 1933. In Guatemala there is a very small production of tea in the Alta Verapaz district, but most of the tea consumed is imported and is used chiefly by Americans, English, and Chinese.

Northern Africa

Egypt has a tea consumption practically equivalent in volume to that of New Zealand, Germany, or South Africa, singly; net imports average 14,500,000 lbs. This is almost three times the annual average in 1920-24, and over seven times that of prewar years. Population also has increased, but with that considered, the per capita is .9 lb. compared with .2 lb. in 1909-13. The tea is largely from Ceylon, India and the Netherlands East Indies.

Morocco takes a little more tea than Egypt. Imports averaged 14,912,000 lbs. annually in 1930–32. The French zone and Tangier are included in these figures. Per capita of 2.8 lbs. is higher than Egypt's, but Morocco does not present such striking progress in increased volume, although there is an upward curve in imports. Tea is popular with all classes, especially green tea from China.

Tunis imports an average of about 2,-975,000 lbs. of tea annually. Here, there is a per capita of 1.2 lbs. China supplies the bulk of the tea. Per capita has shown a gain from .7 lb. in 1920-24.



BOOK V SOCIAL ASPECTS

CHAPTER XVIII

EARLY HISTORY OF TEA-DRINKING

A BRIEF HISTORICAL BACKGROUND FOR SUCCEEDING CHAPTERS—DESCRIPTION OF THE FIRST USE OF THE TEA DRINK BY ABORIGINAL TRIBESMEN—IT BECOMES A PANACEA IN CHINA AND JAPAN—DEVELOPMENT OF TEA-DRINKING AS A SOCIAL RITUAL BY THE CHINESE, AND AS THE OBSERVANCE OF AN ESTHETIC CULT IN JAPAN—IT BECOMES A TAVERN DIVERSION IN PERSIA AND INDIA, AND A FUNCTION OF POLITE SOCIETY IN HOLLAND, ENGLAND, AND AMERICA

S a brief introduction to the succeeding chapters on the social aspects of tea, it will be recalled that the Chinese learned the use of the tea drink from aboriginal tribesmen of the hill districts bordering on Southwestern China. These tribesmen occasionally prepared a beverage by boiling raw, green leaves of wild tea trees in kettles over smoky, outdoor fires. This was the earliest, crude beginning of what the Chinese and Japanese later developed into a socio-religious rite of exquisite refinement.

Throughout the earlier centuries of its use, however, the tea drink always was taken, either primarily or secondarily, as a medicine; this aspect was never forgotten, and its Chinese and Japanese protagonists regarded it as a remedy for every human ailment.

By the time of Lu Yu, about A.D. 780, the Chinese had developed a tea code of such rigid requirements that no fashionable family would be without the twenty-four articles of tea equipage which it prescribed. Sets of the implements required for grinding, infusing, and serving tea were made by artists and skilled artisans. When not in use, they were kept in a specially and artistically made cabinet, constituting a marked evidence of the family's social consequence.

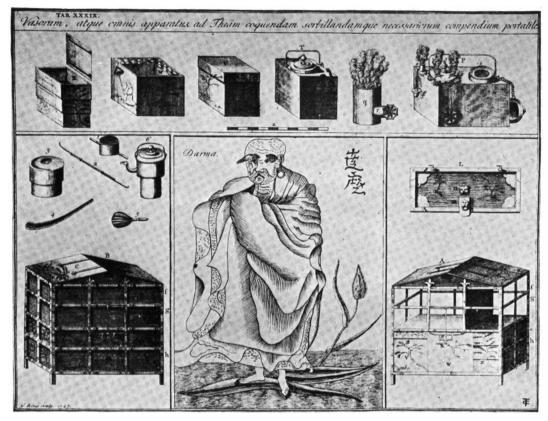
It was at once the privilege and the duty of the lord of the house to preside over the tea service. No wife or other member of the household might aspire to

this honor. Servants brought a baked teaball to the master, who pulverized it in an ornamental device for this purpose; then he was handed an urn of boiling water, which he poured onto powdered leaf in a tall, slender-spouted pot of the wine-jug type. After infusion, the master poured the steaming beverage into cups of kaolin.

Tea-drinking reached its supreme distinction in Japan, under the distinguished patronage of the ex-Shogun Yoshimasa, who shaved his head and devoted the latter years of an eventful life to the philosophic reflections of the Tea Ceremony, for which Shuko, the first great tea master, prepared a code of rules. The method of preparing the beverage for the Tea Ceremony was derived from a Chinese custom of the Sung period, and consisted in grinding the leaves to a fine powder, adding boiling water, and beating the liquid to a froth with a bamboo whisk.

At the same time that the Tea Ceremony was evolving as a socio-religious rite, the social art of tea-drinking was being cultivated assiduously by all of the better classes, in emulation of the social tea ritual of China. Starting in Japan as a medicinal beverage, which priests and laymen, alike, regarded as a sacred remedy, it became also the most popular and the most socially correct beverage for all occasions.

In 1637, Olearius, the secretary of the Dutch Embassy to Persia found that the Persians and "Indians" were great drinkers



EARLY ORIENTAL PORTABLE TEA EQUIPAGE WITH PORTRAIT OF DARUMA, PATRON SAINT OF TEA

A-B—Tea equipage, designed to be carried on a pole by servants. x, w, v—wooden cases for tea utensils (1-6); also coals, fuel, dishes, and eatables to be presented with the tea; T—fresh-water container; q—brazier which fits into the water boiler P. The tea pot (6) sits in the aperture (1) of the water boiler. L is a side panel. From a drawing by Kaempfer in 1692.

of China tea. He wrote that the Persians boiled it until it was black and bitter; but the Indians put it into seething water, in handsomely-made brass or earthen teapots.

The first European tea-drinkers were Jesuit priests who went to China and Japan in the sixteenth century, and who learned tea-drinking along with other customs of the people of those countries. Early in the following century, a few noble patrons of the Dutch East India Company at The Hague introduced tea-drinking as an exotic and tremendously expensive novelty at their levees. By 1635, it had become the fashionable beverage of the Dutch Court. By the middle of the century, a few of the great and near great of England were using the "China drink" occasionally, either as a panacea or in the entertainment of some grandee. By 1680, every housewife in

Holland had a tea room in her home, where she served tea and cakes to callers.

Tea-drinking became a vogue within the inner circle of the English Court after the arrival of Catherine of Braganza, the teadrinking queen of Charles II, in 1661. Also the Court of Directors of the East India Company began to drink tea at their meetings about the same time, and with such a start tea soon was a coveted luxury in homes of social importance throughout the kingdom. By Queen Anne's time, 1702–14, tea-drinking had become an institution in all classes of society in the United Kingdom.

In America, the wealthier Dutch and English colonists emulated the fashion of the mother countries by supplying themselves with artistic tea sets and by making tea-drinking a pretentious social function.



Yoshimasa's Ginkaku-ji, or Silver Pavilion, at Kyoto, Which Housed the First Tea Room.

The pavilion was originally the villa of the Ashikaga shogun Yoshimasa, who spent the evening of his life in retirement here, practising the rites of Cha-no-yu.



THE KINKAKU-JI, OR GOLDEN PAVILION, OF YOSHIMITSU WHO HAD A PASSION FOR THE TEA CEREMONY
This temple was built in the fourth year of Onin by the Ashikaga shogun Yoshimitsu. Its tea room was planned according to the ideas of Sowa Kanamori.

WHERE THE CHA-NO-YU CEREMONIAL WAS FIRST PRACTICED IN JAPAN

CHAPTER XIX

GLORIFICATION OF TEA IN JAPAN

How Tea-Drinking Was Given a RITUAL, THEN BECAME A TEMPLE CEREMONY, TO EMERGE AS THE CONCOMITANT OF POLITE SOCIAL INTERCOURSE—DARUMA, BUDDHISM'S PATRON SAINT OF TEA-HOW CERTAIN IDEAS OF TAOISM AND ZENISM BECAME EMBODIED IN TEAISM-THE EVOLUTION OF CHA-NO-YU-TEA-ROOM ESTHETICS-STORIES OF THE TEA MASTERS—THE PRECEPTS OF RIKYU—DETAILS OF THE CEREMONY—THE TEA ROOM

-Flower Arrangement and Art Appreciation

'APAN'S greatest contribution to tea was the Cha-no-yu, or Tea Ceremony. While Lu Yu, author of the Ch'a Ching in China, was the first to codify tea, it remained for the Japanese cha-jins. or tea masters, to invest the serving of the

beverage with a ceremony, the spirit of which still persists in the present-day tea service of Japan, and in the afternoon-tea functions of Europe and America.

In China and Japan, tea began as a medicine and grew into a beverage. Soon after Lu Yu wrote his book, tea was being generally celebrated by Chinese poets, and Japanese fancy created the Daruma legend of its origin.

It does not appear that Daruma ever came to Japan. However, Japanese Zen priests paid him high honor, and it was due

largely to their proselyting that the story took such a hold on the popular fancy as to make his image a favorite with artists, with the netsuke carvers of toys, and even for tobacconists' signs.

The real Daruma-or Bodhidharma, as he was known in India—was the founder of the Dhyan, or Zen, sect of Buddhism, and was the twenty-eighth Buddhist patriarch. Leaving India, he reached Canton early in the reign of the emperor Wu Ti, about A.D. 520, bringing with him the sacred bowl of the patriarchs. peror invited the sage to his capital at Nanking and gave him as sanctuary a cave-temple in the mountains. Here Tamo, or the "White Buddha," as he was called by the Chinese, is said to have re-

mained seated before a wall in meditation for nine years: wherefore he has been called the

"wall-gazing saint."

The Daruma legend runs that during one of his meditations the saint fell asleep. awakening, he was so chargrined that he cut off his eyelids to assure himself of no recurrence of the sin. Where the severed eyelids dropped to earth a strange plant came up. From its leaves it was found a drink could be prepared that would banish sleep. And so the divine herb was born and the tea beverage



Portrait of Daruma by Shokei, ca 1400.

came into being.

Later, Ta-mo offended his emperorpatron by asserting that real merit could be found, not in works, but solely in purity and wisdom. Whereupon, he is said to have retired to Lo-yang, crossing the turbulent Yangtze on a reed. This feat has been the inspiration of Chinese artists and poets who celebrated it in painting, song, and story. A Japanese version pictures the saint as a swarthy Hindu priest, with a spiky black beard and supported by a millet stalk, riding the waves on a journey



DARUMA CROSSING THE YANGTZE ON A REED From a painting ca 1600 by Mu-An, a Chinese monk, in the Anderson Collection, British Museum.

to Japan. He became the original of the Japanese toy, to which was given the name "Daruma," so weighted that nothing can destroy its poise. In humorous treatments of his sensational vigil, the netsuke carvers show him indulging in prodigious yawns, stretching his arms above his head, one hand clutching a fly swatter, or as a not unpleasant mass of flesh, sitting Buddhalike in benign contemplation. Some less reverent representations show him as a spider in a web, or gazing at a pretty geisha with an expression that has in it nothing of patriarchal contemplation.¹

Japanese tradition has it that Daruma died in Japan, on Kata-oka Mountain. After his death, about A.D. 528, he is said to have made such a lightning ascent to paradise that, in his hurry, he left one shoe behind in his coffin. Wherefore, he is sometimes pictured as being barefoot, and carrying a shoe in his hand. Legend has it that three years after his death and burial, he was seen traveling toward India, across the western mountains of China, shoe in hand. The Emperor caused his tomb to be opened, whereupon it was found to be empty save for a cast-off shoe.

The doctrines of Daruma were preached

first in Japan about 1191 by the Abbot Yeisai, who had become a convert and a tea protagonist on his second visit to China. A knowledge of tea-drinking and tea seeds from China had preceded Yeisai's activities by some 400 years, but the abbot did much to promote tea-drinking and tea cultivation. In 1201, Yeisai was invited to Kamakura, and so began the connection of Zen with the militarists of the Empire. The Zen discipline was particularly congenial to the spirit of the Samurai.²

The Ideals of Teaism

"In the fifteenth century," says Okakura Kakuzo, "Japan enobled tea into a religion of estheticism—teaism." **

Previous to the Heinan period, A.D. 794-1159, in the age of Buddhist culture in Japan, the Japanese made tea-drinking a pretext for religious and poetic conversation, but it was not until the close of the Heinan period that a regular ceremonial began to be associated with it; a ritual which contributed to the propagation of Buddhism, and the cultivation of that literary spirit which, centuries after, produced the most brilliant period of the emperor's Court and its literature.

The Buddhist priests not only found the beverage useful for keeping them awake during their long vigils, but it also enabled them to do with less food. It was especially endeared to them by the Daruma

legend, and was supposed to have great healing power. Gradually tea-drinking extended from the priests and religious orders to the laity. It became an excuse for congenial gatherings of friends and retainers, for learned or religious discourse. for political purposes, and later, in Cha-noyu, it became an esthetic rite.

Cha-no-yu means



Wooden Image of Daruma

¹ Henry L. Joly, Legend in Japanese Art, London, 1908.

² Herbert H. Gowen, D.D., F.R.G.S., An Outline History of Japan, New York, 1927. ³ Okakura Kakuzo, The Book of Tea, Copyright by Fox Duffield & Co., New York, 1906-28; Edinburgh and London, T. N. Foulis, 1919. Excerpts in this chapter used by permission.



CARVED WOODEN STATUE OF THE ABBOT YEISAI From the original in the Kennin Temple, Kyoto.

"hot water tea." The first meetings were held in the temple groves, where everything was in harmony with the solemn occasion. Transported to the towns there was an attempt to simulate natural surroundings by celebrating the ceremony in a little room set apart in a garden. Rikyu, founder of the most popular school of Chano-yu, forbade frivolous conversation in the tea room, and demanded that the simplest movements be performed according to strict rules of ceremony and a prescribed decorum. A subtle philosophy lay behind it all, and its finished product is known to the Japanese as "Teaism."

Teaism is a cult founded on the worship of the beautiful. Love of nature and simplicity of materials are its keynotes. It inculcates purity, harmony, mutual forbearance. In a certain sense it celebrates the aristocracy of taste, yet its symbol is the "cup of humanity." It is an ever present influence in Japanese culture and for five centuries it has been a dominant force in shaping the manners and customs of the Japanese people. It is reflected in their porcelain, lacquer, painting, literature. The nobility and the peasantry do it homage. In Japan no class has a monopoly of polite manners; courtesy is common currency. The esthetics of flower arrangement are known to the commoner and the high born, equally. The laborer offers his

salutation to the trees, the rocks, and the waters as does a prince of the blood.

The Japanese speak of a certain type of individual as having "no tea in him," when he is incapable of understanding the finer things of life; and the esthete is sometimes said to have "too much tea in him."

Foreigners often wonder at this seeming much ado about nothing. Okakura makes answer: "When we consider how small after all the cup of human enjoyment is, how soon overflowed with tears, how easily drained to the dregs in our quenchless thirst for infinity, we shall not blame ourselves for making so much of the teacup. Mankind has done worse. In the worship of Bacchus, we have sacrificed too freely; and we have even transfigured the gory image of Mars. Why not consecrate ourselves to the queen of the Camelias, and revel in the warm stream of sympathy that flows from her altar? In the liquid amber within the ivory-porcelain, the initiated may touch the sweet reticence of Confucius, the piquancy of Lao-tse, and the ethereal aroma of Sakyamuni himself."

Teaism represents much of the art of Japanese life. The Chinese tea clubs made no such demands upon the potter and the artist as did similar gatherings in Japan. The reason was that in China conditions were different, and the tea clubs never were the centers of estheticism which they became in Japan. Teaism has been called "the art of concealing beauty that you may discover it, of suggesting what you dare not reveal; the noble secret of laughing at yourself, calmly yet thoroughly—the smile of philosophy."



HUMOROUS NETSUKE CARVINGS OF DARUMA

Embodied in teaism are many ideas common to Taoism and Zenism. Taoism is one of four principal religions of China. It finds its basis in the teachings of Laotse, a moralist-philosopher who was a contemporary of Confucius, about 500 B.C., and it is especially popular among the common people. It is written in a Chinese school manual that the ceremony of offering tea to a guest began with Kwanyin, a disciple of Lao-tse, who first, at the gate of the Han Pass, presented to the Old Philosopher a cup of the golden elixir.

Taoism, and its successor, Zenism, represent the individualistic trend of the southern Chinese mind. On the other hand, the more conservative communism of Northern China expresses itself best in Confucianism. Frequently, these two are as wide apart as the poles.

Zenism, as expounded by Okakura, emphasizes the teachings of Taoism.

Zen is a name derived from the Sanskrit word dhyana, which means meditation. It claims that through consecrated meditation may be attained supreme self-realization. Meditation is one of the six ways through which Buddhahood may be reached, and the Zen sectarians affirm that Sakyamuni laid special stress on this method in his later teachings, handing down the rules to his chief disciple Kashiapa. According to their tradition Kashiapa, the first Zen partiarch, imparted the secret to Ananda, who in turn passed it on to successive patriarchs until it reached Bodhi-Dharma, the twenty-eighth.

Zenism, like Taoism, is the worship of Relativity. One master defines Zen as the art of feeling the polar star in the southern sky. Truth can be reached only through the comprehension of opposites. Again, Zenism, like Taoism, is a strong advocate of individualism. Nothing is real except that which concerns the working of our own minds. Yeno, the sixth patriarch, once saw two monks watching the flag of a pagoda fluttering in the wind. One said "It is the wind that moves," the other said "It is the flag that moves"; but Yeno explained to them that the real movement was neither of the wind nor the flag, but of something within their own minds.

Zen was often opposed to the precepts of orthodox Buddhism, even as Taoism was op-posed to Confucianism. To the transcendental insight of the Zen, words were but an incumbrance to thought; the whole sway of Buddhist scriptures only commentaries on personal speculation. The followers of Zen aimed at direct communion with the inner nature of things, regarding their outward accessories only as impediments to a clear perception of Truth. It was this love of the Abstract that led the Zen to prefer black and white sketches to the elab-

orately colored paintings of the classic Bud-dhist School. Some of the Zen even became iconoclastic as a result of their endeavor to recognize the Buddha in themselves rather than through images and symbolism. We find Tankawosho breaking up a wooden statue of Buddha on a wintry day to make a fire. "What sacrilege!" said the horror-stricken bystander. "I wish to get the shali out of the ashes," calmly rejoined the Zen. "But you certainly will not get shali from this image!" was the angry retort, to which Tanka replied, "If I do not, this is certainly not a Buddha and I am committing no sacrilege." Then he turned to warm himself over the kindling fire.

A special contribution of Zen to Eastern thought was its recognition of the mundane as of equal importance with the spiritual. It held that in the great relation of things there was no distinction of small and great, an atom possessing equal possibilities with the universe. The seeker for perfection must discover in his own life the reflection of the inner light. The organization of the Zen monastery was very significant of this point of view. To every member, except the abbot, was assigned some special work in the caretaking of the monastery, and curiously enough, to the novices were committed the lighter duties, while to the most respected and advanced monks were given the more irksome and menial tasks. Such services formed a part of the Zen discipline and every least action must be done absolutely perfectly. Thus many a weighty discussion ensued while weeding the garden, paring a turnip, or serving tea. The whole ideal of Teaism is a result of this Zen conception of greatness in the smallest incidents of life. Taoism furnished the basis for esthetic ideals. Zenism made them practical.

Thus it is apparent that the main factors at work in the foundation of Cha-no-yu were of a religious nature, the quintessence of centuries of Chinese philosophy, which influenced, to an almost incredible extent, the thought and art of Japan. It taught that art does not exist for the wealthy alone; it is often to be found in the simplest home, in the unpretentious endeavors of humble folk. The old Zen priests and cha-jin, mindful of these things, preached the evils of ostentation and by means of the Tea Ceremony sought to win back to the straight and narrow path the erring

It is to be regretted that the Tea Ceremony is almost a thing of the past in present-day Japan. Occasionally one hears of its being performed as an entertainment for foreign visitors, but the charming reunions in the cause of high thinking and the simple life are to be met only among

⁴ The precious jewels formed in the bodies of Buddhas after cremation.





SEN-NO RIKYU, HIGH PRIEST OF CHA-NO-YU

a dwindling number of devotees of the ancient manners and customs.

The Evolution of Cha-no-yu

The ritual instituted by the Zen monks of drinking tea out of a bowl before the image of Daruma or Sakyamuni was the start of the Tea Ceremony. The altar of the chapel in a Zen monastery was the prototype of the tokonoma; the place of honor in a Japanese room, where paintings and flowers are placed for the edification of guests.

The earliest rules for Cha-no-yu were promulgated during the time of the shogun Yoshimasa, 1443-1473, when Japan was for a time at peace. Yoshimasa engaged Shuko, a priest of the Shomyoji temple, as master of ceremonies at his Ginkaku-ji, or "Silver Pavilion," Palace near Kyoto, whither, in 1477, he had retired to private life. Shuko introduced the tea-drinking art to his noble patron who became so charmed with it that he added to his famous palace the first nine-by-nine tea chamber, became an ardent collector of tea utensils and curios, gave frequent tea parties, and made Shuko the first high priest of Cha-no-yu. Shuko's code of regulations for the ceremony was formed from word-of-mouth information supplied by those who remembered the old ceremonial. These rules served as a basis for all the ceremonial procedure which followed. Shuko used matsu-cha—powdered tea—in the ceremony. Yoshimasa not only entertained his friends and retainers at tea, but used to reward his fighting men with presents of tea utensils, in place of swords and arms.

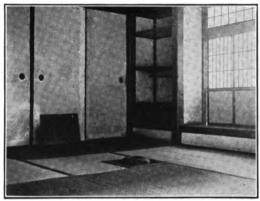
In time Ota Nobunaga, 1534-1582, the celebrated general who deposed the last of the Ashikaga shoguns, became devoted to Cha-no-yu, and Jo-o, who first taught him the principles of the cult, was appointed its second high priest about 1575. Jo-o substituted plaster for paper on the walls of the tea room.

Sen-no Rikyu, who had been a pupil of two well known tea experts, Dochiu and Sho-wo, was for a time Nobunaga's master of ceremonies. Later, about 1586, he became high priest of *Cha-no-yu* under Hideyoshi, known as Taiko Sama, and, acting upon instructions received from his master, he simplified the tea ritual, purging it of many abuses and extravagances that had crept into it after the time of Shuko.

Under the pine groves of Kitano, near Kyoto, in 1588, Hideyoshi gave an historic Tea Reunion which continued ten days. All the *cha-jin* were summoned with their tea untensils, under pain of never being allowed to take part in the ceremony again if they disobeyed. All classes responded and the Taiko drank tea with everyone—a truly democratic proceeding. According to the *Toyotomi Koun Ko-Ki*, "the sound of the water boiling could be heard at some distance. About 500 persons attended, and they extended over an area of about three miles."

Sen-no Rikyu brought Cha-no-yu within the reach of the middle classes and introduced the more esthetic stage of the ceremony. Rikyu considered its fundamental principle to be politeness, and he is regarded as the restorer of this art. He considered that a tea party demanded as its essentials purity, peacefulness, reverence and abstraction. He instituted many changes and improvements, making the ceremony less tedious and elaborate.

After Rikyu came his favorite pupil, Furuta Oribeno-Jo, who, about 1605, restored some of the older usage; and Kobori Masakazu, who departed from the severe style of Rikyu by introducing a profusion of rich and beautiful objects, thereby reverting to the ornate luxury of the fifteenth century ceremonial. Besides these there were many other distinguished cha-jin, who introduced various slight variations and forms; however, for the past 400 years there has been no material change in the ceremony. Kobori-Enshiu-



THE FIRST TEA ROOM IN JAPAN

Tokyudo or four-and-a-half mats room in the

Ginkaku-ji, Kyoto.

no-Kami was court instructor of *Chano-yu* to Iyemitsu, 1623–1651, third of the Tokugawa shoguns. Katagiri-Iwami-no-Kami was the sixth and last, of the acknowledged high priests of *Cha-no-yu*. He was its preceptor for the Tokugawa shogun Iyetsuma, 1651–1680.

Tea Room Esthetics

The tea room was originally a portion of the ordinary drawing room of a Japanese house, screened off and known as the kakoi, or enclosure. The cha-seki, or separate tea room, succeeded this. The independent tea house, which was the next development was known as the sukiya, meaning the Abode of Fancy, the Abode of Vacancy, or the Unsymmetrical; which Okakura explains as follows:

"It is an Abode of Fancy inasmuch as it is an ephemeral structure built to house a poetic impulse. It is an Abode of Vacancy inasmuch as it is devoid of ornamentation except for what may be placed in it to satisfy some esthetic need of the moment. It is an Abode of the Unsymmetrical inasmuch as it is consecrated to the worship of the Imperfect, purposely leaving some thing unfinished for the play of the imagination to complete. The ideals of Teaism have since the sixteenth century influenced our architecture to such degree that the ordinary Japanese interior of the present day, on account of the extreme simplicity and chasteness of its scheme of decoration, appears to foreigners almost barren."

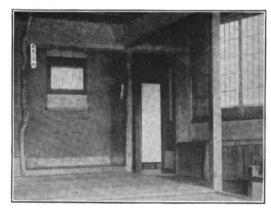
The first tea chamber is still an object of great historic interest to travelers and pilgrims who visit the *Ginkaku-ji* at Kyoto. In the center of the floor the *ro*, or sunken fireplace, is to be seen in its prescribed place. "This quaint cubby hole," as one

traveler describes the chamber, "looks more like a play room than the sometime habitat of a powerful sovereign." It is as bare as a monk's cell, and is ascribed to Soami, painter, poet, cha-jin, and prime favorite of Yoshimasa.

The first independent tea room, or teahouse ensemble, was the creation of Sen-no Rikyu under Hideyoshi. It included a small cottage consisting of the tea room proper, designed to accommodate not more than five persons, and a mizu-ya, or anteroom, where the tea utensils were washed and arranged; a machi-ai, or portico, in which the guests were to wait until they received the summons to enter the tea room; and a roji, or garden path, connecting the machi-ai with the tea room.

The tea room itself suggested refined poverty, yet it demanded such selection of material and careful workmanship that it was usually a costly affair. Its simplicity and purism were inspired by the Zen monastery. Okakura tells us that the size, ten feet square, was suggested by a passage in the Sutra of Vikramadytia, where Manjushiri and 84,000 disciples of Buddha were welcomed in a room of this size: the allegory being based on the theory of the nonexistence of space to the truly en-The ron, or path, served to lightened. break connection with the outside world, and signified the first stage of meditation.

The tea masters displayed marvelous ingenuity in arranging the approach to the tea room. Regular irregularity marked the stepping stones, while dried pine needles, moss-covered lanterns, and evergreens suggested the spirit of the forest, even in the heart of a city. Rikyu said the



THE "SERENE EVE" ARBOR
This 's the tea room of the Kinkaku-ji, Kyoto.



Museum of Fine Arts, Boston

IMPLEMENTS USED IN THE CHA-NO-YU CEREMONY

On the top of the daisu [stand] may be seen on the left the ko-ire [receptacle for incense]. In the center is the cha-wan [tea bowl]. On top of this bowl is the cha-saji [spoon for powdered tea, usually made of bamboo]. Inside the bowl and therefore not visible in the picture is the cha-sen [whisk for stirring the tea]. On the right is the cha-ire [receptacle for powdered tea]. On the lower shelf to the left is the cha-toko [kettle holder] for the charcoal fire. This is surmounted by the cha-kama [kettle for hot water]. To the right of this is the mizu-koboshi [receptacle for waste water or tea]. To the rear of the mizu-koboshi is the yu-shaku-ire [water dipper holder] containing the yu-shaku [water dipper] and the hibashi [fire tongs] which are not visible. The small cup-like affair next to the right is the cha-tate-ire [tea-stirrer holder]. On the extreme right is the mizu-ire [receptacle for cold water]

secret for obtaining effects of serenity and purity in laying out the roji was to be found in an ancient ditty which runs:

"I look beyond; Flowers are not. Nor tinted leaves. On the sea beach A solitary cottage stands In the waning light

Of an autumn eve."

Kobori-Enshiu-no-Kami, a great master of the tea ceremony, found his inspiration in these verses:

"A cluster of summer trees,

A bit of the sea,

A pale evening moon."

Being thus prepared the guest approached the tea sanctuary. If he was a samurai he left his sword on the rack beneath the caves, for the tea room was a house of peace. Noble or commoner, after washing his hands, he bent low to enter the sliding door, which, being not more than three feet high, was intended to inculcate humility. Inside, host and guests followed the strict rules laid down for the ceremony. There were, in every tea room, a few things designed "not to depict, but to suggest" thoughts that made for beauty and The picture or flower arrangeserenity. ment, the singing tea kettle, the general cleanliness and sweetness of the room, its very architectural frailty, suggesting the transitory nature of human life; all these things tempted the guest to loaf and invite his soul, to dwell upon truth and beauty in the abstract and forget for a time the harshness and the crudities of the workaday world.

The Zen ideals easily lent themselves to



Metropolitan Museum of Art, N. Y.

such an abode of Fancy, of Vacancy, and of the Unsymmetrical. Small wonder then that Cha-no-yu had a marked influence upon the fine arts and the industrial arts

ARTISTIC EQUIPAGE FOR THE JAPANESE CHA-NO-YU

of Japan. By its influence those arts were restrained within conservative limits, and any tendency towards ostentation or vulgar display was severely and promptly curbed.

True art appreciation, and the birth of the art of flower arrangement went hand in hand with Teaism. Okakura has devoted a chapter to each in his Book of He tells us that the tea masters guarded their treasures with religious care, and it was often necessary to open a whole series of boxes, one within another, before reaching the shrine itself—the silken wrapping within whose soft folds lay the holy of holies. Rarely was the object exposed to view, and then only to the initiated.

The tea masters subordinated flowers to the general scheme of decoration in the tea room. Later, there arose a cult of flower masters which was independent of the tea Within the tea room, however, flowers speak a various language. Noisy flowers are taboo. Katagiri ordained that white plum blossoms may not be shown on the tokonoma when snow blankets the garden. But a spray of wild cherries and a budding camellia may find a place in the flower vase in a tea room late in the winseason, because \mathbf{the} combination breathes promise of spring. If, on a hot summer's day one should enter a darkened tea room and find in a hanging vase, with the morning dew fresh upon it, a single lily, his drooping spirits are refreshed by the contemplation of the lovely symbolism.

Again, if a living flower graces the tokonoma, a flower kakemono is not permis-

sible. If a round kama, or kettle, is used, an angular water jar is indicated. Frequently the pillar of the tokonoma was of a different colored wood, to relieve monotony and avoid any suggestion of symme-"In placing a vase on an incense burner on the tokonoma," says Okakura. "care should be taken not to put it in the exact center, lest it divide the space into equal halves."

The principles of Teaism had a most important influence upon the thoughts and the life of the Japanese people from the thirteenth century onward; an influence so beneficent in character that Japan's purest ideals are directly traceable to them. Luxury was turned into refinement, the abnegation of self became a supreme virtue, and simplicity its chief charm. Artistic and poetic ideals were born that produced a romanticism which will live as long as the race endures. Never before in the world's history had the doctrine of high thinking and simple living been so translated into terms of the practical as under the influence of Cha-no-vu.

Stories of the Tea Masters

There are many stories of the old tea masters which serve to illustrate their austerity, their noble ideals and, at the same time, to throw light upon the manners and customs of Cha-no-yu. For example, Rikyu, the great tea master under Hideyoshi, on being questioned regarding the supposed secrets of the ceremony, replied: "Well, there is no particular secret in the ceremony save in making tea agreeable to the palate, in piling charcoal on the brazier so as to make a good fire for boiling the water, in arranging flowers in a natural way, and in making things cool in summer and warm in winter." Somewhat disappointed by the apparently insipid reply, the inquirer said, "Who on earth does not know how to do that?" Rikyu's happy retort was, "Well, if you know it, do it."

Upon one occasion Rikyu remarked to his son Shoan, who had been sweeping and watering the garden path, "Not clean enough. Try again." After a time the boy returned and said: "Father, now indeed is it finished. Three times have I washed the stones of the way, the lanterns, trees, moss, and lichens are sparkling after



PORTABLE CEREMONIAL TEA OUTFIT

their sprinkling; not a twig nor a leaf have I left on the ground." "You young fool," cried Rikyu, "that is not the way to sweep a garden path. I will show you." Stepping into the garden he grasped a maple tree, all crimson and gold in its autumnal beauty, and swaying it gently to and fro scattered its leaves about the garden, making it appear as if nature herself had bestowed the finishing touch. Thus cleanliness and natural beauty were combined according to the best principles of *Chano-yu*.

Rikyu also figures in a flower story which has to do with a marvelous garden of morning glories cultivated by him with much loving care. Its fame reached the Taiko, and he expressed a desire to see it; whereupon Rikyu invited him to tea. When the Taiko arrived he was amazed to find that the garden had been laid waste. There was not a flower to be seen; nothing but a stretch of fine sand. Much chagrined he entered the tea room only to find on the tokonoma, in a rare vase of Sung workmanship, a single morning glory, the queen of the whole garden.

But alas for the worship of truth attributed to Cha-no-yu votaries! Even Rikyu, the codifier, the one in a thousand, was to fall a victim to it. It is related that the Taiko was smitten by the beauty of the widowed daughter of Rikyu and demanded her for his mistress. When Rikyu explained that the lady was still in mourning for her husband and begged to be excused, the Taiko was offended.

"It was an age rife with treachery [records Okakura], and men trusted not even their nearest kin. Rikyu was no servile courtier, and had often dared to differ in argument with his fierce patron. Taking advantage of the

coldness which had for some time existed between the Taiko and Rikyu, the enemies of the latter accused him of being implicated in a conspiracy to poison the despot. It was whispered to Hideyoshi that the fatal potion was to be administered to him with a cup of the green beverage prepared by the tea master. With Hideyoshi suspicion was sufficient ground for instant execution, and there was no appeal from the will of the angry ruler. One privilege alone was granted to the condemned—the honor of dying by his own hand.

honor of dying by his own hand.

On the day destined for his self-immolation, Rikyu invited his chief disciples to a last Tea Ceremony. Mournfully at the appointed time the guests met at the portico. As they looked into the garden path the trees seemed to shudder, and in the rustling of their leaves are heard the whispers of homeless ghosts. Like solemn sentinels before the gates of Hades stand the grey stone lanterns. A wave of rare incense is wafted from the tea room; it is the summons which bids the guests to enter.

One by one they advance and take their places. In the tokonoma hangs a kakemono— a wonderful writing by an ancient monk dealing with the evanescence of all earthly things. The singing kettle, as it boils over the brazier, sounds like some cicada pouring forth his woes to departing summer. Soon the host enters the room. Each in turn is served with tea, and each in turn silently drains his cup; the host last of all. According to established etiquette, the chief guest now asks permission to examine the tea equipage. Rikyu places the various articles before them, with the kakemono. After all have expressed admiration of their beauty, Rikyu presents one of them to each of the assembled company as a souvenir. The bowl alone he keeps. "Never again shall this cup, polluted by the lips of misfortune, be used by man." He speaks, and breaks the vessel into fragments.

The ceremony is over; the guests with difficulty restraining their tears, take their last farewell and leave the room. One only, the nearest and dearest, is requested to remain and witness the end. Rikyu then removes his tea gown and carefully folds it upon the mat, thereby disclosing the immaculate white death robe which it had hitherto concealed. Tenderly he gazes on the shining blade of the fatal dagger, and in exquisite verse thus addresses it:

> "Welcome to thee O sword of eternity! Through Buddha And through Dharuma alike Thou hast cleft thy way."

With a smile upon his face Rikyu passed forth into the unknown.

Kobari-Enshiu-no-Kami, the tea master who followed Rikyu, was quite a connoisseur. He once said, "One should approach a great painting as one approaches a great prince." Being complimented on his collection of objets d'art by his disciples, one of whom told him it was superior to Rikyu's because all could appreciate it, whereas

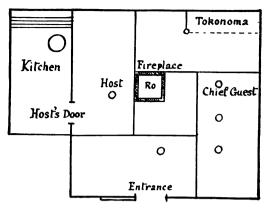


Fig. 1-Ground Plan of Tea Room

Rikyu's appealed to only one in a thousand, he exclaimed: "How commonplace I am. I cater to the taste of the majority. Rikyu dared to collect only those things which appealed to his own love of the beautiful. Verily he was one in a thousand among the tea masters."

Cha-no-yu sometimes was put to base uses. It is said that Kato Kiyomasa, Hideyoshi's great general, and the conqueror of Korea, was poisoned by means of arsenic at a tea party, by the command of Ieyasu, who ordered one of his retainers to act as host, and invite him to a Chano-yu meeting. The host drank, to induce Kato to do the same, knowing it to be certain death, and died in consequence, while Kato's hardy constitution resisted the poison for some time, but ultimately gave way.

The Precepts of Rikyu

The following rules, or precepts of Rikyu, long served as a guide to the general behavior of those taking part in the tea ceremony:

RULES AND MAXIMS

1. As soon as the guests are assembled in the waiting room, they announce themselves by knocking on a wooden gong.

2. It is important on entering this ceremony to have not only a clean face and hands, but

chiefly a clean heart.

3. The host must meet his guests and conduct them in. If, on account of the host's poverty, he cannot give them the tea and necessaries for the ceremony, or if the eatables be tasteless, or even if the trees and rocks do not please him, the guest can leave at once.

4. As soon as the water makes a sound like the wind in the fir-trees, and the bell rings, the guests should return from the waiting room, for bad would it be to forget the right moment for the water and the fire.

5. It is forbidden, since long ago, to speak in or out of the house of anything worldly. In this category comes political conversation, and especially scandal. The only thing is the Tea and the Tea Societies.

6. No guest or host may, in any true, pure meeting, flatter either by word or deed.
7. A meeting may not last longer than two

hours (Japanese)—four hours European time.

Notice.—Let the time pass by in talking about these rules and maxims. The Tea Societies recognize no difference of social standing, but permit free intercourse between high and low.

Written in the 12th year of Tensho [1584], and the 9th day of the 9th month.

As a commentary on this "notice" it may be added that, although no social difference was recognized, yet some guests were treated as more or less distinguished, according as they were more or less proficient in the usages of tea ceremony. The owner of a celebrated tea utensil was honored by a kind of reflected glory, while the descendant of a sosho, or master of polite ceremonies, took precedence of an ordinary mortal. Rikyu reduced the size of the tea room from $4\frac{1}{2}$ mats to $2\frac{1}{2}$ mats.



Fig. 2-GARDEN WITH TEA ROOM

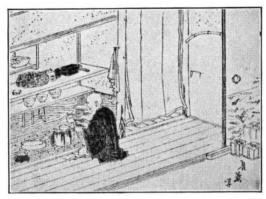


Fig. 3—Host's Kitchen [Mizu-ya]

Details of the Ceremony

We come now to the details of the actual ceremony, commencing with a word or two about the people who took part in it. These are, for the most part, taken from a paper on *Cha-no-yu* by the late Mr. W. Harding Smith, read before the

Japan society of London.

Custom required that no more than four guests should be invited. The chief guest, who generally was chosen on account of his experience and skill in Cha-no-yu, acted as fugleman, or spokesman for the others; he sat near the tokonoma, to the left of the host, and nearly facing him. Everything was offered first to the chief guest, and the requests of the other guests were made known to the host through him. He was the first to enter the room, and if he were a very expert and devoted cha-iin he affected a shaven head, a practice which was supposed to be conducive to cleanliness, purity, and abstraction. It seems also to point, like so many other details, to a religious origin.

The cha-shitsu, or tea room, usually was of 4½ mats, about 9 feet square; each mat being 6 feet x 3 feet. It usually was built in a garden apart from the house, and was quite isolated from it. Fig. 1 shows the ground plan of the tea room. The accompanying illustration, Fig. 2, from a Japanese work entitled *Cha-do Haya-manabe*, or "Easy Compendium of Cha-no-yu," written by one Kano Soboku, gives a general view of the garden. In the foreground will be seen the tea room with its sliding door, and just to the left of it the chozubachi, or washing place. On one side of the tea room was a sort of kitchen called mizuya, in which the host kept the tea utensils, and not very far from the tea room was the covered bench of the machi-ai, where the guests assembled and whiled away the time of waiting with tabako-bon, or smoking apparatus, there provided.

The tea room had an entrance at one side with a sliding panel, only two feet square, through which the guests entered, and another doorway leading into the kitchen. On another side was the tokonoma, which usually contained a hanging picturekakemono—or a writing by some celebrity, while on the side post of the tokonoma was a hanging vase of flowers, either of bamboo or basket work. Sometimes a vase hung from the roof. Both the kakemono and the flower arrangement followed the general rule of simplicity. The illustration, Fig. 3, showing the interior of the kitchen, is from another Japanese book called Matsu-sha Hitori Geiko Chano-yu Gaisoku, also by Soboku.

The garden was tastefully arranged with rocks, plants, shrubs, stone lanterns, and sometimes miniature lakes and landscapes. Stepping-stones led from one part

to another.

When the guests were all assembled they signalled to the host by knocking on the gong. The host then conducted them to the door of the tea room. There the host knelt and allowed his guests to enter be-



Fig. 4-Guests Leaving Machi-ai

⁵ W. Harding Smith. "The Cha-no-yu, or Tea Ceremony." Transactions and Proceedings of the Japan Society. London, Vol. 5, Part 1, 1900. (By per-mission.)



Fig. 5-Guests Entering the Tea Ceremony Room Through the Characteristic Low Door

fore him; they having first washed their hands and faces at the *chozu-bachi*, a rough block of stone with a cavity hollowed out of the top, and a dipper attached for pouring water over the hands. In winter a vessel of warm water was placed near the *chozu-bachi* for the guests' use.

Before entering the room, the party left their straw sandals outside, on end against



Fig. 6—HANGING FLOWER VASES [KAKE-HANA-IKE]

the front stone of the threshold. The illustrations, Figs. 4 and 5, show guests leaving the *machi-ai* and going towards the tea room, one guest washing at the *chozubachi*, and another just about to enter the low door.

All having entered, they sat facing the host, who exchanged bows with each one The host then arose and, after thanking his guests for coming, went to the door leading to the kitchen, and told them he was going to fetch the materials for the fire. While the host was gone the guests examined the room and its decorations. Kneeling before the tokonoma, they admired the kakemono and the flower arrangement in set and orthodox terms. Sometimes this was done by each guest as he entered the room. In the illustration Fig. 7, one guest is seen sitting opposite the tokonoma in an attitude of rapt admiration, while another has just entered the low doorway. The forms of kakemono painting generally deemed most suitable were the austere monochrome landscapes of the Ashikoya masters and their followers, fine and typical examples of which are landscapes by Sesson. In the case of the flower decorations, these formed a special branch of the art of

flower arrangement which afterward became so popular in Japan. Here again the ideal was simplicity and austerity, the expression of the growth of the plant being deemed of more importance than the color arrangement. The vases in which the flowers were placed varied from elaborate vessels of bronze to simple baskets and vessels cut out from a single stem of bamboo. Cha-no-yu flower arrangement, though extremely simple in its elements, has a most pleasing effect. Perhaps, the arrangement most characteristic of the ceremony will be found in the basket-work flower holder [Fig. 6] hooked on to the wall or the side post of the tokonoma. This is shown in situ in Fig. 7, and again further on in Fig. 17. Red flowers, or those with a strong perfume, were avoided. Fig. 8 shows the interior of tea room at

Fig. 8 shows the interior of tea room at the Nanzenji Temple, with the guests assembled. This is an adaptation from an illustration in Morse's "Japanese Homes."

Returning to his guests, the host brought out of the small room a charcoal basket containing pieces of charcoal of the prescribed size, $5 \times 1\frac{1}{2}$ in. and $2\frac{1}{2} \times 1$ in.; a feather duster made of three feathers; iron rings, open at one side, for lifting the kama, or kettle; and hibashi, or fire-tongs, for arranging the coals. Marching very slowly and deliberately, he deposited these on the floor, and then brought a vessel full of ashes and a bamboo spatula, and arranged them near the fireplace. Then lifting the kettle, which already had been placed on the hearth, off the fire, he stood it on the bamboo mat.

Fig. 9 consists of a group of the chief utensils employed in *cha-no-yu*, Fig. 10 shows various forms of kettle, and Fig. 11



Fig. 7—Guests Entering Tea Room and Admiring Tokonoma

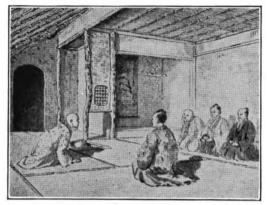


Fig. 8—Tea Room in Nanzenji Temple with Guests Assembled

is a particular form of table or stand, invented by the celebrated Rikyu. All of these illustrations are from *Cha-do Haya-manabe*.

The kettle usually was made of iron, but sometimes was of bronze. It often had an intentionally rough surface. Celebrated tea experts invented new shapes. Lifting the kettle off the trivet was the signal for the guests to draw near and watch the process of making the fire, after politely asking permission to do so. The host first heaped up the smouldering embers and arranged fresh charcoal in the form of a trellis or grating; then he banked it up with fresh ashes, arranging it tastefully with the spatula, and placing a few pieces of white charcoal on the top. This charcoal was made from the branches of the tsutsuji, or Rhododendron indicum, dipped in a mixture of powdered oyster shells and water. Fig. 12 shows the host about to make up the fire and the guests watching the process.

Having sprinkled a little incense taken from the ko-bako, or incense box, the host finally replaced the kettle on the trivet, and the guests complimented him in due form, asking to be allowed to examine the incense box, which often was a work of art. When the box had been returned to the host, there was an interval in the proceedings, during which the host withdrew to the kitchen, and the guests went into the garden.

During this interval a few words must be said about the different modes of conducting this first part of the ceremony. The summer and winter modes differed in some respects. In the summer, the fire vessel, or *furo*, was made of earthenware,

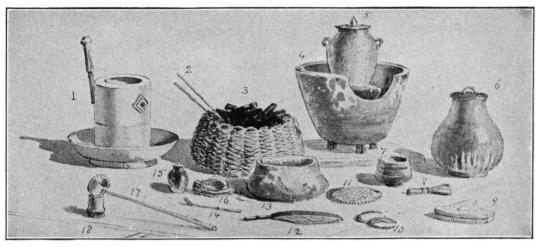


Fig. 9-Utensils for Tea Ceremony

- Tea-mill
 Tongs [Hibashi]
 Charcoal-basket
 Furnace [Furo]
 Kettle
- Water-vessel Tea-bowl Bamboo Whisk Incense-box 10. Handles [for Kettle]

and stood on the floor or the mats; the incense box and the cha-ire, or tea box, were made of lacquer. In the winter, the incense box and cha-ire were of pottery, and the ro, or fireplace, was a square metallined fire box, about eighteen by eighteen inches, sunk in the floor flush with the tops of the mats. In the winter ceremony also, the garden generally was strewn with dry pine needles. In the summer mode the garden was kept freshly

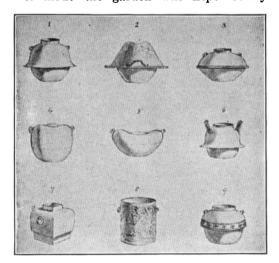


Fig. 10-Hot-water Kettles [Kama]

- Crane neck
 Fuji
 Plum
 Designed by Rikyu
 Belonged to Nobunaga
- 6. Chinese dog 7. Four Cardinal Points
- 8. Dragon 9. Swastika

- 11. Bamboo Mat [for kettle]
 12. Three-feather
- Duster
 13. Slop-bowl
 14. Bamboo Tea-spoon
- Tea-jar
 Silk Bag [of Tea-
- jar]
 17. Water-ladle
 18. Stand [for same]

watered, and the stepping stones were scrubbed clean. It is stated by some authors that these differences depended entirely on the whim of the host. However, the seasons usually were divided thus: Summer mode, May to October; winter, November to April. The decorations of the room usually were in accordance with the season-chrysanthemums in autumn, peonies in summer, cherry blossoms in spring, etc. The kakemono was changed with each season, and even the lacquer boxes often symbolized the season in the same way. The hours at which meetings were held varied, but the following were considered the proper ones:

- 1. Yogomi [overnight], 5 A.M. in summer, when convolvulus and similar quickly fading flowers were used to decorate the tokonoma.
- 2. Asa-cha [morning tea] 7 A.M. in winter, often chosen when snow was on the ground, in order to enjoy the sight of it in all its freshness.
 - Hango [after breakfast], 8 A.M.
 Shojo [mid-day] 12.

 - 5. Ya-wa [night conversation] 6 P.M. 6. Fuji, any other time than the above.

We had come to the point where the host and guests retired from the room. During their absence the host took the opportunity of sweeping out the room, and arranging fresh flowers. Mr. Conder, in his work on the flower arrangements of Japan, says that "sometimes, when the

guests retired, the host removed the kakemono, and hung a new arrangement of flowers in its place." Then, as soon as the water began to boil, he rang a bell or sounded a gong, as a signal for the guests to reenter. When they had done so, the host set food and sake before them, offering each first to the chief guest. All the guests were supplied with white paper to wrap up the portions of food which they could not eat, so that nothing might be left. The meal generally finished with sweetmeats. The food usually was simple and latterly was supposed to be in the style of the sixteenth century.

Some authorities say that after this

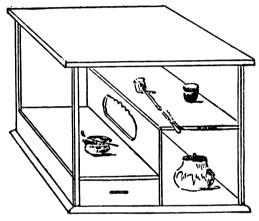


Fig. 11-Stand for Utensils [Tana]

second stage in the proceedings, a second adjournment took place while the host rearranged the room and donned a special dress, in honor of the all-important function which was to follow; others only mention one retirement from the room. Which of these may be the right version is not clear, but at any rate the chief business of the meeting now commenced.

The host brought in separately, and with much ceremony, a table of mulberry wood about two feet high [Fig. 11], though sometimes this was omitted, and a cha-ire of lacquer or pottery, preferably the latter, as the little stoneware jars were often of great value and antiquity. These jars usually had ivory lids, and were carefully wrapped up in silk brocade bags, which often were made out of the dresses of celebrated persons. The most highly prized of these cha-ire were those made at Seto by Kato Shirozaemon, or Toshiro, as he was called, who went to China in 1225



Fig. 12-Making the Fire

to study pottery for five years, and brought back with him materials for making pottery; those made of Chinese clays were the most esteemed.

Fig. 13 illustrates some of the various forms of tea jars [cha-ire]. These are only a few of the shapes and styles of tea jars. Any one wishing to study the subject further cannot do better than visit the British Museum, where, in the Franks' bequest, may be seen the finest collection of these little cha-ire in England, as well as many fine examples of tea bowls. Examples of the other vessels used in the tea ceremony may be found in the Far Eastern Section at South Kensington, among the Japanese pottery.

The host returned once more, and brought the *mizu-sashi*, or water vessel, for supplying the kettle. This was often very old and of extremely rough design and



Fig. 13—Tea Jars [Cha-ire] and Incense Boxes [Ko-bako]



Fig. 14-Water Vessels [Mizu-sashi]

modelling, while others were of elegant shape and refined workmanship, the chief beauty of all of them being in the glaze. Fig. 14 shows the kind of pottery held in much esteem for the water vessel. No. 1 is of old Seto ware, hard dark gray, with a greenish glaze on the shoulder, and is entirely hand molded; the lid is of lacquered wood. No. 2 is made of Takatori ware, in varying shades of brown.

The cha-wan, or tea bowl, was a vessel of the greatest importance, and highly prized by the tea amateurs. The Karatsu, Satsuma, Soma, Ninsei, and especially the Raku wares, were all well suited to this purpose; these latter being particularly esteemed by tea-drinkers, in so much that Taiko Sama gave a seal of gold to Chojiro, the son of the first maker of the ware, Ameya, the Korcan, who died in 1574, in



Fig. 15—Tea Bowls [Cha-wan]

order that he might stamp the pottery with the character raku, "enjoyment," which was the second character in the name of Jiu-raku, the name of Taiko Sama's castle at the time. This was considered one of the greatest compliments which a feudal lord could bestow. The fabric of these Raku bowls was eminently suited to the purpose for which they were intended—a thick spongy paste that would not readily conduct heat; a rough outside, making it easy to hold; a slightly incurved rim to prevent spilling; and a glaze that was smooth and pleasant to the mouth, not to omit the fact that the frothy green tea looked well in its setting of rough black pottery, which showed it off to perfection.

Fig. 15 shows examples of tea bowls. Besides the articles mentioned, were the slop bowl, or *mizu-koboshi*, for washing the utensils; the bamboo whisk, or *chasen*, for stirring the tea; the bamboo spoon,

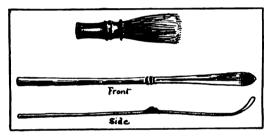


Fig. 16—Bamboo Whisk [Cha-sen] and Teaspoon [Cha-shaku]

or cha-shaku [Fig. 16]; and the silken cloth, or fukusa, generally purple in color, which was used to wipe the tea bowl and other articles. This cloth had to be folded in a prescribed manner, and placed in the breast of the host's dress after each occasion on which it was used. All these things were brought in separately and in their prescribed order.

The host, having brought all the tea utensils into the room, exchanged salutations with all his guests, and the ceremony commenced. All the tea utensils were cleansed and wiped, and the host, taking one of the tea jars out of its silk bag, put two spoonfuls and a half of the powdered green tea, matsu-cha, into the tea bowl. This tea was ground to a fine powder in a hand-mill, and not used in the leaf, as we use tea. Hot water was poured on the tea in the bowl, either by means of the ladle, shaku, or, if the water in the kettle was too hot, from a kind of jug or kettle called



Fig. 17-THE HOST SITS SURROUNDED BY HIS UTENSILS AS ONE OF THE GUESTS DRINKS

yu-zamashi, in which it had been cooled down somewhat; for boiling water makes the infusion too bitter. When enough water had been poured on the tea to make koi-cha, or "strong tea," having approximately the consistency of pea soup, it was stirred sharply with the bamboo whisk until it frothed on the top, and it was then handed to the chief guest, who sipped it, and asked where the tea came from, in the same way that we discuss a rare vintage of old port or claret. Out of compliment to the host, it was considered etiquette to make a loud sucking noise, by drawing in the breath, while drinking the tea. Fig. 17, from the Matsu-cha Hitori Geiko, shows the ceremony taking place. The host sits surrounded by his utensils, while one of the guests drinks.

The chief guest having drank, passed the bowl to the next person, who in turn passed it round until it reached the host, who drank last. Sometimes a cloth or napkin was provided to hand the bowl with, and was used not only for holding it, but also for wiping the cup after each person had drank. The bowl was held in the palm of the left hand, supported by the thumb and fingers of the right. A glance at the illustration, Fig. 18, will show better

than any words the prescribed mode of holding the *cha-wan*. No. 1, the guest takes the bowl; No. 2, raises it to the level of his forehead; No. 3, lowers it; No. 4, drinks; No. 5, lowers it again; No. 6, returns to the same position as No. 1. During the last four positions the bowl is given half a turn towards the right, gradually bringing the side which was originally next to the guest round to the opposite

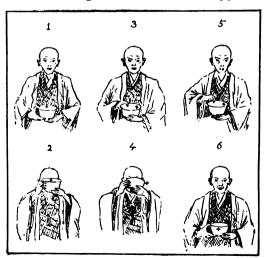


Fig. 18—THE SIX POSITIONS OF DRINKING



INSPECTING THE BIG BOWL AT THE ANNUAL GRAND TEA CEREMONY, SAIDALJI TEMPLE AT NARA

position [See the mark + on side of bowl]. When the host had finished drinking he always apologized for the tea, saying what poor stuff it was, etc.; this was quite the right thing to do. After that, the empty bowl was passed round for the guests to admire, as it was often a piece of great antiquity or of historical interest. With this the ceremony closed, and after further washing of cups and pots the guests took their leave, the host kneeling at the door of the tea room as they passed out, and receiving their compliments and farewells with many bows and obeisances.

Some authors state that another kind of

tea, usu-cha, or "weak tea," was taken with sweetmeats and pipes after the ceremonial tea; but the best authorities agree that usu-cha, when taken, was drunk before the koi-cha of the Tea Ceremony.

The ceremony of usu-cha, which sometimes was taken alone without the koi-cha, was much less formal, and was held either in the same room as the koi-cha or else in the guest room of the house. The number of guests was not limited, and each person had a cup to himself. A similar examination of the room and tea utensils took place, but in a less formal manner.



CHAPTER XX

DROLL TALES FROM THE TEA GARDENS

Wherein the Burra Sahib Is Shown as a Mighty Hunter—The Christening of Tiger Sam—Rings from a Chota Sahib's Pipe, or the Observations of a Fledgling Assistant on a Planter's Life in Assam in the 'Seventies—Short Essays on "The Big Master," "The Estate Engineer," "The Tea Factory," and "How Mac Sold the Old Firing Machine"—"The Inquisitive Elephant"—A Tea Planter Finds Himself with "A Herd of Elephants on His Hands"

ONDITIONS were most primitive when tea started in Assam. It was at least a six weeks' journey from Calcutta to the Sibsagar district, and only those who ever have lived so far away from civilization in the tropics can understand what that means. It is not strange therefore that tea planting produced a folk-lore all its own, and many are the tales that have come down to us from those pioneer days. Then indeed was the burra sahib a mighty hunter. All kinds of jungle beasts nagged him and shared with Mother Nature the resentment she always shows to the man who batters down her woodland splendors and scatters her rustic furniture. There is, for instance, the true story of the sanguinary christening of Tiger Sam, vouched for by an honorable member of the Bengal Club.

The Christening of Tiger Sam

A man-eating tiger had taken heavy toll of life on one of the plantations, carrying off coolies working in the fields. planter, enraged at the loss, called his two neighbors for a conference. After dinner it was arranged that the three men should sit on the veranda of a disused bungalow and await the tiger which frequently prowled near the building. Something stronger than tea having been drunk at dinner, the three men dozed off in the cool of the evening. Two were suddenly awakened by the calls of the third, who, taken by surprise, had been seized by the arm and dragged from the veranda by the tiger they were awaiting. The two planters, quickly realizing the situation, succeeded in shooting the animal. The hero ever after was known by the name of Tiger Sam.

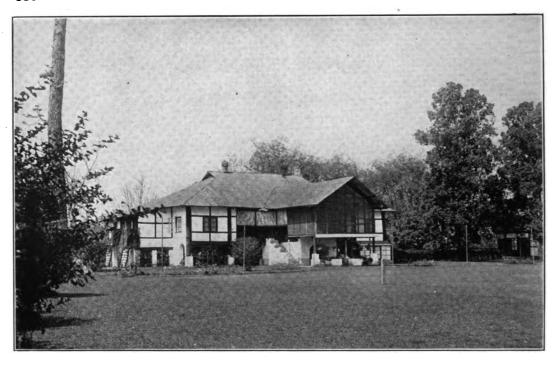
The Python and the Log

And here is another tale of early tea planting; this one being vouched for by a tea planter, who has the reputation of being the biggest liar in Assam.

Coolies were felling trees in a forest, making a clearance for a tea plantation. A monstrous python made its appearance, and the workers rushed from the place. One of the men reported to the planter, who came along with his gun; the coolies, recovering from their fright, accompanying him. He was shown where the snake had been discovered, but, unable to distinguish it in the timber, looked for the largest felled tree. Mounting the trunk to secure a better view, he asked that the location of the snake be pointed out. The reply was, 'You are standing on the python, master."

Rings from a Chota Sahib's Pipe

During the closing years of the nineteenth century, The Englishman, of Calcutta, published a number of articles which purported to be written by a Yorkshire lad working as an assistant on a tea estate in Assam in the 'seventies. Subsequently, in 1901, these anonymous sketches were pub-



A TEA PLANTER'S BUNGALOW IN UPPER ASSAM, 1934

lished in book form under the title Rings from a Chota Sahib's Pipe. They furnish entertaining reading, and give interesting side lights on the life of the pioneer British tea planter. The following excerpts are from some of the most amusing essays in the collection, whose author, said to be a former I.T.A. officer, might be termed the Kipling of the tea gardens.¹

The Big Master

It would be nonsense to say that the burra sahib is a fool. He was an assistant himself once, though he seems to forget the fact, and this is the one redeeming point in his favor. There are other good points about him, but none that might be called redeeming. No,—I'm wrong there, for he does keep good whiskey.

Now the burra sahib—that is, my burra sahib—annoys me a good deal. You see, he has his notions of how the tila work should chall and, unfortunately, I have mine. But a house divided against itself cannot stand, nor can a garden run two

dasturs. Rather neat that? If the B.S. [for short] would only allow me to run the show, why the proprietors would not know what to do with their profits. However, he does not allow me to run the show, hence the proprietors are quite able to cope with the spending of their measly five per cent dividends. It's this way, see: the boss—"old faither," we call him—sits in his bungalow and thinks! Did you ever hear of such a thing? We down below, swatting on the tila in the rain, in the sun, in the dumps, in a devil of a bad temper, do the work. When the sun gets tired and sleepy and the birds begin to wake up and chirrup, "faither" drives out in his tumtum round the work, with a face as long as a kodal bait, and at each section grumbles and nags, until our worn-out selves wish him at-Jericho. It is hot there, isn't it?

Then, the leaf weighing, which he regularly attends, becomes the nastiest bit of the day's work when it should be the pleasantest, for is it not the end of the bela? Not a woman brings in leaf fit to be seen; poor devils, it is not for want of hazri cutting and gallikaroing. Then a round of the tea house, and the man there—God help him!

¹ For the meaning of important Hindustani and other foreign words used in these stories see the Tea Dictionary and Glossary at the end of this volume.

Mark you, now the boss's work is done; he has grumbled, nagged at, and been displeased with, every stroke of work performed on the garden that day—work, mind you, looked after by efficient assistants,—and now we all adjourn by common consent to the factory bungalow, where "Mac"—all engineers, more power to 'em, are called "Mac"—keeps open house.

There, after the third peg, faither opens up a bit and tells of the days of long ago; of days of hand-rolling, of real cooly driving, of Lushai scares, and tells also of tales concerning planters only, tales not to be understood by the uninitiated. And so after a "split" round, the burra sahib gets into his tum-tum and drives home, and such is the nature of the assistant, that the next peg sees the boss actually toasted, and voted "not half a bad sort of a chap, rocially!"

The Estate Engineer

Ay! The mistri sahib! Was it not Shakespeare who said "What's in a name?" But of course I hardly think Willy knew much about mistris when he wrote about that, or he might have thought fit to modify it,—but to the point.

Mac and I are great friends and he confides in me "a wee bit"; yet there are lots of things I should like to ask him about himself but dare not, for he is very "touchy." For instance, he wears huge solid double-soled "tacketty" English boots, for which I know he pays a great price. These monstrosities are made in his busti in Scotland, and he gets a pair "out" at regular intervals. He is proud of his boots, and keeps telling you they simply can't wear out. If this is so, why does he get so many pairs? His bungalow is not more than thirty yards from the tea house, and as his work is entirely inside and round about that beastly structure, there is absolutely no necessity for him to wear boots at all. He would be comfortable in a pair of loose slippers, which would do admirably for his work; but, no, he goes thumping round with those heavy "beetle crushers," to the detriment of the tea house floor and the annoyance of all lovers of peace. Thud, thud, thud!

Well, well! at the same time it is hardly fair to criticize his boots and not his clothes, which are beautifully clean and neat every morning. Mac looks the reverse of "at home" in 'em so long as they are clean; five minutes in the tea house and



THE MANAGER'S BUNGALOW ON SAM SING IN THE DOOARS, 1906



THE TEA PLUCKER'S LOT IS A HAPPY ONE Taken from a motion picture film by Mr. D. S. Withers

he is himself again. His first action is to peel off his coat and hang it on a nail, along with numerous wrenches, in the engine house. To get to the engine house he has to pass through his office where there is a neat little hat-rack, and why the deuce he doesn't hang his coat there, instead of going out of his way to make it the neighbor of dirty greasy tools, passes my comprehension.

Rid of his coat, he gives a sigh of contentment and rolls up his shirt-sleeves, exposing to view a forearm of massive proportions, hardened by years of "work at the file in the shops at home." He then proceeds to poke his hand into every part of the engine, which he addresses familiarly in this way: "An' hoo are ye feelin' this mornin', ye auld Rechabite, ye?"

He has no fear; he chucks her under the chin here, he tickles her there, he wrestles with the great piston, he climbs over the fly-wheel, he opens and shuts every handle she's got; he dives under her, he slides along her, he slaps her, and after risking every limb he possesses, he emerges from the conflict, smeared with dirt and oil, but with the flush of victory on his face . . .

From the engine house Mac makes his way through the tea house, leaving behind him a trail of badly-treated and loudly-grumbling rollers, firing machines, sifters, etc. Not one escapes; he pulls every one of them about most mercilessly and, if it

should happen that there is no handle, cock, or lever by which he can annoy any machine, then he relieves himself by abusing in most opprobrious terms the dead relations of the poor devil in charge.

Next the leaf house comes in for a share of his attention, and it is a sight to see Mac chase the leaf-boys from end to end of the different houses. Yes! it's quite worth anyone's while to go round the tea house with Mac.

In a Tea Factory

Riding in from the ghat, you suddenly emerge from the jungle and find yourself on the edge of a great green sea; the absence of any motion, for the sea is but seldom still, or that mirror-like glistening surface which it has in its moments of tranquillity, both preclude the idea that you have struck some inland sea. What still widens the difference between this sea and the veritable original is that the road along which you have just come, instead of stopping short at what might be the shore, stretches away in front of you, to where an island seems to have formed.

Through the trees on the island, glimpses of white-wash and corrugated iron can be had. I am not prepared to say whether this massive pile of buildings is Renaissance or Early English; between ourselves I don't think it is either. One thing I am sure of is that the columns are neither Corinthian nor Ionic, for Mac told me they were iron. I can't say exactly how he knows, for they are hidden in the center of the walls; however, Mac's word is good enough for me.

The tea house standing alone in its



S. F. Benton

RAILWAY STATION SCENE IN ASSAM



UNDER THE ALBIZZIAS IN AN ASSAM TEA GARDEN

stately grandeur, dwarfs all the surrounding leaf-houses, godowns, and offices; but if what Mac says is true, it will have a rival soon. He told us that in the old days in Scotland, everything that was not wanted inside a house—he specially mentioned fowl bones, fish entrails, cabbage stalks, and old furniture—was simply thrown out of the window, and that, in course of time, the pile of rubbish collected outside grew to such a size that it became necessary to either shift the house to a more convenient spot, or to build another flat on top of it. Well, as I was just going to remark when you interrupted me, I'm afraid we shall soon have to follow the example of the Scotch, and shift our tea house; for the heterogeneous collection of "whatever is not wanted" round about it is something tremendous.

The factory could hardly be described as a beautiful building, for it is a plain two-storied brick erection with an iron roof. The walls at some remote period had been whitewashed, and there are still evidences of that in the shape of dirty white streaks which now help to relieve the dull monotony of the present puce color.

I think the rolling room by far the best part of the factory; there is some order and decency about it. The eight tablesthings used to roll the leaf and give it that familiar twist we all know-ahem!-are all set out in a straight long row, each one a certain distance apart from the other, and no space wasted between; so nicely has the distance between each been measured off that I never pass between two machines without my heart rising into my mouth. . . . I tell you I've had some very narrow escapes, and I often wish I wasn't so foolhardy as to try and emulate Mac who goes through broadside-on when both machines are in motion.

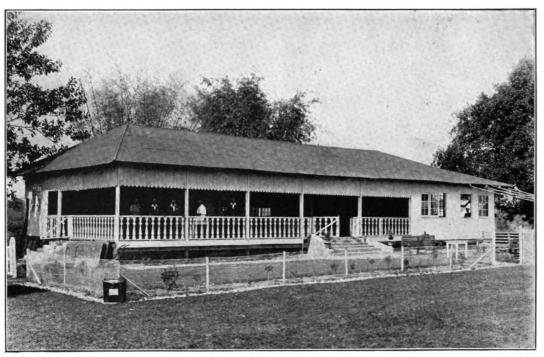
We have more than one kind of roller; in fact, we have four; but that's not the reason we make four different grades of tea, as one of the proprietors—bless him—thought when he came up. . . .

It is just a step from the rolling room to the engine house,—but mind that belt! The large engine seems to be going round grandly, and I sometimes wish I was an engineer when I look at her. I don't quite know what purpose the small engine and boiler serve, but I feel sure that it must be a great comfort to Mac to have more than one engine to look after.

Besides the driers there are many other machines in the firing room, and in different parts of it sorting, packing, and boxmaking are carried on. The firing and



THE MANAGER'S BUNGALOW AT CHUBWA



A PLANTERS' RECREATION CLUB IN THE DOOARS

other machines are scattered all higgledypiggledy over the place; there is no order and less arrangement in the way various machines are "planked down." A small No. 1 Sirocco has its back turned to a down-draft, and is in its turn looked down upon by a sixteen-tray updraft. A few feet away another down-draft and an automatic drier crop up, and, surrounded by weighing, breaking, and packing machines, more down-drafts, up-drafts, steam and automatic driers lie about; not to mention pukka and kutcha sifters. Most of these machines are very heavy, and I shouldn't wonder if, in the old days, the manager didn't cram the tea house full of machinery and then sit down and wait till the earthquake of 'ninety-seven came along and distributed it for him. This would account for the methodical manner in which the firing room is arranged.

Well, I think that's all there is worth seeing—Oh damn the box-making—so let's go over to Mac's bungalow and have a peg until he comes, and I'll tell you how he sold the old firing machine to the babu.

Take the long chair man, that one is groggy; yes, rattling good whisky, Mac always keeps White Seal; sure you wouldn't prefer beer?

Well it came to happen in this way. Faither was going to have one of the old driers thrown out, as we had no further use for it; and besides something had gone wrong with its works and it wouldn't chul somehow or other. He was down in Calcutta last August, and on his return he told us at Mac's bungalow that he had met the proprietor of a native garden close by, at the ghat dak bungalow.

The babu, who was a big wealthy man from Rampur, was on his way to visit his garden and in the course of conversation mentioned to faither that his manager had written him that another drier was required. Faither promptly told him that he had an old one he wanted to get rid of to make room for newer machinery.

"We talked it over," said faither with great glee to Mac, "and he has decided to call in at the tea house on his way through and see the machine working. If he is satisfied with it, he is to hand you a cheque for the amount and you must get the machine taken down and put on his carts next day; he'll be passing through tomorrow afternoon, so get the thing working somehow for an hour or so."

"Impossible," said Mac, 'mon, a've used half o' her to patch up other machines wi';

she cudna' work no even by a miracle."
"But damn it." replied faither "I told

"But damn it," replied faither. "I told the babu that it is in working order and now sell it we must."

"Is't sellin' ye're talkin' about?" said Mac "that'll be easy eneuch; but to make the crater chul! Mon, a' canna dae that."

"Well, how the devil are you going to sell it unless you can show it to him working?"

"Toots, mon, that's a trifle; just you leave it tae me an' a'll get the cheque

a'right."

"Very well, Mac, I leave the sale to you, but mind he won't buy unless he sees it working, and for God's sake be polite to the man and don't go calling him "babu," for he's a bahadur or a torpedo or at any rate a big gun of some sort and worth lakhs of rupees." After which faither got into his tum-tum and drove off.

"The auld fule!" growled Mac contemptously, "him tae sell a thing! an' me lodgin' wi' an auctioneer's wife in Glesca' for twa year!"

The next afternoon I was sitting with Mac in his bungalow when the torpedo arrived in a palki at the tea house. "C'way doon an' see the roup," said Mac to me. Down we went together, Mac cursing and grumbling all the way, "Ay, be polite tae

him. Dinna ca' him babu! Did he think a'd pit ma han's on the bit body?"

In the *palki* lolled a great 20 stun *babu*, bathed in perspiration and his fat chumps wreathed in smiles.

"Mon, ye're an awful stranger," said Mac, reaching into the palki, and shaking the limp paw of the occupant till he nearly shook him out of his box, "An' ye're after the wee bit drier are ye? C'way ben an' hae a look at her."

With many cries of "Kubbardar" and "Aste! aste!" the palki was lowered to the ground and the mass of quivering blubber helped out and pulled on to his feet, gasping and smiling. We all three entered the tea house by the rolling room and, wending our way through, we came to the old firing machine safely, with the babu panting and blowing with the heat. It did not tend to keep him cool the way Mac shouted to him every few yards, "Good God Mon! Mind ye'r heid frae that belt," and when the poor old chap backed hastily away, "Can ye no keep ye'r starn out o' that furnace?"

Mac commenced to explain all about the machine to the old man; it seemed to be running very well, so far as I could tell, and to be making tea just as fast and as pukka as its neighbors. The babu smiled, panted, and asked questions; Mac swore



THE MANAGER'S BUNGALOW AT MOONDAKOTEE, DARJEELING, 1906



Platé Ltd

Two of the "Boys" on a Ceylon Tea Estate

and opened and shut things. He must have been bluffing faither, I thought, about the machine not being able to run, for here it

was doing splendidly.

"Its a dawm shame sellin' the machine," said Mac confidentially to the babu, "but that's just the way wi' the burra sahib. He disna' care tippence hoo a' mak the tea so long as its made; an' tho' we are gettin' newer macheenery, it's goin' in the face o' Providence sellin' a soond auld yin like this. If it wis ma'sel a'widna gie ye it for onything, but the auld man disna ken ony better."

"But the ma-chine has been per-romised to me," said the babu, "and it would not be well for me to receive it not, now I have kom long road to see-e. You have a many big ma-chines and my garding it is not large and"—with hands and eyes uplifted—"I lose great loss in it ev-ery year. I will write the che-eque, where?"

"Toots! toots!" cried Mac "A' widni try tae dae ony man oot o' a bargain an' forby its the burra sahib's hukm, so we'll just gang owre tae the bungalow an' hae a peg while ye're writin' oot the cheque. A'll hae the machine takkin doon the morn's morn an' help tae pit it on your cairts when they come. Min' that black nigger o' a manager o' yours pits it up right when he gets it!"

At the bungalow the babu raised his hands in holy horror at the peg saying, "I

am high-caste Brahman"; to which Mac replied, "Ah, well, White Seal may be no guid eneuch for ye, but the *chota sahib* an' ma'sel hae nae objections tae it, sae 'Here's up agin ye, an' guid luck tae ye're bargain."

The cheque was handed to Mac and, after much hand-shaking, interlarded with complimentary remarks, the babu was assisted into his palki and carried away.

In the evening Mac handed the cheque to faither with the remark, "A' managed it, but ye'll hae tae commit the next frawd yersel."

"Nonsense," said faither, "there is no fraud about the matter whatever. If these babus will go in for cheap and nasty things, am I to blame? Besides, I know for a fact that little garden, mismanaged as it is, pays the babu a handsome profit every year."

A couple of days after I had heard that the machine had been dispatched, I was knocking round the tea house and found—the machine in its old place! "I thought you had sent off the babu's machine," I said to Mac. "So I have," he replied. "Well then, how is it still here?" I asked. "Mon! that's the machine a' shewed him, but that's no the one a' wis sellin'. A' had the auld yin covered up wi' a tarpaulin,' an' the babu is half doon the river by noo, an wha's tae say which he seen an' which he boucht? See ye dinna mention it tae faither!"

The Inquisitive Elephant

Andrew Nicol, "the poor but industrious coffee and tea planter," famous in Ceylon for over a generation, was wont to regale



E. C. Elliott & F. J. Whitehead

UP-COUNTRY TEA PLANTER'S BUNGALOW, CEYLON

his fellow planters with tall yarns regarding his prowess as a sportsman. On one occasion, in an out of the way rest house where he had been teaching the astonished appu how to fry sardines in paper, he told this tale:

"We were bothered with a brute of an elephant at Batticaloa. Jock Cumming had been after him for days, but could not get near him. I was living in a small talipot hut, and at night my servant lay at my feet. One night I was awakened by the shrieks of my appu, and a strange, rat-tling, thumping noise in the roof. With my dim floating light I could just see the huge trunk of an elephant swinging backwards and forwards right above me; his head filled the doorway, and he had evidently made up his mind to have a lark with us at his leisure. I mounted to my elbow, slipped my hand below my campbed, where my rifle lay, always ready loaded; steadily and deliberately I took my aim, and fired. There was a terrific snort, a trumpet, and something like an earthquake. I replaced my rifle, turned on my side, and was asleep again in five minutes; but in the morning a large rogue elephant lay dead in front of our hut!"

A Herd of Elephants on His Hands

Mr. Frederick Lewis in his reminiscences of life and adventure in Sixty-four Years in Ceylon, tells how on one occasion he found himself with a herd of elephants on his hands:

"I had taken my gun, but expecting nothing larger than a plump jungle fowl, had only provided myself with a few cartridges loaded with No. 8; but so far, I had not even seen reason to use these, as the forest seemed still and lifeless.

"Presently a sudden crash made us all

start to our feet and stare in the direction the noise came from, and suddenly we found ourselves surrounded by elephants. My men fled like monkeys, and started climbing up the nearest trees, while I was left to myself to decide as to my course of action.

"Fortunately for me, a moderately large ficus was growing a few yards from me, so, slipping my handkerchief through the trigger-guard of my gun and knotting the loose ends together so that I could carry the whole with my teeth, I proceeded with haste to climb the friendly ficus and get out of reach as quickly as possible. Below there was hardly any underwood, so I could see the ground for some distance.

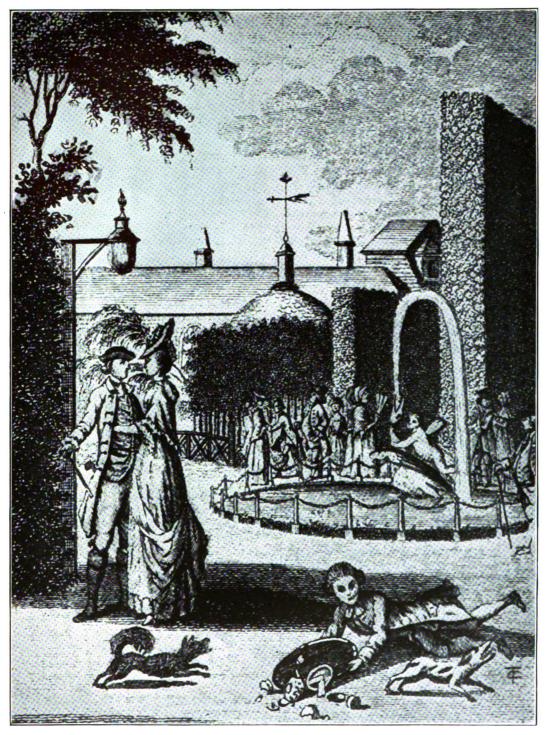
"Evidently the elephants had 'winded' us, for presently one by one the huge beasts filed out and, standing still for a moment, they sniffed the air with their erect trunks. I counted seventeen, but not all large ones. One little calf caused the trouble, for it seemed to know the tree that I was in.

"I decided to fire a shot, not at any of the elephants, but with the hope that the noise of the explosion would so alarm them as to make them bolt. The first shot only made them stand still and produce a curious loud rumbling sound; but a double second shot produced an excellent stampede, though unhappily in the direction we had to go.

"I climbed down and called my men, and once more we started off, but in less than an hour we found ourselves treed-up again, with the very same herd, while the little brute I referred to repeated its activities, much to my annoyance.

"Once more a double shot produced a stampede, but this time in a different direction, so that we resumed our journey without further trouble."





ONE OF THE FAMOUS LONDON TEA GARDENS OF THE MID-EIGHTEENTH CENTURY

From an engraving entitled "Delights of Bagnigge Wells." It cartoons the manners and customs of the early British tea drinkers in a popular public garden of the period.

CHAPTER XXI

HISTORIC LONDON TEA GARDENS

THE ADVENT OF THE LONDON PLEASURE GARDENS TAKES TEA INTO THE OPEN, WHERE, FOR THE FIRST TIME IN ENGLAND, IT IS DRUNK IN PUBLIC BY BOTH SEXES—A WIDE POPULARITY FOR THESE RESORTS FOLLOWS, AS FEMININITY GIVES THE SEAL OF ITS APPROVAL TO THE BEVERAGE AND THE GARDENS WHERE IT IS SERVED—THE ULTRA-FASHIONABLE VAUXHALL, RANELAGH, AND MARYLEBONE—OTHER POPULAR GARDENS AND THEIR LOCATIONS IN VARIOUS OUTLYING SUBURBS

HE advent of the London pleasure gardens brought tea out of doors in England. One of the reasons why gardens in the suburbs, like Vauxhall, Ranelagh, and many others, began to be more frequented than the centrally-located but wholly-masculine coffeehouses was because they offered their attractions to the fair sex as well as to the men. All sorts of beverages were served, including tea, coffee, and chocolate; but tea soon acquired an outstanding vogue.

The public gardens of the preceding century, known only as "pleasure gardens," were tealess. Many of them were pretty rough; but the "tea gardens" of the eighteenth century were places where the best people went for relaxation and amusement.¹ Many of them incorporated the word "tea" in their names, like the Belvidere, Kensington, and Marlborough tea gardens—to mention only three,—but all of them offered tea as one of a list of fashionable and popular beverages.

The tea gardens provided flowered walks, shaded arbors, a "great room" with music for dancing, skittle grounds, bowling greens, variety entertainments, concerts, and not a few places were given over to gambling and racing. Their season extended from April or May to August or September. At first there was no charge for admission, but Warwick Wroth tells us that visitors usually purchased cheese,

cakes, syllabubs, tea, coffee, and ale.² Later, the Vauxhall, Marylebone, and Cuper's gardens had a fixed admission charge of a shilling, in addition to any refreshments that might be purchased, and at Ranelagh an admission charge of half a crown included "the Elegant Regale of Tea, Coffee, and Bread and Butter."

Vauxhall Gardens

Much favored by pleasure-seeking Londoners were the Vauxhall Gardens, located on the south side of the Thames, a short distance east of Vauxhall Bridge. They were opened in 1732 by Johnathan Tyers as a recrudescence of the New Spring Gardens [1661], which had fallen into questionable notoriety. Vauxhall was celebrated for its lantern-lit walks, its musical and other performances, suppers, and fireworks. High and low were to be found there, and the drinking of tea in the arbors was featured. Not the least of the pleasures of a visit to Vauxhall was the somewhat general use of boats for a trip there by river.

The opening fête was an exceptionally brilliant occasion, and one calculated to give social éclat to the venture. Frederic, Prince of Wales, attended in person, and was one of a select company of about four hundred of London's socially elect, most of whom wore dominoes and masks. An ad-

¹ E. Beresford Chancellor, The Pleasure Haunts of London During Four Centuries, London, 1925.

² Warwick Wroth, The London Pleasure Gardens of the Eighteenth Century, London, 1896.



VAUXHALL ASSEMBLY AND GARDENS, 1751

mission of one guinea was charged, and the festivities lasted from nine o'clock in the evening until four o'clock the next morning. Similar fêtes were given from time to time, limited to the patronage of London's "four hundred." But this sort of encouragement, however gratifying from a publicity standpoint, could hardly have made the place pay; so the astute Mr. Tyers fixed the ordinary admission at one shilling, in order to bring in a volume of general patronage.

William Hogarth painted a number of pictures for the rooms, which added not a little to their fame. The English historical painter, Francis Hayman, also contributed a number of canvases, and Cheere and Roubiliac, sculptors, were engaged to place examples of their art about the gardens.

The pictured representations of Vaux-hall invariably show a band stand as a central object in brilliantly lighted grounds. The original stand was occupied by a small but impressive pipe organ and the "best band of musick in England." In 1758, however, a dazzlingly illuminated music pavilion replaced the original structure. This and a new pipe organ were done in the Gothic style then being popularized by Walpole, and upon completion, Tyers added to his famous band concerts the offerings

of the most popular vocalists of the day.

Tyers' shrewdness in assuring to his gardens the patronage of the aristocracy accounts in a large measure for the constant vogue they enjoyed, but it is likewise true of Vauxhall, in common with all the tea gardens of the eighteenth century, that a highly ornate but extremely unsophisticated people in the drab London of that period found an intoxication hard for us to understand in the simple pleasures of the tea gardens. At all events, Vauxhall not only gained the chief vogue among amusement-going Londoners, but it most pertinaciously retained the vogue thus achieved throughout the eighteenth and the first half

of the nineteenth centuries.

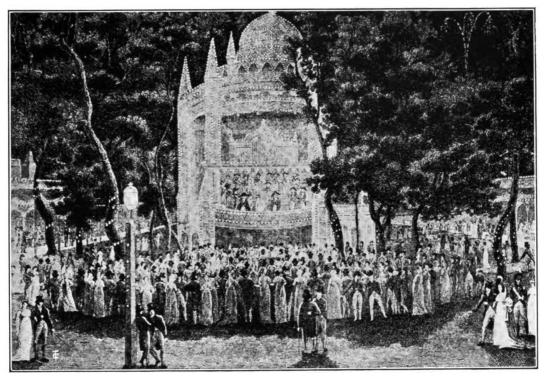
Vauxhall gardens were at their zenith in the years from 1750 to 1790 when Horace Walpole [Lord Orford], Henry Fielding, and Dr. Samuel Johnson, with their brilliant literary sets, were frequent visitors. Numerous as were the suburban tea gardens of London, none ever equaled the patronage enjoyed by Vauxhall; nor could any of them boast such a long and eventful history.

Ranelagh Gardens

Ranelagh Gardens, "a place of public entertainment," was opened at Chelsea in 1742, and soon became a serious rival of The gardens took their name Vauxhall. from the Earl of Ranelagh whose private residence and grounds they had been. After the death of the earl, the managing owner of the Drury Lane Theatre secured the property with a view to converting it into a resort which should be a little more select than Vauxhall, but to be operated along similar lines. However, nothing was accomplished until a stock company was formed, with Sir Thomas Robinson as the principal share-holder and first manager.

In 1741, Sir Thomas commissioned William Jones, the architect, to plan and erect Ranelagh's famous Rotunda. This central structure contained a principal room, circular in shape and 150 feet in diameter,

⁸ England's Gazeteer, 1751.



ABOUND THE BANDSTAND IN VAUXHALL GARDENS ON A GALA NIGHT, 1758

with a double tier of boxes containing refreshment tables around the entire wall. A highly ornate colonade formed a roof support in the middle of the great room and housed a mammoth fireplace for use when the evenings were cool; thus making possible the use of the building during the colder months. An equally ornate orchestral stand, with a huge pipe organ and a platform for singers was prominently located at one side of the main room, leaving the balance of the circular floor space clear for promenaders and a few centrallylocated dining-tables-in-ordinary for hoi polloi, or those unable to secure private boxes.

Promenading and taking refreshments vied with musical entertainment as the principal diversions. Except on gala nights of masquerades and fireworks, only tea and coffee with bread and butter were to be had at Ranelagh, and this was included in the regular admission fee of 2s 6d.

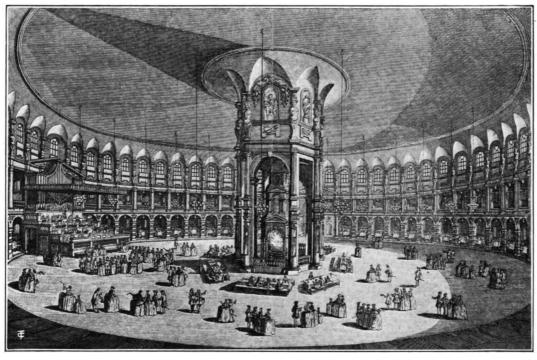
The night of the opening, April 5, 1742, was a memorable one in the annals of aristocratic London. All who mattered socially were on hand for the event. Walpole wrote that, "the Prince, Princess,

Duke, much nobility, and much mob besides, were there. There is a vast amphitheatre, finely gilt, painted and illuminated, into which everybody that loves eating, drinking, staring, or crowding, is admitted for twelvepence." 4

While nowhere near as sylvan or extensive as the gardens at Vauxhall, the Ranelagh Gardens boasted a small canal or lake, in the middle of which was a Chinese house, and a Venetian temple. On either side of the canal was a tree lined walk that hardly compared with the rural beauties of Vauxhall Gardens on a pleasant summer day; but where Ranelagh competed to the disadvantage of its rival was in its great rotunda, where, on rainy days and on cold nights, its patrons might perambulate or lounge in the boxes, regardless of the inclemency outside; and where, in the winter time, frequent dances and masquerades were given.

Ranelagh apparently realized the am-

⁴ At first the admission varied from 1s. to 2s., which was increased to 3s. on nights when there were fireworks. Half-guinea and guinea tickets were issued for masquerades, and visitors were admitted to view the place during the day time at 1s.



THE ROTUNDA IN RANGLAGH GARDENS WITH THE COMPANY AT BREAKFAST, 1751

bitious determination of its manager, Sir Thomas Robinson, to make the place more select than the larger Vauxhall or the Marylebone Gardens, for the poet Samuel Rogers wrote that, "all was so orderly and still that you could hear the whishing sound of the ladies' trains as the immense assembly walked round and round the room."

This walking round the Rotunda seems to have been one of the chief amusements and inspired many comments, mostly satirical, by contemporary writers. But such minority verdicts are unconvincing in the face of the well known fact that Ranelagh enjoyed an enormous vogue and that crowds flocked to its innumerable entertainments.

It was at Ranelagh that Emma Hart, "the tea maker of Edgware Road," who later became Lady Hamilton, scandalized her lover, the Honorable Charles Greville, younger son of the Earl of Warwick, by singing to the assemblage from the front of the box where he thought he had hidden her safely from prying eyes while he went to call upon some of his society friends in other boxes.

While it is true that Ranelagh capital-

ized largely its claim to be more select than Vauxhall, it also is true that it was patronized by the same people, who visited either garden as occasion suggested.



"THE TEA MAKER OF EDGWARE ROAD"

Greville's Emma Hart, Nelson's Lady Hamilton, as Bacchante, by George Romney, who called her "the Divine Lady."

Doubtless better order at Ranelagh was due more to regulation than anything else.

Marylebone Gardens

Another famous tea garden in the out-skirts of London was Marylebone, located on the east side of High Street, opposite the old church in Marylebone. Daniel Gough, its owner, laid it out on the site of a former tavern and bowling alley, the "Rose of Normandy." There was a "great room" for dances and supper parties, and Gough engaged singers, some famous and others notorious, to provide vocal entertainment; while theatre orchestras and a pipe organ supplied instrumental music for concerts and dancing.

Patterning on a lesser scale after Vauxhall and Ranelagh, the management gave frequent masked carnivals, or ridottos, as they were popularly known, and special displays of fireworks. Horace Walpole, who was a great frequenter of the tea gardens, has written of the statue-lined walks and pyrotechnics at Marylebone.

Although well regulated as a rule, this garden had occasional disturbances, and on one occasion, at least, swords flashed in personal encounter. There also are records

of scandalous conduct on the part of the Duke of Cumberland; but on the whole, Marylebone Gardens had a far better reputation than most of the pleasure resorts of the time.

The year 1753 brought a change of proprietorship, when John Sherratt became the owner, and John Trusler, who had won fame as a cook, became the active manager. This change was indirectly responsible for Marylebone's chief claim to historical distinction, for Trusler had a daughter whose culinary ability in the production of rich seed, cheese, and plum cakes to be served with tea, coffee, and chocolate soon made the place famous among the epicures of the metropolis.

Under the new management, the music was the best obtainable; with many of the same singers on the bill that were appearing at Vauxhall and Ranelagh. Also, notables began to frequent the place; among these, Georg Frederich Handel, the composer, and Dr. Samuel Johnson, the lexicographer. A burletta, "La Serva Padrons, or the Servant-mistress," was given its première at Marylebone and was so successful that it was often repeated.

In 1760, Marylebone Gardens were thrown open on Sundays, when, as a sop



FAMILY GROUP IN A LONDON TEA GARDEN OF THE EIGHTEENTH CENTURY
From a stipple in color by George Morland.

to public opinion, the admission was free; but this loss of revenue was made up by the sale of fruit freshly gathered in the gardens, as well as by an increased demand for Miss Trusler's delicious cakes and tea.

Three years later, the proprietorship passed to Tommy Lowe, who had long been a favorite singer here and at Vauxhall. Lowe gave the patrons five years of vocal harmony and his creditors five years of increasing worry. The creditors took the place over at the close of the 1767 season, and in January of the following year, Dr. Samuel Arnold took the place off their hands.

Under Arnold's management the gardens reached the zenith of their popularity. He did much to improve them, adding drains and a covered platform where guests might find shelter when it rained, and he arranged notable pyrotechnic displays, vocal and instrumental programs, etc. On the occasion of all special performances the admission price was advanced to five shillings.

Notwithstanding the continued delight which eighteenth-century Londoners found in Marylebone Gardens, Dr. Arnold, like Tommy Lowe, found the venture unprofitable, and though he sought to stave off disaster by sinking a mineral-spring-water well on the place and re-christening it Marylebone Spa, the die was cast; in September, 1776, the gates were closed and the place was dismantled.

Cuper's Gardens

Another well remembered resort of the period was Cuper's Gardens. The present Waterloo Bridge Road passes directly through their former location a few rods after the bridge has been crossed. Here a landing stage on the river was the favorite approach for the greater number of the patrons whose inclination favored the trip by water, and from the landing a short lane led to the entrance. The gardens extended southward almost to St. John's Church, and were perhaps 800 feet long by 200 wide.

Serpentine paths, trees, and shrubbery bordered a broad central promenade, while the buildings were grouped at the end of the gardens nearest the river.

Cuper's started in 1691 as a recreation park. In 1738, one Ephraim Evans took

over the gardens and made extensive improvements, including the installation of an orchestra to perform the compositions of Corelli and Handel. An entrance fee of a shilling was charged, except on Sundays, when the admission was free. Realizing there was no money in the patronage of the rough element, Evans took measures for its exclusion, and for keeping the gardens select.

After having established Cuper's as one of the élite pleasure gardens of that period, Evans died in 1740 and was succeeded in the management by his widow, under whom the gardens achieved their greatest prosperity. People of fashion from the West End became frequent visitors, and royalty, in the persons of the Prince and Princess of Wales, was often to be seen there.

While excellent music sufficed the patrons of the gardens for a time, it became necessary at length to add pyrotechnic displays, which were extensively advertised, and which soon became one of the garden's chief attractions. The change which an increased volume of business brought to the place was not without its disadvantages, however, for before long Cuper's began to lose its former high repute, and despite Mrs. Evans' undoubted wish to keep it clean, it got beyond her control. In 1752, a renewal of its license was refused, and the place passed from its original aspect as a pleasure garden.

In the same year, however, Mrs. Evans reopened Cuper's as a tea garden, and made a determined effort to reëstablish it with its original select clientele by the excellence of its service. In this she was measurably successful, for she kept the place very much in the summer-time plans of the better class of Londoners for seven They entertained, or were entervears. tained there in many delightful tea al frescos, with no jarring note so long as the manageress kept the place as a tea garden. A break occurred, however, in 1755, when Mrs. Evans made a tentative move toward reviving its former character. Fireworks were a part of the attempted revival, but the whole thing was stopped, and the gardens reverted to their tea garden status, under which they continued until 1759, when they came to an end with a final concert.



WHITE CONDUIT HOUSE, 1747

Bermondsey Spa Gardens

About the year 1765, a rather clever, self-taught artist named Thomas Keyse, having won a measure of public attention by his efforts in the field of art, and finding the financial rewards insufficient for subsistence, bought the Waterman's Arms Tavern at Bermondsey and opened it as a tea garden. A short time afterward a mineral spring was found on the property, whereupon the name Waterman's Arms was discarded, and the place thereafter was known as Bermondsey Spa Gardens.

Keyse laid out the gardens with the usual accompaniment of buildings, leafy walks, and arbors for tea parties. A music license was secured, and an orchestra installed. Then, in order to provide further diversion for his patrons, the cheery host of Bermondsey hung many of his own canvases in a special gallery, and had occasional special displays of fireworks in the grounds.

The place became a miniature Vauxhall, with colored lights strung about the trees and buildings, and by the year 1784 its vogue had increased to such an extent that Keyse laid out several thousands of pounds in improvements and then threw it open as a regular pleasure garden, charging a shilling admission, increased to half a crown, or even three shillings on special nights.

Bermondsey Spa was not a fashionable place, but catered to a respectable, somewhat unsophisticated clientele, who were well satisfied with its entertainment and fare. While its patrons were not as rich and fashionable as some who went to the big gardens—Vauxhall, Ranelagh, Mary-

lebone, and Cuper's—they were less exacting; and Keyse seems to have prospered until the last few years of the century. He died in 1800, and though the place managed to keep going a few years longer, it was closed in 1805 by his successors.

White Conduit House

White Conduit House, so-called because it was located near a water conduit faced with white stone, was situated some two or three miles to the northeast of Marylebone Gardens. Built in an open field, the house had attractive grounds that were laid out into paths and gardens about the year 1745, when the place was reconstructed. At this time a "long room" was provided and the place was ornamented with a fish pond and numerous arbors for tea parties.

White Conduit House came into its own with the proprietorship of Robert Bartholomew in 1754. Bartholomew enlarged and greatly improved the gardens, and was always prepared to serve "hot loaves and butter" with tea, or other drinks. Cricket was played extensively on the field adjacent to the gardens, so Bartholomew kept a supply of bats and balls for those who wished to enjoy the pastime. Adequate reward came to the enterprising manager, for people trooped in delight to White Conduit House, well pleased with its entertainment in surroundings so truly The success of the gardens was well established during the life of Robert Bartholomew, and their prosperity continued after his death, under the management of his brother Christopher Bartholomew.

There was no attempt made to provide any regular entertainment at White Conduit House until 1824, when a band was installed and bowls and archery introduced. Fireworks, also, were shown and the Grahams and Hampton made a number of balloon ascensions in the years from 1824 to 1844. In 1829, it was found necessary to add a new hotel with ample accommodations for dancing. After this, White Conduit House fell into the hands of a rowdy element, but managed to drag along until 1849, when a final ball was given for the benefit of its ticket takers. showing that its fortunes had fallen to the lowest notch.

The Lesser Resorts

Prominent among the lesser open-air resorts was Finch's Grotto Gardens, established in 1760 by a heraldry painter named Thomas Finch. This man Finch, it appears, fell heir to a house complete with gardens having lofty trees, evergreens, and shrubbery, which he decided to transform into an outdoor amusement resort of the tea-garden variety. Among its principal attractions were a large grotto, constructed with rocks and lighting effects over a mineral spring, an orchestra, and an "octagon room" for dancing. It was located not far from Vauxhall Gardens, and possibly for this reason, survived less than a score of years.

Bagnigge Wells, which stood just to the east of Gray's Inn Road, was one of the most popular of the mid-eighteenth century gardens. Tradition has it that the original house on the property was the summer home of Nell Gwynne, where she frequently received the visits of her royal lover; but, however this may have been, the vogue of Bagnigge Wells, as a public pleasure resort, dates from the discovery of mineral springs on the land, in 1757, when the lessee, a Mr. Hughes, equipped the place as a spa. After the first advent of the aged and ailing, there was an invasion of youth and gallantry that soon assured the popularity of Bagnigge Wells as a pleasure haunt. This phase of the place was epitomized by the author of a contemporary poem entitled, "The Sunday Ramble," in the lines:

Salubrious Waters, Tea, and Wine, Here you may have, and also dine; But, as ye through the Garden rove, Beware, fond Youths, the Darts of Love.

The Belvidere Gardens, Pentonville, based their claim to public attention on "Zucker and his Learned Little Horse"; while the Castle Inn Tea Gardens, Kentish Town, in the same vicinity, based theirs on "Tea and Light Refreshment." Canonbury House Tea Gardens are remembered from the fact that the house, Canonbury Tower, built in the sixteenth century, was let as a cheap lodging to literary men in the eighteenth century; Oliver Goldsmith being one of the number.

Copenhagen House, another place, was much resorted to in the eighteenth century by players of skittles and Dutch-pins, as well as by those who went there for a dish of tea. There was a special tea room above stairs, with a room for smoking below it. Copenhagen House continued to offer these attractions until taken over by the City as a site for the metropolitan Cattle Market in 1852.

Sadler's Wells, though celebrated through its later career as a playhouse, saw its beginning as one of London's numerous water-drinking spas in 1684. With the subsidence of the vogue of the London spas, Sadler's Wells became a playhouse, and reached our own times as a music hall.

Islington Spa, or New Tunbridge Wells, was a neat tea garden located near Sadler's Wells. Others were: Kensington Tea Gardens; Union Tea Gardens, near Ranelagh; Marlborough Tea Gardens, near Sloane Square; the Yorkshire Stingo, Lisson Green, New Road; Jew's Harp Tea Gardens, New Road: Kilburn Wells, Edgware Road; Adam and Eve, at the top of Tottenham Court Road; Adam and Eve [another], St. Pancras; Chalk Farm; Willoughby's Tea Garden, or Highbury Barn, Islington; Hornsey Wood House and Tea Garden; Shepherd and Shepherdess, City Road; the Hoxton Tea Gardens; Montpelier Tea Gardens, Walworth; Sluice House, near Hornsey Wood; Mermaid Tea Gardens, Hackney; St. Helena Tea Gardens, Rotherhite; Cumberland Gardens, near Vauxhall; Strombolo House and Gardens, later the Orange Tea Gardens; the Star and Garter Tavern and Gardens; Jenny's Whim; and Cromwell's —later called Florida—Gardens.

Today, the eighteenth century tea gardens with their thousands of twinkling candle lanterns, exquisite belles and perfumed beaux, are but ghostly memories in the romance of tea. Not one remains. The names of some are retained by public houses, but fashionable London for the most part takes its tea indoors, except on those rare occasions when, "weather permitting," it may be de rigeur to sip it in some favored spot in the open, such as the lawn before the Fellows' Pavilion of the Zoological Gardens or at Lord's Cricket Ground.

CHAPTER XXII

EARLY MANNERS AND CUSTOMS

THE EARLIEST MANNER OF TEA MAKING IN CHINA—TEA BECOMES A SOCIAL CUSTOM—EARLY FLAVORING AGENTS—TEA ACQUIRES A CEREMONIAL CODE—SHAN USE OF TEA AS FOOD—TEA SALAD OF THE BURMESE—COMPRESSED-TEA MONEY—TEA EXALTED BY THE JAPANESE—CHURNED TEA OF TIBET—THE TEA-SMITTEN LADIES OF HOLLAND—ENGLAND DEVELOPS TEA MANNERS—A DISH OF TEA—AFTERNOON TEA—TEA AND TEMPERANCE—EARLY AMERICAN TEA CUSTOMS

HE oldest manner of making tea was to boil the green leaves in a kettle, as described by Kuo P'o about A.D. 350. The first improvement was the method attributed to the Chinese work Kuang Ya [A.D. 386-535], by Lu Yu in his Ch'a Ching of A.D. 780. "To make tea as a drink," the Kuang Ya reference reads, "roast the cake until reddish in color, pound it into tiny pieces, put them in a chinaware pot, pour boiling water over them and add onion, ginger, and orange."

When employed in early times at entertainments, the use of tea was partly social and partly medicinal; to promote good digestion and to stimulate the appetite. Apparently, it was the custom at this time to serve tea after each of a numerous succession of dishes. Tea was not introduced into general use as a distinctively social beverage until the Sung period, two hundred years after Lu Yu's time.

During the Sung dynasty, A.D. 960-1126, tea was in use throughout all the provinces of China. Whipped tea became fashionable in this period, and salt disappeared as a flavoring agent, so that the drink was enjoyed for its own taste and aroma. Tea houses with such delightful names as The Eight Genii, The Pure Delight, The Pearl, The House of the Pwan Family, The Two-and-Two, and The Three-and-Three, came into existence. These houses reflected the luxury of the times. Bouquets of fresh

flowers adorned the rooms, and "Precious Thunder tea," tea of fritters and onions, and pickle broth were displayed for sale.

The Kuang Ya mentions onion, ginger, and orange as flavoring agents for tea. To these Lu Yu adds dates and peppermint. Later on, salt only was used. As already related, these various flavoring agents did not disappear from use until some time during the Sung dynasty, A.D. 960-1126.

A sort of tea egg-nog was used sometimes, according to the Jesuit missionary, Père Couplet, who went to China in 1659 and became deeply versed in the history and customs of the empire. He said the Chinese made tea by infusing about a dram of the leaf in a pint of water, and occasionally, if they were hungry and there was not time to prepare a competent meal, they beat up the yolks of two freshly-laid eggs with as much powdered sugar as was sufficient for this quantity of liquor. Then they poured in the tea and stirred well together.

For their ordinary use of tea as a beverage, it never has been the practice of the Chinese to utilize either milk or sugar to offset the bitter taste of tea, although they had milk and a sweetening substance similar to our sugar even in early times. A single exception is to be noted in a mention of the use of warm milk in tea at a banquet to some Dutch ambassadors in 1655.2

¹ See Volume I. Chapter II, for translation digest of the Ch'a Ching.

² Johann Nieuhoff, An Embassy Sent by the East India Company of the United Provinces to the Grand Tartar Cham, or Emperor of China, Amsterdam, 1666.

However crude and primitive the early tea-making customs may seem, or however unpalatable the concoctions are imagined, tea became popular "not only for ordinary drink instead of water, but also for entertainment to strangers." It was popular with the nobility, too, for we are told that "the Noblemen and Princes of China and Japan drink Thee at all hours of the Day, and in their visits it is their whole Entertainment." 4

The social amenities of tea-drinking were pitched on a high plane. We read of "the greatest Persons of Quality Boyling, and Preparing the Thee themselves, every Palace and House, being furnisht with convenient Rooms, Furnaces, Vessels, Pots, and Spoons for that purpose, which they value at a higher rate than we do Diamonds, Gems, and Pearls." 5 It was "esteemed a wretched niggardliness to give only good words to those that come to their house, although they be strangers: at least they must have Ch'a; and if the visit be anything long, there must be added some fruit or sweetmeats: sometimes they lay the cloath for this, and when not, they set it in two dishes upon a little square table."6

Tea-drinking was a customary part of casual visits, but not infrequently the entertainment was a formal feast. To the guest on such occasions, "the Master sends him a Kind of Ticket desiring his Presence; when he is come to the House, and the usual Ceremonies past, he is set down in the first Hall, where he drinks his Tea; after which he is conducted to the Feasting-Room." 7

At betrothals in the south of China, tea played an important and symbolical part, for just as a tea bush cannot be transplanted but must be newly grown from seed, so was the prospective family symbolized as a new growth and not a transplanting.

The Shans of Northern Siam steamed or boiled the leaves of the miang, or wild tea tree, and molded them into balls to be eaten with salt, oil, garlic, pig fat, and



U. S. National Museum

CHINESE PEWTER AND BRASS TEA POT

The base contains the fire box. The teapot of pewter fits on the base. A cone of brass passes upward through the body of the teapot and pierces the lid. At the tip of the cone is a small hole for the escape of the charcoal gas. It was the forerunner of the Russian samovar.

dried fish—a custom still followed by their descendants. A later development of the early Shan custom was recorded in 1835 by Dr. N. Wallich, head of the original Tea Commission appointed by Governor General Lord William Bentinck to investigate the possibilities of tea culture in India. He found that the Singphos and Kamtees drank an infusion of wild tea leaves, "prepared by cutting [the leaves] into small pieces, taking out the stalks and fibres, boiling, and squeezing them into a ball, which they dry in the sun and retain for use."

Vestiges of the old Shan custom are detected in the making and eating of Burmese letpet, or tea salad. This is a pickled tea which the Pelaungs long have had a custom of preparing by boiling and kneading jungle tea leaves, and then wrapping them in papers or stuffing them into internodes of bamboo, which they bury in underground silos for several months to ferment. Eventually the product is dug up and eaten as a great luxury at marriage feasts and similar festive occasions.8

Besides being a beverage to some people and a food to others, tea had a third use

⁸ J. J. B. Deuss, "The Chemical Analysis of Tea with Regard to Quality," *Tropical Agriculture*, Peradeniya, Dec., 1924.



³ Father Alvaro Semedo, The History of the Great and Renowned Monarchy of China (Eng. transl.), London, 1655.

London, 1655.

⁴ Anonymous, The Natural History of Coffee, Thee, Chocolate, Tobacco: Collected from the Writings of the Best Physicians and Modern Travelers, London, 1682.

⁵ Op. cit., footnote No. 3.

⁷ Nicolas Trigautius (Trigault) quoted by Simon Paulli in Treatise on Tobacco, Tea, Coffee, and Chocolate (Eng. Transl.), London, 1746 (originally written in 1635).

as money. Tea-money in China is almost as old as tea itself. The Chinese had banknotes long before Western culture came into existence, but in commercial transactions with far-inland tribes, who were mostly nomadic pastoralists, paper money was of little use; the various coins of mystic value, were equally useless. But tea-compressedtea money—could be used as an article of consumption or for further bartering. Unlike real money which often lessens in value the farther it circulates from its point of issue, tea-money enhanced in value the farther it was carried from the tea gardens of China. The first tea-money consisted of crude cakes made in ox-presses. These have been superseded by machine-made, hard-as-granite tea blocks. The area of tea-money circulation has greatly diminished since early times, but brick tea still is used as money in some parts of China and Tibet.

Tea Exalted by the Japanese

When tea-drinking reached Japan, it started as a socio-medicinal beverage in Buddhist temples, where the priests and monks exalted it into "an excuse for the worship of purity and refinement." 9

The esthetic development which followed came slowly to fruition as it became a creed, a ritual, and a philosophy. A ceremony instituted by Zen monks of successively drinking tea out of a bowl before the solemn image of Daruma laid the foundation of the famous *Cha-no-yu*, or Tea Ceremony, which has been described elsewhere. It became a powerful influence on Japanese art and culture.

The Spectacular "Tea Journey"

The prominence given to tea-drinking by the Japanese was given further and spectacular enhancement by the inauguration, in 1623, of the picturesque "Tea Journey," an imposing annual pageant for bringing the first of the season's new tea from Uji to the shogun at Yeddo, now Tokyo, a three-hundred-mile journey.

There were nine great tea jars in the shogun's palace, all genuine specimens of Luzon pottery. Each year, three of them were sent in turn to Uji; two to be filled



Brick-Tea Money

Upper—Northern Russia money.

Lower—Mongolia.**

by two "deputy families," the third, by the remaining nine families of On-mono-chashi. The jars were carried in solemn procession, headed by a master of the tea cult and accompanied by a large party of guards and attendants. In each fief through which the procession passed, it received an ostentatious welcome and was sumptuously feasted. On arrival at Uji, the jars, which always left Yeddo fifty days before midsummer, stood for a week in a speciallyprepared storehouse until every vestige of moisture had been expelled. Then, having been filled, they were carried to Kyoto, and were deposited there for one hundred days. The members of the procession which had escorted the jars from Yeddo returned thither, and in the autumn repaired once more to Kyoto to fetch the tea. The return journey was by the Kiso-kaido, and again the progress of the jars was marked by ceremonious welcomes and feastings in each district. All who might meet this procession in the course of its journey, including the highest nobles in the realm, were required to prostrate themselves before the august jars.

The cost of the Tea Journey being enormous, the frugal shogun Yoshimune, A.D. 1710-44, finally put an end to it.

During all the time while tea was being

⁹ Okakura Kakuzo, The Book of Tea, New York, 1906, p. 43.



PICTURESQUE ANNUAL THREE-HUNDRED-MILE TEA JOURNEY FROM UJI TO YEDDO, NOW TOKYO, 1623.

From a scroll, "Honorable Tea Jars on the Road."

ennobled into a religion of estheticism on the one hand and an object of lordly pageantry on the other, tea-drinking gained some headway as an article of domestic consumption; but in the years between A.D. 1200 and 1333, it still was too much of a luxury for popularity with all classes.

The Game of "Tea Drama"

About this time, the game of tea-tasting, sometimes called "Tea Drama," or "Tea Test," came into vogue. Briefly, the object was to identify various teas by sampling the beverage of ten to a hundred different garden growths, drawn "blind." The game called for the utmost delicacy of taste. It finally grew into such a craze that the shogun Takauji, A.D. 1336-57, made an unsuccessful attempt to stop it. But the game continued to be played until quite recent times.

The Churned Tea of Tibet

The Tibetans early developed tea manners and customs that continue to this day peculiarly their own. William Moorcroft, an English traveler who explored the Himalaya districts in the early years of the nineteenth century, found all classes of Tibetans drinking great quantities of tea churned with butter and other ingredients.

At breakfast [he wrote] each person drinks about five to ten cups, each containing about one-third of a pint; and when the last is half finished, he mixes with the remainder enough barley meal to bring it to the consistency of paste. This is done to soak up and render edible a greasy accumulation of froth which

is blown aside when the preceding cups are being drunk.

The preparation of breakfast tea for say ten persons involves boiling an ounce of brick tea and a like quantity of soda in a quart of water for an hour, or until the leaves of the tea have been sufficiently steeped. The liquid then is strained and mixed with ten quarts of boiling water in which an ounce and a half of fossil salt has been dissolved. The whole is put into a narrow, cylindrical churn, along with some butter, and is churned until it becomes a smooth, oily, brown liquid, somewhat like chocolate. In this form it is transferred to a teapot for immediate use.

At the midday meal, those who can afford it take tea again, with wheaten cakes, accompanied by a paste of wheat, flour, butter, and sugar, served hot.

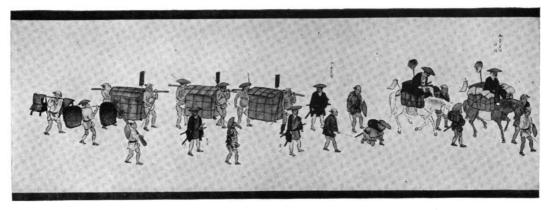
Moorcroft learned upon inquiry that the use of tea by all classes in Tibet dates back only to the middle of the eighteenth century; but previous to that time it had been in use by the wealthier classes for centuries.

The teapots used by the richer classes were made of silver, silvered copper, or brass, ornamented with flowers, foliage, and grotesque figures of animals in embossed or filagree work. Each man carried his own cup either of china or, as was more common, of a knot of horse-chestnut, edged or lined with silver, or plain.¹⁰

But it is to Père Evarist Régis Huc, Lazarist missionary, that we are indebted for one of our most diverting accounts of early Tibetan tea drinking. In 1852, he published Souvenirs d'un Voyage dans la Tartarie, le Thibet, et le Chine, in which he tells, among other things, of what he believed to be "the biggest tea party on



¹⁰ William Moorcroft, Travels in the Himalayan Provinces of Hindostan, Etc., 1841, Vol. I, pp. 329 and 350.



THIS IMPOSING PAGEANT BROUGHT THE FIRST OF THE SEASON'S NEW TEA TO THE SHOGUN The picture is painted on silk by a Japanese artist.

record." At Kounboum a wealthy pilgrim invited the entire lamasery, consisting of 4000 lamas, to a tea party, and all of them accepted. He states that the scene was most impressive. Rows upon rows of lamas sat in decorous silence while boy students brought the steaming beverage from the kitchen in cauldrons and passed it in bowls to the waiting priests. At the same time the host prostrated himself on the ground and so remained until the cauldrons had been emptied and a psalm chanted in his honor.

The Tea-smitten Ladies of Holland

In Holland, where tea was introduced into Europe, the cost was prohibitive to all except the aristocracy. Second only to the cost of the leaf, which was brought in small sealed jars to favored patrons of the Dutch East India Company, was the tremendous expense of the tiny, eggshell, "Chinaware" teacups and teapots that were imported for serving the "China drink." Along about 1637, however, some of the wealthier merchants' wives began offering tea to their guests, and the "Lords Seventeen" of the East India Company were constrained to order, "some jars of Chinese as well as Japanese tea with every ship."

By 1666, the cost had been lowered somewhat, but fabulous prices still were asked for tea; a pound readily brought fl. 200 to fl. 250, or about \$80 to \$100, and only the rich could indulge in tea-drinking. It was not until the importation of larger quantities brought prices down that the use of tea became general. In the years between 1666 and 1680, tea-drinking became fash-

ionable throughout the country and wellto-do homes had a special "tea room," while the lower-class citizenry, especially the women, formed tea clubs that met in beer halls.

The prevailing infatuation for tea was such as to give scope to all manner of satires by concurrent writers. A specimen of these still survives in a comedy entitled, De theezieke juffers, or "The tea-smitten ladies," which was performed at Amsterdam in 1701, and was printed in the same year.

In this period, the tea guests came at two or three o'clock in the afternoon, and were received with much courtesy and state. After greetings, they were seated with their feet on glowing foot-stoves, used both summer and winter, while the hostess took from little tea-boxes of porcelain and silver filagree different kinds of tea, which she put in small porcelain teapots, provided with silver strainers. She made a ceremony of asking each guest to choose the sort of tea preferred, but generally the choice was referred back to the hostess, who then filled the little cups. For those who preferred to mix their drinks, she infused saffron in a small red pot, which she passed to the guest with a larger cup containing the usual small portion of tea, for the guest to fill up from the saffron pot. Sugar was used for sweetening from the first, but milk did not make its appearance on the tea tray, which was of porcelain or walnut, until it came as the invention of the French Madame de la Sablière, in 1680.

Tea was not drunk out of the cup, but out of the saucer, and audible sipping and sniffing, in the expression of gratification,



THE START OF THE FIVE O'CLOCK TEA IDEA IN ENGLAND, FROM A CONTEMPORARY PRINT

were considered polite rewards to the hostess for "a nice tea." The conversation was confined exclusively to tea and the confectionery or cakes that were served with it. After ten or twenty—some say forty or fifty—cups of tea had been quaffed by each guest, brandy with raisins was brought in and was sipped with sugar. With the brandy came pipes, for both women and men smoked.

The craze for tea parties finally resulted in the ruin of many homes, for the women gadded about and left the housework to servants. Many a resentful husband, finding the wife away and the spinning wheel deserted, went to the tavern. As was to be expected, fierce controversies were engendered; reformers attacked tea, and books were written for and against it.

The tea that was used through the "saffron" period of tea in Holland was the green tea of China and Japan. In the second half of the eighteenth century it began to be superseded by black tea, which also to some extent displaced coffee as a refreshing morning beverage.

England Develops Tea Manners

A code of tea manners and customs was begun in England when Catherine, the

Portuguese Queen of Charles II, introduced tea-drinking at the English Court after the Royal wedding in 1662. Throughout an earlier period as a purely masculine beverage in the coffeehouses of London, there had been no distinctive ceremonial in its service; in fact, the beverage had been kept in kegs like ale. But the members of the Court, inspired by Royal example at The Hague and that of their own tea-drinking queen, attached a fashionable éclat to the taking of tea that had been missing at the coffeehouses. Tea was enormously expensive—the East India Company paid 40s. a pound for two pounds presented to the king in 1664—in the early years of its introduction, and "it was served in cups not bigger than thimbles." 11

Tea remained a great rarity until the reign of George I, 1714-27, when green tea began to come into the English market along with the Bohea previously used. By this time tea-drinking had grown in favor, and the cost of the leaf was down to about 15s. a pound; but even at this price it was far too costly a commodity to be entrusted to servants, and hence there came for retention in the living-rooms richly ornamented tea-caddies of wood, tortoiseshell,



¹¹ Lives of the Norths, Jessop ed., Vol. III, p. 318.

brass, or silver, divided for green and black tea and fitted with a lock. In 1722, Humphrey Broadbent tells us, the English custom was to half-fill with boiling water a teapot containing the quantity required for the instant serving of one or more dishes; let it infuse for a brief space, fill the pot with more boiling water and "continue so long as you see it is good." 12

The teapots were mostly of costly china, holding not more than half a pint, and the capacity of the cups scarcely exceeded a large tablespoon. A slightly larger type of bell-shaped silver teapot also was in use, and was credited to Queen Anne, 1702-14. Tradition has it that members of the smart set, during her reign, created considerable scandal when they substituted tea for ale at breakfast.

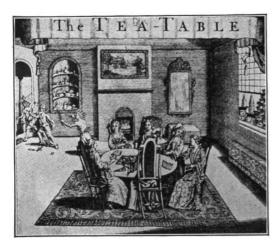
Various passages in the contemporary poets indicate a fixed social position for tea. Pope, writing in 1715, of a lady who left town after the coronation of George I, says that she went to the country—

To part her time 'twixt reading and Bohea, To muse, and spill her solitary tea.

In the same period, Dr. Young, in Satires, speaks of a belle in the city, whose-

Two red lips affected zephyrs blow, To cool the Bohea and inflame the beau.

12 Humphrey Broadbent, The Domestick Coffee Man, London, 1722.



"THE TEA TABLE," ABOUT 1700 From a broadside of the period.



A TEA TACKLE, 1710

This pot-cum-stove, or tea tackle, is the property of the Leicester City Museum. Hot embers were placed in the chamber above the flue, while the tea was in the back chamber and was drawn off through the tap.

When a lady had sipped enough tea, she laid her spoon across the top of her cup or else tapped on her cup with the spoon for one of the gentlemen present to relieve her of the cup. Another way of indicating that no more tea was desired was to turn the cup upside down in the saucer. In this connection we read:

Dear Mrs. Hoggins, what? Your cup Turned in your saucer, bottom up! Dear me, how soon you've had your fill! 18

In Edinburgh, where tea-drinking acquired fashionable prestige from having been introduced by the Duchess of York, the Scottish ladies did not consider it correct to return a cup for refilling until all were emptied. And so it came about that the spoons were numbered to insure that each guest received back her own cup.

Another precept of Edinburgh teaetiquette demanded that the spoon be retained upright in the cup instead of being laid in the saucer after the tea had been stirred. "Saucering" tea, and then drinking from the saucer, was commonly practiced and probably accounted for the custom of retaining the spoon in the cup.

In 1785, the price of tea still was so high

¹³ Sir Walter Besant, London in the Eighteenth Contury, London, 1902.





LONDON COFFEE HOUSE SCENE IN THE EARLY EIGHTEENTH CENTURY

This little body-color drawing by an unknown English artist of the reign of Queen Anne was given by Mr. R. Y. Ames to the British Museum. It is a document of considerable interest for students of social history. It is a naïve and obviously faithful representation of the interior of a London coffee house, with its clients seated at tables, smoking, and drinking coffee, which is poured out from a black pot by a boy waiter, while other coffee pots are kept hot before a blazing fire. It is possible that these pots were also used for tea at this period.

An elegant lady in a "Fontange" head-dress presides at a bar under a tester on the left, and is handing out a glass, the contents of which may be guessed from a framed notice on the wall: "Heare is Right Irish Usquebae." Of the newspapers which lie on the tables no word but "April" is legible. Pictures, perhaps for sale, adorn the wall; a connoisseur is examining one of them by the light of a candle. The prevailing colors are scarlet, pale blue, grey, and white, against a background of the various browns of wall, tables, and floor. The probable date, judging by the costume, is about 1705. The drawing resembles in several respects a small engraving of a coffee house which appeared in 1710, but is not the original of that engraving, and represents the fashions of a slightly earlier period. The date "A.S. (for 'Anno Salutis'?) 1668" which appears to the left is obviously a later and spurious addition.

in London that its devotees had to get the last bit of good out of it by successive drawings. This practice evolved rules which indicated that the strength of Bohea was drawn with three waters; Congou with two; and common green, Hyson, or Gunpowder with three to five.

"A Dish of Tea"

Somewhat suggestive of "saucering" was the expression "a dish of tea," but it had quite a different meaning, since it referred to tea in a cup or bowl, and was a survival of the Elizabethan custom of referring to a "dish of milk," etc. It persisted until the middle of the nineteenth century. At one time it was the custom to drink "a dish

of tea" after dinner, even as at present the demitasse of coffee concludes the meal.

Speaking of a "dish" of tea in another sense, an amusing contretemps is narrated by, "one of the party who sat down to the first pound of tea that ever came to Penrith. It was sent as a present without directions how to use it. They boiled the whole at once in a kettle, and sat down to eat the leaves with butter and salt; and they wondered how anybody could like such a dish." 14

"Tea," "Tea-Time," and "High Tea"

The general term "tea" was used almost from the first to denote any occasion, like a

14 Southey, Commonplace Book, Warter, ed. London, 1850, p. 402.



reception, where tea was served, and "teatime" connoted the hour for such entertainment; but "tea," a light repast served with the beverage tea as the evening meal dates back only to the eighteenth century. In 1780, John Wesley, the religious reformer, wrote that he met all of the Society "at breakfast and at tea," implying that tea had become a definitely recognized meal by his time.

"High tea," or "meat tea," a meal with meats and other relishes served with tea, presumably was adopted after "tea" itself had become a regular meal; but when that was English antiquarians have failed to discover.

The Origin of Afternoon Tea

A possible seventeenth century origin for the custom of afternoon tea is suggested by some lines in Southerne's *The Wive's Ex*cuse (1692), as well as a reference in one of Mme. dé Sévigné's (1626–1696) letters to "thé de cinq heures."

Dr. Alexander Carlyle wrote in his autobiography of the fashionable mode of living at Harrowgate in 1763 that, "The ladies gave afternoon tea and coffee in their turn." For the custom of afternoon tea as a distinct and definite function, however, the world is indebted to Anna, wife of the seventh Duke of Bedford, 1788-1861. In her day, people ate prodigious breakfasts. Luncheon was a sort of picnic, with no servants in attendance. There was no other meal until eight-o'clock dinner, after which tea was served in the drawing-room. The Duchess of Bedford struck out a new line; she had tea and cakes served at five o'clock, because, to quote herself, she had "a sinking feeling."

Fanny Kemble, the actress, in her Later Life records that she first became acquainted with afternoon tea in 1842 at Belvoir Castle, seat of the Dukes of Rutland. She added that she did not believe the now universally-honored custom dated back any further than this.

Tea and Temperance

The 1830s saw tea recruited as the ally of temperance reformers for the overthrow of alcoholic beverages in England. "Tea Meetings," as they were called, were held in Liverpool, Birmingham, and Preston. The attendance ran as high as 2500, and all who came were served with tea. Tables were laid out with tea equipage interspersed



AFTERNOON TEA IN THE LONG ROOM, BAGNIGGE WELLS, 1772 From a mezzotint published by Carrington Bowles; artist unknown.



THE DUKE OF WELLINGTON TAKING TEA IN PARIS, AFTER WATERLOO, 1815

with flowers and evergreens. A contemporary account relates that, "wealth, beauty and intelligence were present; and great numbers of reformed characters respectably clad, with their smiling partners, added no little interest to the scene." 15

Early American Tea Customs

The use of tea as a beverage was well established in Holland by the middle of the seventeenth century, and the afternoontea custom crossed the Atlantic to New Amsterdam. With tea came also the teaboards, teapots, "bite and stir" boxes, silver spoons and strainers, and other tea-table paraphernalia which were the pride of Dutch housewives.

Milk was not used at first, but the socially-correct dames of New Amsterdam offered sugar and sometimes saffron and

15 Arthur Reade, Tea and Tea Drinking, London, 1884, pp 32-48.

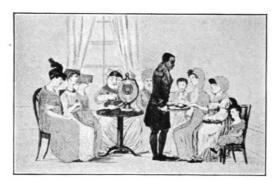


Dr. Johnson Taking Tea with Mrs. Boswell From a sketch by Collings and Rowlandson, dated 1786.

peach leaves as flavoring agents for tea. Their guests would either nibble a lump of loaf-sugar or stir powdered sugar into their tea; hence tea tables were provided with "bite and stir" boxes. These were partitioned in the center; one side for lump sugar, the other for powdered. The ooma, or sifter, also adorned the table. This was filled with cinnamon and sugar with which they sprinkled hot puffets, pikelets, hot waffles, or wafers.

Washington Irving painted a vivid picture of a sumptuous tea-table of the early days of New York—then New Amsterdam—in his Legend of Sleepy Hollow.

New Yorkers of the pre-Revolutionary period bought spring-water for making tea from vendors who drove about the streets selling water from the tea-water pumps in



AN ENGLISH TEA PARTY, ABOUT 1820

the outskirts. The cry of, "Tea water! Come out and get your tea water!" was heard up to the middle of the eighteenth century.

British governors and their wealthy Tory friends helped to give a note of formal dignity to the early tea manners of New England, but the price of the leaf was too high during the third quarter of the seventeenth century to permit its frequent use. By the turn of the century, however, teadrinking had an extraordinary vogue, which influenced not only the furniture of the period but required for its service silver, porcelain, or earthenware teapots and china teacups and saucers of great beauty and cost. With these would go all the equipage of the tea-tray made by craftsmen whose artistry made them famous.

Many of the living rooms had several tea tables of various kinds. Around these much of the social life of the colonists centered. The realization of this fact gives



TEA SERVICE IN COLONIAL AMERICA

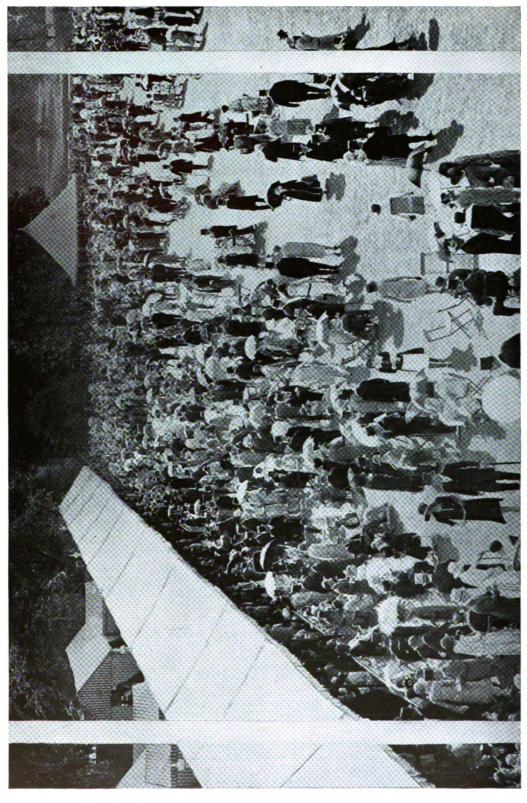
A room from a house in Philadelphia, 1768. In the American Wing of the Metropolitan Museum of Art, New York.

point to the irritation which led to the Boston Tea Party. Large tip-top tables, small kettle stands, and tray-topped four-legged tables were made for this purpose. With their rich woods covered with dainty and artistic teapots and cups they gave a beautiful variation of color to the rooms. Their disappearance caused many a sigh of regret when our Colonial women pledged themselves to give up tea as a patriotic duty.

In the early days of the Republic, tea returned to the American table, becoming prominent at meals. From a coeval account we learn that George Washington at Mount Vernon "ordinarily, for breakfast, had tea, English fashion, Indian cakes, with butter, and, perhaps, honey, of which he was very fond. His evening meal, or supper, was especially light, consisting of, perhaps, tea and toast, with wine."

Tea remained for many years the principal table beverage at the evening meal in America, which was designated synonymously as either "supper" or "tea."





AFTERNOON TEA IN ENGLAND REACHES ITS CLIMAX AT THE ROYAL GARDEN PARTY, BUCKINGHAM PALACE

CHAPTER XXIII

PRESENT-DAY MANNERS AND CUSTOMS

TELLING IN THE ORDER OF THEIR PER CAPITA CONSUMPTIONS HOW THE PRINCIPAL TEADRINKING COUNTRIES PREPARE AND SERVE TEA—GREAT BRITAIN AND IRELAND, THE GREATEST TEA DRINKERS—NEW ZEALANDERS AND AUSTRALIANS DRINK TEA SEVEN TIMES A DAY—CANADA—THE NETHERLANDS—UNITED STATES—OTHER EUROPEAN COUNTRIES—CHINA AND JAPAN—OTHER ASIATIC COUNTRIES—AFRICAN AND LATIN AMERICAN COUNTRIES—ODDITIES IN THE NEWS

N Asia, where tea and tea-drinking manners and customs date back to a remote antiquity, the several races follow methods of preparing and serving the beverage that have changed very little

since the early days. A more decided change is observable in the methods of western consuming countries which first obtained their tea, as well as the manner of using it, from the Chinese, but have since established manners and customs more in harmony with their own habits and temperaments. In the survey which follows, the discussion has been limited to the principal



TEAS AND HOT WATER
Almost anywhere in rural England.

consumers, arranged in per capita order.

Great Britain and Ireland

The people of the United Kingdom are the world's greatest tea consumers. They use about ten pounds per capita annually, and nowhere else can a better or a more satisfying cup of tea be found. Here the making and serving of the drink is an art. Every man, woman, and child in the United Kingdom seems to know how to brew a good cup of tea. This statement will provoke snorts of derision from chronic grousers, who are always complaining in the newspapers, but, in the main it cannot be disputed.

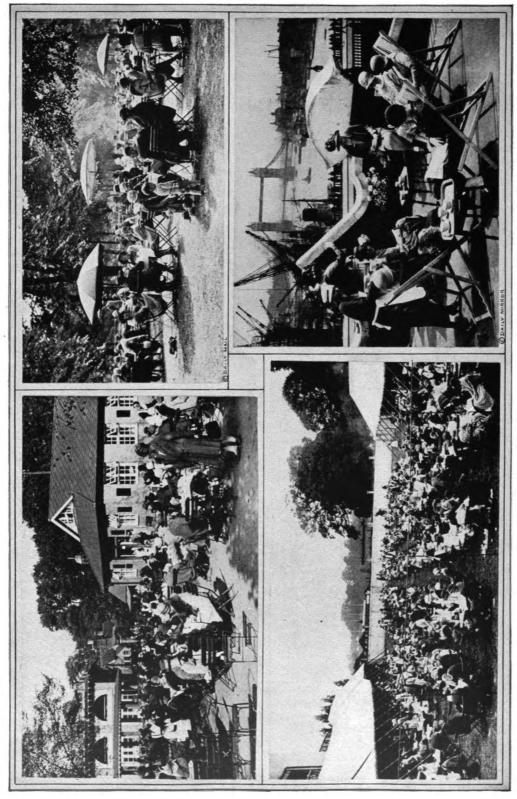
Blends of India, Ceylon, Java, and China are favored mostly, in the British Isles, and Indias and Ceylons also are drunk straight and unblended to some extent. China teas, blended and unblended, still are sought by

connoisseurs and those who believe these teas deal more kindly with the digestive organs. Large consumers buy their teas in various-sized chests, but few private consumers buy more than a pound at a time. Only in England, though, can one get the thick, syrupy liquor, so pleasing to the English palate—and so helpful to the trade.

Silver, china, or earthenware teapots are used

indiscriminately, except that china and earthenware pots often are considered best for China tea. Some of the pots are fitted with an infuser-basket, which permits the withdrawal of the leaf when the brew has been completed.

The tea—a teaspoonful for each person and one for the pot—is placed in a previously-warmed teapot, and is infused for about five minutes with freshly boiling water. Unless an infuser-basket is used, the liquor is sometimes poured off the leaf into another warmed teapot, to avoid too much astringency. Tea bags are not used, as our English cousins think tea draws better when not confined in a bag; instead, the leaves are kept out of the cups by the



IN SUMMER MANY LONDONERS TAKE THEIR TEA OUT OF DOORS
Upper left-Zoological Gardens [© Sport & General]. Upper right-Tea time in Kensington Gardens. Lower left-Tea enclosure, Wimbledon. Lower rightThe terrace, Langbourn Club.



ORCHARD TEA GARDENS, LEE, NORTH DEVON

use of cup or spout strainers, in better-class homes.

Milk or cream generally is added to the beverage in the cup. Cold milk is used by most people, but some prefer hot. It is placed in the cup before the tea is poured. In Scotland, where the cream is thin, it is used as a superior alternative to milk. In Western England, cream is not used much in tea as the milk is quite rich. Tea, to a small extent, also is served Russian fashion; i.e. in a glass with a slice of lemon. Sugar is entirely a matter of taste.

The price of tea per pot for one person in cases and restaurants ranges from 3d (6ϕ) to 6d (12ϕ) . A common price in good medium-class restaurants is 4d (8ϕ) per pot per person, but a separate pot is not necessarily served. Usually, a range of pots is used, suitable for either one, two, three, or four persons.

It is customary to serve a jug of hot water—the jug matching the pot—which is added to the teapot as occasion demands. This makes the tea go much further, and people frequently have three cups of tea each from one individual pot—a very cheap drink.

The extent to which tea is drunk in the United Kingdom is surprising, not only to the American or Continental visitor, but to the Britisher himself who pauses to take stock of his fellow countrymen. Each stratum of British society has its own particular tea-drinking habits and habitats. The afternoon tea of the upper classes is the most characteristic of British institutions, as well as the most charming reunion of the whole day; and the afternoon tea of old Betty, the charwoman and laundress, is

the most refreshing meal she takes. With the well-to-do, tea time is the prelude to a late dinner, but with the poor it is the sequel of an early one, and so the extremes meet.

Among the classes that keep servants, it is the custom to have an early-morning cup of tea brought to the bedside. This first cup is regarded as the awakener and stimulator, with which to start the day. It is a habit which is recognized and catered to by many hotels, and their tariffs usually state a price for the bedroom cup of tea.

When the ten-hour working day was the rule, the working classes indulged in a cup of tea at about 5:30 a.m. In most cases, the husband would rise at this early hour, light the fire or the gas ring, make himself a cup of tea and take one up to his wife, before he turned out into the streets. His breakfast—again with tea—would be taken at his workplace about two-and-a-half hours later. Nowadays, the eighthour day worker takes his full breakfast before leaving home and nine times out of ten tea is the drink taken.

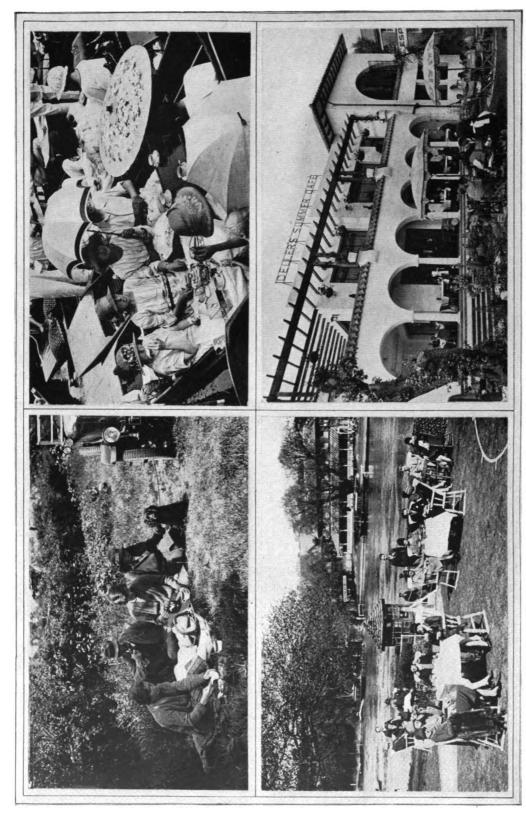
Among the higher classes coffee is more frequently taken with breakfast, but, nevertheless, a large number take tea, as is proved by the choice always offered at hotels of tea or coffee for breakfast.

One would think that after the hour of seven or eight p.m. the teapot would be laid to rest for the day, but there are those who cannot retire without a final cup of tea with a little bread and cheese at



TEA-ROOM IN A COUNTRY VILLAGE HOUSE

"The old lady says she knows of a house four doors up the street where we might get a cup of tea. . . . There will be tea, if we don't mind waiting a little, while the kettle is got a-boiling."



TEA-TIME SCENES BY THE ROADSIDE, ON THE RIVER, AND BY THE SEA Upper right-At the Molescy Amateur Regatta. Lower 16/1-Murray's River Club, Maidenhead. Lower right-Sea-side cafe, Paignton. Upper left-Picnic tea.



Sport & General

A GARDEN TEA PARTY AT HAMPTON COURT PALACE

about 10 o'clock. Night workers in the newspaper world and other trades can call for a cup of tea or coffee at the all-night "coffee" stalls; and the lonely night watchman guarding in the street the tools of the roadmenders, surrounded by his red danger lanterns and seated in his little wooden hut before his glowing open-air fire, takes his meal and his tea in the stillness of the night.

Recent social changes in England have caused a spread of the early morning and midday cup of tea among domestic servants, shoppers, and business women. Teadrinking at midday is not frequent among the well-to-do, but is common among the working and lower middle classes. The midday meal is the chief meal of the day with these people, consisting of meat, vegetables, and a sweet course, followed by a cup of tea. The famous English "five o'clock tea" of the higher and middle classes is more frequently taken at about four o'clock nowadays, or between four and five; and it is an extremely light meal, if meal it can be called at all, consisting of a cup of tea with cake, pastry, or biscuits. The third meal of the day of those whose main meal is consumed at midday takes its name from the beverage, and is a much more substantial meal than the four o'clock tea of the well-to-do because there is no evening dinner to follow it. This "tea" is usually served at about six o'clock, on the worker's return from business.

On Saturday afternoon and Sunday, when the Londoner is free to roam afield, he will hire a boat on the Thames, and together with his picnic basket and spirit kettle he will be found at the right hour partaking of his afternoon tea with his boat moored under the riverside trees in delightful sylvan surroundings. Again, others who can afford only a motorcycle and side-car will be found with the vehicle drawn up on the quiet roadside in some beautiful woodland spot or on some hilltop twenty or thirty miles out of London, with picnic tea spread out on a table cloth on the grass.¹

Recently the caravan tea shop appeared in Southern England. It is drawn by a small motor car and makes stops and serves tea at places where motorists congregate.

In the days of the London coffeehouses, it was impossible for an unescorted woman

¹ Thomas Dunkerley, "Tea Manners and Customs in England," Tea and Coffee Trade Journal, New York, June, 1928, pp. 759-60.



COTTAGE TEA-ROOMS, PICCADILLY

to obtain refreshment, but in the tea rooms which succeeded, women were welcomed as well as men.

The tea-room pioneers in London were the Aërated Bread Company, familiarly known as the A.B.C. Tea at the A.B.C. costs 2d per cup or 3d per pot per person. This company with its sixty-five shops, has many competitors. Lyons, operating the largest chain of tea-shops in the world, has hundreds of ordinary tea-shops in addition to many huge and handsome restaurants, in and out of London. Pioneer Cafés number more than fifty, and the Express Dairy Company has a score of refreshment shops. Other well-known London tea-rooms are: Buszards, Ridgways, Cabins, Callards, Flemings, Rullers, "J.P.s," Liptons, the Mecca Cafés, Slaters, Stewarts, Williamsons, etc. Also, the big London department stores, such as Selfridges, Whiteleys, Harrods, Barkers, and Pontings, all operate



Sport & General

DERBY DAY AT EPSOM

A Royal Enfield Motorcycle combination makes a good tea shop.

enticing tea-rooms in an endeavor to tempt the women shoppers to remain on the premises rather than go out for tea and not return. Numerous smaller choice tea-rooms are scattered throughout the London metropolis, where orchestras play and tea dansants are not infrequent. In the average London tea-shop the price of a cup of tea ranges from 2d to 3d, while a pot of tea per person can be secured at a cost of 3d to 4d.

The Lyons tea-shop may be considered as truly representative of the best English tea traditions. Built around a forty-year-old idea of "a good pot of tea for two-pence" it still is possible to get in a Lyons shop a pot of tea for $3d [6\phi]$, or 2d a cup.

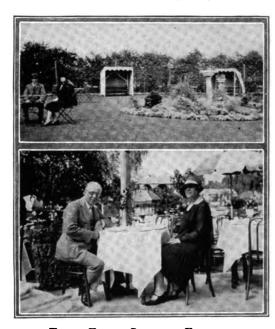
No account of the Lyons' tea-shop would be complete without a reference to the en-



THE EVOLUTION OF A "NIPPY"

Right to left—Periods 1894, 1897, 1924, 1934.

gaging waitress, nicknamed "nippy." The aim of the management has been to dignify and, if possible, to "glorify" service. Yet nippies as an institution are quite different from Mr. Cochran's "young ladies," or Mr. Ziegfeld's "glorified" American girls. The Lyons management set out to remove from the dress of the waitresses every semblance of servitude, and to that end they caused to be designed an up-to-date frock, minus the high collar and cuffs, and the flying apron-strings of the early Victorian era. They made their waitresses stylish, human, and comfortable. The choice of the name "nippy" occupied the attention of the firm for several months. The word in colloquial English means active, vigorous, alert. As applied to the Lyons type of waitress, the name quickly became popular and now is in common usage in London.



Tea al Fresco, Suburban England

Upper—Tea hutches in a roadside tea garden at
Greenford. Lower—Tea at the Café de Paris,
Bray, Maidenhead.

At the Lyons Corner Houses excellent orchestras play daily. The firm spends over £150,000 [\$730,000] a year for orchestra music and entertainment generally.

Dellers, "the Cafés of the West," at Exeter, Paignton, and Taunton, may be regarded as typical outside of London. Here, the charge is 4d for a pot of tea.

Almost anywhere in England during the summer season it is possible to enjoy one's afternoon tea in the open, amid surroundings which are at once restful and inspiriting. Tea-gardens are operated in the public parks of London, mainly in Hyde Park, Kensington Gardens, the Zoological Gardens and Kew Gardens. A visitor can obtain a pot of tea in any of them for 4d. At these public places one is likely to find people from all walks of English society enjoying their afternoon tea at tables under the trees or sheltered from the sun by spreading white umbrellas. In the open, tea is served in individual pots with hot water ad libitum, and in the suburban districts one is always sure to find any number of private houses that turn their parlors and back yards into tea-rooms or teagardens during the afternoon tea hour. The signal to the passer-by is usually the one word "Teas" neatly displayed in window or on door post, and it is not uncommon to see the announcement cheerily waving from the top of a flag pole.

In the lounges of many London hotels, afternoon tea is served to residents and casual callers. The average price is 1s 6d per head or 2s 6d including sandwiches and pastry. At theatre and cinema matinées, patrons will be found holding on to small tea-trays during intermission. All clubs serve tea. Tea at important social affairs such as the Ascot Races, Henley Regatta, Lords Cricket Ground on Harrow vs. Eton day, Cowes Regatta, the King's Annual Garden Party, etc., are colorful pictures. Without afternoon tea these events would seem very un-English.

London abounds with all classes of restaurants, most of which serve tea throughout the day and evening. Although wines and liquors are obtainable at most of the first-class restaurants and public houses, practically all of them make a specialty of afternoon tea.

At the great London railway terminals the platform tea-wagons and the tea-rooms always are busy, but more so at night when the passengers for the night trains are ready for a warm tea "send off." The platform tea-wagons, or trolleys, are surmounted by an urn containing water which is kept hot



A WAYSIDE TEA COTTAGE IN CORNWALL From a wash drawing by Mr. R. Barrett.



PLATFORM TROLLEY WITH TEA URN

by means of a Primus lamp fitted into the trolley. The trains generally stop in the dead of night at a station one or two hundred miles from London just long enough to enable the passengers to buy a cup of hot tea or coffee at the station buffet.

If he is to be happy, the Briton must have his tea—good tea—whenever he wants it, and it was with this in mind that the more important railroads of England inaugurated a plan to provide him with tea service en route, graded to suit his pocket-book, from a simple tray to a de luxe tea-



TEA BASKET SERVICE, GREAT WESTERN RAILWAY

room or restaurant-car service—but all good.

It was not until many years after the English railways had been developed to a high degree of comfort and efficiency that some one first thought to attach a restaurant car to a through train or to serve trays of tea from the station platforms to passengers in the compartments. The Great Northern Railway between London and Leeds operated the first dining car in 1879, and now such vehicles are common on through trains, being open to all classes of passengers at no extra cost beyond the price of the refreshments served.

On the London Midland & Scottish Railway, the number of teas served in the restaurant cars is about 1,160,000 per year. In the dining cars, a cup of tea is obtainable at 4d and tea with bread and butter, toast, or cake may be had for 9d. On the Great Western Railway, over 2,500,000



TEA AND THE CINEMA

Grand Circle Tea Room in the Stoll Picture Theatre, Kingsway, London.

cups of tea and 17,000 tea-baskets have been served in one year.

Due to its convenience, the tea basket service to passengers in the compartments, without their having to leave their places on the train, is immensely popular and a great number of baskets are served upon the arrival of the trains at stations on all of the regular daytime tea hours, as well as throughout the night. The teabaskets are set aside or pushed under the seats after use, and are cleared from the train by a special staff at the large stations to be returned to the station from which they were issued. On the Great Western Railway, the tea-baskets comprise a basket



TEA SERVICE ON THE L. M. S. RAILWAY container with an enamelled-iron lining. When served the tea-basket contains tea,



AFTERNOON TEA IN THE AIR

The saloon of a Silver Wing London-Paris aeroplane over Trafalgar Square, London. Sketch by C. E. Turner. with additional hot water, milk, sugar, three slices of bread and butter, cake, and a banana or other fruit, the charge for which is 1s 3d [30¢].

Tea-time customs also prevail on all British-owned and operated ocean-going steamships. During the daytime, afternoon tea is served in the dining saloon, or on deck, where the deck steward performs the tea honors; and along about midnight the cabin steward will supply the passengers, if they so desire, with tea and cakes.

The first "tea-in-the-air" service was inaugurated in England by the Imperial Airways, Ltd., operating between London and Paris, in 1927. For the Londoner who would experience the service of "tea-in-theair," planes of the Imperial Airways make



GREAT WESTERN RAILWAY TEA BASKET

regular afternoon trips over the City of London during the months of May to October. The inclusive charge is 30s [\$7.50].

During the World War a new custom started in many English factories—probably on account of the large number of women workers who then moved into the industries—of sending around tea-wagons, as used on railway platforms, to the workers at their benches and machines at about eleven o'clock in the morning. Although this custom has practically died out, eleven o'clock tea-drinking still survives in some form or other among the women workers in many factories, large shops, offices, etc. Men and women in offices which do not serve tea usually are given time off to go



Daily Mail

ing the Thames?

TEA ON THE TERRACE OF THE HOUSES OF PARLIAMENT

out and get it in some nearby tea-shop. The London business man in his office about four in the afternoon is almost certain to be interrupted by the entrance of a lady typist with two cups of tea—one for the visitor. Even board meetings of directors have been known to be invaded by the tea-tray. If this sounds extreme, what shall be said of the thinning out of the House of Commons itself, and the discovery of legislators in the tea-room or, when weather conditions are favorable, at al

Several years ago a London towel concern hit upon the happy idea of a daily "tea-in-the-office" service, supplying complete equipment, including fresh supplies of tea, sugar, and biscuits.

fresco tea on the famous terrace overlook-

In Northern Ireland, and the Irish Free State, the usual English method of preparing tea is followed; that is, the water is brought to the boiling point and poured



AFTERNOON TEA MAY BE HAD HERE At Little Gaddesden, Herts, England.

immediately upon the tea. It is permitted to infuse for five or ten minutes before serving. A very strong brew generally is favored. Tea is consumed by every class of the population. It often is served at seven o'clock in the morning; with breakfast at nine; again at eleven o'clock; at one o'clock, for lunch; at four o'clock; with dinner at about seven o'clock; and often about eleven o'clock before retiring. In Northern Ireland, tea sold by retailers usually is packed in one, two, four, and five ounce and one-pound sealed packages. The Irish Free State, particularly the South and West, always secures the choicest teas.

New Zealand

The people of New Zealand consume about seven and a half pounds of tea per capita annually. It is drunk as many as seven times a day.

In the preparation of the beverage, the New Zealand housewife follows much the same method observed in England, though in recent years the tea bag has made some headway. However, those living in the rural districts known as the "back blocks" are prone to boil the leaves.

Tea usually is served with two pots, one containing tea and the other hot water, the strength of the beverage being adjusted to the individual taste of the drinker. However, tea is drunk much stronger than is customary in most English-speaking countries. Although New Zealand is one of the largest producers of cream in the world, its tea drinkers seem to prefer milk in their tea.

Bedside tea, a large cup served on aris-

ing, is accompanied by a piece of bread and butter, or a biscuit. At breakfast, another large cup is consumed. At eleven o'clock comes the morning tea; not only a household function, but a feature in most offices, shops, etc. At lunch, at least ninety per cent of the population drinks tea. At four o'clock tea again is served in the home, in hotels, restaurants, tea-rooms, and offices. At dinner time there is more tea drinking, and about nine or nine-thirty, New Zealanders indulge in the meal which they term supper; and tea may be said to be the main reason for partaking of this last repast of the day.

All in all, eighty per cent of the people of New Zealand may be said to drink from one to three big cups of tea seven times a day, ninety per cent six times a day, and ninety-nine and a fraction per cent at least four or five times daily. Ceylon tea is the favorite.

All important cities in New Zealand have tea-rooms. They range from unassuming places which serve tea with bread and butter or cakes to the more pretentious kind usually found in department stores. The latter, especially, are crowded daily at eleven in the morning and at four in the afternoon. Morning tea for the discharge of social obligations is as general as is afternoon tea.

Every drapery establishment of any consequence has a tea-room. One of the finest is Ballantyne's Lounge, operated by J. Ballantyne & Co., drapers, Christchurch. Another very popular one is the Tudor Tearoom in Auckland, which occupies the top floor of Milne & Choyce's department store. The Tudor is partly a restaurant, as light luncheons are served in addition to morning



TEA DISH AND SAUCER OF 1770

This dish has no handle. It was in use until a few years ago at the Tavistock Hotel, London.



Well-Known New Zealand Tea-Rooms

Upper—Tea-room in the drapery establishment of
J. Ballantyne & Co., Ltd., Christchurch. Lower—
Tudor tea-room in the Milne & Choyce Department Store, Auckland.

and afternoon tea. Individual one, two, or four-person nickel-plated teapots are used, and the correct amount of tea is supplied by a measuring machine. The Tudor management also has installed a hot-water boiler which insures that no tea is served unless made with boiling water. The price of tea per pot per person is 6d [12ϕ], while tea with sandwiches, cakes, and scones is 1s 3d [30ϕ].

Australia

Many people think the palm for individual tea-drinking should be awarded to the workers on the great Australian sheep farms in the "back blocks." These men of the wide-open spaces, "four-meal, meat-fed men," who rank as the tallest of any of the civilized races, drink the strongest kind of tea on every possible occasion.

In few countries is tea more popular than in Australia, where the per capita is nearly eight pounds per annum. Blends of India, Ceylon, and Java are the most popular. In many homes and in most hotels tea is served seven times a day—before breakfast, at breakfast, at eleven o'clock in the forenoon, at lunch, at four o'clock, at dinner, and just prior to retiring. Practically all large offices and business houses serve tea to their employees at eleven o'clock in the morning and again at four in the afternoon.

In the average Australian home tea is



THE "BILLY" IN USE ON A PICNIC NEAR SYDNEY

prepared in the same manner and with the same care as in New Zealand, but in the back blocks the bushman makes tea quite differently. He has a smoke-blackened tin "billy" can in which he boils water as soon as he crawls from his bunk in the morning. He throws in a handful of tea and lets it go on boiling until his bacon is cooked. By this time the tea is well stewed and ready for breakfast. The meal over, the billy is left simmering; and when he returns to his cabin at dusk, he rekindles the fire, warms up the black concoction which has stewed all day, and drinks it with the utmost enjoyment.

The billy can, used by the bushman, "sundowner," or "swaggie," has been given the name of "Matilda," for reasons unknown. Under this sobriquet it has been celebrated in an almost-national song, entitled "Waltzing Matilda," which has for its refrain, "You'll come a-waltzing Matilda with me."

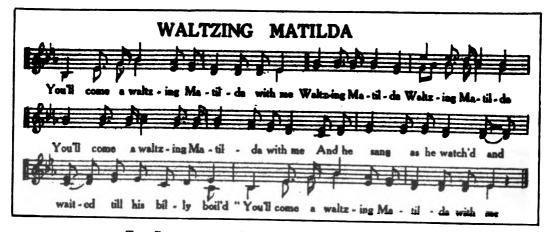
The tea-rooms of the larger cities are much like those to be found in London and New York. In Sydney, "The Leonora" serves morning and afternoon tea at a charge of 1s. All the principal lunch-rooms serve morning and afternoon tea at an average price of 1s per person. Private hotels in Sydney advertise a weekly rate which includes afternoon tea.

In preparing tea in the restaurants big urns are used, such as may be seen in the cafeterias and hotels in the United States; although in Australia, as in America, it is only in the cheaper places that these urns are in plain view of the tea-drinker. Music of some kind is part of the program during the afternoon tea period.

The railroads make a practice of serving tea to passengers en route. On the Trans-Australian Railway, morning and afternoon tea is served to first-class passengers free of charge. Second-class passengers are served in the sleeping compartments, as they do not have access to the lounge car. The charge for a cup of tea and toast is 6d. In addition to morning and afternoon tea on these trains, tea is served to each passenger in his sleeping berth at 7 a.m. All tea is made with freshly boiled water, which is poured over the leaves and allowed to stand for three or four minutes. It then is poured into a previously-warmed teapot and served. A pot of freshly boiled water completes the service.

Canada

Canada is the foremost tea-drinking country of the Western Hemisphere, with an annual per capita consumption of al-



THE CHORUS OF THE AUSTRALIAN BILLY-CAN TEA SONG



AFTERNOON TEA, TRANS-AUSTRALIAN RAILWAY

most four pounds. The demand is chiefly for Indias and Ceylons, with a small percentage of Japan greens, which find their readiest market in the lumber regions and like places.

Canadians are particular about the manner in which their tea is made. In most homes the method is to scald out a crockery teapot, and put into it a teaspoonful of tea for each two cups. Then freshly boiling water is poured on, and the tea is allowed to steep for five to eight minutes. The liquor is poured off the leaves into another warmed teapot to serve—usually with cream and sugar. Lemon with tea or drinking it clear is not common. In Canada, the beverage is served as a breakfast drink, with the other meals throughout the day, and before retiring. Tea bags are being used in increasing quantities.

The large hotels and theatres in leading cities serve tea and cakes in the afternoon. At swagger hotels a charge of 60 cents is made for afternoon tea, while the price for high tea is 85 cents. With the revival of winter sports in Canada, many tea-rooms and tea-houses have sprung up along the trails throughout the country districts. The afternoon tea idea also is gaining favor at the summer resorts. With shoppers, too, afternoon tea is becoming quite the fashion. Most of the big department stores are equipped with tea-rooms and, particularly in winter, do a big business. There are no places where only coffee is served, as in London.

Tea is served in the dining cars of the Canadian railways much the same as in England. The prevailing charge for a cup or pot of tea is about the same as that charged on the railroads in the United States. On the Canadian-owned river and

Great Lake steamers, no special tea-service is provided, as is the case with Britishowned ocean-going steamships. However, tea may be obtained from the stewards when desired.

In New Brunswick, Nova Scotia, and Newfoundland, tea is prepared in the English manner, but tea bags are growing in favor. Five o'clock tea is becoming more of a function in the new modern hotels of St. John, Digby, Halifax, and St. John's, N. F.

The Netherlands

The people of the Netherlands lead the nations of Europe as tea-drinkers, with a per capita annual consumption of three and eight-tenths pounds. Fermented teas of Java, India, Ceylon, and China are favored. In preparing the beverage the Dutch housewife uses only freshly boiling water, permitting the tea to infuse not longer than five or six minutes, and then places the pot under a cozy to keep warm.

Tea may be had in all cafés, restaurants, and in many bars throughout the country. In the larger cafés it is common to see more than half of the men customers drinking tea, although drinks of all kinds, both soft and alcoholic, are available. There also are tea-rooms in the larger centers, operated along lines similar to the tea-rooms in the United States, but there are no places which serve tea to the exclusion of other beverages. Tea can be obtained in these public places both in the afternoon and in the evening.

In the homes, tea is the drink commonly taken at breakfast, and in many households it is served at luncheon, although



ARCADE GRILL AND TEA-ROOM, DEPARTMENTAL STORE OF HENRY MORGAN & Co., Ltd., MONTREAL



A COMPLETE NETHERLANDS TEA SERVICE

On the tea table from left to right are: tea cups with sugar bowl, spoon holder, and creamer behind them; tea-measuring scoop and spoon; tea egg, to hold the leaves during infusion; square china teapot; and glass tea caddy. A tea cosy hangs from the stand, and on the side table is an electric tea kettle and a tea alarm clock.

coffee is largely used. In the late afternoon and in the evening, about an hour after dinner, tea is served in most Dutch homes. The conventional afternoon tea is a family affair—women, men, children, and callers if they drop in.

The United States

The United States has a per capita tea consumption in the neighborhood of threequarters of a pound annually. Americans drink black, green, and Oolong teas, and, unlike the British, we pay more attention to leaf appearance than to cup quality. There is abysmal ignorance concerning differences in teas, popular education having progressed little beyond a notion that the term "Orange Pekoe" is synonymous with quality. Our English cousins tell us we buy poor teas in our blends and usually spoil the beverage in the making. Certainly we seem to prefer the fancy Pekoes to the more substantial brokens, and we may as well admit that even our best hotels, restaurants, and homes as often as not use flat, stale water for brewing.

Indias and Ceylons, which together account for 42 per cent of the American demand, are pretty generally consumed in all the states. Javas and Sumatras repre-

sent an additional 20 per cent. Japans, supplying about 17 per cent of the nation's needs, are used principally by the Northern border and far Western States. Oolong teas are consumed chiefly in New York, Pennsylvania, New Jersey, and the Eastern States; Formosas, representing 8½ per cent of the tea imports, being specially favored in New York and Boston, while Philadelphia always has adhered to Foochows. China teas account for about 8 per cent of the imports; the blacks still being sought after by connoisseurs throughout the Union, while the greens are consumed chiefly in the Middle States, such as Ohio, Indiana, Missouri, and Kentucky.

During the transition period of the late '90s, supper, or "tea," was displaced by dinner as the evening meal. The older generation will remember the light repast at the evening hour, when the teapot reigned supreme. Coffee held undisputed sway at the breakfast and noon-dinner tables, but "tea" and "supper" were synonymous, inseparable, and ingrained parts of the American's daily habit throughout the nineteenth century.

The peak came with a per capita consumption of 1.56 pounds of tea in the United States during 1897. Then followed the big break; among the urban population, dinner took the place of "tea," and coffee was substituted for tea at this meal. In ten years, up to 1907, the tea per capita dropped to .96, and there has been a further drop in the succeeding years.

Package teas are preferred by American housewives and are sold in four sizes—pounds, halves, quarters, and a ten-cent packet holding about 1½ ounces. The latter are the biggest sellers, finding their



AFTERNOON TEA AT SCHEVENINGEN



AFTERNOON TEA CORNER AT THE RITZ, NEW YORK

market in the big cities, while the quarters and halves are about tied for second place. Only a relatively small number of consumers buy the pound size.

There is great lack of uniformity in the use of tea throughout the country; some sections being heavy consumers, and others using very little, depending on racial descent. Also some sections are seasonal consumers, like the Southern States, which consume only a little hot tea in winter, but offset this by liberal consumption of iced tea in summer.

Recently the ubiquitous American soda fountain has begun adding tea, hot or iced, to its menu, and this has opened up a new and important avenue of public tea service.

The introduction of the tea bag, or tea ball, has done much to popularize tea, not alone in the American home, but to an even greater extent among chefs and stewards. The latter believe that tea bags simplify brewing and insure a better and more uniform brew.

Tea bags are made in two sizes—the one-cup and the pot-service. The latter varies from two to four cups quantity. The cup size is made up 200 bags to the pound,

while the pot size varies from 150 to the pound for black tea to 100 for green.

Bags for iced-tea service also have been introduced and are proving popular. These contain from one to four ounces of tea; the one-ounce size being intended to produce one gallon of brew.

The gauze of which tea bags are made is as nearly pure cellulose as it is possible for the chemist and the manufacturer to produce. The claim is made for them that it is not possible for the tea to absorb any chemicals from their use.

The average American housewife prepares tea in practically the same manner as it is prepared in England, but in the homes of Continental emigrants of the first and second generations, tea is prepared after the manner of their mother countries. Infusion varies from three to ten minutes, with the average from five to seven.

To the average American, tea for breakfast is "flat, stale, and unprofitable." He must have his coffee. There are many, however, who prefer tea even for breakfast and invariably at luncheon.

Afternoon tea in the American home has its variants. In many cases, all the traditions of the British "bun worry" are observed, but the younger generation has in-



JAPANESE TEA GARDENS IN AMERICA
Upper-At San Antonio, Texas. Lower-Golden
Gate Park, San Francisco.



A New England Tea Balcony
This is the balcony of the Hall Tea-Room at
Springfield, Mass.

troduced some startling innovations; for example, it is not unusual to find the same hostess serving hot tea in winter and iced tea in summer. In winter, most hostesses bring the pot of tea from the kitchen with the tea all brewed and serve it with nothing but crisp pieces of toast and home-made jam. In the summer, it's tea on the porch, and iced tea is served. Iced tea, being purely an American development, almost any variation and accompaniment that one desires is proper. The tea wagon is popular as it saves steps, but as a rule the American hostess prefers a prettily arranged tray on a small firm table. Instead of the omnipresent muffin stand of the English tea, there is a nest of tables, which the hostess distributes among her guests, keeping the largest for the tea tray.

Tea-drinking in the United States received considerable impetus when the afternoon-tea idea was revived with the dancing craze of the last decade and when, for a while, afternoon tea-drinking promised to become an American institution. Every city, town, and village has since inaugurated some form of the tea-room, or, as they are often termed, tea-gardens. They really are light lunch places.

The growth of the tea-room in the United States is attributed to increasing demand of the public, particularly the workers and the tourists, for more homelike surroundings, where service may be had without the noise and bustle of the ordinary restaurants. The average price of a cup of tea is 10 cents, or 25 cents for a pot of tea for two, including cream, sugar, or lemon, and hot water. There are 200 tearooms in New York City alone and be-

tween 2400 and 2500 tea-rooms and teagardens in the United States.

In the cities, society folk frequent the restaurants of the leading hotels for afternoon tea. Nearly all these places serve black, green, and Oolong teas. New York society does its afternoon teaing in the refined, quiet, and sumptuous surroundings of the best hotels. Tea at the Waldorf-Astoria, Ritz-Carlton, and the Savoy-Plaza, is 50 cents; at the St. Regis, 45 cents; and at the Astor, 25 cents. At Rumpelmayer's the price is 40 cents. Tea bags are common, but not at Rumpelmayers. A Gramercy Park hotel advertises to "serve tea from 3 to 6 afternoons and 8 to 12 evenings, in the solarium on the 17th floor overlooking the city"—which should appeal to any Australasian vis-

The best hotels throughout the country provide an individual tea service for which they charge on the average 20 cents per cup, or 30 cents per pot for two, including sugar and cream, or lemon. Tea bags are universal. In chain restaurants like Schrafft's, tea for one person costs 20 cents, and service for two, 30 cents, while the Childs' chain serves only individual pots for which the charge is 15 cents. Sugar and lemon, or cream, is included in both places. In New York, "Gypsy" tea rooms serve tea with cinnamon toast or cake for 50 cents, and read "a real fortune gratis from your teacup." In the Fountain and Tea Room on the 86th floor of the Empire State building tea is 20 cents per pot.

Tea is served with meals on all American coast and river steamers, and ocean-going vessels, as well as on all principal railway lines. The average price per pot of tea per



Tea-Room, 86th Floor, Empire State Building, New York



THÉ DANSANT, HOTEL ADLON, BERLIN

person on the navigation and rail lines is 20 to 25 cents, including sugar and cream, or lemon. The Great Northern Railway serves a daily complimentary four o'clock tea to its Pullman passengers, in the observation cars. On the Pennsylvania Railroad, the charge is 25 cents per pot, containing one tea bag. A like charge is made in the diners of the New York, New Haven & Hartford Railroad, the Seaboard Air Line Railway, and the New York Central lines. Tea bags are used on all railroads.

In some of the larger American cities, afternoon tea is served to office and factory workers. In Boston, one concern serves four o'clock tea to its employees, who also are accorded the privilege of brewing a cup any time they please throughout the day. In many American business houses there is a pause for afternoon tea.

Germany

Germany has yet to acquire the teadrinking habit as her annual per capita consumption amounts to only one-fifth of a pound. Five o'clock tea is confined to very limited circles. Speaking generally, coffee has the preference as an afternoon drink; tea being taken with the evening meal

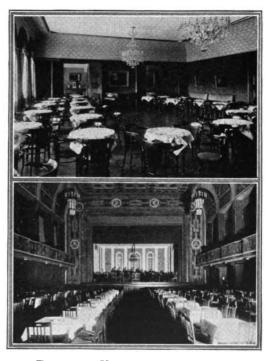
In few German homes, and then only among the higher classes, can one now and then get a cup of tea prepared in the English way. A uniform method of preparation does not exist. There is little regard for the keeping of tea, and often there is no proper pot reserved for its brewing; some even use the coffee-pot. Tea prepared in the English manner may be had in first-class hotels, cafés, and bars of cities like Berlin, Hamburg, and Munich. Five

o'clock tea at these places is a function of the well-to-do. In coffee-rooms and restaurants, tea is served in glasses, a "tea egg," or perforated tea ball, serving as infuser. Among families in the east provinces, the Russian samovar may be found.

The housewife prefers tea packets of 50, 100, and 250 grams, though tea in small boxes of a quarter- and a half-pound are in demand. In the country, little bags of 10 and 20 grams of cheap quality tea are sold. Seventy-five per cent of the tea consumed is Indian or Ceylon; the balance comes from China and the Netherlands Indies.

France

The annual per-capita consumption of tea among the French is only about one-tenth of a pound. Tea-drinking is confined to the bourgeois; the poor classes preferring to use wines that can be had cheaply and in abundance. The large English, American, and Russian colonies in France, particularly on the fashionable Riviera, help to increase the Frenchman's per capita consumption. The teas come from China, Indo-China, and the British Indies. Lately, Javas appear to be coming into favor.



Tea at the Kurhaus, Bad Nauheim
Upper—Small tea-room. Lower—Large tea-room.



RUMPELMAYER'S IN THE RUE DE RIVOLI, PARIS

Tea is prepared much as it is in England. The use of tea bags is not common. The tea hour is between five and six o'clock in the afternoon; somewhat later than it is in England. This is due to the fact that the dinner hour in France is later.

Afternoon tea in the hotels, restaurants, and cafés, usually is served with milk, sugar, or lemon. The always-delightful



WHERE THE FRENCH "FIVE O'CLOCK" STARTED W. H. Smith & Son, Place de la Concorde, Paris.

French pastry accompaniment may be responsible for the tendency of the guests to demand a second cup.

The Parisian "five o'clock" started modestly and has been evolving gradually ever since the day in 1900 when the Brothers Neal, in their stationer's shop, now W. H. Smith & Son, on the Place de la Concorde, at the end of a counter, on two tables, began to serve tea and biscuits. Since then afternoon tea has grown steadily in importance and assurance among the smart set in Paris.

The first modern tea-room to popularize the brew in Paris was the "Kardomah Tea Rooms." Others sprang up, and the tea-rooms now are as numerous in the French capital as cafés and restaurants. The department stores have democratized the "five o'clock." Tea also may be had al fresco at the restaurants in the Bois.

Afternoon tea at from 3 to 10 fr., with cakes from 1 fr. each, may be had between four-thirty and six-thirty o'clock at any of the following favorite resorts: the Ritz, Rumpelmayers, Colombin, Ciro, Hôtel de Crillon, Mirabeau, Carlton, Claridges, Thé



KARDOMAH TEA-ROOMS IN THE RUE DE RIVOLI

Volney-Chatham, Restaurant du Pré-Catelan, Thé Recamier, A la Marquise de Sévigné, Pihan, Compagnie Anglaise, W. H. Smith & Son, Kardomah, Ixe, Dovet, Montaber, Rivoli, and the British Dairy.

Soviet Russia

The people of Soviet Russia now consume China, Japan, Ceylon, India, and Georgia teas. The term "Russian tea" for many



AFTERNOON TEA AT THE HOTEL RITZ, PARIS



POPULAR TEA-ROOMS IN PARIS

Upper-Grands Magasins du Printemps.
**Lower-Salon de Thé "a la Marquise de Sévigné."

years meant China tea imported into Russia. The beverage is made with boiling water drawn from a samovar, a large, graceful, copper, brass, or silver boiler, heated by charcoal in a metal pipe extending vertically through its center. The charcoal pipe usually resolves itself into four legs and a tiny grate; while the top is crowned by a saucer-shaped receptacle upon which the teapot rests. There it usually is to be seen keeping hot above the steaming urn, and ready to fill the tall glasses in which tea is served à la Russe.

Before the samovar is brought to the table, the boiler is filled with water, lighted chips and charcoal are placed in the vertical pipe, and an extra length of pipe is placed on top to draw the flame. When the charcoal is glowing steadily and the water is boiling, the source of forty-odd cups of good cheer is borne into the room and placed upon a silver tray at the right hand of the hostess.

When Russians foregather for tea, the host sits at one end of the table, while the hostess presides over the samovar at the other. Tea is made in a small teapot and this is placed on top of the samovar.

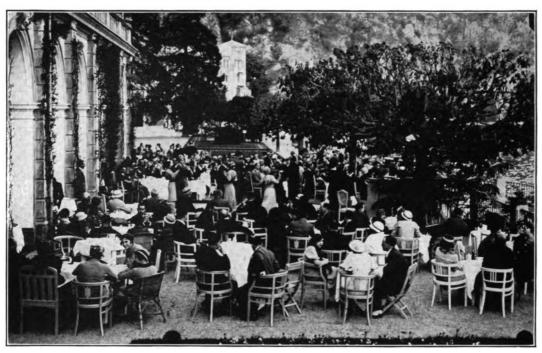
As soon as the tea has drawn its full strength, the hostess fills each glass about one-quarter full of tea from the pot, and the other three-quarters with boiling water from the samovar. The glasses have silver holders with handles, similar to those used at American soda fountains. A slice of lemon is served with each glass of tea whenever lemons are obtainable, but no milk or cream. Each guest has a tiny glass dish of jam and another for sugar. Large basins, placed about the table, contain a supply of sugar in large lumps. The guests supply themselves from the central sugar basins, using sugar tongs, and then break the lumps into small pieces by means of silver nippers. The sugar is rarely placed in the tea by the peasant classes, but is taken in the mouth prior to each mouthful of tea. A not unusual variant is putting a spoonful of jam in the tea in place of lemon; and in winter time, sometimes a spoonful of rum is added as protection against influenza.

Connoisseurs of tea for three centuries, the Russians differ in their tea-drinking from all other peoples. Mostly, they eat but one substantial meal a day. Their breakfast is light, consisting of bread and tea; but dinner and lunch are combined into one enormous meal, which is eaten be-



TEAING IN THE BOIS, PARIS

Upper-Pré-Catelan. Lower-Pavillon d'Armenonville.



THE TEA TERRACE, GRAND HOTEL VILLA D'ESTE, LAKE COMO

The tea-room per se is frankly an importation in Italy, as it is in many other Continental countries, but all Italian tourist centers have them.



TEA GARDEN, "CHEZ VOUS," EXCELSIOR PALACE HOTEL, LIDO, VENICE

AL FRESCO AFTERNOON TEA AND DANCING IN THE ITALIAN MANNER

tween three and six. Throughout all the rest of their waking hours they drink tea constantly, if they can get it.

The tea-room, or chainaya as it is called in Russian, abounds in the cities, towns, and villages, and is liberally patronized during all hours of the day and night. In fact, the tea-rooms have replaced largely the vodka shops of czarist days.

Russian tea is not always drunk from glasses, for in some districts cups and large mugs are used. Also the accompanying painting by a native artist shows some muzhiks drinking tea from saucers that sometimes are put under tea glasses.

Tourists visiting present-day Russia have been impressed with the free early-morning tea and rusks served them on railway trains by the Soviet authorities, and like-



RUSSIAN MUZHIKS DRINKING TEA

wise by the rush of the native Russians for hot water for tea, supplied free, from a large boiler in the stations, every time the trains stop.

Other European Countries

The other countries of Europe are not large tea-drinkers. However, five o'clock tea may be had in polite society and at the best hotels in Austria, Hungary, Belgium, Czechoslovakia, Denmark, Finland, Greece, Italy, Norway, Poland, Sweden, and Switzerland.

The Austrians, Hungarians, and Czechoslovakians mix rum, lemon, or milk with tea. The Greeks prefer it about an hour after dinner. The Norwegians drink it with their evening meal, about eight or nine o'clock. In Poland, tea à la Russe obtains. Sweden's upper classes serve it with coffee at afternoon "coffee parties." The Swiss serve it to the foreigner, but



T. Dunkerley

TEA AT THE CAFÉ DE PARIS, MONTE CARLO

seldom use it themselves. Laplanders, in Europe's Farthest North, brew tea in a large bowl which is passed from hand to hand around the family circle.

China

The Chinese, inventors of tea drinking, do not use teapots as a rule, but simply infuse the tea with water much below the boiling point in the cups from which it is drunk without milk or sugar. The tea leaves are placed in cups which are not unlike our bouillon cups, but without handles. The cups are filled with hot water and covered. The covers resemble inverted saucers and are used to strain off the tea. The covered cup is raised to the mouth and with the fingers of the hand holding the cup the lid or cover is raised by the forefinger just enough to permit the liquid to flow into the mouth as the cup is tilted.

Statistics not being obtainable, it is not possible to do more than guess at the actual consumption of tea by the Chinese people.



PRESENT-DAY TEA HOUSE, SHANGHAI



TEA-HOUSE INTERIOR, SHANGHAI

By some they are believed to be the world's largest tea-drinkers. Certainly in no other country, except Japan, does tea-drinking appear more universal. Tea is drunk in China by high and low, upon all occasions and at all hours of the day and night. It is presented on receiving visits, making purchases, transacting business, and at all ceremonies. It is offered invariably on entering a Chinese house. The covered cup, with freshly infused tea, is placed before each guest. The request to take more is generally construed as a polite hint that the interview should end.

Invariably, one's manners are tested by the way one drinks tea. It is very rude to drink a whole cup of tea at one time. Before you drink, you turn politely to the head of the family and as many others as possible, and invite each in turn to drink; after which you sip your own tea.

People of the upper classes sometimes put into a cup of tea two or three dried flower blossoms, which, when expanded on the surface of the bright infusion, are most attractive.

Well-to-do Chinese drink black tea, but not usually new tea. They keep it in sealed earthen jars for a couple of years before using it, to moderate the pungent quality which new tea possesses and make it more acceptable to the taste.

The oldest manner of tea-drinking still is followed by certain classes in the

preparation of brick tea. By this method, the powdered tea is boiled with rice cakes into a thick, syrupy substance; the bitter taste being removed by adding ginger.

In the cities, teahouses, or kwans, flourish. They are the equivalent of the continental cafés, and are the only convenient places of public resort. Of the 400 teahouses in Shanghai, almost all of them have fixed clienteles. Different groups of customers attend at different hours of the day. Customers may bring their own tea and, for one cash, sit all day at the tables and have as much hot water as they please.

When tea is taken at a tea-house, the practice is to use two cups; a large one for brewing that will hold about a halfpint, and a thimble cup, smaller than a demitasse, from which the beverage is drunk. The larger cup has a saucer, which is placed bottom side up over it. This saucer is provided with a notch to permit pouring into the smaller cup.

In the modern home and in business offices, the beverage is made in teapots, and is poured into individual cups having neither saucers nor handles. However, along the seaboard, where foreign influence is strongest, handles are used, and the cups are placed in saucers, after the western manner.

Station-platform hot-water heaters for tea are familiar sights on Chinese railways. A galvanized-iron canopy offers protection from the sun, and beneath it the concession-naire has his charcoal braziers gently burning, keeping hot his kettles filled with water or his single copper caldron. Passengers usually supply their own tea, teapots, and cups. A copper cash pays for the hot water. For those who have not their own utensils



THE WILLOW PATTERN TEA-HOUSE, SHANGHAI



HOT WATER FOR TEA, PEIPING-MUKDEN RAILWAY

the hot-water vendor supplies both. These are carried on by the train to the next station. The vendor at that station recovers them and returns them by train boy or as service to another traveler—all very like the English custom.

Japan

The Japanese, like the Chinese, are great tea-drinkers. It is estimated that they consume more than three-fourths of their annual production of the leaves, or about sixty-five million pounds. They have a worshipful regard for it, and always refer to it as O Cha, meaning "Honorable Tea." Upon arising it is the custom in the home to offer tea to one's ancestors by placing it before the altar, and to one's parents before partaking oneself.

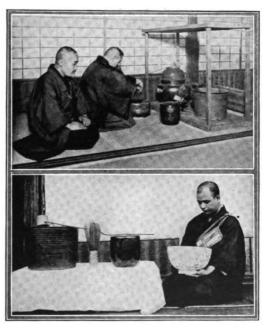
Japan's greatest gift to society was the Tea Ceremony, and its influence persists in high and low places to-day. Powdered tea still is offered to honored guests by the host, who fills the cups with hot water, then places in each as much powdered tea as will lay on the point of a knife. This is stirred until the liquor begins to foam and has the consistency of soup. No sugar or milk are used. Every lady of good family is schooled in the etiquette of the ancient Tea Ceremony as part of her classical education; at least three years of instruction and practice are considered necessary to acquire proficiency.

The entire population—men, women, and children—all drink tea constantly; in fact, the business of the empire is said to be transacted over the teacup. Green tea is used mostly, but certain brands of Cey-

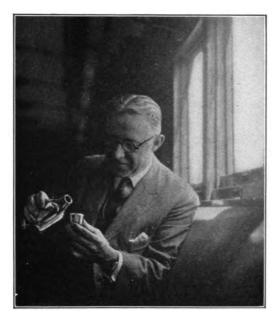
lon and India black teas are on the menus of the leading hotels, restaurants, steamship lines, and dining cars. Tea is served in small handleless cups, without sugar or milk. The manner of making it is to cool freshly boiled water to a temperature of about 176° F. before pouring it on the tea leaves in a heated teapot, where it is infused for from one to five minutes.

At the railway stations, hawkers sell little green bottles of tea to travelers for four cents a bottle. These bottles contain about a pint of hot tea and are provided with a glass-cup top from which the beverage can be drunk or sucked, which is the popular but noisy way of drinking tea in Japan. Little brown teapots of ready-brewed Ceylon and India tea are offered in the same way for 7½ cents, including the pot.

Tea-houses abound throughout the country. They are democratic, comfortable, and afford more amusement than the conventional hotel. To the Japanese; the home is too personal a place to receive a guest; therefore guests are entertained in teahouses, clubs, and restaurants. The teahouses are so much a part of the national life that one would be quite lost without them. Green tea is served from the typical Japanese teapots, without sugar or milk,



ANNUAL TEA CEREMONY, SAIDAIJI TEMPLE, NARA Upper—Making the tea. Lower—Priest with the great tea bowl, a foot in diameter.



Individual Tea Service, Japanese Railways

These little green bottles of tea are sold at nearly
all railroad stations.

in dainty handleless teacups. The mass of the people in Japan use *Bancha*, or ordinary tea, made from coarse leaves.

Other Asiatic Countries

As in the beginning, boiled and churned butter-tea continues the great stand-by of the Tibetans. No Tibetan drinks less than fifteen or twenty cups a day, and some even seventy or eighty.

Siberia drinks both loose and brick teas from China after the Russian manner. The Mongols and the other Tartar tribes make a kind of soup from powdered brick tea, which they boil with alkaline steppe water, salt, and fat. Then they strain it and mix it with milk, butter, and roasted meal. Korea consumes mostly Japan teas, prepared by dropping the leaves into a kettle of boiling water, and serving with raw eggs and rice cakes. The eggs are sucked between sips of tea, and the cakes are eaten when the eggs have been consumed.

The natives of Indo-China follow the Chinese method of preparing the beverage, and prefer strong acrid teas to those of delicate flavor. They never sweeten tea for drinking, and laugh heartily when they see a European drop a lump of sugar in his cup. They drink tea when it is near the boil. It is customary to see before the door

of each house a big teapot for the use of travelers and visitors.

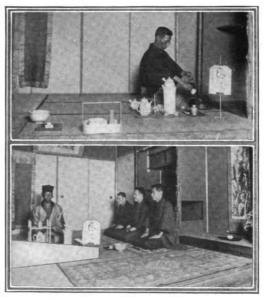
In Burma, the tea manufactured and consumed by the natives is the *letpet*, or pickled tea, prepared in the time-honored fashion. Newly-married couples drink from the same cup a mixture of tea leaves steeped in oil, to insure a happy union.

The population of Siam consumes enormous quantities of the native miang, or Siamese tea, which they chew with salt and other condiments. The country also imports some teas from China, Formosa, and India.

The bulk of the teas consumed in the Straits Settlements come from China and Ceylon. Unsweetened tea is drunk by the large Chinese population. The European residents follow the English custom.

Tea-drinking is becoming a habit among the natives of British India through persistent efforts of the Tea Cess Committee. The natives buy only the cheapest teas and dusts, but every bazaar and railway station now has its tea stall and there are street vendors who sell tea to passing pedestrians. The British residents use the best India teas and import small quantities of the leaf from Ceylon and Java.

The average native Ceylon villager relishes a cup or bowl of tea, which he drinks without milk, but with a little sugar or, more often, jaggery—the coarse sugar of the palm. In tea kiosks patronized by the



SENCHA TEA CEREMONY, JAPAN
Upper-Kagetsuan-Shin Form. Lower-Gyo Form.



TIBETANS MAKING BUTTER TEA

laboring and poorer classes, a strong extract of tea is made at the beginning of the day, and the kiosk keeper puts a spoonful of this into each cup and fills it with boiling water. The foreign residents use the fine teas raised in Ceylon, and import some Indias and Javas.

Tea is the national drink of Iran. A native can live without meat or vegetables,

but he must have seven or eight cups of tea each day. The home-grown variety is insufficient for local needs so 75 per cent is imported from India, China, and Java—mostly green teas.

In Arabia, the tea-drinking habit is spreading and, as in Iran, green teas are mostly in demand. Every coffee house reserves a tea table, in the drawers of which one finds the precious commodity, together with sugar and a hammer to break it up. The large cities have sumptuous tea-rooms built in Moorish style. In these, the tea and cakes are as good as those served in the larger tea-rooms of London, Paris, or New York.

Practically all of the tea imported into Syria and Lebanon is consumed by resident Americans, Europeans, and the higher native class. The beverage is prepared in the English manner.

In Palestine, tea obtained from Ceylon, the United Kingdom, and India, is prepared in English fashion, but served after the Russian manner.



U. S. National Museum

UTENSILS USED FOR MAKING AND DRINKING TEA IN TIBET

Brass pot.
 Bamboo strainer.
 Silver spoon.
 Wooden bowl.
 Red leather and striped cloth barley bag.
 Copper tea pot.
 Wooden butter box.
 Brick tea.
 Small tea dasher.
 Wooden tea churn and dasher.



A TEA SELLER IN BAGDAD

In Turkey, street vendors brew tea by the Russian method and serve it in glasses. The outfit includes a brass samovar and portable table with tea caddies, slices of lemon, glasses, spoons, and saucers. A European teapot also is carried for the occasional Occidental with different ideas of tea-brewing.

In the native Indian state of Cashmere, churned tea and bitter tea, or *Cha tulch*, are favored. The latter is boiled in a tinned copper pot and red potash, aniseed, and a little salt are added. For churned tea, bitter tea is churned with milk.

Cream tea, or Vumah cha, is a product of Turkistan, and sometimes is found in Cashmere. For this, only black tea is used. The tea is boiled in a tinned copper pot and a much stronger decoction made than ordinary tea. Cream is added to the tea while boiling or after it has been poured into the teapot. Bits of bread are soaked in the beverage.

In Bokhara, a Soviet state, the native carries his tea with him in a small bag, and when he is thirsty he looks for the nearest tea booth, of which there are thousands, and has the proprietor brew it for him. Tea seldom is purchased at these booths—the proprietor being paid only for the water and his skill at brewing the beverage. The breakfast drink is tea flavored with milk, cream, or mutton fat, in which bread is dipped. After drinking,

it is customary for Bokharans to eat the tea leaves.

Tea-Drinking Countries of Africa

Green tea is the favorite beverage of Morocco, and is an essential article of diet for all Moors of whatever degree or occupation. Practically all the tea comes from China. Black tea is used only by the European population. The Moors drink the beverage hot out of glasses, the liquor being almost saturated with sugar and strongly flavored with mint.

In Tunisia, most of the tea comes from China, the French colonies, and the British Indies. Black tea has the preference.

Most of the tea consumed in Algeria comes from China. It is prepared by the Europeans in much the same manner as it is in England, but the native population brew theirs with mint and much sugar.

In Egypt, tea is prepared and served as in England, except among the natives, who prepare it in glasses and drink it with the addition of sugar, only. Five o'clock tea is customary among the resident foreigners and Europeanized Egyptians.

In the Union of South Africa, which comprises the provinces of the Cape of Good Hope, Natal, Transvaal, and the Orange Free State, the favorite teas are Ceylons and Indias, home-grown Natal, and a small proportion of Netherlands Indies. Tea is drunk not only in the afternoon and after meals, but also in the early morning on arising and at eleven o'clock. Tea is prepared and served in the English manner.

Tea-Drinking in Latin America

In the countries of Central America, teadrinking is an exotic custom followed by foreign residents.



A TEA-ROOM IN ALGIERS



SALON DE TÉ, MEXICO CITY
This famous tea rendezvous, with its Aztec
Temple decorations, was formerly the Jockey
Club.

The tea consumed in Mexico is imported from the United States, China, Great Britain, and British India, in the order named. Most of the natives drink coffee. Tea is consumed by foreign residents and a few better-class Mexicans. In Mexico City, a number of restaurants, tea-rooms, clubs, etc., serve afternoon tea.

Little tea is consumed in Guatemala, El Salvador, Costa Rica, Honduras, and Nicaragua, as these are coffee-producing countries, and coffee is their national drink.

In South American countries, tea drinking is done mainly by foreign residents or the upper classes; the lower-class native populations almost invariably prefer coffee or yerba maté. In Paraguay, Argentina, Chile, Peru, Bolivia, Ecuador, and Southern Brazil, yerba maté prepared from the leaf of Ilex paraguayensis is the popular drink. The leaf is prepared by roasting and crushing; hot water is poured upon it, and the infusion is imbibed through a tube with a strainer from a bottle-shaped gourd.

Sugar and milk or the juice of oranges, limes, or lemons sometimes is added.

Tea Oddities in the News

Many tea oddities creep into the day's news. Editors love them; they make good fillers, but not all of them are authentic. Here are a few typical specimens.

At the London Zoo, the chimpanzees are to be seen drinking tea in a special tea room on a platform with one of their number pouring and all of them dressed for the occasion.—Country people of Great Britain are advised to throw spent tea leaves on the fire in order to make the coal go farther.—In some English villages, dried raspberry leaves are used as a substitute for tea.—At an inquest held on a London man, it was stated by witnesses that the deceased had been in the habit of smoking tea leaves.—In China, pillows stuffed with tea leaves are supposed to be good for the eyes.—A little cold tea mixed with cold water and applied with a soft woolen rag is said to make stained woodwork look bright and fresh.—In some parts of Southwestern China and Tibet, where transaction by monetary unit is a rarity, Chinese brick tea is used extensively as a medium of exchange. It is made in various qualities, having different values.—"Hop Tea," a blend of Indian and Ceylon teas with Kentish hops—invented by Mr. H. A. Snelling, London, was manufactured and sold extensively throughout the United Kingdom in the 1920's until it was discovered that an Act of Parliament, 200 years old, prohibited the mixing of any other leaf with that of the tea plant.—Tea oddities in the news of 1933-34 included the manufacture and sale of tea candy in Japan and tea cider in Java and Ceylon.



CHAPTER XXIV

EVOLUTION OF TEA-MAKING APPLIANCES

THE PRIMITIVE KETTLE—THE CHINESE ADOPT THE WINE JUG AS MODEL FOR THEIR FIRST TEAPOTS—THE FAMILIAR, SQUATTY TYPE IS EVOLVED—CHINESE BOCCARRO POTS—THE JAPANESE INVENT THE OVERHEAD HANDLE—TIBETAN TEAPOTS—FIRST TEAPOTS IN EUROPE—MATCHED TEA SETS APPEAR—LATER EUROPEAN AND AMERICAN POTS—INVENTIVE GENIUS AND THE TEAPOT—INSET PERCOLATORS AND TEA-BALL POTS—TEA BAGS—OTHER INFUSERS—TEA-TABLE MISCELLANY

HE introduction of tea and coffee in eastern countries, which began in the early years of the Christian era and reached western lands in the seventeenth century, created a demand for types of infusing and drinking appliances that were unique as compared to any previously used; and each of the two beverages developed infusing and drinking apparatus peculiarly its own.

The earliest method of tea-making was by boiling, according to Kuo P'o who wrote about A.D. 350. From this we are led to infer that the earliest tea-making appliance was the primitive kettle. However, the Chinese soon adopted a method of teamaking that called for infusion rather than boiling, and a definitely prescribed equipage was evolved. A small kettle was used to heat the water, and the tall, vase-shaped, slender-spouted wine jug was adopted for The earliest-known the infusing vessel. picture of a teapot, in the Ch'a Ching, written by Lu Yu in the eighth century, shows a pot of this character. But the Chinese were not long in discovering the general unsuitability of pots of the winejug type for tea; they were too unstable to be safe containers for a scalding liquid, and their slender spouts clogged with tea leaves. Gradually, a squatty teapot evolved that was suited to the tea beverage.

Chinese Boccarro Teapots

Early in the sixteenth century, the potteries at Ihing, a few miles up the Yangtze from Shanghai, became famous for teapots known to Europeans by the Portuguese name boccarro [large mouth], which came to Europe with the teas, and served as models for the first European teapots. These were small, individual pots [Fig. 1, "A"] according to Chou Kao-ch'i, author of Yang-Hsien ming hu hsi, an account of the Ihing teapots. Not many of the early Ihing teapots were so conservative in design, however, for examples preserved in various museum art collections present a bewildering array of form and motive taken from all parts of the animal and vegetable kingdoms, mythology, and classic art. The musk-melon [Fig. 1, "B"], on account of its globular shape, was one of the favored models.

Ihing teapots still are immensely popular in China, but the modern productions are clumsy and rough as compared with those turned out during the latter half of the Ming dynasty.

Japanese and Tibetan Teapots

The preference for Ihing teapots was even more marked in Japan, where the ware is known as shu-dei [vermillion ware] or haku-dei [white ware], and where no cha-jin's equipage was considered complete without a shu-dei or a haku-dei teapot.

Japan has a ware called banko-yaki which copies as closely as possible the Ihing ware, but it is appreciably lighter and coarser. The most significant thing about the Japanese adoption of the Chinese teapot, has been the refinement of model and the frequent use of the overhead

handle, which allows the pot to be carried easily. The melon shape, in a multiplicity of decorations and glazes, is the most common.

Concurrently with the evolution of the teapot in China, Tibet evolved a pitcher-like pot especially designed for the service of the churned tea of that country [Fig. 2].

The First Teapots in Europe

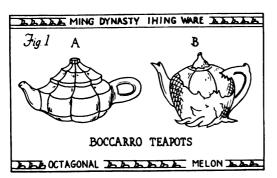
When the Dutch and English East India companies began importing teas, they brought supplies of the various appurtenances associated with tea drinking, includ-

ing cups, pots, and tea jars.

In Holland, Germany, and England more or less successful efforts were made to imitate the Chinese boccarro teapots early in the eighteenth century. The Chinese models were accepted and closely imitated at first, because a Chinese atmosphere was preserved about tea drinking after its western adoption, and nothing else would have been acceptable. It was not until the master potters and silversmiths of Europe, later in the eighteenth century, began to apply artistry of the first order to its design and decoration that the teapot reached its apotheosis in the West.

The earliest English teapot now in existence is a lantern-shaped silver pot of the year 1670, in the Victoria and Albert Museum at London. From this and other early teapots to the splendid tea sets of the late Georgian period, there was a progressive display of skill and craftsmanship that is remarkable when we take into consideration that the first ones were copied from the Chinese product at its artistic peak.

The pyriform, or pear shape, was the first European departure from Chinese tradition. This is exemplified by a tiny silver teapot of 1690, having a spout stopper attached to the lid-knob by a chain. Its total height is 4¾ inches. Pyriform teapots





Victoria and Albert Museum, London

EARLIEST ENGLISH SILVER TEAPOT, 1670
Inscribed as having been given to the Honourable East India Company in that year by George, Lord Berkeley. In the early days of its use in England tea was boiled in coffee pots and served in cups not bigger than large thimbles.

[Fig. 3-A] were much in vogue during the reign of Queen Anne, 1702–1714, and in one form or another have retained their popularity to the present time. The spouts on the earlier ones are duck-neck shaped, but this model evolved into the more slender and graceful swan's neck, while the shape of the pear was inverted, so that the larger part was uppermost and the lower, or smaller part of the pear, rested on a more or less elevated foot.

A type of globular silver teapot existed concurrently with the pyriform models. This had a globe-shaped body on a raised foot, with handles and spouts variously arranged. Occasionally, examples of the round teapots are found with straight,

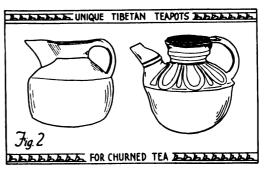




Fig. 3-Eighteenth Century European Teapots

tapering, tubular spouts; but usually they had the duck-neck spout. The handles often were of wood, but silver handles also were used, and these were fitted with washers of ivory, inserted in the joints as heat insulators [Fig. 3-B].

Next came teapots of the graceful urn, or vase, shape, on a high foot, and decorated with festoons, knots of ribbon, and medallions, in the style of Louis XV. These had graceful swan-neck spouts, silver handles insulated with ivory, and represent the only thing like a reversion to the original wine-pot type in the history of teapot evolution [Fig. 3-C].

Matched Tea Sets Appear

The greatest factor in the evolution of complete tea sets came with the introduction of the English porcelain and cream-colored ware during the last half of the eighteenth century. In that period, English ceramic factories produced matched sets which, as the art progressed, showed more and more beauty of line and decoration.

The vogue for "China" tea sets raged at first among all classes, but presently died down as far as the wealthy families were concerned. The latter reverted with great enthusiasm to silver pieces, and a demand was created for complete tea services made in this beautiful metal. In the last half of the reign of George III, these sets were produced extensively by English and American silversmiths.

Tea sets also were produced by pewterers in the less precious but highly utilitarian metal so dear to our great-grandfathers and grandmothers. However, no new forms of the various pieces of the tea service were developed and, in the main, the models were simplifications of current silver pieces.

Later European and American Pots

Dating from the late Georgian period in both England and America, two new forms appeared; these were the oval and octagonal silver pots, commonly known as "Colonial," which have perfectly flat bases, plain "C" shaped handles, and spouts that often are straight and tapering.

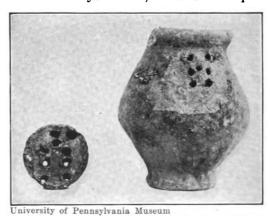
The European chinaware teapots, due to limitations connected with their structural strength, clung in the main to variations of the globular, or melon, shape. However, many strikingly-artistic models were produced, within the capabilities of the ceramic materials.

There was a stage in the evolution of the lids in which the cover rested in a sort of recess or box in the top of the body of the pot. This antedated the pots in which the lid sets over the top. To-day, both types of lids are used, and they have a deep flange to prevent their falling off too easily when the tea is poured.

It always has been a principle of correct teapot construction to provide for ingress of air to permit the liquid to pour without dripping. This is effected by looseness around the cover or a vent hole placed above the level of the liquid—usually in the lid.

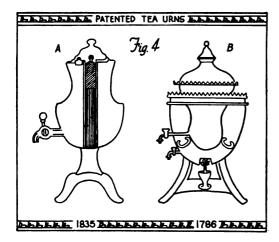
The strainer, built over the opening from the body of the pot into the spout, is much older than tea; it dates from about 1300 B.C. The idea was early applied to the construction of coffee pots and, later on, to teapots.

About the year 1700, tea and coffee pots



THE FORERUNNER OF THE TEAPOT STRAINER

Pot with spout strainer—spout broken off—and separate strainer for filling. Palestine, circa 1300 B.C.



made of tinware and of britanniaware, began to appear. A tin teapot, made of tin-plated sheets of sheet iron or steel, represented then, as now, a minimum of cost combined with a fair degree of durability. Britanniaware is made of a silvery white alloy of antimony, tin, and copper; and to these sometimes are added small quantities of lead, zinc, or bismuth.

Salt-glaze earthenware teapots of fantastic shapes were produced in Stafford-shire from 1720 to 1780. These shapes were made possible because molds were used instead of the pots being thrown on a wheel, in the usual way. Such pots appear as houses, animals, and other curious objects.

Nickel-plated copper, and nickel-plated britanniaware tea and coffee pots were introduced in the last half of the nineteenth century, and enjoyed widespread use before their partial eclipse by enamelware and, later, by aluminumware.

Enamelware tea and coffee pots, began to be widely used in the last decade of the nineteenth century; their popularity having to do largely with their sanitary surfaces and ease of cleaning.

The most widely popular teapots in England and America to-day are the Englishmade, brown-glazed, earthenware pots from the ancient pottery towns of Swinton, Burslem, Whieldon, etc. In Germany, Czechoslovakia, and France the most commonly-used pots are made of a hard-body porcelainware, and are decorated to match the dinner and tea sets to which they belong.

The most recent development in teapot construction is the transparent pot of heat-

proof glass, such as is used for cooking purposes.

Inventive Genius and the Teapot

Inventive genius continually busied itself with improvements for the teapot from the period of its introduction into the western world. Considerations of space make it impossible to review all of the teapot patents, but a résumé of typical examples will assist in a study of progress in teamaking devices.

The first English teapot patent was issued in 1774 to John Wadham of the Parish of St. George-in-the-East, County of Middlesex, for a "tea fountain," in which the water was kept hot by a cast-iron insert like the one shown in Fig. 4-A. Later urn patents had a spirit lamp as the heating agent [Fig. 4-B]. In 1812, Mrs. Sarah Guppy, wife of a Bristol merchant, was granted a patent on a teapot with a wire basket suspended in its upper part for boiling eggs.

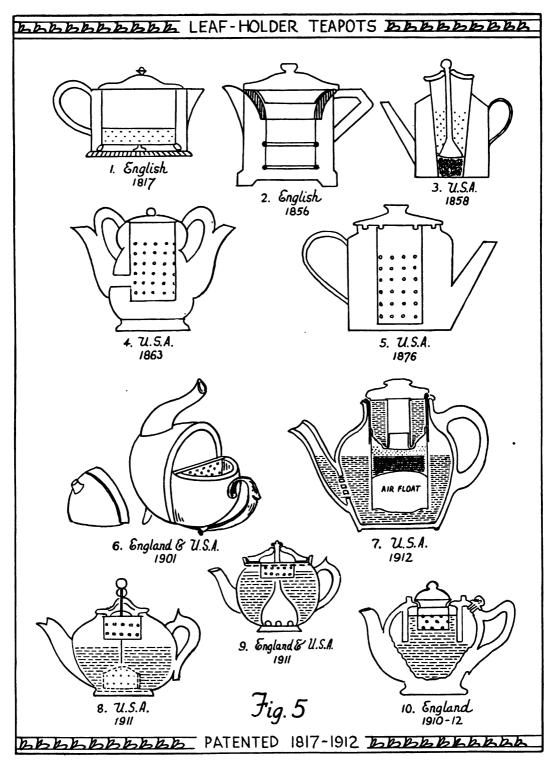
At the beginning of the nineteenth century, a Frenchman named De Belloy and a British-American, Count Rumford, working independently of each other, evolved from the ancient spout strainer the Frenchdrip coffeepot and the coffee percolator. From these there soon developed the inset infuser for holding the leaves in teapots.

Inset Infuser Teapots

In 1817, Henry Meade Ogle was granted an English patent for a tea or coffee biggin [Fig. 5, No. 1] with a metallic leaf basket that rested on the bottom of the pot. In 1856, Charles Carey patented in England a pot [Fig. 5, No. 2] with a muslin strainer-bag on a metal frame which ex-

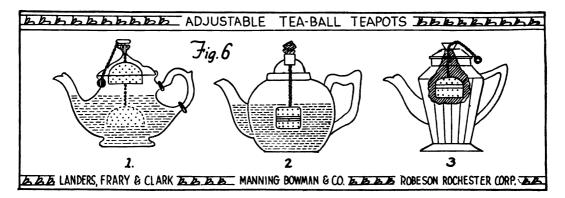


OCTAGONAL COLONIAL SILVER TEAPOT



VARIOUS ENGLISH AND AMERICAN PATENT INSET INFUSER TEAPOTS

Ogle's tea or coffee biggin.
 Suspended strainer bag.
 Leaf Squeezer.
 Dual strength.
 Removable leaf basket, attached to lid.
 "S.Y.P." tip-over pot.
 The "London Tea Bob."
 Raisable leaf holder.
 Air-valve leaf separator.
 The "Anti-Tannic" air-valve tea infuser.



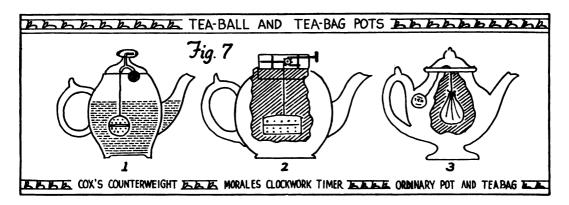
tended nearly to the bottom of the pot, but was suspended from the top opening. William Obdyke took out a United States patent in 1858 for an inset percolator pot [Fig. 5, No. 3] having a plunger resting on the tea leaves, to be used for squeezing out all of their strength.

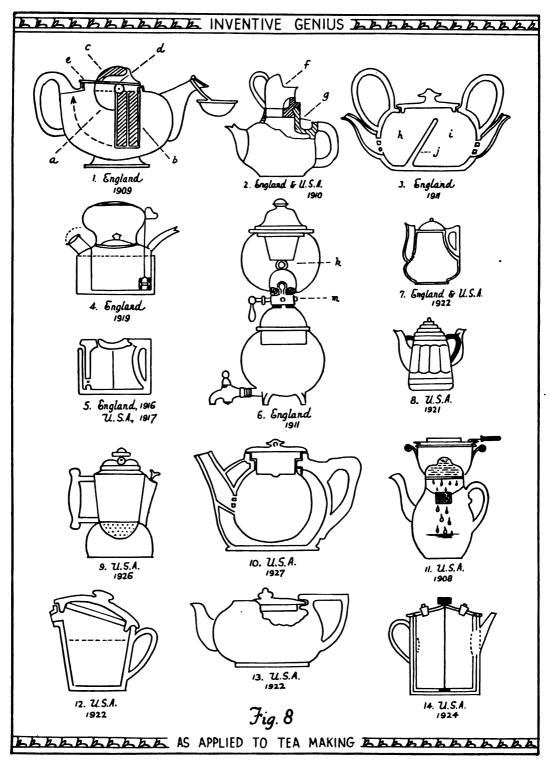
In 1863, Alexander M. Bristol, patented in the United States a teapot [Fig. 5, No. 4] having two handles and two spouts. One spout was connected to the outer shell of the pot, while the other led directly from the lower part of the infuser basket, for the benefit of those who desired extra strong tea. Another American, John W. Brewster, received a patent in 1876 for a percolator teapot [Fig. 5, No. 5] with the leaf basket detachably secured to the lid.

In 1901, the Earl of Dundonald patented in England and the United States the S. Y. P.—"Simple Yet Perfect"—tip-over teapot [Fig. 5, No. 6], which automatically separates leaf from liquor after infusion by being returned to an upright position. This teapot was brought to America in 1907 as the "Ceylon Teapot," being used for demonstrations in connection with the propaganda for Ceylon tea.

In 1912, Elmer N. Bachelder was granted a United States patent on "The London Tea Bob," an inset percolator teapot [Fig. 5, No. 7] provided with a waterdrip timing device, on the order of an hour-glass, to withdraw the leaves from the liquor after any predetermined infusion period. Previously, in 1911, John C. Hollands was granted a United States patent on a teapot [Fig. 5, No. 8] with a leaf basket that could be raised or lowered, and Leonard Lumsden, an Englishman, took out a United States patent, and L. L. Grimwade an English patent, on an ingenious idea for separating the leaves from the liquor in a percolator teapot [Fig 5, No. 9] by the release of an air valve in the lid. The culmination of the vented air-chamber infuser teapots appears to have been the "Anti-Tannic" tea infuser [Fig. 5, No. 10], patented in England, 1910-12, by A. F. Gardner and T. Voile.

The market is well supplied with non-patentable inset infuser teapots that differ little, if any, from the original teapots of this type used more than a century ago. Such pots meet the popular demand for simplicity and easy cleaning.





SHOWING A WIDE VARIETY OF ENGLISH AND AMERICAN PATENTS

1. Automatic electric teapot. 2. Combination teapot, milk jug, and sugar holder. 3. Self-diluting pot. 4. Combined teakettle and teapot. 5. Cube safety teapot. 6. Urn with separate infusing and dispensing chambers. 7. Safety-spout pot. 8. Double handles and spouts. 9. Whistling pot. 10. Vacuum insulated. 11. Richheimer Tricolator. 12 and 13. Safety lids. 14. Dual tea and coffee pot.

The idea of confining tea leaves in a perforated metallic container and suspending this in the teapot by a small chain, string, or other flexible medium, dates well back into the nineteenth century; but it is only recently that teapots have been manufactured having this convenience as a built-in feature.

In 1909, Landers, Frary & Clark, New Britain, Conn., began the manufacture of their tea-ball teapots, which they patented in the United States and Great Britain. Fig. 6, No. 1, shows a pyriform model with the tea ball adjustable to two positions. When raised it fits into the lid, clear of the liquor.

In 1910, Manning, Bowman & Co., Meriden, Mass., patented and began the manufacture of tea-ball teapots. Their patent covers the method of attaching the tea ball to the knob, so that when the tea ball is raised the chain holding it is entirely enclosed under the knob [Fig. 6, No. 2].

The Robeson Rochester Corporation, Rochester, N. Y., manufacture tea-ball teapots that have a cup-shaped receptacle for the chain knob in the center of the lid, and the tea ball is adjustable to any desired height [Fig. 6, No. 3].

In 1916, Irwin W. Cox took out a United States patent on a tea-ball teapot [Fig. 7, No. 1], having a counterweight arrangement within the pot to raise the tea ball when released by a movement of the knob.

In 1917, Caleb A. Morales, sought to make this removal fool proof; he patented in the United States a pot [Fig. 7, No. 2] with a clockwork arrangement in the lid to withdraw the tea ball from the liquor after a predetermined number of minutes.

Individual Tea Bags

The latest development in tea-making devices is the individual tea bag. This innovation has been received with mingled feelings of doubt and alarm by our English cousins, but it has attained a tremendous vogue in America.

Trade acceptance of tea bags in the United States dates back to about 1920. Their use has increased rapidly since then. At first tea bags were used only in public eating places. Gradually they were introduced into the home. Whereas, at one time, 80% of the total output of tea bags in the United States was used in restaurants, as compared with 20% in the home,



ROYLE'S SELF-POURING TEAPOT, MANCHESTER

Pressing the lid, which forms a piston, pours the
liquid without the pot being lifted.

at present there is a decided trend toward increased home use and the indications are that the ratio is being reversed.

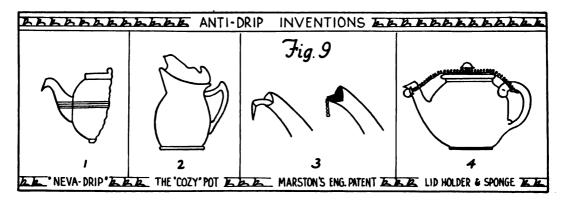
The tea bag is simply a spoonful or more of tea sewn in a cloth packet, and is designed to be dropped into the cup for individual service or to be infused in a teapot [Fig. 7, No. 3]. When the infusion is completed the little bag is removed by its string.

Other Infusers and Gadgets

In 1858, James M. Ingram, of New York, took out a United States patent on a tea and coffee infuser consisting of a steam boiler connected to an infusing receptacle.

In 1908, I. D. Richheimer, Chicago, introduced his tea and coffee Tricolator [Fig. 8, No. 11]. This is an aluminum device resting on an ordinary tea or coffee pot, which combines the French-drip and filtration ideas, with Japanese paper as the filtering medium. The tea Tricolator differs from the Tricolator coffee-maker in having a smaller filter chamber, smaller holes for the water to pass through, and thicker filter paper.

In 1909, M. Marzetti patented in Great Britain an automatic electric teapot [Fig. 8, No. 1]. This was a trick affair having a horizontally rotating cover (a) meunted on pivots, with an external opening (d) on top in which the dry tea leaves were placed, and two heating electrodes (b) extending into the pot from its under side. Cold water was poured into the pot and the electric current turned on. As soon as the water boiled, the steam pressure acting on the cover-flange (e) caused the cover member



to rotate clockwise with the assistance of a counter weight (c) thereby dumping the tea into the pot and lifting the electrodes from the water.

In 1910, Thomas H. Russell, an Englishman, patented in Great Britain and the United States a teapot [Fig. 8, No. 2] with a receptacle for sugar (g), immediately above the handle, and a detachable hinged lid in the shape of a milk pitcher (f). In the next year, G. W. Adkins and K. L. Bromwich, patented in England a self diluting teapot [Fig. 8, No. 3] having a hot water chamber (h) and an infusion chamber (i) with a sloping partition (j) between them. The act of tilting the pot to pour from the tea infusion chamber caused hot water to flow over the partition, diluting the tea, but when hot water was poured no reverse flow occurred. Also in 1911, C. H. Worsnop and G. Chappell were granted an English patent on a tea urn [Fig. 8, No. 6] having an upper infusion chamber (k) and a lower dispensing chamber, with a valve and filter (m) between.

In 1916 and 1917, R. C. Johnson patented in England and the United States a "Cube" safety teapot [Fig. 8, No. 5] having flat sides, top, and bottom, with a view to safe packing and storing. In 1919, N. Joseph



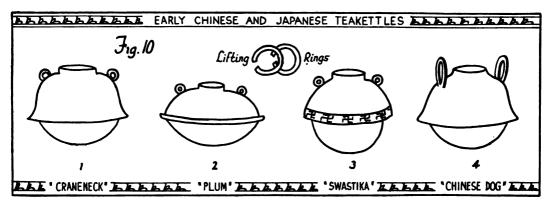
"TEAKET" HEAT-PROOF GLASS TEAPOTS

took out an English patent on a combination teakettle and teapot [Fig. 8, No. 4]. Hot water from the kettle was admitted to the tea in the pot through a valve. In 1921, Ben F. Olsen patented in the United States a teapot [Fig. 8, No. 8] with two handles and two spouts. This pot could be passed from hand to hand without the risk of spilling.

In 1922, Fritz Lowenstein, a New Yorker, patented a teapot [Fig. 8, No. 12] designed to rob the lid of its tendency to fall off into the teacup. In the same year, William G. Barratt, of Stoke-on-Trent, secured the English and American patent rights on a teapot [Fig. 8, No. 13] provided with a projection from the handle over the rear part of the lid as a cure for this same difficulty. The idea has been further elaborated by a number of other patentees. Also in 1922, Arthur H. Gibson, of Burslem-on-Trent, was granted patents on both sides of the Atlantic for a teapot [Fig. 8, No. 7], with a safety spout laid back against the body.

In 1924, John A. Kaye, of Sault Ste. Marie, Ontario, Canada, came to the aid of boarding-house keepers with a combination pot [Fig. 8, No. 14] with rotating compartments for making and serving both tea and coffee. In 1926, Stephen P. Enright, Philadelphia, secured a patent on a steampressure tea and coffee pot [Fig. 8, No. 9] which whistles as soon as the boiling point is reached.

In 1932, the Hartford Products Corporation, Hartford, Conn., introduced a heat-proof glass teapot known as the "Teaket." This was improved, in 1934, by the addition of a patented leaf-catching device to prevent tea leaves from pouring with the beverage. The Teaket is made in 2, 4, 6,



and 8 cup sizes, either with wooden handle or with scalloped metal shell and chromium plated handle.

Tea Balls and Tea-Making Spoons

The tea ball, or "tea egg" as it is called in European countries, was evolved during the first half of the nineteenth century.

A recent development of the tea-ball idea is the perforated tea-making spoon. This usually is about the size of a teaspoon, and is provided with a lid of the same general size and shape as the bowl.

Tea Service Miscellany

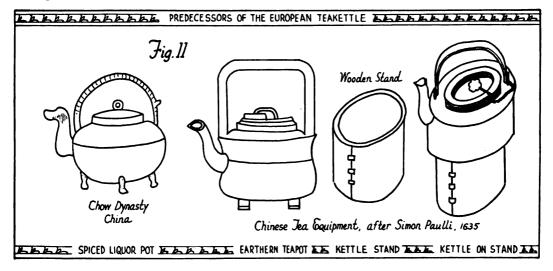
There are tea strainers without number on the market, due to the tendency of teapots of the ordinary sort to emit tea leaves when the beverage is poured. In its oldest and most popular form, the tea strainer is of a size and shape to rest on the top of a teacup while the tea is being poured into it. From the cup strainer there evolved during the last half of the nineteenth cen-

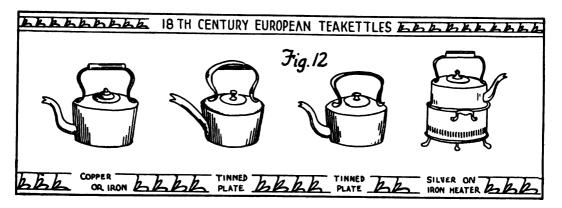
tury the swinging spout-strainer, designed to be attached to the spout of the teapot. The chief objection is its tendency to drip.

But the spout-strainer is not the only offender in the matter of dripping, as many perfectly innocent looking spouts have a bad habit of dribbling either from the mouth or down the under side of the spout and body of the pot. Inventive genius has applied itself to the problem, however, and has resulted in several patented spouts, etc. [Fig. 9], designed to overcome the difficulty.

Teakettles and Water Boilers

The idea of the teakettle, or tea-water boiler, came from China along with the first tea and teapots. European countries had their open and lidded caldrons to boil water for various purposes, but the Chinese developed a small tea-water kettle on the order of a chafing dish, which was designed to rest on a portable charcoal heater. Lu Yu mentioned these kettles in the eighth





century, and similar ones have been preserved by the Japanese [Fig. 10]. The Japanese usually made them of iron, though some were of bronze. They were of many curious shapes, but had certain features in common; viz., a rather broad, uncovered top opening for pouring and filling, some form of flanged body design to fit into the top of the furo, or heater, and a pair of pierced lugs into which lifting rings were inserted for lifting from the fire.

It is believed by some that the familiar European covered and spouted teakettle was originally a tea brewing device—in fact, a teapot. Drawings of Chinese teapots published by early European authors and reproduced in Fig. 11 seem to furnish confirmation of this view.

Fig. 12 shows the full bodied, covered, and spouted teakettle as developed in Europe, during the eighteenth century. From left to right, the first three are copper, iron, and tin. The kettle at the right is silver, and has a spirit lamp. In America, small copper teakettles were in use at Plymouth, Mass., in 1702. The first cast iron teakettles were made in Plympton [now Carver], Mass., between 1760 and 1765.

The first silver teakettles on European tables appeared in the reign of Queen Anne. They were fitted with separately-made supporting stands, and were provided with spirit lamps. Later in the eighteenth century, the silver urn displaced the teakettle on the tea table, and the kettle stayed out until a recent vogue for period tea sets brought them in again.

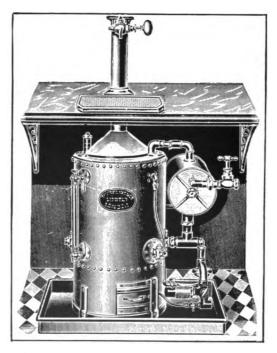
The urn had two advantages over the teakettle. One was elegance of form, and the other was freedom from lifting. Electric heaters, like those applied to other table articles, are now obtainable on tea

urns, samovar sets, and table teakettles, although the spirit lamp seems to hold its own, as heretofore.

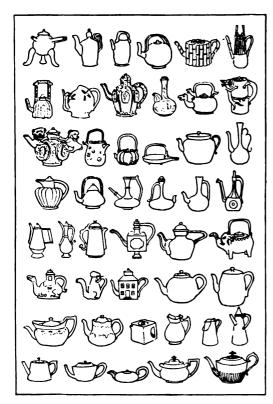
The samovar, or tea-water urn of the Russians, evolved independently of the tea water heaters of Western Europe. Made usually of copper, they are kept boiling by a tube of live charcoal extending vertically through the center of the urn from top to bottom.

Urns and Boilers for Public Use

The exigencies of catering to numbers beyond the capacity of the ordinary teapot have created a group of larger urns and



AUTOMATIC BOILING-WATER HEATER, ENGLAND



TEAPOTS ANCIENT AND MODERN

A grouping by Mr. T. Dunkerley from specimens in several London museums.

boilers for public use. The earliest and simplest of these, the plain cylindrical "teameeting boiler," with its primitive muslin tea bag, still is used for occasional large gatherings at churches, public halls, and camps. But for meeting the regular public demand at the tea hours in high-class restaurants there are patented devices which automatically supply freshly-boiling water immediately, whenever the draw-off tap is opened—insuring the best possible infusion. The boiling water from these machines is drawn onto the proper amount of leaf in either cups or teapots. English tea-making machines of this character are Stott's, Still's, Jackson's, Summerling's, etc. Many American restaurateurs draw water for tea-making from the hot-water jacket of their nickel-plated coffee urns. There are two perfectly sound reasons why this is not an ideal arrangement; these are, that the water seldom is freshly boiling, and that in the off hours between meals, when the tea hours occur, the heat usually is shut off to conserve gas, leaving the water in the jacket merely tepid. The characteristic difference between the English and the American methods is that the English insures against any water being drawn that is not freshly at the boiling point, while the opposite is apt to be the case in the United States.

Rise and Fall of the Tea Caddy

The English and American tea caddy was a lineal descendant of the tea jars used by the Chinese and Japanese for keeping a small supply of the prepared leaf. During the latter years of the eighteenth and early years of the nineteenth century, exquisite little caskets were fashioned by Chippendale and other master-craftsmen to safeguard the household supply of tea. When tea became less costly and lost its status among the family valuables, the caddy devoluted into the tin tea canister of the kitchen, where it usually is kept to-day.

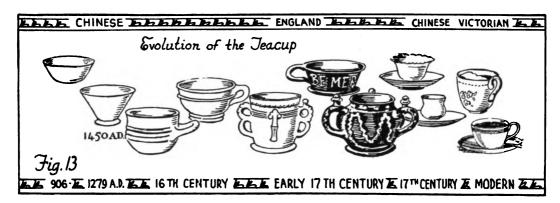
Evolution of the Teacup and Saucer

The teacup and saucer, like the teapot, had an oriental beginning. The discovery of true porcelain in China, contemporaneously with the introduction of tea-drinking, resulted in the production of dainty handleless and saucerless china teacups. The first step in the evolution of the saucer was the invention of a lacquered wooden cupholder, which protected the fingers from the hot teacup. Later, the ingenious Chinese formed a ring around the bottom of the cup, and a hundred-and-one new styles of cup-holders made their appearance. From



CADOGAN COVERLESS TEAPOT, ENGLAND

It was filled through a funnel-shaped tube in the bottom.



among them there gradually evolved the porcelain saucer as we know it to-day.

The Chinese teacups and saucers made for export to Europe in the seventeenth century were dainty little things. The cups were about 21/4 in. wide across the top, about 11/4 in. wide at the bottom, and about 1½ in. deep. The saucers were about 4½ in. in diameter. The European potters copied the Chinese teacups and saucers and continued to make them tiny in size at first, but ale and posset-drinking England was used to tankards and almost equally large two-handled posset cups, so they were soon making "tea dishes" of fairly generous capacity. As tea, like posset, was a hot drink the English potters began putting handles on their tea dishes; some of them had two handles and a lid, but these designs were not so popular as the onehandled cup that has survived. The teacup handle is a distinctly western improvement, for even though occasional examples of Chinese teacups with handles have been found, the traditional teacup of the native Chinese has none [Fig. 13].

Another development was the introduction of cup plates by English potters about the year 1800. They were miniature plates to hold a teacup and any light refreshment.

After about fifty years they went out of fashion, only to be revived recently in what are popularly known as "bridge sets," for serving tea and light refreshments at the card table. The reincarnated cup plate is oblong or oval, like a miniature platter, rather than circular, like its original.

The substitution of glasses for teacups in Russia and other Slavic nations dates from early in the eighteenth century.

Evolution of the Teaspoon

The teaspoon is a western contribution to the tea set. Various forms of small spoons were used in Europe as far back as the thirteenth century, but the teaspoon as we know it made its appearance contemporaneously with the introduction of tea and coffee in fashionable Continental and English homes.

The first teaspoons were as small as our demitasse spoons, and were both few and precious; but in the Georgian period they grew to their present size, and were produced in greater numbers. One of the most interesting things about teaspoons is the combination of strength and grace that has been worked into their design as a result of the progressive craftsmanship and artistry of their makers.



CHAPTER XXV

PREPARATION OF THE BEVERAGE

VARIOUS ASPECTS OF SCIENTIFIC BREWING—WHAT EXPERIENCE HAS SHOWN TO BE THE BEST METHOD TO FOLLOW FOR PRODUCING AN IDEAL CUP OF TEA IN ENGLAND AND IN THE UNITED STATES—THE MAIN ESSENTIALS—WATER AT THE BOIL—FIVE MINUTE INFUSION BEST—Advice to Tea Lovers on How to Buy Tea and How to Make It in Perfection—Quantity Tea-Making for Restaurants, Hotels, and Soda Fountains—Some Tea Recipes

In approaching the subject of the proper preparation of tea as a beverage it is necessary that we take into consideration the local background. For example, it does not follow necessarily that the most popular method of making tea in England is to be recommended for Americans, or that the ideal method as worked out by experts and connoisseurs in Great Britain is the one best adapted to the United States. Not any more so than that the most favored Latin custom of making coffee in Brazil is best for Americans—because it is not.

We have seen how the tea drink was made and served in the beginning, and how it is prepared in the principal tea-consuming countries today. Now let us examine briefly into what science and epicureanism has indicated is the best procedure to obtain the cup that cheers in perfection in the two great English-speaking countries, Great Britain and the United States: for here, in the last analysis, tea manners and customs are to be found at their best among the Caucasian peoples. Let us not be surprised to find that considerations of climate and national characteristics indicate one thing for England and the same considerations indicate something quite different for America.

Responding to the author's request, his collaborator on the scientific aspects of this work, Mr. C. R. Harler, has contributed the following discussion of tea making:

It is difficult to say, in a few words, what constitutes tea goodness. The connoisseur

drinks tea for its delicate aroma and flavor, and, to him, the stimulating and comforting qualities are secondary factors. On the other hand, the settler in the back blocks of Australia who is, perhaps, the world's heaviest tea drinker, cares little for the finer qualities of the beverage, judging by the way in which he makes his tea. It is common in these wayback places to put the tea in a billy can and to let it stew. This process produces a stimulating, strong, thick liquor, but one lacking all the subtleties of a carefully prepared infusion. Quite different from the tea made by the lonely Colonial is that drunk, at all hours of the day, in China and Japan. In these countries the brew usually is so weak that the beverage becomes little more than a thirst quencher.

The Main Essentials

In the British Isles, Australasia, North America, and Holland, where most of the black tea of India, Ceylon, and Java is consumed, the beverage is drunk primarily for its stimulating effect and then for the peculiar sour-harsh taste or pungency, given by the astringent tannin and tannin compounds which occur in a black tea infusion. This taste becomes palatable by use. The alkaloid caffeine, responsible for the stimulus in tea, has a slightly bitter taste when taken in medicinal quantities, but the small amount present in the usual tea beverage is practically tasteless.

Caffeine taken in small doses increases mental and muscular power and has no after, depressant effect on the system. Tannin in large doses has a deleterious effect on the mucus membrane of the mouth and on the alimentary canal, but in the amount present in a cup of carefully-made tea its harmful effect is negligible. The ideal preparation of tea, then, is one which extracts a maximum of caffeine and a not-excessive amount of tannin. Such a preparation also conserves the aroma and flavor; evanescent qualities easily lost by careless preparation.

Digitized by Google



TEA-MAKING DEVICES IN GENERAL USE IN EUROPE AND AMERICA

"London Tea Bob," American.
 Inset infuser, American.
 Tea and hot water pots, American.
 "Cube" pot, British-American.
 China, tea-ball, American.
 Willow Pattern, Wedgwood.
 China, American.
 Glass, American.
 Silver-plated tea-ball, American.
 Silver-plated tea-ball, American.
 "Silver-plated tea-ball, Eritish.
 "Cosy." British.
 "Anti-Tannic" air-valve infuser, British.
 "Cosy." British.
 China, tea-ball, British-American.
 Fireproof stoneware, British.
 Inset infuser, stoneware, British.
 Improved "S.Y.P.," tip-over, made in Japan.
 Stoneware inset infuser with safety lid and anti-drip device, British.
 China inset infuser, Austrian.
 Enamel, Czechoslovakian.

To bring out the best qualities of tea in the infusion, two main essentials must be observed -first, the water must be freshly boiled; second, the infusion should not be for more than five minutes. There are other points to be observed, but they are of a secondary nature

and will be mentioned en passant.

The kind of water used in tea making is of importance, but this matter is outside the control of the tea consumer who must take his water from the main. The tea buyer makes his purchases according to the district in which the tea is to be distributed, and often tastes the tea samples infused with the water from the district for which he is buying. As an example of how the local water may influence the tea buyer, it may be mentioned that some tasters consider that the chalky waters of Kent, England, go best with teas which are slightly high fired. It is doubtful, however, whether the average tea drinkers' palate would be able to detect these subtle differences. Alkaline water or water containing much iron gives dull-colored infusions. Tea infuses more readily in soft water than in hard. Small, thick, full teas are required for soft waters; brisk, full, flavory teas where the water is hard. Liverpool water, which comes from the nearby Welsh mountains, is said to be the softest water in England and the best for mak-

ing tea.
Water that comes from the main is aerated, and modern irrigation schemes include aeration of the water supply by allowing it to flow over a corrugated dam. When water is brought to the boil and kept boiling for some time, the dissolved air which it contains is driven off and it becomes "flat," or de-aerated. Tea made from such water has not the "live" taste that is noticed with an infusion prepared from

water just brought to the boil.

Tea made at railway stations and on ships is often poor, although the blend may be a good one. The reason for the poorness often is traceable to the fact that the tea is stewed in an urn, whereby not only is the water rendered "flat," but an excessive amount of tannin is extracted and the essential oil, making for aroma and flavor, is distilled off in the steam. On ships, the water usually is heated by passing steam into the vessel which re-places the household kettle. In this case, prolonged steaming may overboil and de-aerate the water, so that even though the tea is made in separate tea pots the best is not made of the infusion. Another common cause of poorness in ship's tea is the use of artificial milk. On ships where milk is made from milk powder, butter, etc., in an "iron cow," the tea is said to be a great improvement on the ordinary ship's product.

Water at the Bubbling Boil

The water used in tea making should be actually at the bubbling, boiling point, if the brew is to be of the best. In places of high elevation where water boils much below 220° F. it is noticeably difficult to get a good cup of tea.

The quantity of tea required is popularly laid

down as "one spoonful for each person and one for the pot." This measure is obviously unsound, not only on account of the variation in the size of spoons, but also because of the extra spoonful, regardless of the number of persons about to partake of the brew. Long experience among tea drinkers has shown that about two-thirds of an ounce of tea to about a quart of water [18 grams to 900 cub. cms.] is the best measure.

When the water is poured into the teapot it must be left to "draw" and, while this proceeds, the pot should be kept warm. customary method of doing this is to cover the pot with some insulating material—a tea cozy—or to keep a small light under the vessel containing the infusion. The latter method is a process not to be recommended because the brew may boil and will certainly steam a little, thereby giving up some of the essential oil. As an aid to keeping the teapot warm while "drawing," it is well to rinse it out with hot water before adding the tea.

Five-Minute Infusion is Best

The question of the length of time the tea should be allowed to draw is one which has been settled empirically, and certain conclusions thus reached have been verified in the laboratory. In the case of fermented teas, it is considered that a five-minute infusion gives the best results both as regards the quantity of caffeine and of tannin, although Mr. George F. Mitchell, former United States Supervising Tea Examiner, reached slightly different conclusions in a series of tests some years ago at the United States Department of Agriculture. These investigations demonstrated that a perfect cup of tea from a chemical standpoint was, unfortunately, not a perfect cup of tea from the consumers' standpoint. From a chemical standpoint the length of time in which the maximum amount of caffeine and total soluble matter was extracted with the minimum amount of tannin, averaged three minutes after boiling water had been poured on the leaves. After that time more tannin was extracted with only a small amount of caffeine. However, in most cases this makes a very "skinny" cup of tea lacking body and a certain amount of pungency that is desired by all tea drinkers; and, of course, if cream or milk is added to this beverage it takes away from the small amount of pungency, so the cup appears even less desirable. For this reason, Mr. Mitchell concluded it best to brew to that is to be drunk without cream or milk from three to four minutes and with cream or milk from four to five, and even six minutes, as in some teas the real flavor of the tea does not come out until after a six-minute infusion.

It is Mr. Mitchell's opinion that one of the reasons why Americans do not consume more tea is because they drink tea with their eyes. As soon as an infusion of a fully-fermented tea gets the least bit of color, they imagine it is too strong; and they fail to steep it long enough to get the full benefit of the flavor and body. They should learn not to judge the strength of the tea by the color of the infusion, as a deep color does not necessarily



denote a strong tea. It all depends on the

kind of tea being used.1

After tea has infused five or more minutes, the partly-spent leaf should be discarded. If all the brew is not poured out after five-minute infusion, the remainder should be poured off the leaf if it is to be drunk at a later period.

The Messmer Method

Messmer of Frankfort a/M. evolved a method for making tea which, while quite scientific, seems "too bright and good for human nature's daily food." Messmer's method is to put one teaspoonful of leaf into a previously-warmed china or earthenware pot, pour upon it sufficient actively-boiling water to cover and permit all the leaves to expand in infusion. Draw five minutes, and then pour off the extract into a smaller pot. Repeat the procedure, but infuse for only three minutes, adding the second infusion to the first brew. In the cup, add more boiling water according to the strength desired. By this method one obtains the maximum of stimulant, flavor, and aroma, and the minimum of tannin, in happy combination.

Caffeine and Tannin Content

An average cup of tea contains about ¾ grain of caffeine and 2 grains of tannin. The medical dose of caffeine as suggested in the British Pharmaceutical Codex is 1 to 5 grains and of tannin 5 to 10 grains. It will be realized, therefore, that these two most-important constituents of tea are present in very small amounts; especially when it is remembered that the caffeine is injected gradually and the tannin is fixed by proteins during its journey through the alimentary tract.

Milk and Sugar

Milk should be added to tea. This not only mellows the taste and adds body to the liquor, but the casein therein renders the tannin insoluble. In such a state, the astringency of the tannin is lost and the harmful effect on the mucus membrane of the mouth is obviated. Not till the tannin enters the smaller intestine is it set free, and here it exercises its properties, although a degree of toleration is developed by tea drinkers. Milk or cream in excess detract from the characteristic bite of tea, consequently few tea drinkers add more milk than will give an amber-colored infusion.

Milk contains 3½ per cent of casein, and this precipitates the tannin. Now cream, true cream, the Devonshire stuff, contains very little casein, which mostly remains in the skim. American cream really is thickened milk, and hence contains much more casein than what is known as "cream" in England, but less casein than ordinary milk. Hence, for American

can people we may say, "add milk or cream," but for English people, "add milk." The word cream has a somewhat different significance in the two countries.

The addition of sugar is a matter of taste, and many people do without it because it tends to mask the peculiar taste of tea. The addition of lemon, customary in Russia, adds a lemon flavor. Where tea is drunk thus, it usually is taken very weak.

Although the amount of meat protein precipitated by the 2 grains of tannin in the average cup of tea is negligible, it is better not to

take meat with tea.

Rules for Scientific Tea Making

The way to get the best out of tea is as follows:

- 1. Water should be brought first to the boil.
- 2. The teapot should be warmed by rinsing with hot water.
- Add about two-thirds of an ounce of tea to make one quart of infusion.
- 4. Allow the tea to draw five minutes under cozy.
- 5. If all of the tea is not to be served immediately after "drawing," then pour off the tea for subsequent use and keep in separate pot.
- pot.6. Do not "water up" partly spent tea, but make a fresh brew.
- Milk should be added till the infusion is amber colored.
- 8. Sugar may be added.

For the British Tea Drinker

The inveterate British tea drinker usually takes his tea strong, and the strength is often gauged by the depth of color of the tea as it is poured from the pot. Some years ago, leaf teas, well twisted, were in demand on the English market. These teas gave up their soluble coloring matter slowly as the leaves untwisted, and the teapot could be watered once or twice before these substances were exhausted. Watering, however, produced a thin, weak tea, lacking in stimulant. People sometimes added a crystal of soda to the second brew "to bring out the strength of the tea." What actually happened was that the soda turned the infusion alkaline, thereby bringing about the formation of brown, dioxidized tannin compounds. The goodness of the tea was reduced and a "flat" liquor made, but the color of the infusion was darkened, and this, in many cases, was sufficient warrant that the tea was all right. The watering of tea is not recommended.

The present high rate of tea consumption in England is believed to be due partly to the fact that broken teas are used extensively in place of leaf teas. A broken tea is one that has been hard rolled during manufacture and broken up in the roller, so that a flaky rather than a twisted tea is obtained. A flaky tea gives its liquor quickly, and most of its goodness is removed by the initial infusion. This quick brew suits the present day rush. The watering of the leaf after the first brew has



¹ George F. Mitchell, "Correct Tea Brewing," The Tea and Cofee Trade Journal, New York, July, 1930, p. 44.

been taken yields a much poorer liquor with a broken tea than with a leaf tea.

In India and other hot countries where tea is drunk, it causes free perspiration, as do other hot drinks, but the ultimate effect on the drinker is considered to be a cooling one. Even when ice is available in India, people often prefer hot tea to cold drinks. The physiological explanation is that the after-evaporation from the pores much more than offsets the actual heat taken with the tea; in fact, the principal cooling effect of either ice water or hot tea lies in the after-evaporation. It is said that ice water, in addition to cooling us at the time of drinking, takes off fifteen times as much heat later, through the pores; while a cup of hot tea takes away in evaporation from the skin fifty times as much heat as it brings to us.

Advice to Tea Lovers

Addressing the consumer who would know more about tea and tea making, or the tea lover who yearns to become a connoisseur, it may be well to discuss with him several phases of the subject.

TEA CHARACTERISTICS.—Generally speaking, teas may be divided into three classes,—1, fermented or black; 2, unfermented or green; and 3, the semifermented or oolong teas. The tea plant being practically the same plant in all countries, the differences in the various classes mentioned are due to methods of manufacture, and local climatic, soil, and cultivation conditions. There are hundreds of marks of tea, differing with the country, district, and garden; while the number of possible blends is almost unlimited.

The fermented or black teas include the China Congou or "English breakfast" teas, subdivided into North China Congou [black leaf] from Hankow and the South China Congou [red leaf] from Foochow; India, Ceylon, and Java [blacks].

The unfermented or green teas include two main varieties, Chinas and Japans; also such green teas as may be manufactured in India, Ceylon, and Java.

The semifermented [Oolong] teas are obtained from Formosa and Foochow.

Among the black teas that grow and are plucked the year round in Southern India, Ceylon, Java, and Sumatra, the best qualities are obtainable as follows: From Southern India, in December and January; from Ceylon, in February, March, April, July, August, and September; from Java and Sumatra, in July, August, and September.

The seasonal teas are those of Northern India, China, Japan, and Formosa. North-

ern India's fermented teas are best when made from the second flush in June and July, and the autumn flushes from September onward. The first pickings from April to October of the North and South China blacks are best. The best China greens are made in June and July, although they are obtainable from June to December. In Japan, the season is from May to October. There are several crops, but the first and second—May and June—are best. In Formosa there are five recognized crops; viz., spring, first and second summer, autumn, and winter. The season extends from April to November. The summer teas—June and July—are the finest.

"Orange Pekoe," a term used to conjure with by American tea merchants, has nothing to do with oranges, nor is it a particular kind or quality of tea. It simply is a grade consisting largely of the first and second leaves of the tea shoot, and results from sifting the tea, after firing, through a sieve which has a mesh of a certain size. Orange Pekoe from high-grown tea bushes is a very fine tea; from low-grown bushes is not so good as some of the larger-leaf sizes from mountain-grown bushes, and it can be distinctly inferior. The term "Orange Pekoe" is in no sense a description of quality, as the cup value of the tea depends entirely on the country of origin, the elevation at which it was grown, climatic conditions in which it was produced, and the manufacturing process to which the tea has been subjected.

WHAT KIND TO BUY.—Before the general acceptance of packet teas, the average consumer approached the dealer with a request for a pound of black or green tea, knowing little more than this about the article, and leaving the rest with the dealer. Frequently it was not suspected by either dealer or consumer that there were as wide differences between black teas alone as there are between tea and any other beverage, or as there are between coffee and chocolate. Today, the average consumer must be content with the packet-blend selections made for him by the proprietary packers, unless he wishes to become a tea connoisseur, and has access to a tea specialist's shop.

How many marks of China black tea is it possible for the tea merchant to furnish? We answer, after careful enumeration of the kinds and grades, about 500. And how many of green? About 200. And how many of Ceylon and India? over 2000.

How many of Japan tea? About 100. Java, Sumatra, and the other tea countries supply at least 200 more. Now, as all these 3000 teas can be blended, it follows that it is possible to obtain an enormous number of combinations. It is remarkable, therefore, that after hundreds of years so many people do not know how to find a tea that suits them, nor how to prepare it after they have found it. Somewhere there is a tea or a blend of teas to suit every individual taste.

"Which is the best tea to drink?" Our advice is, first, to try the leading descriptions, and having determined which suits the taste, then to drink the highest grade of that description. The highest grades of each are equally pure and good. We say, "drink the best," because it is folly to consume the lower grades, which lack both flavor and tonic effect.

There are between 150 and 200 cups of tea to the pound. Consequently, at the apparently high price of a dollar a pound, the cost to the customer is from one-half to two-thirds of a cent a cup—and less if great strength is not required. At 50 cents a pound, the cost is from one-quarter to one-third of a cent a cup, and no water sold in bottles is cheaper than this.

Interesting though it is to know that we have a wide range of blends, and that there is one which will give us supreme satisfaction if we take the trouble to find it, few persons, unless they wish to become connoisseurs, have the time or inclination to go exhaustively into the subject. Wherefore we have prepared the following brief suggestions, under the titles of the teas of the best known tea producing countries as a handy guide for those who at least wish to be initiated into the joys of tea drinking.

CHINA TEAS.—Among the fermented teas of China, the best known are the North China Congou or English Breakfast teas. "English Breakfast" is a popular expression, first used in America to describe the tea drunk by the English people for breakfast in colonial days. While originally it was applied only to China black tea, it now is used to include blends in which the China flavor predominates.

The North China Congous are strong, full bodied, and fragrant. To try them, ask for a Ningchow or Keemun, the best-known districts. Infuse four to five minutes.

The South China or red-leaf Congous are light in the cup. The best-known districts are Pakling, Paklum, and Panyong. Infuse for four minutes. All fermented China teas should be served with or without sweetener but always with milk or cream.

China greens are divided into Country Greens, Hoochows, and Pingsueys. They are prepared in the following styles or shapes: Gunpowder, Imperial, Young Hyson, and Hyson. To try them, ask for a Moyune Gunpowder or Moyune Young Hyson and infuse for five minutes. Serve plain.

Some China teas are made up into the semi-fermented teas, known as Oolongs—similar to Formosas—and are called Foochow and Amoy Oolongs, after the ports whence they are shipped. There also is a Scented Orange Pekoe produced in China, which is a Souchong tea scented with jasmine, gardenia, or yulan blossoms in the manufacturing process.

If unable to purchase any of these teas loose, ask your dealer for some good-quality blend in which China tea is the dominant factor.

India Teas.—The teas of India are known principally by the names of the districts in which they are produced, such as Darjeeling, Assam, Dooars, Cachar, Sylhet, Terai, Kumaon, Kangra, Nilgiri, and Travancore. The kinds of India tea are further identified by the names of the gardens or estates on which they are produced. They are manufactured by machinery and graded according to the trade classifications of Broken Orange Pekoe, Orange Pekoe, Broken Pekoe, Pekoe Souchong, Fannings, and Dust.

Ask for a Darjeeling blend, the finest and most delicately flavored India tea, which should be given a five-minute infusion. Serve sweetened or unsweetened but always with milk or cream. If unable to purchase a Darjeeling blend or any of the other Indian district teas loose, ask your dealer for some good-quality packet blend containing India tea.

CEYLON TEAS.—The teas manufactured in Ceylon are principally black. They are graded like Indias. Ceylon teas also are known by the names of the gardens or estates producing them, irrespective of grades. They are broadly divided into high-grown and low-grown varieties in considering their cup characteristics. The high-grown teas are produced in the hill

districts in the interior of the island, and are noted for their fine flavor and aroma; while the low-grown teas are produced at lower levels nearer the coast, and are commoner and rougher in liquor and lacking in flavor.

Ask for a high-grown Ceylon or some good-quality package blend in which Ceylon tea is the dominant factor. Ceylon tea should be given a four to five-minute infusion, served sweetened or unsweetened but always with milk or cream.

JAYA AND SUMATRA TEAS.—Teas grown in the islands of Java and Sumatra in the Netherlands Indies are manufactured by machine processes as in Ceylon and India, and are almost entirely of the black variety. They are graded like Indias and, like Ceylons, are known by the names of the gardens producing them. Java teas are further classified into Assam Javas and China Javas; the former being produced from plants raised from Assam tea seed, and the latter from plants grown from China tea seed. Assam Javas are similar in cup characteristics to the milder growths of Indias, while the China Javas exhibit the liquoring characteristics of their China prototypes.

Ask for Java tea or a good blend containing Java or Sumatra tea, infuse for five minutes, and serve sweetened or unsweetened, but with milk or cream.

JAPAN TEAS.—Japan teas are unfermented, or green, teas. They are prepared in the following leaf styles: Sundried, Pan-fired [straight], Guri [Panfired curled], Basket-fired, and Natural Leaf, an arbitrary term of no particular significance except to distinguish leaf that is not rolled or manipulated. Japans are graded in district types as well as for style and cup quality. They are generally recognized in the trade as: Extra Choicest, Choicest, Choice, Finest Fine, Good Medium, Medium, Good Common, Common. There are also Nibs, Dust, and Fannings. They should be infused from three to five minutes and served plain or with lemon.

Ask for Momikiri, or "pretty fingers," a fine-quality tea from the Enshu district, Hachiogi, or Yamashiro or any good package blend.

FORMOSA TEAS.—The Formosa Oolongs are of fine flavor and very fragrant. Being semifermented, they have some of the characteristics of black tea, with certain of the

cup qualities of green tea, and therefore resemble a blend of the two.

Ask for a summer-crop Formosa or any good package blend, which should be given a five-minute infusion. Serve sweetened or unsweetened, but without milk or cream.

THE AUTHOR'S CHOICE.—The author confesses that his own allegiance is torn between a Darjeeling and a Formosa Oolong. However, he also admits a weakness for a North China Congou, preferably a Keemun, and finds a high-grown Ceylon hard to resist. When touring the Netherlands Indies he has found Java teas most satisfying, and in Japan nothing seems to fit into the local scene as well as a Gyokuro from the Uji district. A delicious tea compromise may be had by blending 10 to 20 per cent of Formosa Oolong with a Darjeeling tea.

How to Make and Serve It.—The art of making tea comprehends three things: (1) a good-quality tea, (2) freshly-boiling water, and (3) separating the liquor from the spent tea leaves after proper infusion. The time for infusing varies with the kind of tea from three to five minutes.

There are several important intermediate steps, but, generally speaking, a perfect cup of tea cannot be produced from anything but a quality growth nor without water freshly drawn from the tap and brought to a bubbling boil. Also the brew must take place in a pot fitted with a removable leaf basket or one which automatically separates the leaves from the liquor after the proper infusion, or the liquor must be poured into another receptacle and the spent leaves not used again. There is nothing better than a porcelain pot.

Stated in general terms for all loose teas, this, then, is the best practice:

- Buy the highest grade of the kind of tea suited to your taste and the locality where you intend to use it.
- Use freshly-drawn, slightly-soft or slightlyhard, cold water from the tap, or faucet.
- Bring it to a bubbling boil.
 Allow one rounded, standard teaspoonful of tea for each cup of tea required.
- 5. Pour freshly boiling water over the tea leaves in a heated earthenware, porcelain, or glass pot and let them steep for three to five minutes, depending upon the kind of tea used. Stir while infusing.
- Pour off the liquor into another heated china vessel and never use the leaves a second time.
- Keep the beverage hot and serve it sweetened or unsweetened, and with milk, cream, or without, as your fancy dictates. If sugar

and milk or cream are required put them in the cup in this order before the tea is poured.

For brewing tea with individual tea bags:

1. Place tea bag in a warmed cup.

 Fill cup with freshly and furiously boiling water. Brew 3 to 5 minutes, to suit taste. Remove tea bag from cup.

3. For pot service: one tea bag for every 2 or

3 cups.

4. For iced tea: brew 5 to 6 minutes. Add ice and a slice of lemon.

When to Serve.—Tea may be served for breakfast, luncheon, dinner, or supper, but its particular place in the American dietary would seem to be in the afternoon, say about four o'clock, when it will be found a most refreshing drink to relieve fatigue at home or in the office or factory, to promote efficiency and carry one's workday over to a happy and successful conclusion. Its magical properties also commend it to the hostess as a social custom tried and proved in England and certain to become the socially-correct thing in America.

Quantity Tea Making

In making tea for hotels, restaurants, soda fountains, and quantity service generally, the best practice is to prepare a tea concentrate from which a larger number of cups of tea of regulation strength are to be served. The quantity of tea to be used must be the aggregate of the number of teaspoonfuls required for the same number of cups if made up individually.

If, for instance, it is desired to make an extract to serve say twenty-four people it will be necessary to use twenty-four teaspoonfuls of tea to make the extract. This may be done in a six-cup teapot in the regular way. All of the twenty-four teaspoonfuls of tea would be put in the six-cup teapot and thoroughly boiling water poured thereon. The infusion should be allowed to brew not less than five minutes; then the leaves should be stirred and allowed to settle and the liquor poured into another teapot or suitable container. This will form the concentrate.

A quarter of a cup of this concentrate should be used to each cup and the balance of the cup should be filled up with boiling water. This same procedure must be followed in varying proportions to suit each situation. It is all a matter of preserving the proper ratio of tea leaf to cup,

and seeing that the tea never is overbrewed or underbrewed in the making of the extract. For iced tea the hot liquor is poured into ice-filled serving glasses.

Some Tea Recipes

When anything is added to or taken away from the tea drink per se it still may be a pleasing drink but it is no longer tea. However, there are those who like variants and for their benefit we suggest that, if the latest cook books fail to satisfy, the following may be of service:

AMERICAN ICED TEA

Brew as for hot tea, but allow a heaping teaspoonful to the cup. Pour the hot tea into tall glasses two-thirds filled with cracked ice. Serve with sliced lemon. Sweeten to taste. Sometimes cloves, grated orange peel, and sprigs of mint are added to the brew in the making.

BRITISH ICED TEA

Allow one teaspoonful of tea to every halfpint of water. Pour the water onto the tea in a warmed pot, and allow to stand for four minutes. Fill up the teapot with boiling water and stand for a further three minutes. Place a large piece of ice in a jug. Pour the hot tea over the ice.

Maitre Laitry, chef of the Savoy Restaurant, London, varies the method as follows to produce London iced tea: Make a fairly strong brew of China tea, and when it has stood for a minute or two drain it into glasses containing cracked ice. Do not add sugar unless specially desired, and serve a slice or two of lemon with the glass, but not actually in the tea.

TEA COCKTAILS AND HIGH-BALLS

Make an extra strong brew of fermented tea. For a cocktail, mix with one-third of fruit juice in a cocktail shaker; shake in the orthodox manner and serve with a cherry in a cocktail glass. The high-ball is made with one-fourth tea and the balance club soda or ginger ale.

TEA PUNCHES

There are many kinds of tea punch. In one a five-minute infusion of fermented tea is made by using two teaspoonfuls of leaf to 1½ cups of boiling water. Pour over a cup of sugar and when dissolved add three-quarters of a cup of orange juice and one-third of a cup of lemon juice; then strain into a punch bowl over a block of ice. Before serving add a pint of ginger ale, a pint of club soda, and a few slices of orange.

Another: pour one pint of boiling water over two tablespoons of any full-bodied fermented





The Gorham Company

MODERN AMERICAN TEA AND COFFEE SERVICE, COLONIAL PATTERN

tea. Allow it to steep for five minutes. Boil two cups of water and one cup of sugar for five minutes. Add the juice of three lemons and two oranges, with one pint of strawberries or one tin of grated pineapple to the syrup. When cold, add the prepared tea and cracked ice. Serve in tall glasses with a sprig of fresh mint.

RUSSIAN TEA

Using three teaspoonfuls of fermented tea to two cups of boiling water, infuse for five minutes. Serve it hot or cold in glasses, with sugar, candied cherries, or strawberries and thin slices of lemon. A teaspoonful of rum, two or three brandied fruits, and barley sugar is a curious variant. In another, sometimes called "cherry tea," the beverage is served in cups, with the addition of maraschino cherries and slices of lemon powdered on both sides with cinnamon.

LEMON TEA

A new British recipe, for lemon tea, calls for one teaspoonful of tea and half a small lemon for each person. Squeeze the lemons into a jug and add a half pint of boiling water. Pour this onto the tea in a warmed pot, and allow

to stand for four minutes. Fill up the teapot with boiling water and stand for a further three minutes. Serve in glasses, with cut slices of lemon on the side. Lemon tea also makes an excellent summer drink when iced. Allow the tea to become perfectly cold. Place a small lump of ice in each glass. Pour the tea over this. If preferred, oranges may be used instead of lemons.

MILK TEA

There are two British methods of making milk tea: 1) Allow one good teaspoonful of tea to each half-pint of milk. Bring the milk to the boiling point. Heat the pot with boiling water, put in the tea, and then infuse with boiling milk for seven minutes. 2) Warm the tea pot. Place in the tea. Half fill with boiling milk. Allow to stand for four minutes. Fill up the teapot with boiling water. This disguises the milky taste disliked by some people.

TEA ICE CREAMS

Strong black-tea infusions may be employed for flavoring the usual ice cream mixture, with grated orange rind, cinnamon, and sometimes sherry added before freezing. The following is a recipe for ceremonial-tea ice cream as served in Kyoto, flavored with the delicate Uji tea which makes it look like pistache, but with a taste, oh, so different!

In a large bowl or like receptacle put one quart of commercial single cream, one pint of milk, and 1½ cups of sugar; mix thoroughly until the sugar is dissolved. Place in a cup one heaping teaspoonful of *Matcha*, the powdered ceremonial tea. Add tepid water until the cup is three-quarters full, then mix the tea and water into a thin paste. Add this to the cream, milk, and sugar mixture, and mix thoroughly. Freeze in the usual manner.

POWDERED JAPAN TEA FLAVORINGS

Tealate, or powdered Japan green tea combined with cocoa butter and molded into solid cakes for flavoring purposes as a substitute for bitter cooking chocolate, is a novelty recently patented in Japan and the United States by the inventor, Mr. Haruzo Nagasaki, of Tokyo. Tealate resembles cooking chocolate except that it is dark green instead of chocolate colored; wherefore it imparts a delicate green tint as well as a tea flavor to candy, cakes, puddings, sauces, syrups, etc., in which it is used. Powdered Japan green tea is also used for flavoring and coloring ices and cakes; for making iced tea without brewing.

Tea Novelties

Here follow descriptions of some important tea novelties:

TEA CIDER

Tea cider was known in Germany as early as 1911, and is said to have been introduced from the Orient. In 1933, experiments with its manufacture were begun in Java and Ceylon

The process of manufacture is comparatively simple. An ordinary infusion of tea, using 1½ to 2 ounces of tea to a gallon of boiling water, is strained from the leaves and to the liquor 10 per cent of sugar is added; i.e., 1 pound of sugar to 1 gallon of liquor. This is cooled and placed in an open, dust-proof jar. The ferment, or yeast, is added and converts the sugar into alcohol and carbon dioxide gas, which latter escapes. The alcohol is then converted into acetic acid by the bacterium. These reactions give the cider its character. The yeast used appears to be a mixture of fungi, only two of which are of importance, according to Dr. C. H. Gadd of the Tea Research Institute of Ceylon. One of these is a yeast, Saccharomycodes ludwigi, and the other a baccillus, Bacterium xylinum. The particular yeast does not apparently matter, although the specific bacterium named is important, since it gives the characteristic odor and flavor to tea cider.

The sugared infusion is sweet at first, but the sweetness gradually disappears as the yeast begins to work, and acidity develops. The degree of sweetness or acidity is a matter of taste which decides when fermentation shall be stopped. The time required for fermentation depends on the temperature and may be as long as two or three days.

When the infusion has attained the right flavor and taste it is filtered through a thick, double cloth and bottled in vessels completely filled and tightly corked. The absence of air stays the action of the bacterium, but the yeast continues to work and produce gas, which gives an effervescence to the liquor. The cider should be kept in a cool place, well stoppered. It seldom contains more than one per cent alcohol. A tea vinegar also can be prepared by allowing the ferment to proceed for about a month. Then the vinegar is strained, boiled, and bottled.

"TABLOID" AND TABLET TEAS

"Tabloid" [a copyright trade mark name] tea, for the convenience of travelers, campers, etc., has been manufactured by Burroughs Wellcome & Co., of London and New York, for many years. It consists of small, circular tablets, one or two being sufficient for a cup of the beverage.

More recently a firm in Bandoeng, Java, started the manufacture of tea tablets, both with and without sugar. In both instances, fine or powdered commercial teas are compressed by tablet machines such as manufacturing chemists use for a wide range of tableted products.

A method for producing compressed "tea aroma tablets" from a tea extract has been patented by a Leipzig firm. It is claimed that the process preserves only "the desirable aromas," and these are susceptible of manufacture in any desired concentration or decaffeinization, for correct tea brewing in the cup or, in more concentrated form, as flavoring for candy, chewing gum, etc. The chemicals employed are recoverable after use.

TEA EXTRACTS AND CARBONATED TEA

Many attempts to produce liquid tea extracts have been made; most of them failures. Recently the India Tea Bureau, New York, developed a method for making a soluble liquid tea extract of considerable concentration, from which a cup of tea may be instantly prepared with hot water, or a glass of iced tea made with iced water. This concentrated extract is slightly sweetened and is said to be quite stable. It also has been employed in making a tea syrup for use with carbonated waters and in the production of a bottled carbonated drink similar to ginger ale.

BOOK VI ARTISTIC ASPECTS



TEA A L'ANGLAISE AT THE COURT OF PRINCE DE CONTI, EIGHTEENTH CENTURY This charming historical painting by Michel Barthélemy Olivier in the Musée du Louvre, Paris, shows the company listening to the young Mozart.

CHAPTER XXVI

TEA AND THE FINE ARTS

How Tea and Tea-Drinking Have Been Celebrated in Painting, Drawing, and Engraving—Tea in Sculpture and in Music—Songs of Chinese and Japanese Tea Pluckers—Songs of the Temperance Hall and Concert Chamber—The Art of the Potter in China and Japan—Tea Ceramics of Western Countries—Exquisite Silver Tea Accessories—Sheffield Plate—Electroplate—Pewter—Caddies and Spoons—Modern Table Silver

HE tea drink has been a source of inspiration to artists and sculptors in many lands, likewise the fashionable demands of the tea table in the West and of ceremonial tea in the East have influenced the potter and the silversmith to supreme achievements, following strictly utilitarian beginnings.

Although the Portuguese were bringing silks, porcelains, and spices from the Far East in the sixteenth century, it was not until early in the seventeenth century that the Dutch brought tea to Europe, and with it dainty Chinese teapots, delicately fragile teacups, and ornamental jars for holding the leaf. European potters and silversmiths, attracted by the high prices of the imported Chinese wares, began to copy them in order to satisfy a rapidly-growing demand for art tableware of the highest artistic excellence.

Oriental Pictorial Art

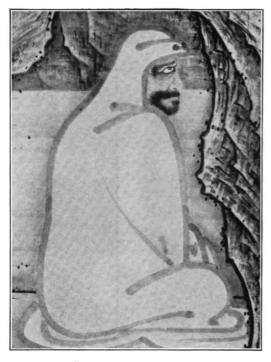
Early Chinese paintings on tea subjects are surprisingly rare, but there is one in the British Museum entitled "Preparing Tea for His Majesty," by the artist Chiu Ying of the Ming dynasty, A.D. 1368-1644. The painting shows the garden of a walled palace, presumably at Nanking, the capital. It is painted on a long scroll of dark-colored silk. As the scroll unrolls, the garden of the imperial palace is disclosed with the emperor on a raised seat.

The best-preserved Early Chinese tea paintings belong to the eighteenth century and represent cultivation and manufacturing scenes. They depict each step in the preparation of the leaf from the sowing of the seed to the final packing into chests and sale to a tea merchant.

Japanese pictorial art is largely Chinese in its origin, but has developed great originality in treatment of themes. The point at which it exhibits the closest resemblance to Chinese art is in a nobly austere type of religious painting, the product of a special phase of Buddhism which developed along somewhat new lines after it came to Japan. An example is the painting of Saint Myo-e, which was one of the treasures of Kozan Temple. It has been preserved in the Municipal Museum at Kyoto. Saint Myo-e, who planted the first tea in Uji, is shown seated in meditation in a grove of pines—emblems of immortality.

A rare and valuable makimono, presented to the author by the Japan Central Tea Association on the occasion of one of his visits to Japan, depicts twelve scenes connected with the historic "Tea Journey," or annual pageant attendant upon the transportation of tea for the emperor from Uji to Tokyo, 1623 to the beginning of the 18th century. [See pages 400-401.]

The artists of Japan have preserved for future generations many scenes showing tea manufacture. A series of unmounted colored drawings by the nineteenth century artist, Uwa-bayashi Sei-sen, in the British Museum show "The Processes of Tea Preparation." The pictures are drawn in ink on silk and painted in colors. Each of the



DARUMA IN MEDITATION

This conception by Sesshu, 1420-1506, shows the saint as he sat nine years before a wall. It is one of Japan's national treasures.

steps in the preparation of the leaf is illustrated and, also, the final ceremonial of presentation.

A favorite subject for fanciful portrayal has been Daruma, whom legend connects with a miraculous origin of the tea plant. He has been done by a legion of artists.

Motives chosen from nature hold the preponderant interest, as in "Chrysanthemums and Tea," painted by the eighteenth-century artist, Nishikawa Sukenobu. It shows a Japanese gentleman contemplating a bed of chrysanthemums. A feminine group fills the center of the picture; while a simmering, charcoal-heated teakettle and the tea equipage in its lacquered carrying-case are shown on the verandah, in the background.

Western Pictorial Art

The first European pictures of tea subjects were steel engravings—now rare—that were published to illustrate early accounts of the China plant. One of these, printed at Amsterdam in 1665, shows a Chinese tea garden and the method of picking the leaf from the bushes [p. 31, Vol. 1]. Two plants in the foreground are enor-

mously enlarged, to show the botanical structure of the bushes and their leaves.

The idea of enlarging one or more plants in an otherwise-correct perspective, seems to have been a favorite with early European engravers. Most of the existing tea prints published about this time exhibit the peculiarity.

The succeeding century found tea a fashionable beverage in Northern Europe and America, so genre artists frequently painted tea-drinking scenes in the new environment. William Hogarth, 1697–1764, London's well known eighteenth century satirical artist, lived close to the famous Vauxhall tea gardens and painted a number of pictures for the rooms. None of these were tea subjects, but three other pictures, which he first painted and then engraved, illustrate tea-drinking and the tiny teacups then in use.

The accomplished French artist, Jean Baptiste Chardin, 1699-1779, painted his "Lady Making Tea" at about the same time that Hogarth was rising to celebrity. This canvas is in the Hunterian Museum art collection at Glasgow.

Two fine examples of line engraving depicting eighteenth century tea-drinkers are "Cafee und Thee," an oval bookplate in



SERVING TEA, BY RYOSAN



"CHRYSANTHEMUMS AND TEA," AN EIGHTEENTH CENTURY PAINTING BY SUKENOBU

a square frame from Martin Engelbrecht's Sammlung von Folgen figurlichen Inhalts, or Collection of a Series of Figurative Contents, published at Augsburg, Germany, 1720-1750, and "Le Phlegmatique," engraved by R. Brichel, also of Augsburg, in 1784, after a painting by Joseph Franz Göz, 1754-1815. "Le Phlegmatique" is a Johnsonian tea-drinker, clay pipe in hand, and with teapot and cup beside him, whose rapt expression bespeaks an imagination unleashed and far afield. The painting "Tea a l'anglais at the grand salon of the Temple with the court of the Prince de Conti listening to the young Mozart," by Olivier. in the Louvre, represents a stately formal tea in the time of Louis XV. The assembled guests are grouped about tables having tea as they listen to a harpsichord recital by the seven-year-old German musical prodigy.

Nathaniel Hone, 1730-84, the Irish portrait painter, has left us a charming picture of a tea-drinker of 1771 in the portrait of his daughter, which he painted in that year. This young tea devotee, in shimmering satin, with a snowy lace fichu about her shoulders, and another bound modishly about her head, is holding by its saucer in her right hand a steaming handleless "dish" of tea, which she stirs gracefully with the tiniest of silver spoons held in her left.

"A Tea Party at Bagnigge Wells,"

painted by George Morland, 1764-1804, offers a delightful glimpse of a family group enjoying al fresco tea at the famous pleasure garden.

Edward Edwards, 1738-1806, a London artist, painted a picture of a couple about



A TEA-DRINKER OF 1771
From a mezzotint by J. Greenwood after N. Hone.



A TEA PARTY AT BAGNIGGE WELLS From a print after George Morland, 1764-1804.

to take tea in a box at the Pantheon, Oxford Street. This canvas, painted in 1792, shows a richly-bedizened coquette about to accept a tiny cup and saucer from the hand of a no-less resplendant gallant. A tray on a bare table in the foreground brings into prominence the tea service of the period, while another female figure in the rear seems to be whispering discretionary advice in the lady's ear. Other teaers are to be seen in the boxes on the opposite side of the house.

The canvas "A Cottage Interior," by W. R. Bigg, R. A., 1755–1828, signed and dated 1793, in the Victoria and Albert Museum, shows a rural housewife, in middle life, seated before a huge open fireplace with a small tea table at her elbow, and an iron teakettle singing on the crane.

The painting "Delights of the Tea Table," by Sir Daniel Wilkie, 1805-41, the celebrated Scotch artist, portrays the solid comfort of an English family at their tea in the beginning of the nineteenth century, just before Dickens' time. A good-sized round table with snowy cloth is laid with



GERMAN ENGRAVINGS WITH TEA INSPIRATION

Left—"Kaffee und Thee" by Martin Engelbrecht.

Right—"Le Phiegmatique" by R. Brichel. In the

Staatliche Kunstbibliothek, Berlin.



TEA DRINKING AT THE PANTHEON, LONDON, 1792 From a mezzotint by Humphrey, after Edwards.

the tea things before an open grate fire, while two male and two female figures intent on the function are having tea with every appearance of deep satisfaction. A somnolent tabby, lying contentedly on the rug before the fire, adds a final domestic touch to the picture.



Victoria and Albert Museum

"COTTAGE INTERIOR WITH AN OLD WOMAN PREPAR-ING TEA," BY W. R. BIGG, R.A., 1793

The famous races of the swift China clippers, with the first of the new season's teas from Foochow and other Chinese ports to London and New York, have furnished the inspiration for innumerable canvases by both contemporary and modern painters of sea pictures.

Visitors to the Metropolitan Museum of Art, New York, are familiar with two tea pictures that hang there. They are "The Cup of Tea," by Mary Cassatt, and "Tea

Leaves," by William M. Paxton. There are a number of paintings in the Musee Royal des Beaux Arts at Antwerp showing groups of tea-drinkers. They include Oleffe's "Springtime," Ensor's "Afternoon in Ostend," Miller's "Figure and Tea Service," and Portielje's "Teasing."



Metropolitan Museum of Art

"THE CUP OF TEA," PAINTED BY MARY CASSATT

The substitution of Peoples Palaces, with their chai-naya, or tea rooms, for the vodka dram shops of pre-war days in Russia, supplied the artist A. Kokel with the in-



"THE DELIGHTS OF THE TEA TABLE" Painted by Sir D. Wilkie, 1805-1841.



Mural Paintings in the Baltimore Courthouse of the Burning of the "Peggy Stewart"

These three groups by Charles Yardley Turner depict the destruction of the tea ship by its owner, Anthony Stewart, at Annapolis, October 19, 1774.

spiration for "Chai-naya," which hangs in the Academy of Art, Leningrad.

Tea in Sculpture

Lu Yu, venerated by Chinese tea merchants as the founder of their trade, is honored by a life-size effigy in the Hall of the Tea Guild at Ya-chou. His name and his designation, Shen Shi, or "early teacher," are duly inscribed. The image is carefully preserved under a large glass-enclosed frame.

Small images of Lu Yu are frequently seen in Chinese tea-firing establishments, where they are supposed to bring good luck. Chinese tea makers, to whom every step in the manufacture of tea is a rite, regard Lu Yu as their patron saint and



PORTIELJE'S "TEASING," IN THE MUSÉE ROYAL DES BEAUX ARTS, ANTWERP

place his image between their tea-firing stoves.

A handsomely-carved wooden statue of the Abbot Yeisai, father of the Japanese tea industry, adorns his shrine as founder of Kennin Temple at Kyoto.

The Buddhistic patriarch Daruma, who is associated in Japanese legend with a



Academy of Art, Leningrad

"CHAI-NAYA," PAINTED BY KOKEL

miraculous beginning of the tea plant, is frequently to be met with in the shape of images that range all the way from good sized effigies to children's toys. Some show serious purpose and have a lofty expression, while others—and their name is legion—are given humorous treatment along legendary lines.

When treated seriously, Daruma becomes a swarthy Hindu with a short bristling black beard or a chubby, smooth-faced oriental. Following legendary accounts, he



NETSUKE FIGURES OF DARUMA

Bequeathed by Sir Wollaston Franks to the British Museum, London.

often is represented as crossing the Yangtze on a reed, or standing on the waves supported by a millet stalk, bamboo, or reed.

There are two imposing statues of the late Hon. Kahei Otani, the grand old man of the Japanese tea trade and ex-president of the Japan Central Tea Association. One of these is in Shizuoka and the other in Yokohama, and both were erected during Mr. Otani's lifetime.

Tea in Music and the Dance

It is a curious fact that tea has not supplied the same inspiration to musicians as coffee. Tea never caused any great composer to write a cantata celebrating its allure as did Bach for coffee; no comic opera such as Meilhat and Deffes produced in Paris, nor lilting chansons like those praising coffee in Brittany and other French

provinces. The best that music has done for tea is represented by the pluckers' songs of the East, and in the West by a few

temperance hymns and various ballads—comic and otherwise—dealing with social exercises rather than praise of the beverage.

Tea appears first to have entered the realm of music in the form of tea pluckers' songs that have been common in the tea districts of China and Japan from time imme-



Daruma becomes the God of Happiness in this ivory figure.

morial. These songs serve to keep the pluckers—usually women and girls—in the best of spirits and to stimulate their activities. At a public reception to the author, on the occasion of a recent visit to Japan, the school children at Tsu, in Miye Ken, sang one that is typical:

CHA-TSUMI

Natsu mo chikazuku Hachi-Ju-Hachi-Ya No nimo yama nimo wakaba ga shigeru Areni miyuru wa cha-tsumi ja naika Akane-tasuki ni suge-no-kasa.

Hiyori tsuzuki no kyo konogoro wo Kokoro nodoka ni tsumitsutsu utau Tsumeyo tsume tsume tsumanebanaranu Tsumanya Nihon no cha ni naranu.

LITERAL TRANSLATION

The eighty-eighth night, forerunner of sum-

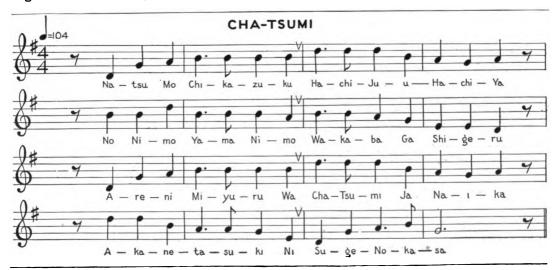




TABLEAU FROM THE JAPANESE TEA DANCE AS PRESENTED AT A STATE DINNER IN SHIZUOKA

mer, has come. Young leaves grow abundantly all over the hills and fields.

Over there I see a group of girls, with sedge hats on their heads and crosses of red cloth over their backs. Are they not picking tea leaves?

In the beautiful weather that has continued for the past few days, these rustic girls are busy picking leaves and singing, free from cares.

Pick all you can, you young maidens! If you don't pick, we Japanese will have no tea.

Japan has also dramatized tea in a graceful dance performed by geisha. A tableau from this dance, as presented for the author's entertainment on one of his visits to Shizuoka, is illustrated.



TEA CELEBRATED IN AMERICAN MUSIC

The English, foremost tea-drinkers of the Western World, have occasionally, though rarely, sung of tea. The temperance movement during the nineteenth century yielded a few such songs, and they were sung with great enthusiasm at what were known as "tea meetings." A popular one began:

THE CUP FOR ME

Let others sing the praise of wine, Let others deem its joys divine, Its fleeting bliss shall ne'er be mine, Give me a cup of tea!

Another with many stanzas started:

A CUP OF TEA

When vanished spirits intertwine, And social sympathies combine, What of such friendship is the sign? A cup of tea, a cup of tea.¹

"Tea in the Arbour" is the title of a comic song, set to rollicking measure, which was written by J. Beuler, arranged by A. C. Whitcomb, and "sung with great applause by Mr. Fitzwilliam," about the year 1840. Charles Dickens was turning out some of his best work at the time, and George Cruikshank, the celebrated caricature art-

1 Arthur Reade, Tea and Tea Drinking, London, 1884.

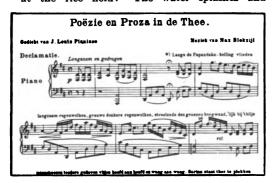


ist, who illustrated some of Dickens' books, drew the humorous cover design for "Tea in the Arbour." The song told of the glee with which folks who live out of town invite their unsuspecting friends of the city to look at their insect-infested walks and bowers, and then sit them down amidst caterpillars and frogs to "Take Tea in the Arbour."

Poëzie en Proza in de Thee, or Poetry and Prose in Tea, a declamation in the Dutch language with piano accompaniment and closing with a song, was composed and presented by the well-known Dutch chansonniers, J. Louis Pisuisse and Max Blokzul, when they toured the Netherlands Indies in 1918. The author is indebted for the accompanying liberal prose translation to Dr. Ch. Bernard, former Director of Agriculture, Buitenzorg, Java.

Declamation

On the slopes of the Papandaan, while darkgray rain-clouds caress the green mountain-wall, like lovers snuggling head-to-head and cheek-to-cheek, Sarina is plucking the tea. Clearly her slim figure stands between the pale green bushes, bending, straightening, reaching, again and again. The bright blue of her jacket accentuates the brown of her neck, and shyly reveals the curve of virgin breasts through soft thin cotton. Diligently she plucks the leaf from bushes which seem to tremble at the touch of her fingers. See how gracefully the little hands bend away the twigs, whose leaves are surrendered in petulant jerking which tinkles the bangle of coins round her slim wrists. When she hears the tinkle she stretches her body higher from out the even rows of tea bushes and, shading her eyes with her dark-red slendang, gazes and gazes where yonder Doe-roek Assi, strong Sundanese, lifts and lets fall the patjol in his rice field. . . . Doeroek Assi, who bought the heavy coppery-golden bangle. . . Look, the sun shines on the iron of his patjol, giving it the appearance of an ax; a magic ax of pure silver! Hoei! How he hacks at the rice field! The water splashes and



TEA CELEBRATED IN DUTCH MUSIC



TEA-SONG COVER DESIGN BY CRUIKSHANK, 1840

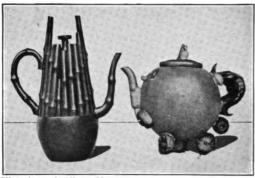
glimmers his chest and shoulders.... Handsome and strong is Doeroek Assi! And in his arms it must be nice to rest.... Sarina smiles and sighs. Then she bends again to pluck more diligently than ever, for with every handful of tea leaf that she throws into her basket, she approaches her Fate; approaches her Happy Day.... Sarina plucks for her dowry.

And that tea is drunk by auntie, who dares not leave Holland and knows nothing of the East; but, as an unappropriated blessing, in her negligée and curlpapers, she appreciates the comfort of an early-morning cup of tea. Etc., etc.

A modern American composer, Louise Ayers Garnett, has written the words and music for a charming little chamber or concert solo for soprano entitled "A Tea Song." In it a "little brown maid" from far-away Nippon tells how she delights to serve her favorite drink, Japan tea, to appreciative American men. Not bad propaganda, even if written as such—which it was not.

The Art of the Potter in China

The art of the potter, as it applies to articles of the tea service, began in China with the introduction of tea and the concurrent discovery of the materials and process for making artistic porcelains in which to serve it. Then it spread to Japan, where glazed stoneware—often of fabulous worth—became the accepted pottery of the Tea Ceremony; but where beautiful and artistic porcelain tea sets also are made and appreciated. Next, it went to Holland, where Dutch ships brought delicate Chinese tea porcelains with the first teas that came to Europe, and where these served as the pattern for later productions of Dutch, German, French, and English factories.



Victoria and Albert Museum

TEAPOTS OF IHING WARE (CHINESE BOCCARRO)

The world owes a lasting debt to the Chinese for discovering the materials and methods for producing the hard, translucent, glazed ware known in that country as tz'u, and to us as "china" or "porcelain." Their successes in this direction date from the T'ang dynasty A.D. 620-907, concurrently with the invention of tea-manufacturing and the spread of tea-drinking. Other countries had manufactured earthenware in all ages, but the genius of the Chinese asserted itself in the artistic tz'u, which for beauty of form and coloring hardly have been equalled, and which form the source whence all the art ceramics of tea have been derived.

There are few specimens of porcelain known that are older than the Ming dynasty, 1368-1628, but there is a stoneware tea bowl of the Sung, 960-1126, from Kian, in Kiangsi, displayed in the British Museum. It has a buff-stoneware body, and richly-variegated glaze of hare's-fur type inside, with painted medallions. The out-

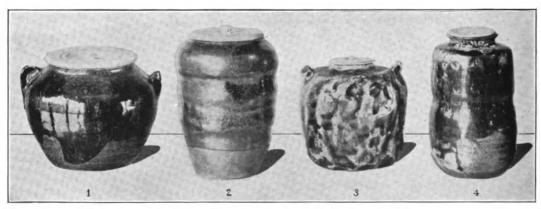
side is black with brown tortoise-shell markings.

The principal Chinese porcelain-manufacturing center of Kingtehchen, located near Nanking, dates from 1369, when a factory was built there for the express purpose of producing superior articles of the tea service for the Imperial establishment. The long and prosperous reign of Ch'ien Lung, 1735-95, was the last of a number of great periods of art ceramics in China, and it was at this time that the skill of the Kingtehchen potters reached its zenith.

The Art Potteries of Japan

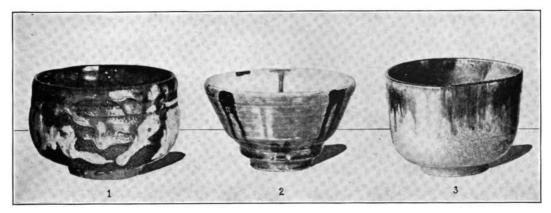
Like every other country, Japan had its primitive pottery, but it lagged far behind China, whence its culture and arts were derived, until two events in the thirteenth century combined to provide the necessary stimulus. The first of these was the spread of tea-drinking in Japan, and the second was the return from China of Kato Shirozaemon, or Toshiro, as he is commonly called, after a thorough study of Chinese ceramic production. Kato settled at Seto and was succeeded by many generations of potters, who maintained the family tradition in the production of Seto ware.

No further progress was made by Japanese ceramics, however, until the end of the sixteenth century, when a number of Korean potters followed Hideyoshi's army upon its return to Japan and, about this same time, Senno Rikyu established the ritual for *cha-no-yu*, the Tea Ceremony, which had a far-reaching influence on Japanese



RARE TEA JARS USED IN THE CHA-NO-YU CEREMONY

1. By Toshiro. 2. Zeze ware. 3. Oribe ware. 4. Satsuma Seto-gusuri.



THE ART OF THE JAPANESE POTTER AS EXPRESSED IN TEA BOWLS 1. Satsuma-gusuri. 2. Satsuma Bekko-gusuri. 3. Satsuma Torafu.

nese ceramics. The pottery used for *chano-yu* included: the small jar for holding the powdered tea, the drinking bowl, the wash-bowl, the cake dish, and frequently the water container, the incense box, the incense burner, the fire holder, and a vase to hold a single spray of flowers.

The utmost in the line of anxious care was lavished on the production of pottery for this use. Several of the great tea masters were potters and had kilns of their own where they produced vessels that now are almost priceless. A class of ware was produced that was studiously coarse, rough in finish, and devoid of decoration, but possessing a wealth of hidden beauty to the Japanese connoisseur. Fabulous prices often are paid for treasured pieces; not long ago, at Tokyo, a little tea jar-the cha-ire of the tea ceremony-brought a sum equal to more than \$20,000. A tea bowl, or cha-wan, decorated by the great Ninsei, realized slightly more than \$25,000; an undecorated black bowl nearly \$33,000; and a famous example called Yohen Temmoku Jowan, with a lustrous black outside glaze and a curious, iridescent, bubble-like pattern inside, was bought for \$81,000.

The most highly-prized tea jars are the old Seto stoneware productions, nearly or quite black in appearance, and some of them attributed to Toshiro. These are not considered complete unless in their original silk wrappings and wooden boxes.

The tea bowls for cha-no-yu have a body of coarse, porous clay, with a soft, creamlike glaze. This material acts as a non-conductor of heat and serves to preserve the temperature of the tea as the bowl is passed about for each guest to sip. It

does not become too hot for the hands, and the glaze offers an agreeable surface to the lips. They vary in color from salmon pink to a deep, rich black, with a treaclelike glaze of wonderful color and depth. A type highly-prized is the Raku ware that was first made by Cho-jiro, a Kyoto potter, after a design by Rikyu, the great tea master. While the most extreme taste requires that the tea bowl be without decoration, there are some highly-valued examples by Ninsei and other great masters who have made superb decoration a part of the utmost simplicity. Among the undecorated cha-no-yu wares that were especially valued was one known as Hagi, from the chief town in the province of Nagato.

The first ware of importance was made at Matsumoto in the late sixteenth or early seventeenth century in imitation of Korean ware. It has a pearl-gray crackled glaze of a milky appearance, characteristic of its prototype. Kilns were opened later in other parts of the province, and the color



British Museum

SEVENTEENTH CENTURY JAPANESE TEAPOTS

of the glazes became varied in character. To the western connoisseur, the chief interest of this ware lies in the remarkable variety and beauty of its crackle.

Toward the latter half of the seventeenth century a Kyoto potter settled at Ohimachi in the province of Kaga. Cha-no-yu pottery made by him and his successors has a soft paste, and is fashioned much after the Raku style. The color of its glaze is a rich, warm, translucent brown, simulating that of brown Chinese amber.

Perhaps the most fascinating effects of glazing are found in Takatori and Zeze productions. The finest examples of Takatori date from the seventeenth century, and are distinguished by the light gray or mouse-colored quality of its clay, which is both fine and hard in texture. The great variety of effects in plain and colored glazes obtained by the potters of Satsuma province is a matter of astonishment to those whose only idea of Satsuma ware is the decorated cream-colored article that usually is ascribed falsely to that province. Of the colored glazes, that known as "Seto glaze," is the most generally known.

Of the various masters of the Tea Ceremony who impressed their individuality on the productions of the Seto kilns, Furuta Oribe and Shino Ienobu are the most notable. A kiln was erected at Narumi, in Owari, near the end of the sixteenth century, at which Oribe superintended the making of sixty-six tea jars of great excellence. Thereafter, the wares from that kiln always bore the name of the great tea master. Shino, another tea master, potted wares that are highly valued by connoisseurs. His work was done under the patronage of the shogun Yoshimasa, and shows characteristics of remarkable originality.²

The first porcelain made in Japan was the work of one Gorodayu go Shonzui, who went to Kingtehchen in 1510 and studied there for five years. He brought to Japan a knowledge of the Kingtehchen blue and white china with a supply of the materials for its manufacture, and, although he established himself near Arita, afterwards celebrated for its porcelain stone, he was limited to what he could make before his Chinese materials were exhausted. Pieces of this ware are rare and of great value.

A Korean named Risampei was the first

to discover porcelain stone deposits in Japan—on Izuma mountain. A factory was established at Arita and manufacture of true Japanese pottery began. 1660, a potter named Sakaida Kakiemon developed the delicate enameled designs, in the best Japanese taste, for which Arita wares are noted. The Kakiemon enamels were soft orange red, grass green, lilac blue, pale primrose, turquoise, gold, and under-glaze blue. This ware was purchased eagerly by the Dutch after they were allowed to establish their trading factory on the island of Deshima, in 1641. Catalogues of the period call it the première qualité coloriée de Japon, and it was copied freely at Delft, St. Cloud, Mennecy, Bow, Chelsea, and elsewhere.

The Arita ware was, however, a little too delicate in design for the Dutch taste of the period, so a ware more florid in design was developed at Imari for the European trade. This porcelain was apt to be coarse and grayish, and the designs were irregular and confused. However, the ware enjoyed great popularity in Europe, where it was called "Old Imari."

Both the Kakiemon and Old Imari wares were copied by Chinese potters, alert to supply whatever was wanted by the export trade. Many of these Chinese reproductions would deceive the ordinary observer, but experts know them by certain marks left from the manufacturing process.

Tea Ceramics of Europe

FAIENCE.—Shortly after the Dutch brought the first Chinese teapots and teacups to Europe, continental potters began to imitate them in a tin-glazed decorated earthenware known as "faience." The first thus to copy the Chinese tea wares was Aelbregt de Keiser, a master potter of Delft, Holland, in 1650.

The Delft ware of the seventeenth century was a beautifully-decorated faience in which Dutch artists successfully captured the color and charm of Chinese blue-and-white porcelain. The body of the ware was a fine buff-colored clay, which was dipped after the first firing in a white tin enamel. This formed the ground for painted decorations which were covered with a transparent lead glaze and given a second firing. With the advent of the tea set, about the middle of the seventeenth century, numerous French and German faience makers turned their attention to the

² Charles Holme, "The Pottery of the Chano-yu," in the Transactions and Proceedings of the Japan Society, London, 1908-09, Vol. VIII, Part II.



Sèvres Museum

TEA SERVICE, SEVRES PORCELAIN, NINETEENTH CENTURY

production of pseudo-Chinese teapots and other articles of the tea service. Scandinavian potters in Denmark, Sweden, and Norway followed suit the following century. Examples of these early European teapots, from the various countries mentioned, are preserved in existing collections.

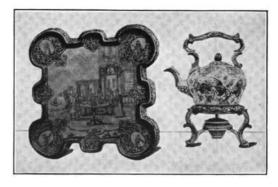
Porcelain.—About the year 1710, the famous Böttger, at Meissen, Germany, made the first true-porcelain teapots, teacups, etc., produced outside of China and Japan. The factory continued in existence until 1863 and, although located at Meissen, the ware produced is commonly known as In 1761, Frederick the Dresden ware. Great, brought workmen from Meissen and started the Royal Porcelain Works at Berlin. Existing examples of teapots in the Berlin porcelain show the Meissen influence. Holland, Denmark, and Sweden followed in the production of tea sets in the German style, while the French developed a peculiar, glassy porcelain of great translucence, in which they imitated the Japanese Imari tea sets extensively. French porcelain works at Vincennes, one of several factories of this character started by private enterprise, was taken under Royal patronage in 1756 and transferred to Sèvres. Subsequent to this change the product developed great beauty and originality of design along lines of coeval French art. Sèvres porcelain is famous for its ground colors; such as, gros bleu, bleu du roi, rose Pompadour, pea green, and apple green. The notorious Madame Pompadour is said to have influenced some of the beautiful designs to be seen on articles for the tea table that have been preserved in art collections, and the beautiful shade of rose

appearing as the ground color on some of the pieces was named in her honor.

English Tea Ceramics

STONEWARE.—The first teapots made in England were produced by the pioneer potter, John Dwight, at Fulham—now a part of London—about the year 1672. Dwight's pottery made hard-fired, redstoneware teapots in imitation of the Chinese boccarro teapots, as well as other shelf and table pieces in "tortoise shell" and "agate" variegated wares.

ENGLISH FAIENCE.—About the time that Dwight was beginning to manufacture teapots at Fulham, the manufacture of tinenamelled pottery was started on the south side of London, at Lambeth, and before the end of the century the dainty Delft teacups and teapots were being imitated there, and also in Bristol and Liverpool. The manufacture of English faience continued until the closing years of the eighteenth century,



DELFT SALVER AND TEAPOT, EIGHTEENTH CENTURY Left—Salver, showing a group drinking tea in a garden. In the Town Museum at The Hague. Right—Teapot, Metropolitan Museum of Art, New York.



A FAMOUS COLLECTION OF OLD-ENGLISH TEAPOTS

Top row—Worcester ware. Second row—Staffordshire. Third row—Chelsea. Fourth row—Lowestoft.

Bottom row—Leeds ware. From the Bulwer Collection, Aylsham, Norfolk.

when it was displaced by English creamcolored ware.

SALT-GLAZE AND EARTHENWARE.—Staffordshire salt-glaze, a siliceous body glazed by throwing salt into the kiln, was applied to the manufacture of teapots and caddies by two skilled Dutch potters named Elers, about the year 1690. There are many curious examples of this ware in both European and American collections. The Elers, assisted by John Chandler, who had been with John Dwight at Fulham, also began the manufacture of the red earthenware teapots that subsequently made Staffordshire famous. Another Staffordshire potter, who was producing teapots that now are eagerly sought for art museums, was Thomas Whieldon. He had a factory at Little Fenton from about 1740 to 1780.



THREE EARLY ENGLISH TEAPOTS Upper—Leeds earthenware, Willett Collection, Brighton. Left.—Pinxton, Herbert Allen Collection, Victoria and Albert Museum. Right.—Stoke-upon-Trent, Metropolitan Museum of Art.

CREAM-COLORED WARE.—The development by Staffordshire potters of creamcolored ware for the production of tea sets and similar articles drove the tin-enamelled faience from the markets of England. Josiah Wedgwood, 1730–95, is credited with an active part in the change, but his contemporaries, the Warburtons, Turners, Adamses, and others were in it too, although none of them approached him in range and originality of products. Wedgwood's cream-colored "Queensware" was the best of its kind, and he originated "Jasperware," which has grounds of unglazed blue, green, black, etc., adorned with classic motives applied in white. ware, which is Wedgwood's most original production, is to be seen in teapots, teacups, etc., many of the designs being copied from Roman and Greek jewels and vases. Wedgwood also made a black basalt, unglazed stoneware of great artistic perfection.



Victoria and Albert Museum

SALT-GLAZE TEAPOTS, EIGHTEENTH CENTURY

English Porcelains.—The production of English porcelains on a commercial scale began in the period from 1745 to 1755, when important porcelain works were established at Chelsea, Bow, Worcester, and Derby. The output of these factories was confined at first to artificial, glassy porcelains similar to the French, but in 1800, Mr. Josiah Spode, of Stoke-upon-Trent, dropped the use of glass entirely and made an artificial porcelain of china clay, boneash, and felspathic rock, which he covered with a rich lead glaze. The Chinese influence appears to have been paramount at first, but later on, the somewhat florid Imari ware of the Japanese was extensively copied.

About 1750-55, porcelain factories were established at Bristol and Plymouth that are notable as the only English potteries in which true porcelain, similar to that of China, ever was produced. It had a cold, glittering glaze that was far from the beauty of the other ware, and it may be



Bulwer Collection, Aylsham

BLACK BASALT TEAPOTS



Victoria and Albert Museum

TIBETAN TEA-SERVICE UTENSILS

Left to right—Leather carrying case, compressed tea, and silver teapot inscribed "Hail, the Jewel of the Lotus." Inst.—Porcelain teacup with metal holder and cover.

said without hesitation that the high prices paid for existing pieces have respect to their rarity rather than their beauty.

The Liverpool Museum contains some good examples of tea porcelain made by a colony of potters at Liverpool in the late eighteenth century. There also were factories at Leeds, Caughley, Coalport, Swansea, and Nantgarw. The manufacture of porcelain tea sets, etc., also invaded the established Staffordshire potteries about this time, and brought into prominence the firms of Davenport, at Longport; Shorthose, at Hanley; and both Spode and Minton, at Stoke-upon-Trent.



THE FAMOUS WILLOW PATTERN As reproduced by Wedgwood.

The Willow Pattern.—This well-known decoration, in the traditional Chinese blue and white, is supposed to have originated at the Caughley, Shropshire, porcelain works about 1780. It was quickly copied by migratory engravers in the factories of Staffordshire and other parts of England. A story differing in detail at the hands of various raconteurs, but retaining its main essentials, is told about the willow pattern, which is said to illustrate the legend of Koong-se and her lover Chang.

Koong-se was the beautiful daughter of a wealthy mandarin, who lived in the two-storied house in the center of the pattern. There is an orange tree behind the house. A willow tree overhangs a footbridge. Koong-se lost her heart to her father's secretary, Chang. This greatly angered the proud mandarin, who ordered Chang to keep away from the place. As a further precaution, he betrothed Koong-se to a wealthy but dissolute old Ta-jin [Duke]. The father then built the palisade, or fence, that appears across the foreground of the picture, in order to keep Chang and Koong-se apart. He allowed her only the freedom of the garden and teahouse encircled by the stream.

The lover, Chang, floated messages of love and devotion down the little stream in a coconut shell to his fair one. On the evening of Koong-se's first meeting with her hated fiancé, he presented her with a box of jewels. After the guests had feasted and the *Ta-jin* was drunk with wine, Chang slipped into the banquet hall dis-

guised as a beggar and signaled Koong-se to flee with him. Three figures are shown running across the footbridge. These are: Koong-se, holding a distaff, the symbol of virginity; Chang, carrying the box of jewels; and the old mandarin brandishing a whip. Chang hid Koong-se in the house across the stream while he went for a boat. Just as her father's guards were closing in, the lovers pushed off. The boat is shown in the design. It drifted far downstream to an island shown in the upper left of the pattern. Here they built a house, Koong-se helping, and Chang brought the land to a high state of cultivation. This can be seen in the design, for the whole of the ground is furrowed and every scrap of it is utilized -even narrow strips of land being reclaimed from the river. They were very happy, and Chang became a celebrated writer, but his name at length reached the Ta-jin, who had his soldiers slay Chang. Koong-se, in despair, set fire to the house and was burned to death. The gods cursed the Duke, but in pity transformed the souls of Chang and Koong-se into two immortal doves, emblems of constancy, shown in the upper part of the pattern.

TRANSFER PRINTING.—With the eighteenth century passed the greatest era of art pottery connected with tea; the era of handwork and high prices. The English wares of later date possess serviceability, durability, and neatness in a degree previously unknown, but a general adoption of transfer printing has taken them quite definitely out of the field of art and into that of mass production. In transfer print-



COLONIAL CUP PLATES

These small dishes, varying in size from 3 to 4½ inches in diameter, were used in America a century ago to hold the cup while the tea or coffee was allowed to cool in the saucer before drinking. The two specimens are from the collection belonging to Miss A. Josephine Clark, South Framingham, Massachusetts.



Victoria and Albert Museum

ARTISTIC INDIAN TEAPORS
ing, the design is printed on paper from

engraved copper plates, and is transferred from the paper to porcelain either on or under the glaze. This can be done almost endlessly, without variation.

Developments in Europe and America

A splendid exhibition of the applied arts of Japan at the Paris Exposition of 1867 brought about an immediate renaissance of the oriental influence in pottery throughout Europe. The finest examples of this work were produced at Worcester. A most important result of this revived interest in Japanese art was in the development of a new style-almost it may be called a new art—of porcelain decoration as applied to tea sets and other table ware at the Royal Copenhagen factory. Through the use of the finest Swedish felspar and quartz and the finest kaolin from Germany and Cornwall, a body of great excellence is prepared, and on this are painted—in delicate under-glaze blues, greens, and grays-birds, fishes, animals, water, and landscapes.

In the meanwhile, America had been developing a pottery manufacture of its own, based on English methods and manned at first by English potters. In this way factories were established at Trenton and Flemington, N. J., East Liverpool, Zanesville, and Cincinnati, Ohio, and Syracuse, N. Y. At all these centers earthenware tea and dinner sets have been manufactured

³ Harry Barnard, "The Story of the Willow Pattern Plate," published by Josiah Wedgwood & Sons, Ltd., Etruria, Stoke-on-Trent, England.



Crichton & Co., New York

EARLY EIGHTEENTH CENTURY SILVER TEAPOTS Left—Queen Anne, Ball-shaped, 1707. Pyriform, or pear-shaped, 1716.

after the best English traditions, and there have been some individual efforts at artistic production.

Exquisite Tea Accessories in Silver

When tea became a fashionable beverage of European high society in the seventeenth century, the first teapots used were of porcelain, but European silversmiths soon began to design teapots, teaspoons, etc., in silver. The first silver teapots were ster-ling, or "solid," silver. Plated-ware pots -some of them highly artistic-did not make their appearance until 1755-60.

EARLY ENGLISH SILVER TEAPOTS.—Of the English silver, that made during the eighteenth century was the most interesting. It has a higher quality of workmanship than the product of any other period of English silversmithing, and it was during this time that the largest amount of English ware was exported to the American Colonies. Most of the early examples of silver teapots were small, on account of the scarcity and dearness of tea. Those that have been preserved are plain in design, being either lantern- or pear-shaped. The earliest is



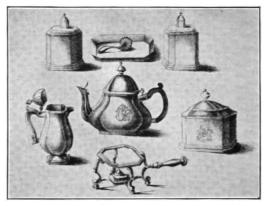
Victoria and Albert Museum

SHEFFIELD PLATE TEAPOT, ca. 1780

lantern-shaped, dating back to 1670, but has no claims to artistic design, being perfectly plain, and practically identical in shape with the earliest coffee pots.

The pear-shaped teapot first appeared during the reign of Queen Anne, 1702-14, and never has gone entirely out of style. The earliest American teapot of which we know is of this type. It is in the Clearwater collection at the Metropolitan Museum of Art, New York, and was made by John Coney, 1655-1722, of Boston. Plain teapots with this same pear-shaped outline were common down through the time of George I, 1714-27, but in the closing years of that reign they were ornamented with chasing in the rococo style then prevalent in France.

From early in the eighteenth century



TEA SERVICE, SEVENTEENTH WILLIAM PENN'S CENTURY

until the end of its third quarter, a globular body on a molded foot was favored. In the early examples, the spout was straight and tapered. The later pots of this form have a cast spout, gracefully tapered and curved. The handles, like those of most of the early silver teapots, usually were of wood, but a few were silver with ivory nonconductors inserted.

About 1770-80, Glasgow silversmiths created a new form by reversing the Queen Anne pear-shape, placing the larger part uppermost. Their pots were decorated with an embossed design, faintly suggesting the rococo. In this same period, there was a pronounced movement in favor of silver teapots that were beautiful in their simplicity. They were either octagonal or oval, with straight, vertical sides, flat bases, straight tapering spouts, scroll-shaped



Museum of Fine Arts, Boston

AN ARTISTIC TEA SERVICE BY PAUL REVERE, 1799

handles, and slightly dome-shaped lids. SHEFFIELD PLATE.—Closely allied with solid silver in general appearance, but less in cost, was Sheffield plate. Tableware of this material was manufactured from a little before 1760 until about 1840, when it was superseded by electroplate. Sheffield plate was made during the best period of silver-smithing in England and, under the classical inspiration of such masters as John Flaxman and the brothers Adam,

COLONIAL TEA URN, EIGHTEENTH CENTURY The Henry Jackson urn by Paul Revere in the Sleeper Collection, Museum of Fine Arts, Boston.

pieces of the utmost refinement and artistic excellence were produced.

ELECTROPLATE.—The electroplating process was adopted extensively on both sides of the Atlantic, from 1840 onward, by leading silversmiths, who were well provided with designers and facilities for the production of artistic table wares. The design and general beauty of electroplated wares has followed closely and is in no respect inferior to that of the finest solid silver. From a strict utilitarian standpoint, it often has been given the preference, due to its greater structural strength.

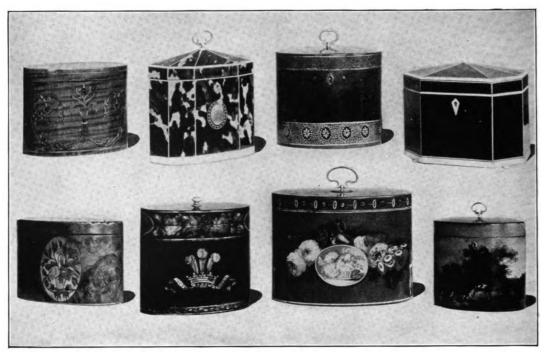
PEWTER.—This alloy of a number of base metals, of which tin is the chief constituent, was in almost universal use for table wares at the end of the seventeenth century, but thereafter the growing cheapness of chinaware and the invention of silver-plated ware in the eighteenth century placed it at a disadvantage.

CADDIES AND TEASPOONS.—The necessity for the tea caddy passed with extreme high



Metropolitan Museum of Art

PEWTER TEAPOT AND PLATE, 18TH CENTURY



TEA CADDIES IN THE VICTORIA AND ALBERT MUSEUM, LONDON

Upper row—Satinwood, inlaid; tortoise shell and ivory; papier mache, painted and gilded; ebony and ivory. Lower row—Mahogany, inlaid; painted on black ground, formerly the property of the Prince Regent; painted with floral designs; painted with landscape and figures.

prices for tea, but when the leaf cost 6s. to 10s. per pound it was kept under lock and key. Often this was done in little silver caddies—one for each kind of tea. Sometimes these were contained in a box ornamented with silver handles, lockplates, and delicately-chased corner pieces. Beautiful caddies may be found in every style and shape, following in general the prevailing fashions of the times. Many are so dainty

Modern American Silver Tea Service

Popular hotel and club design by the Gorham
Company, Providence.

and of such exquisite workmanship that mere words fall short of doing them justice. They date mostly from the eighteenth century when silversmithing was at its best.

The teaspoon is only a miniature in spoon history, but the fashionable auspices under which it first appeared made it the favored child of the family. Beautifully was it wrought upon by silversmiths of the seventeenth and eighteenth centuries, and beautiful are thousands of examples in all of the larger collections. Generally speaking, the style and general design of teaspoons



AMERICAN NINETEENTH CENTURY TEAPOTS

have followed the cycles of plainness to ornateness of teapots.

Tea-caddy spoons were common in the eighteenth century. They varied from broad, squat shapes to cockleshells, leaves, etc., all in dainty silver and delicately engraved. Sometimes the handles were of wood, sometimes of ivory, and more often they were silver.

Modern Table Silver.—The art of the modern silversmith equals the sum of all the craft and all the design that has gone before. There is no lost art of silversmithing insofar as table silver is concerned; in fact, new art and new skill have been added year by year to the production of artistically-elegant tea and coffee services, until it is possible for connoisseurs to secure for their tables sets of silverware that faithfully reproduce any desired period and are everyway the equals of historic pieces with but one exception—the individuality of handmade originals.

Fashions in the design of silverware have moved in cycles. The ornateness of the closing years of the nineteenth century has given way to a preference for simplicity of design. Among the various styles now offered in period tea sets are the Elizabethan, Italian Rennaissance, Spanish Renaissance, Louis XIV, Louis XV, Louis XVI, Jacobean, Queen Anne, George I, George III, Sheraton, Colonial [Paul Re-



EARLY ENGLISH TEASPOONS

1. Apostle spoon. 2. Sixteenth century. 3. Apostle spoon. 4. Seventeenth century.

vere], and Victorian. One finds in the modern silver the graceful curved line and broad, plain surface of silverware that might have been made in the days of Queen Anne, or the straight lines and oval shapes of our own versatile Paul Revere.



CHAPTER XXVII

TEA IN LITERATURE

TEA IN THE WORLD OF LETTERS FOR TWELVE CENTURIES—A FRUITFUL THEME OF POETS, HISTORIANS, MEDICAL AND PHILOSOPHICAL WRITERS, SCIENTISTS, DRAMATISTS, AND AUTHORS OF FICTION SINCE THE FIRST BOOKS WERE PRINTED—TEA IN EARLY CHINESE AND JAPANESE PROSE—IN CHINESE AND JAPANESE VERSE—TEA IN EARLY WESTERN POETRY—IN MODERN VERSE—TEA IN EARLY OCCIDENTAL PROSE—IN MODERN PROSE—QUIPS AND ANECDOTES OF TEA AND TEA-DRINKERS

ITERATURE gained in tea a new and fruitful theme. Beginning with early Chinese and Japanese commentaries, and continuing down to the present, through a period of twelve hundred years, a galaxy of writers—occasional antagonists along with more numerous protagonists—have treated its many angles. To Chinese literature a debt is owed for our all-too-meager knowledge of the genesis of tea; to the literature of Japan, for the history of its expansion into a cult; and to the literature of the West, for a thousand side lights on the progress of its adoption as one of the world's greatest temperance beverages.

Tea in Early Chinese Prose

We owe the preservation of many early writings on tea to the lucky chance that brought the invention of printing contemporaneously with the spread of the new drink. Books began to be bound during the T'ang dynasty, A.D. 620-907; previous to that time only scrolls were used. The Ch'a Ching, or Tea Classic, by Lu Yu, was published in the T'ang period.

There are so many charming myths attaching to Lu Yu that some Chinese scholars question whether such a person ever really existed. They say that one or more of the tea merchants of the eighth century may have written the book, or hired some scholar to write it, and then credited it to Lu Yu, who has come to be known in China as the patron saint of tea. According to the Ch'a China, "the effect of tea

is its cooling flavor. As a drink, it is well suited to persons of self restraint and good conduct." Dr. Johnson should have had that line to hurl at Jonas Hanway in the great tea controversy of 1756. Further along, Lu Yu cautions his readers that "the first and second cups are best, and the third is the next best. One should not drink the fourth and the fifth cups unless one is very thirsty."

Ancient Chinese literature abounds in tea stories that have been current for centuries. The typical ones that follow were translated for this work by Mr. Baen E. Lee of Shanghai.

GENERAL LI AND THE TEA MASTER

Li Chi-ching, a Chinese general, was passing through Yangchow on his way to Huchow prefecture, when he met the famous tea master near the confluence of the Nanling and the Yangtze. "I have heard that the water of the Nanling is exquisite for making tea," said Li, "and Mr. Lu is the nationally-renowned tea expert. We should not miss an opportunity that may happen but once in a thousand years." He then dispatched a few of his faithful soldiers to sail away to the Nanling to get water, while Lu prepared the tea-making implements.

After the water was brought, Lu spilled some with a ladle and said at once, "This is not Nanling water." The water was ordered to be poured into a basin. When about half of it was poured, he suddenly ordered the pouring stopped. He again spilled the water with the ladle and said that the remainder was true Nanling water. The soldiers who had brought it showed amazement, and confessed having first filled the receptacle with Nanling water, but subsequently lost half by the rolling of the boat. Fearing the wrath of their master if they appeared with so small a quantity, they had filled the jar with other water near the shore.

THE MATCHLESS TEA MAKER

One of the stories told of Lu Yu's youth is that he studied under the monk Chi-shih, who had the tea-drinking habit, but unless the tea was made by the boy, Lu, the worthy priest would not drink so much as a sip. When Lu Yu grew up, he went on mendicant journeys, and his worthy master was compelled to stop tea-drinking. One day the Emperor Tae Tsung summoned Chi-shih to conduct a service at the palace, and knowing the monk's great liking for tea, he ordered the most skilled tea maker at the palace to prepare the beverage for him. To the surprise of the emperor, the monk merely sipped once and stopped. Pressed for an explanation, he told the emperor he could drink no other tea after having tasted that made by Lu Yu. Tae Tsung decreed that a search be made for Lu, who was brought to the palace and directed to prepare tea for the monk, without the latter's knowledge. When this was done, the monk emptied his cup and said the tea was equal to that made by Lu Yu. The emperor then smilingly produced Lu Yu in person.

THE DAME WITH THE TEAKETTLE

During the reign of the Emperor Yuan, A.D. 311-322, an old dame in the market place sold tea from a kettle. From morn till eve she was well patronized, yet the tea in the kettle remained undiminished. All the money from her sales the old woman distributed to the poor. Her actions attracted the curious attention of the authorities, who ordered her arrest and imprisonment; but at night the old dame and her kettle disappeared.

THE WIDOW'S REWARD

Mrs. Chen Wu, a widow, lived with her two sons in Yenhsien. She was fond of tea. In the yard of her house was the tomb of an unknown. Whenever she made tea, she first offered it to the dead in the tomb before drinking. This displaced her come

"What does the tomb know? You are simply giving yourself trouble," said they, and made up their minds to remove the grave. It was only through the mother's earnest pleading at different times that they refrained from doing so. One night, the widow dreamt that a man accosted her, saying, "Nothing is left for me but this tomb, which has existed for three hundred years. Your sons have wished to destroy it on several occasions, but through your protection it still is safe. Moreover, you always offer me fragrant tea. Now, although I am only long-buried dry bones, how can I forget to repay your kindness?"

When she arose in the morning, the widow found in the hall one hundred thousand cash, which had the appearance of having been a long time buried, although the string was quite new. The widow then called her two sons and put them to shame by showing them what the old tomb had done.

Ancient Chinese literature contains many works devoted to tea and allied subjects, including the previously-mentioned Ch'a



Lu T'ung, Chinese Tea Poet
This picture of the "Philosopher of the Jade
Stream" is by a present-day Chinese artist and
shows Lu Tung with his teakettle, serving pot,
and cup. The latter two were also used for wine
in Lu T'ung's time.

Ching, by Lu Yu, of the T'ang dynasty, and such others as: the Ch'a P'u, by Ku Yuan-ch'ing and the Ch'a Tung P'u, by Ch'in K'e, both of the Ming dynasty; and the T'seen Ch'a Shwuy Ke, by Chang Yew-sin, a treatise on tea water from different sources, at the beginning of the ninth century; the Shwuy P'in, another treatise on tea water, by Seu Heen-chung of the Ming; the Shih luh T'ang P'in, on the proper method of boiling water, care in pouring, kettles, and fuel, by Soo Yih; and the Yang Seen Ming Hoo He, a discourse on teapots, by Chow Kaou-ke.

Tea In Ancient Japanese Prose

Tea occupies a supreme position in the social and religious life of the Japanese, and, as might be expected, their literature is rich in tea references. One of the earliest

now extant is to be found in the Ogisho. written by the poet Kiyosuke Sugawara, who died in Jisho 1st, or A.D. 1178, toward the end of the Heian period. There are important tea references in the ancient Japanese history Ruishu Kokushi, compiled in A.D. 1552 by Michzane Sugawara, one of the foremost men of letters of his

The first Japanese work devoted exclusively to tea, was the Kitcha Yojoki, or Book of Tea Sanitation, in two volumes, by the abbot Yeisai, one of the foremost figures in the early history of tea in Japan. The learned abbot wrote, "Tea is a sacred remedy and an infallible means of longevity. The soil of the mountains and valleys where the tea plant grows is sacred."

Tea in Chinese Poetry

The tea goddess has inspired the muse from the earliest days of the "cup with vapors crowned." The poet Chang Mengyang of the Chin dynasty wrote in the sixth century: "Fragrant tea superimposes the six passions." It was during the brilliant Tang dynasty, A.D. 620-907, when outside influences and the break with ironbound tradition found expression in China's Age of Poetry, that the Honan poet Lu T'ung sang:

TEA-DRINKING

The first cup moistens my lips and throat; The second cup breaks my loneliness:

The third cup searches my barren entrail but to find therein some five thousand volumes of odd ideographs;

The fourth cup raises a slight perspiration—all the wrongs of life pass out through my pores

At the fifth cup I am purified;

The sixth cup calls me to the realms of the immortals.

The seventh cup—ah, but I could take no more! I only feel the breath of the cool wind that raises in my sleeves. Where is Elysium? Let me ride on this sweet

breeze and waft away thither.

Also of the T'ang period are two poems, which follow, by the poet Po Chu-i, A.D. 772-846.

TEA AFTER LUNCH

After lunch—one short nap; On awakening-two cups of tea. Raising my head, I see the sun's light Once again slanting to the southwest. Those who are happy regret the shortness of day;

Those who are sad tire of the year's sloth. But those whose hearts are devoid of joy or

Just go on living, regardless of "short" or "long."

ON RISING LATE

All the morning I have lain perversely in bed; Now at dusk I rise with many yawns. My warm stove is quick to get ablaze; At the cold mirror I am slow in doing my hair. With melted snow I boil fragrant tea Seasoned with curds I cook a milk pudding. At my sloth and greed there is no one but me to laugh;

My cheerful vigor none but myself knows. The taste of my wine is mild and works no poison,

The notes of my harp are soft and bring no sadness.

To the Three Joys in the book of Mencius I have added the fourth of playing with my baby boy.1

Among the best of the Chinese tea ballads, insofar as sentiment and metaphor are concerned, is one entitled the "Ballad of the Tea Pickers" that is sung by the girls and women as they pluck the leaves. The Chinese original, by Le Yih, a native of Hae-yang, was written sometime during the early part of the Ching [Manchu] dynasty, which began in 1644 and ended in the fore part of the present century. Each stanza of the original is composed of four lines; the first, second, and fourth of which rhyme. Each line contains seven words.

The entire ballad has been rendered into English verse by the late S. Wells Williams LL.D., 1812-84, professor of Chinese language and literature at Yale, who lived for many years in China. Here are typical stanzas:

BALLAD OF THE TEA PICKERS

Where thousand hills the vale enclose, our little hut is there,

And on the sloping sides around the tea grows

everywhere; So I must rise at early dawn, as busy as can be, To get my daily labor done, and pluck the leafy tea.

No sweeter perfume does the fair Aglaia shed, Throughout Wu-yuen's bounds my tea the choicest will be said;

When all are picked we'll leave the shoots to bud again in spring,

But for this morning we have done the third, last gathering.

Our time is up, and yet not full our baskets to the mouth—



¹ Arthur Waley, A Hundred-and-Seventy Chinese Poems, Constable & Co., Ltd., London, 1918. By permission.

A PROSE-TRANSPLATION of an ODE on TEA. Composed by Kirn-Long the present Em-peror of China and Firtury in the Year 1746.

Composed by Kiew-Long the present Emparor of China and Instany in the Year 1746.

THE Color of the Flower Mi-bon is not so thisking as pleasing. A sweet Smell, and Neatness distinguish especially the Plant of Fabour. The Fruit of the Dung-hear line is aromatic and of an attractive Odor. These are three excellent Productions of Nature, for their agreeably flattering the Sight, the Smell and the Tatle. With these at hand, let there be placed on a moderate Fire, a Tripod Boiler whose Form and Color shall show it to have been well-seasoned by long Service; it should be filled with the limpid Water of melted Snow, and warmed to that Degree which sufficies for whitening the fanny Tribes, or reddening the Shell of the crusticeous Kindi: Then your it into a Cup made of the Porcelain of Yony; let it stand till the Vapours which, at service, will rise in Abundance, and form a thick Cloud, shall have gradually thinned into the Appearance of a light Mist: Then you mey, without Precipitation, so this delicious Liquor. Nothing more effectual far distinguising the Difquiets, apt to arise from their sive Causes. You may then regale the Smell, and the Tatle: But there is no expressing the Calm which stells upon the Senses from a Liquor so prepared.

Delivered, for a little while, from the Tu-British Museum

m. It of Affairs. I find myfelf, at length, alone in my Tent, rethored to the Power of enjoying myfelf at Liberty. With one Hand, I take the Fruit of the Follow, making as little or as much Uie of it as I pleafe; with the other, I hold the Cup, from the Contents of which the vapourous Mill fent up invitingly havers on the Surface; I take, at Intervals, iones Sips, now and then cathing a pleafed Eye on the Mei-Loa Flower. Then it is that I give a Loofe to my Flower. Then it is that I give a Loofe to my Flower. Then it is that I give a Loofe to my Flower. Then to myfelf the famous Ou-space all wing himfelf to cat nothing but the Fruit of the Pine (Soung-cheos); He enjoyed himfelf, in Peace, in the middle of this primitive Frugality I enzy him, and with to imitate him. I put fome Kern. Is of it into my Mouth, and find them delicious.

Then again, I think I fee the virtuous Lin-fou, pruning and trimming with his own Hands the Branches of the Mi-ba-che u. Thus it was, fay I to myfelf, that he indu'ged his Mind with fome Relaxation; a Mind fatigued with the most profound Medications on the msflinterelling Objects. I look then at my Mei-boa Plant, and fancy myfelf with Lin-fou, arranging the Branches to give them a new Ferm.

From Lin for I make a mental Transition to Telan-tebesa, or to Va-tebesan. I think I fee

the first with a Number of small Cups before him, in which are all the Sorts of Tea; sipping sometimes of one, sometimes of another, thus affectedly varying every Moment his Taste. The other I figure to myself deinking the most exquisite Tea, with the most perfect. Indifference, and with searce any Distinction of it from the vised Liquor. Their Taste Is, not mine: Would I then wish to imitate eighter?

ther ?

But, hark! I hear the martial Maße already announce the Evening: The Frefincis of the Night is coming on: The Rays of the Monthine already penetrate the Openings of my Tent, and throw a pleafing Light on the military Simplicity of its Furniture. I feel myleff free from Defquiet, free from Fatigue; my Stomach is not oppieffed, and I can, without Fear, deliver myleff up to the Arms of Repute.

pofe.

In this Mood it is, that with but a finall Talent for Poetry, I wrote their Lines, in the fail of the Spring of the tenth Alson of the Pregan Year of my Reigh. KEEN-LONG.

Thefe Verfit are authenticated at Briton with raw reals, a great one and a familione. The facall one sations merely the Name of KIEN-LONG: The great one comprehends for Characteric expressive of one of the Years of KIEN-LONG of the Dynalty of Tal-TSIEN.

British Museum

PROSE TRANSLATION OF AN ODE ON TEA. COMPOSED BY CH'IEN LUNG, EMPEROR OF CHINA AND TARTARY, IN THE YEAR 1746. FROM THE Public Advertiser, SATURDAY, JULY 14, 1770.

The twigs anorth are fully searched, let's seek

them in the south; Just then by chance I snapped a twig whose leaves were all afair;

See, with my taper fingers how I fix it in my hair.

Ye twittering swallows, rise and fall in your flight around the hill,

But when next I go to high Sunglo, I'll change

my gown, I will;
And I'll roll up the cuff and show arm enough, for my arm is fair to see;

Oh, if ever there were a fair round arm, that arm belongs to me.²

The scholar-Emperor Ch'ien Lung, 1710-99, was an inveterate and tireless versifier who wrote on a wide range of subjects, including tea. Many of his shorter poems adorned Chinese teapots in the eighteenth century. The following is a prose translation of one:

"Let there be placed on a moderate fire a tripod boiler whose form and color show it to have been well-seasoned by long service; it should be filled with the limpid water of melted snow, and warmed to that degree which suf-fices for whitening the finny tribes, or reddening the shell of the crustaceous kind. Then pour it into a cup made of the porcelain of Ivay; let it stand until the vapors, which at first will raise in abundance and form a thick cloud, shall have thinned gradually into the appearance of a light mist. Then you may without precipitation sip this delicious liquor.

At another time the poet-Emperor sang, "You can taste and feel, but not describe, the exquisite state of repose produced by tea, that precious drink, which drives away the five causes of sorrow."

Tea in Japanese Verse

From the Golden Age of Japanese literature we have the following verses by Prince Junna, brother of the Emperor Saga, A.D. 810-24, written less than a dozen years after the introduction of tea into Japan:

REFRESHMENT

Aloof from the world the lone villa stood Midst ponds and bamboos, on the edge of a wood.

Coral-hued rose fruits told that spring now was past,

While green mosses heralded summer at last. The tea was made 'neath the trees in a glade. Sultan's parasols sheltered as harps softly played;

The Phoenix 1 prevailed-all cares were forgotten-

Then in darkness, at length, the path homeward was trodden.

A tea ode written by Koreuji in Tencho 4th, or A.D. 827, is freely translated:

TEA ODE

The gems on the tea-twigs are treasures long-cherished; The hillsides are glowing with green, fragrant

² Dr. S. Wells Williams, *The Middle Kingdom*, Chas. Scribner's Sons, New York, 1883. Vol. I, pp. 710-714. By permission.

⁸ Sultan's Parasol.—A tree upon which the Phoenix is supposed to alight.

4 Phoenix.—A bird of happy omen.

What joy it will be to dry leaf o'er the brazier; Tis time, now, to pluck the young shoots from the tree.

"Wu's salt" when admix't with the drink is a pleasure-

The crystal-clear water from woods that are bare.

Such things by their nature are clean, and are wholesome;

And teacups from Keng Hsin, on trays that

A sip of the tea o'er the clouds will transport us;

It's clean as the core of a rock, I declare. Like Yoga with powers that daily are growing, The tea's fine aroma still clings to the air.

Sanyo, b. 1779, renowned as a historian and poet, gives us a glimpse of the feeling of his time in his verses on tea-brewing, which have been freely translated:

TEA-BREWING

The kettle by its singing my attention claimed; I beheld "fish-eye" bubbles like ocean pearls; For the past three decades all my tastes it drained.

Yet there remains a nectar and my content unfurls.

Haiku verse is the shortest of the Japanese poetic forms, and is necessarily fragmentary. It consists of seventeen syllables, with five in the first line, seven in the second, and five in the third. Like all Nipponese poetry—long or short—haiku verse is impressionist; suggesting much more than is actually expressed. An interesting example is a tea haiku by the poet Onitsura which reads:

> Ujini kite Buobu ni nitaru Chatsumi kana.

Or, freely:

A rare thing to see, Is a glimpse of gath'ring tea . In Uji's fair scene; As from bushes on a screen.

Tea in Early Western Poetry

English letters had barely entered upon a fresh phase, under the influence of the secondary Latin poets in the last quarter of the seventeenth century, when Edmund Waller wrote the first English poem on tea as a birthday ode to Catherine of Braganza, the tea-drinking queen of Charles II. In 1663, Waller wrote:

Venus her Myrtle, Phoebus has his bays; Tea both excels, which she vouchsafes to praise. The best of Queens, and best of herbs, we owe To that bold nation, which the way did show To the fair region where the sun doth rise, Whose rich productions we so justly prize. The Muse's friend, tea does our fancy aid, Repress those vapors which the head invade, And keep the palace of the soul serene, Fit on her birthday to salute the Queen.

In England, at this time, t-e-a was pronounced "tay," and this is the pronunciation of the word for tea in most countries of Western Europe, today. The letters e-a were treated as a diphthong and vocalized as "ay." The Irish have preserved the sound of the word in its original form; possibly, because it better suits their dia-

As a satire on Dryden's "Hind and Panther," Matthew Prior and Charles Montague wrote the poem "The City Mouse and Country Mouse," in 1687, in which the rhyme gives the word tea its modern sound, "tee," although this may have been mere poetic license.

"And I remember," said the sober Mouse,
"I've heard much talk of the Wits Coffee House' "Thither" said Bundle, "you shall go and see Priests sipping coffee and Poets tea."

As early as 1692 we find, in Southerne's "The Wives' Excuse," two of the players discussing tea in the garden. The same author's "The Maid's Last Prayer," also in 1692, describes another tea party.

A rollicking Dutch ballad of the year 1697, entitled "The Merry Wedding Guest," acclaimed tea for the medicinal virtues that were ever foremost in the minds of early tea drinkers.

Dr. Nicholas Brady, 1659-1726, the learned chaplain to the court of William III and Mary, was the author of a poem on "The Tea Table," in which he called tea "the sovereign drink of pleasure and of health":

THE TEA TABLE

Hail Queen of Plants, Pride of Elysian Bowers! How shall we speak thy complicated Pow'rs? Thou Wond'rous Panacea to asswage The Calentures of Youth's fermenting rage, And Animate the freezing Veins of age.

To Bacchus when our Griefs repair for Ease, The Remedy proves worse than the Disease, Where Reason we must lose to keep the Round, And drinking others Health's, our own confound:

Whilst Tea, our Sorrows to beguile, Sobriety and Mirth does reconcile: For to this Nectar we the Blessing owe, To grow more Wise, as we more Cheerful grow.

Whilst fancy does her brightest beams dispense.

And decent Wit diverts without Offense. Then in Discourse of Nature's mystick Pow'rs And Noblest Themes, we pass the well spent Hours

Whilst all around the Virtues Sacred Band, And list'ning Graces, pleas'd Attendants stand.

Thus our Tea-Conversation we employ Where with Delight, Instruction we enjoy; Quaffing, without the waste of Time or Wealth, The Sov'reign Drink of Pleasure and of Health.

Dr. Brady's verses on the "Tea Table" were published in conjunction with a tiresome allegory on tea, "Panacea," by his co-worker, Nahum Tate, at London in 1700. The principal gem of the latter was:

"Fear no Circaean Bowls, This is the drink of Health, the drink of souls."

In 1709, Pierre Daniel Huet, the learned Bishop of Avranches, published at Paris his Poemata in Latin, including a lengthy ode to tea in elegiac verse from which the following bit has been translated:

TEA ELEGY

O Tea! Oh leaves torn from the sacred bough!

O stalk, gift born of the great gods! What joyful region bore thee? In what part of the sky

Is the fostering earth swollen with your health, bringing increase.

Father Phoebus planted this stem in his eastern gardens.

Aurora, kind hearted, sprinkled it with her own dew.

And commanded it to be called by her mother's name

Or called in accordance with the gift of the gods. Thea was she called,

As if the gods bore gifts to the growing plant. Comus brought joyfulness, Mars gave high

spirits, And thou, Coronide, dost make the draught healthful.

Hebe, thou bearest a delay to wrinkles and old

Mercurius has bestowed the brilliance of his active mind.

The muses have contributed lively song.

Tea was still "tay" in 1711, when Alexander Pope wrote The Rape of the Lock. The poem contains the following oft-quoted reference to Queen Anne:

. There stands a structure of majestic frame, Which from the neighboring Hampton takes its name.

Here thou, great Anna, whom three realms obey. Dost sometimes counsel take, and sometimes tea.

In Pope's verses, Bohea was another term for the tea in use by fashionable people. Like "tay" the word was pronounced "Bohay," and was so rhymed in The Rape of the Lock:





British Museum

TEA-POEM TYPOGRAPHY, EIGHTEENTH CENTURY

Where the gilt chariot never marks the way, Where none learn ombre, none e'er taste Bohea.

Writing in 1715, the same author says of a lady who left town after the coronation of George I, that she went to the country-

To part her time 'twixt reading and Bohea, To muse, and spill her solitary tea.

Peter Antoine Motteux, a French litterateur, resident in London, wrote "A Poem upon Tea," that was published in 1712. It portrays a discussion among the gods on high Olympus as to the virtues of wine and tea. Fair Hebe proposes to substitute tea for the more heady wine. The author introduces the argument with this salutation to tea:

Hail, Drink of Life! how justly shou'd our Lyres

Resound the Praises which thy Pow'r inspires! Thy Charms alone can equal Thoughts infuse: Be thou my Theme, my Nectar, and my Muse.

Further along in the poem tea is again acclaimed as follows:

Tea, Heav'ns Delight, and Nature's truest Wealth,

That pleasing Physic, and sure Pledge of Health: The Statesman's Councellor, the Virgin's Love, The Muse's Nectar, and the Drink of Jove.

After a lengthy presentation of the claims of tea on the one hand and wine on the other, Jove decides the debate in favor of tea in these words:

Immortals, hear, said Jove, and cease to jar! Tea must succeed to Wine as Peace to War: Nor by the Grape let Men be set at odds, But share in Tea, the Nectar of the Gods.

The pronunciation of the word "tea" must have changed pretty generally to "tee" after Pope wrote The Rape of the Lock, for not only did Motteux so rhyme the word in 1712, but Prior wrote in 1720 of "A Young Gentleman in Love":

He thanked her on his bended knee; Then drank a quart of milk and tea.

Allen Ramsay, a distinguished Scottish poet, sang in 1721:

Where Indus and the double Ganges flow, On odorif'rous plains the leaves do grow, Chief of the treat, a plant the best of fame. Sometimes called green, Bohea's the better name.

The custom of telling fortunes by tea grounds must have had an early inception, as Charles Churchill, a popular English poet, wrote in "The Ghost," about the year 1725:

Matrons, who toss the cup, and see The grounds of fate in grounds of tea.

Dean Jonathan Swift, 1667-1745, described a lady serving tea:

Surrounded with the noisy clans Of prudes, coquettes, and harridans.

An allegorical poem of more than 9000 words, entitled *Tea*, a *Poem in Three Cantos*, was published anonymously at London in 1743. It begins:

While bards renown'd dire Feats of Arms rehearse,

No hostile Deeds prophane my milder Verse: From boisterous War my Lays entirely free, The sweet resistless Force of gentle Tea Shall sing: Attend ye Fair, Polite, and Young! Protect the Poet, and inspire the Song.

At this time the serving of tea had become an important social function of the boudoir. The ladies of English high society had adopted the French custom of not rising until well toward noon, and of receiving their friends and admirers in their boudoirs, while their costuming progressed. The poet John Gay, 1688–1732, who began his career as secretary to the Duchess of Monmouth, refers to this custom in the lines:

At noon [the lady's matin hour] I sip the tea's delicious flower.

Edward Young, in The Love of Fame, the Universal Passion, c1725, says of a fair lady of the period:

Her two red lips affected Zephyrs blow, To cool the Bohea, and inflame the Beau; While one white Finger and Thumb conspire To lift the Cup and make the World admire.

In 1752, Tea Drinking; a Fragment, was published by an anonymous author in Dublin. Its introductory stanzas present with rare charm the picture of one of Dublin's fairest going a-calling in her Sedan chair,

and being served with tea. The latter function is thus described:

The leading Fair the Word harmonious gives; Betty around attends with bending Knee. Each white-arm Fair, the painted Cup receives; Pours the rich Cream, or stirs the sweetened Tea.

With verdant Hyson fill'd, Libation rare, The flow'ry figured-fair Enamel fume; The Odour-spreading Streams regale the Fair, And breezy Fragrance fills the rich-spread Room.

The great lexicographer, Dr. Samuel Johnson, was responsible for the following verses extemporized in ridicule of the ballad form of poetry, about the year 1770:

So hear it then, my Rennie dear, Nor hear it with a frown; You cannot make the tea so fast As I can gulp it down.

I therefore pray thee, Rennie dear, That thou wilt give to me With cream and sugar softened well, Another dish of tea.

In 1773, Robert Fergusson, a dissipated Scottish poet, paid this tribute to the teadrink:

And Venus goddess of the eternal smile, Knowing that stormy brews but ill become Fair patterns of her beauty, hath ordained Celestial Tea;—a fountain that can cure The ills of passion, and can free from frowns, And sobs, and sighs, the dissipated fair. To her, ye fair, in adoration bow! Whether at blushing morn, or dewey eve, Her smoking cordials greet your fragrant board With Hyson, or Bohea, or Congo crowned.

Beautiful in its homely simplicity, after the stilted elegance of the earlier eighteenth century English poets, is William Cowper's tribute to "the cups that cheer." This famous quotation—a phrase borrowed from Bishop Berkeley—appears in The Task, published in 1785, and, with its context, reads:

Now stir the fire, and close the shutters fast, Let fall the curtains, wheel the sofa round, And while the bubbling and loud-hissing urn Throws up a steamy column, and the cups That cheer but not inebriate, wait on each, So let us welcome peaceful evening in.

Also in 1785, there was published *The Rolliad*, a satire written by several whigs and said to have been directed at Lord Rolle, an English Tory politician. One of its passages presents a rhyming list of the kinds of tea then in use:

What tongue can tell the various kinds of tea? Of Blacks and Greens, of Hyson and Bohea; With Singlo, Congou, Pekoe, and Souchong, Cowslip the Fragrant, Gunpowder the Strong.

In 1789, Dr. Erasmus Darwin, an ingenious English poet and physiologist, wrote a poem entitled *The Botanic Garden*, that had a great vogue among his contemporaries, but is rather ornate for modern readers. Under the caption "Loves of the Plants," tea is thus introduced:

And now her vase a modest Naiad fills With liquid crystal from her pebbly rills; Piles the dry cedar round her silver urn. (Bright climbs the blaze, the crackling faggots burn)

Culls the green herb of China's envied bowers, In gaudy cups the steamy treasure pours; And sweetly smiling, on her bended knee, Presents the fragrant quintessence of Tea.

Referring gently to the scandals that float about the room when tea is served, the English poet George Crabbe, 1754—1832, observes:

The gentle fair on nervous tea relies, Whilst gay good nature sparkles in her eyes; An inoffensive scandal fluttering round, Too rough to tickle, and too light to wound.

The poet Byron, England's "matchless eaglet," sighed that he grew pathetic, "moved by the Chinese nymph of tears, green tea."

Some think that tea is meant by Burns in "The Twadogs," 1786, where he makes Cæsar say:

Whyles, oure the wee bit cup an' plaitie, They sip the scandal potion pretty.

Shelley mentioned tea in his "Peter Bell" burlesque description of Hell where he says:

Crammed as they on earth were crammed, Some sipping punch, some sipping tea, But, as you by their faces see, All silent and all damned.

The early American colonists were not literate to an extent demanding an independent poetic literature. Due to predominence of British origin, most of them were readers of the English poets. However, the Revolution of 1776 produced some balladry and lyric verse. After the war and several years' abstinence, tea failed to regain its former place as a popular beverage. For this reason none of the poets of the post-Revolutionary period were inspired to strike the lyre in its praise.

After the smoke of battle and some of the prejudice had cleared away, however, an early but unknown protagonist of the Temperance cause in America wrote and printed a broadside entitled, "The Jug of Rum" and "Dish of Tea." The original is preserved in the Ticknor room of the Boston Public Library. "Let some in grog place their delight," wrote the unknown bard, but—

A dish of tea more pleases me, Yields softer joys, provokes less noise, And breeds no base design.

The Tea; a Poem was published at London in 1819 by an anonymous author. It begins:

Ambrosial plants! that from the East and West, Or from the shores of Araby the blest, Those odoriferous sprigs and berries send, On which our wives and Government depend. Kind land! that gives rich presents, none

receives,
And barters for gold, its golden leaves.
Bane of our nerves, and nerve of our excise,
In which a nations strength and weakness lies.

In his collection of *Broadside Ballads* [10 vols.] printed in London, and covering a period from 1800 to 1870, the Rev. Sabine Baring-Gould includes some doggerel stanzas in this vein:

The Tea! The tea!—the wholesome Tea! The Black, the Green, the mix'd, the strong, Gunpowder or Bohea. Etc.

The poet John Keats, 1795-1821, refers to lovers who "nibble their toast, and cool their tea with sighs," while William Hone, 1779-1842, published an Extract from Ancient Mysteries, Christmas Carols, Etc. in 1823. Included therein is a curious Christmas carol on "Peko Tea," said to have been dedicated by one Francis Hoffman to Queen Caroline.

Hartley Coleridge, 1796–1849, English poet, and prodigy, asked that someone "inspire my genius and my tea infuse," and later wrote:

And I who always keep the golden mean, Have just declined my seventh cup of green.

Percy Bysshe Shelley, 1792-1822, "England's Glorious Ariel," exulted:

The liquid doctors rail at, and that I Will quaff in spite of them, and when I die We'll toss up which died first of drinking tea.

During the English Reform Bill excitement of 1832, Thomas Hood, in an ode addressed to Mr. J. S. Buckingham on the Report of the Committee on Drunkenness, wrote:

Would any gentleman, unless inclining To tipsy, take a board upon his shoulder Near Temple Bar, thus warning the beholder "Beware of Twining!"

Are tea dealers indeed so deep designing As one of your select would set us thinking That to each tea chest we should say Tu doces (or doses) Thou teachest drinking.

Lord Alfred Tennyson, 1809-92, the Victorian poet-laureate of England, sang of Queen Anne's reign as:

> "The teacup times of hoop And when the patch was worn."

The charming custom of afternoon tea was mentioned by the poet Robert Browning. 1812–89. as:

> That circle, that assorted sense and wit, With five o'clock tea in a house we know.

Mrs. Browning spoke in less kindly vein of the woman who:

Then helps to sugar her Bohea at night With your reputation.

A patriotic poem entitled "Boston" read upon the occasion of the 100th anniversary of the Tea Party, December 16, 1873, by Ralph Waldo Emerson, the American essayist, and poet, begins:

Bad news from George on the English throne; "You are thriving well," said he; "Now by these presents be it known You shall pay a tax on tea; Tis very small,—no load at all,— Honor enough that we send the call."

The outcome was thus recorded:

The cargo came! and who could blame If Indians seized the tea, And, chest by chest, let down the same Into the laughing sea? For what avail the plow or sail,
If land, or life, or freedom fail.

Oliver Wendell Holmes, 1809-94, the New England poet, in his "Ballad of the Boston Tea Party," has this final comment on the event:

> The waters in the rebel bay Have kept the tea-leaf savor; Our old North-Enders in their spray Still taste a Hyson flavor; And freedom's teacup still o'erflows With ever-fresh libations, To cheat of slumber all her foes And cheer the wakening nations!

Tea in Modern Poetry

A delightfully domestic picture is presented in a poem entitled, "A Cup of Tea,"

by Helen Gray Cone, published in St. Nicholas magazine, December, 1899. begins:

Now Grietje from her window sees the leafless poplars lean

Against a windy sunset sky with streaks of golden green;

The still canal is touched with light from that

wild wintry sky,
And, dark and gaunt, the windmill flings its bony arms on high.

"It's growing late; it's growing cold; I'm all alone," says she;
"I'll put the little kettle on, to make a cup

of tea!"

Harking back to tea's mystic origin is one of the finest tea poems in English, a sonnet by Francis Saltus Saltus [d. 1889] in Flasks and Flagons:

TEA

From what enchanted Eden came thy leaves That hide such subtle spirits of perfume? Did eyes preadamite first see the bloom, Luscious Nepenthe of the soul that grieves?

By thee the tired and torpid mind conceives Fairer than roses brightening life's gloom, Thy protean charm can every form assume And turn December nights to April eves.

Thy amber-tinted drops bring back to me Fantastic shapes of great Mongolian towers, Emblazoned banners, and the booming gong; I hear the sound of feast and revelry, And smell, far sweeter than the sweetest flowers,

The kiosks of Pekin, fragrant of Oolong!

In some verses on tea in The Little Tea Book, published in 1903, Arthur Gray recites:

> In the drama of the past Thou art featured in the cast; (O Tea!) And thou hast played thy part With never a change of heart, (O Tea!)

Out of the drama of the past, Thomas J. Murray in The Nation seized on the theme of the tea clippers to present a picture of billowing sails and flying spray:

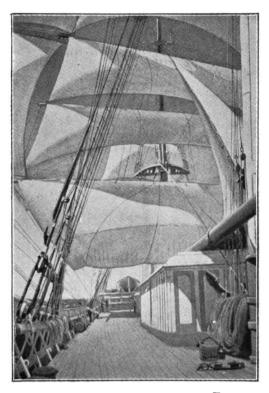
THE TEA SHIPS

Their canvas flared across the China Sea, Back in the misty 'forties ere the steam And plate steel from the Tyne swept every lea, Crowding the sail to yards where they might dream

Of vanished greatness when the seas would cream

Across their surging prows on washing lanes; And o'er the waste to catch Nantucket's gleam-Canton to Boston with their golden gains.

The Tea and Coffee Trade Journal pub-



THE DECK OF A TEA CLIPPER IN THE TROPICS

A decorative purpose is definitely apparent in this picture by John Everett. From British Marine Painting.

lished in 1909 this tribute in verse to the charms of India tea, by E. M. Ford:

A TEA IDYL

In Assam dwelt her ancient family,
And there heart-free grew graceful India Tea;
Till one who long for love of her had pined,
Drawn by the sun and driven by the wind,
From Ocean's realm, Prince Crystal-Water
came.

But Falling Dew stepped forth the bride to claim.

"This blooming flower was pledged from birth

And Nature gave assent"—but India Tea Turned to the one she loved and sobbing said, "Prince Crystal-Water only will I wed." Then on the scene, as ever in each place, Stepped meddling Man, "I will decide this case."

He told the rivals, and, at his command,
A prison's outlines rose by fire spanned.
A scorching blast enwrapped the shrinking
maid,

And soon, thereto by many hands conveyed, Teapot received her form. Cried Man, "Behold,

The altar where ye wed, oh suitors bold!" Cold Falling Dew gave up his hopes and fled, But Crystal-Water scorned the ordeal dread.

And, fearless, plunged into the threatening gloom,
"Make way," called Steam—and lo, a happy

'Make way," called Steam—and lo, a happy groom

Passed through the prison's door and in his

Lay India Tea, with tenfold added charms! The world applauds their union and they live Steeped in the bliss which cream and sugar give.

In 1920, Minna Irving contributed to Leslie's Weekly some delightfully pleasing stanzas on tea. Two of them follow:

MY FRAGRANT CUP OF TEA

When I am tired of work or play, And all my nerves are raw With things I did, and things I said And things I merely saw, I hasten home and donning mules And flowing negligee, Get out the spirit lamp and make A fragrant cup of tea.

I pour the steaming amber drink In china thin and fine, Gold banded, bordered daintily With wild rose flower and vine, Add cream and sugar or condensed, And sipping slowly see A film of far off scenes unroll, The drama of the tea.

In her poem, "The Old Tea Master of Kyoto," Antoinette Rotan Peterson gives us the best English interpretation of the Japanese Tea Ceremony in terms of poetic imagery. The following excerpt is presented by permission of the author and of the publishers of Asia magazine, in which it first appeared in 1920:

We sat on the soft matting; Another bow; Bearing a vase for water now, A rich brown triumph of the glazier, The master came And set it near the brazier



THE OLD TEA MASTER OF KYOTO



"TEA, THE TIE THAT BINDS"

Translated, this reads: "Tea, when analyzed, means the delectable go-between that binds the friendship Tie of the East (Japan) and America." The charming geisha on the left is O-yei (Miss Prosperous) illustrating the author's recital of the poem at Shizuoka.

With deft, slow care; the same Measuring steps, a sort of delicate shuffle, When next he brought a slender tea-jug Of much prized white with streaks of sea-slug And sparks of red as in a pheasant's ruffle, And then a bowl Whose colours "warm as jade" were young When the dynasty was Sung. He seemed so very simple, even humble, As he made the minute motions Of those complicated notions; Not to falter once or fumble Showed his thoughts were not of self at all. More grace than we possessed was needed As the ceremony quaint proceeded, But—at length—we sipped the bowl Where east and west with disparate soul Do meet, for all the world drinks tea.

When the author visited Shizuoka, on the occasion of his second world-tour of the tea countries, in 1924, Mr. Seiichi Ishii composed the following acrostic, which was set to the music of an old folk-song, and prettily sung and danced by geisha:

Tea, when analyzed, means the delectable gobetween that binds the friendship Tie of the East [Japan] and America.

A ballad entitled, "A Drop o' Tea," by Aquilo, appeared in *Ireland's Saturday Night* in 1926. Two of its eight stanzas run:

Bring me a drop o' tea when morning breaks, That I may toast the "teapot dome" of heaven; And while the sun his forenoon journey takes, Bring me a drop o' tea—about eleven; And when the midday meal is timed to stop, Bring me for goodness sake, another drop!

And in the drowsy land of Afternoon, When time hangs heavy and the spirits droop, Bring me a little tray, a little spoon, A little teapot (with a decent "stroup"), A little sugar, and a little cream, A little drop o' tea—and let me dream.

Bringing tea as a poetic theme down to the present, the *New York Times* published the following poem by Harold Willard Gleason in 1931. It is reprinted by permission:

AT TEA-TIME

Pale sun through muslin glances at the gleaming Brass urn, stout, pompous with its burden steaming,

Beside blue bowl and pitcher, both urbanely Class-conscious near the pot. Spout arching

He lords it over cakes and bread and butter, A smug Mikado; in abasement utter Pale serviettes lie folded prone before him; Frail cups and saucers languidly adore him. Pagan this haughty clique, sole reverence vowing

To your slim fingers. I salute these, bowing In humble tribute to the slender graces Which put us—men and tea things—in our places.

Tea in Early Occidental Prose

At the time when tea first appeared in the literature of Europe, Venice was the great commercial center for the Continent, due to its geographical situation between the overland routes from the East and the water lanes to the seaports of Europe; therefore it is not surprising to find that the earliest mention of tea in European literature was published by a Venetian. This was the now-famous account of tea by Giambatista Ramusio, published in 1559.

The sixteenth and early seventeenth century was an era of discovery and rapid extension of commerce. Accounts of voyages and travels were eagerly read. All of the references to tea at this time are to be found in works of this character. Many of them are by ecclesiastics—mostly Roman Catholic priests of the Jesuit Order, who wrote of their missionary travels.

It seems hardly credible now, but the introduction of tea into Europe spread consternation and created a tremendous uproar among medical scientists. In 1635, Dr. Simon Pauli, a German physician and

botanist, attacked tea furiously and in 1648, Dr. Gui Patin, a Parisian physician and professor at the College de France, called tea "the impertinent novelty of the century."

While medical writers on the Continent were fighting their battle, tea invaded aledrinking England so unobtrusively that nobody recorded precisely when it happened. The nearest approach to such a record in the literature of England is a quaint old broadsheet of the year 1660, issued by Thomas Garaway, the London coffeehouse man. His broadsheet, entitled "An Exact Description of the Growth, Quality and Vertues of the Leaf Tea," was intended to spread the knowledge and fame of the new China drink. In the same year, Samuel Pepys, the indefatigable diarist, wrote of ordering a cup of tea.

Various continental writers recorded their views for and against tea during the later years of the seventeenth century. Among the number were Jean Nieuhoff, Philippe Sylvestre Dufour, Simon de Molinaris, Philip Baldeus, Father Athanasius Kircher, Dr. Cornelis Bontekoe (Decker), Madame de Sévigné, and Dr.

Jan Niklaas Pechlin.

William Congreve, the English dramatist, was the first English writer to associate the terms "tea" and "scandal," in his play, "The Double Dealer," written in 1694. One of the characters says: "They are at the end of the gallery; retired to their tea and scandal."

John Ovington, a broad-minded English ecclesiastic and quite a famous person in his day, published a scholarly Essay upon the Nature and Qualities of Tea at London in 1699. After describing the nature of tea at some length, and quoting from various medical writers, he concludes:

It were a happy leaf indeed were it altogether Objection free, and out of the Reach of Enmity and Contradiction. But, however, this Happiness it has, That herein it shares Fate with all things that are Excellent, which are often aspers'd even for their Innocence, and in that respect owe all their Misery to their Perfection.

This panegyric so displeased John Waldron, an English writer, that he replied in doggerel verse with A Satyr Against Tea, or Ovington's Essay upon the Nature and Quality of Tea... Dissected and Burleso'd.

The prevailing vogue for tea gave rise to all manner of satires. There is still extant

a copy of a comedy performed at Amsterdam in 1701, and printed the same year, which is entitled *De thee-zieke Juffers*, or "The Tea Smitten Ladies." Sir Richard Steele, 1671–1729, who published the triweekly *Tatler* and was later associated with John Addison, 1672–1719, as joint editor of the daily *Spectator*, wrote another comedy, *The Funeral*, or *Grief a la Mode*, in which he ridicules the "Juice of the tea." One of the characters exclaims, "don't you see how they swallow gallons of the juice of the tea, while their own dock leaves are trodden under foot?"

Pope, writing in 1718, draws a pleasing picture of an aristocratic lady of the time, who drank tea at nine o'clock in the morning: "She pretends to open her eyes for the sake of seeing the sun, and to sleep because it is night; drinks tea at nine in the morning, and is thought to have said

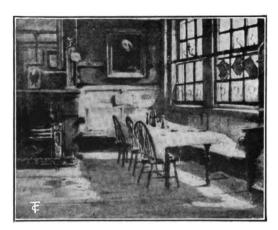
her prayers before."

Of considerable historical importance was the publication at Paris, in 1718, of the Ancient Accounts of India and China by Two Arabian Travelers who went to those Parts in the Ninth Century, as translated from the Arabic by the French orientalist, Abbe Eusebe Renaudot, 1646-1720. The account says that tea preserves the Chinese from all distempers. Daniel Huet, the venerable Bishop of Avranches, whose elegy on tea was quoted earlier in this chapter, was a great believer in the curative properties of the beverage. His curious autobiographic memoirs published in 1718 record that he obtained from tea a cure for an ailment of the stomach, as well as relief from ophthalmia.

Tea as a loosener of female tongues was celebrated by Colley Cibber, 1671-1757, the gay English dramatist and comedian, in these lines from *The Lady's Last Stake*:

Tea! thou soft, thou sober, sage, and venerable liquid, thou female tongue running, smile smoothing, heart opening, wink tipping cordial, to whose glorious insipidity I owe the happiest moments of my life, let me fall prostrate.

In somewhat the same vein Henry Fielding, 1707-54, novelist and playright, declared in his first comedy, Love in Seven Masques, published about 1720, that "love and scandal are the best sweeteners of tea." About this same time, Dean Swift averred that "the fear of being thought pedants hath taken many young divines off from their severer studies, which they



Dr. Johnson's Seat at the Cheshire Cheese

have exchanged for plays, in order to qualify them for the tea table."

Thomas Short, a Scottish physician, published at London in 1730 A Dissertation upon Tea, and Father Jean Baptiste Duhalde included a chapter on tea in his Descript de l'Chine, published at Paris in 1735. In 1745, Simon Mason, published a book on The Good and Bad Effects of Tea, and a few years later, in 1748, John Wesley, the distinguished religious reformer, attacked the use of tea in a sixteen-page tract entitled "A Letter to a Friend Concerning Tea."

It is interesting to note that Wesley abstained from tea for the next twelve years, until his physician advised him to resume its use.

No tea controversialist of the eighteenth century was more earnestly convinced that tea is wholly pernicious than a certain benevolent London merchant and reformer named Jonas Hanway, who published in 1756 An Essay on Tea, in which he attacked it as dangerous to health, an obstruction to industry, and impoverishing the nation. Hanway asserted that tea caused weak nerves, scurvy, and bad teeth, then proceeded to reckon the time lost from productive labor while people are drinking tea, as well as the total annual cost, which he estimated at £166,666.

Dr. Samuel Johnson, who characterized himself as "a hardened and shameless teadrinker," arose in his wrath against this defamer of his favorite beverage, answering him in two articles which were published in the *Literary Magazine*.

Louis Lemery, in 1759, and Abbe Guillaume Thomas Francis Raynal, in 1770,

published commendatory notices of tea in French, and in 1772 The Natural History of the Tea Tree, from the pen of Dr. John Coakley Lettsom, was printed at London.

Isaac D'Israeli, English litterateur, quoted from the Edinburgh Review on the subject of tea in his Curiosities of Literature, 1790:

The progress of this famous plant has been something like the progress of truth; suspected at first, though very palatable to those who had courage to taste it; resisted as it encroached; abused as its popularity seemed to spread; and establishing its triumph at last, in cheering the whole land from the palace to the cottage, only by the slow and resistless efforts of time and its own virtues.

John Hoole, 1727–1803, translator of the poems of Tasso and Ariosto; James Mill, 1773–1836, historian of British India; and Charles Lamb, 1775–1834, essayist and humorist, all toiled as clerks for the East India Company, which was then the sole importer of the teas brought into Britain. "My printed works," wrote Lamb, "were my recreations—my true works may be found on the shelves in Leadenhall Street, filling some hundred folios."

"Tea" wrote Thomas DeQuincey, 1785-1859, "though it is ridiculed by those who are naturally coarse in their nervous sensibilities, or are become so from winedrinking, and are not susceptible of influence from so refined a stimulant, yet it will always be the favorite beverage of the intellectual." Again, he wrote: "Surely everyone is aware of the divine pleasures which attend a wintry fireside: candles at four o'clock, warm hearthrugs, tea, a fair tea-maker, shutters closed, curtains flowing in ample draperies to the floor, whilst the wind and the rain are raging audibly without."

Charles Dickens, the popular English novelist, was a tea devotee, though by no means in Dr. Johnson's class. In *Pickwick Papers*, published in 1837, he described a temperance association meeting at which some of the leading members caused Mr. Weller great alarm by the inordinate amounts of tea they consumed.

"Sammy," whispered Mr. Weller, "if some o' these here people don't want tappin' tomorrow mornin', I ain't your father, and that's wot it is. Why this here old lady next me is a drownin' herself in tea."

"Be quiet can't you?" murmured Sam.

"Sam," whispered Mr. Weller, a moment afterward, in a tone of deep agitation, "mark my words, my boy; if that 'ere secretary feller

keeps on for five minutes more, he'll blow him-

keeps on for five minutes more, he'll blow himself up with toast and water."

"Well, let him if he likes," replied Sam; "it ain't no bis'ness of yourn."

"If this here lasts much longer, Sammy," said Mr. Weller, in the same low voice, "I shall feel it my duty as a human bein' to rise and address the cheer. There's a young 'ooman on the next form but two, as has drank nine breakfast cups and a half; and she's a swellin' wisibly before my were eyes." wisibly before my wery eyes."

Writing in 1839, Dr. Sigmond, an Englishman, declared: "The tea table is like the fireside of our country, a national delight." Looking back over his past life Sydney Smith, 1771-1845, the English divine, essayist, and wit, was moved to exclaim: "Thank God for tea! What would the world do without tea? How did it exist? I am glad I was not born before

William Makepeace Thackeray paid glowing tribute to "the kindly plant" in Pendennis, 1849-50. He wrote:

What a part of confidente has that poor teapot played ever since the kindly plant was introduced among us! What myriads of women have cried over it, to be sure! What sickbeds it has smoked by! What fevered lips have received refreshment from it! Nature meant very kindly by women when she made the tea-plant; and with a little thought, what a series of pictures and groups the fancy may conjure up and assemble round the teapot and cup.

Tea in Modern Prose

In 1883, Dr. W. Gordon Stables, a Scottish author and M.D., published at London, Tea: the Drink of Pleasure and of Health. The book contains numerous quotations in praise of tea. Among the latter is one that has appeared in different forms and with varying credits as to authorship. Dr. Stables credits it to Lu Yu, as follows: "Tea tempers the spirits, calms and harmonizes the mind; it arouses thought and prevents drowsiness, lightens and refreshes the body, and clears the perceptive faculties." Arthur Gray, whose Little Tea Book is described further along, credits it with slight amplification but quite erroneously, to Confucius. Gray's version reads: "Tea tempers the spirits and harmonizes the mind, dispels lassitude and relieves fatigue, awakens thought and prevents drowsiness, lightens or refreshes the body, and clears the perceptive faculties." More naïve and with less flavor of modernism is the version given by Alfred Franklin in La Vie Privee, published at Paris in 1893, and credited to Shen Nung's Pen Ts'ao: "It quenches thirst; it lessens the desire for sleep; it gladdens and cheers the heart." Apparently, the Shen Nung Pen Ts'ao was the original source, for in Lu Yu's "Historical Record of Tea," in the Ch'a Ching, he quotes the Shen Nung work as saying: "To drink tea constantly makes one strong, and is exhilarating."

In 1884, Arthur Reade, the author of Study and Stimulants, published at London Tea and Tea Drinking, a scholarly compilation of tea references by poets and writers of the old school. In the same year, Samuel Francis Drake of Boston, published Tea Leaves, a history of the stirring events culminating in the Boston Tea Party.

Sir Edwin Arnold, 1832-1904, author of The Light of Asia, paid a fine tribute to the spiritual aspect of the teacup of the Japanese in one of the longest sentences from his tireless pen:

Insensibly, the little porcelain cup becomes pleasantly linked in the mind with the snowpure mats, the pretty prostrate musumes [serving girls] the spotless joinery of the walls, the exquisite proprieties of the latticed shojis, adding to all these a charm, a refinement and distinguished simplicity found alike amid high and low, emanating, as it were from the inner spirit of the glossy leaf and silvery blossom of the tea plant—in one word, belonging essentially to and half constituting beautiful, wonderful, quiet and sweet Japan.

Lafcadio Hearn, an Irish-Greek writer who became a naturalized subject of Japan, was, as he expressed it, only an "humble traveler into the vast and mysterious pleasure ground of Chinese fancy," but the Daruma legend of the origin of the tea plant appealed to him. He made it the theme of his weirdly-beautiful "Tradition of the Tea Plant" in Some Chinese Ghosts, published in 1887. After describing the penitential eyelid severance, which has been popularly ascribed to Daruma, Hearn tells of the wondrous shrub which sprang up from the ground where the eyelids had been cast, and tells how, after naming it "Te." the sage spoke to it, saying:

Blessed be thou sweet plant, beneficent, life giving, formed by the spirit of virtuous resolve! Lo! the fame of thee shall yet spread unto the ends of the earth; and the perfume of thy life be borne unto the uttermost parts by all the winds of heaven! Verily, for all time to come, men who drink of thy sap shall find such refreshment that weariness may not overcome them nor languor seize upon them—neither shall they know the confusion of drowsiness, nor any desire for slumber in the hour of duty or of prayer. Blessed be thou!

It has been said that tea-drinking fills all the gaps in English novels. An American essayist points out that the technique of such novelists as Mrs. Humphrey Ward, Mrs. Oliphant, Mrs. Riddell, Miss Yonge, and even the undomestic Ouida is simply to open the door, and a neat-handed Phyllis or two men in livery, as the case may be, bring in the tea urn and everything stops while this immovable feast takes place. They drink tea twenty-three times in Robert Elsmere, twenty times in Marcella, and forty-eight times in David Grieve.⁵

The Russian novelists, Gogol, Tolstoy, and Turgenev, about whose heroines we used to read when we were young, were not behind the English writers in filling gaps in their stories with tea-drinking; the only difference was that they added the picturesque background of the steaming brass samovar.

In 1901, there was published anonymously in Calcutta a collection of essays supposedly written by an assistant on a tea estate in Assam. They had appeared previously in the *Englishman*, and were entitled *Rings from a Chota Sahib's Pipe*; a chota sahib being a junior assistant. They are written in humorous vein and possess marked literary flavor.

In 1903, Arthur Gray published in New York The Little Tea Book, intended, as he states in his introduction, to evidence the high regard in which the spirit of the tea beverage has ever been held by writers whose standing in literature, and recognized good taste in other walks, cannot be questioned. "Domestically and socially," says the author of The Little Tea Book, "tea is the drink of the world."

In 1906, Okakura Kakuzo, founder and first president of the Imperial Academy of Fine Arts at Tokio, and subsequently connected with the Oriental Department of the Boston Museum of Fine Arts, published in English The Book of Tea, an exquisite volume that has held the subsequent interest of the western reading public. The author traces the inception and development of teaism, a religion of

aestheticism; the evolution of the successive schools of tea; the connection of Taoism and Zennism with tea; and discusses cha-no-yu, the Japanese Tea Ceremony, as only a gifted writer and artist could treat of a truly esthetic rite.

"Nowhere is the English genius of domesticity more notably evidenced than in the festival of afternoon tea," declared George Gissing, 1857-1903, in The Private Papers of Henry Ryecroft.

One of the shining moments of my day is that when, having returned a little weary from an afternoon walk, I exchange boots for slippers, out-of-doors coat for easy, familiar, shabby jacket, and, in my deep, soft-elbowed chair, await the tea-tray . . . Now, how delicious is the soft yet penetrating odor which floats into my study, with the appearance of the teapot! What solace in the first cup, what deliberate sipping of that which follows! What a glow does it bring after a walk in chilly rain! The while I look around at my books and pictures, tasting the happiness of their tranquil possession. I cast an eye towards my pipe; perhaps I prepare it, with seeming thoughtfulness, for the reception of tobacco. And never, surely, is tobacco more soothing, more suggestive of humane thoughts, than when it comes just after tea—itself a bland inspirer . . . I care nothing for your five o'clock tea of modish drawing rooms, idle and wearisome like all else in which the world has part; I speak of tea where one is at home in quite another than the worldly sense. To admit mere strangers to your tea table is profanation; on the other hand, English hospitality has here its kindliest aspect; never is friend more welcome than when he drops in for a cup of tea.

In sharp contrast to this purely masculine view of the function, May Sinclair, the English poetess and novelist, in A Cure of Souls gives a charming pen-picture of the afternoon tea service. The locale is an English country town where the social life centers about the parish church, the rectory, and the bachelor rector, Canon Chamberlain. Canon Chamberlain is calling on Mrs. Beauchamp, a wealthy and attractive widow, who has but recently taken a house in the parish.

At that moment the parlor-maid came in, bringing the tea things. There was a flutter of snow-white linen and the pleasant tinkle of china and of silver, and a smell of hot butter. He rose.

"Oh! don't go just as tea's coming in. Please stay and have some.

It was delicious, sitting there in the deep, soft-cushioned chair, eating hot-buttered scones,

⁶ George Gissing, The Private Papers of Henry Ryecroft, Thomas Bird Mosher, Portland, Me., 1921. By permission.



⁵ "Tea in the Novels," Current Literature, New York, May, 1901.

drinking China tea with the smoky flavor that he loved, and watching the plump, but dainty hands hovering about the teacups and the dishes. Mrs. Beauchamp enjoyed teatime and was determined that he should enjoy it too.

The teacups—he noticed such things—were wide and shallow and had a pattern of light green and gold on white, with a broad green and gold band inside, under the brim. His nostrils drank in the fragrance.

"I wonder why it is," he said, "that a green limit a street work of the said, "that a green limit as the said, "that a green limit as the said,"

lining to a cup makes tea so much more de-

licious. But it does."

"I know it does," she said with feeling.
"There's a house where they give you strong
Indian tea in dark-blue china. You can't imagine anything more horrible.

"It would be."

"And all teacups should be wide and shal-

low."
"Yes, it's like champagne in wide glasses, isn't it?"

"A larger surface for the scent, I suppose." "Funny that there should be light green tastes and dark blue tastes, but there are. Only, I didn't think anybody noticed it but

Delightful community of sense. And, like himself, she felt that these things were serious.7

In Drums, by James Boyd, a novel of the American Revolution, we are introduced to Johnny Fraser who was a product of the Carolina backwoods and educated in that Edenton which had a tea party of its own in 1774, following the Boston affair. Says the captain of the skiff that is bearing him up the Roanoke River, home for a holiday:

They's been a row about this yer tea, I expect you heerd tell of it. A tax or something. And bung me if I don't think the province is right, what I understand of it. Anyhow, I like to see 'em stand up against England. It looks good, I'm for shutting down on tea. But what I says is, shut down on it in a general way, but a little tea never done no harm to no one. Specially on a chilly morning like this yer.

Frank Swinnerton in Summer Storm. published in 1926, uses an English tea-time scene as a background for the fade-out of a modern English novel:

Falconer found Mrs. Lane in the garden. He was paying an afternoon call, and he had reached Troy road in time for tea...
"Is your tea as you like it?" asked Mrs.

"Other nations laugh at the English because they are so fond of tea," Falconer said, after satisfying Mrs. Lane that he was perfectly happy. "One would think we drank nothing else all day long. But it's a very pleasant meal -a meal that's no meal, but a charming social

"Of course, some people are always drinking tea," Mrs. Lane assured him. "Many women have a kettle on the hob all the time and a teapot stewing."

"True. I used to know an old man—a sort

of scholar—who drank tea and smoked rank cigars all day. Whenever I read anything he wrote I could always taste the tea and cigars in it. I wonder whether, if one knew the favourite foods of celebrated authors, one could find traces of those foods in their writings. . . ." Mrs. Lane thought this unlikely.

Tea from China, by Frederick William Wallace, published at London in 1927, is a collection of short stories about Canadian sea-farers that appeared originally in various magazines. The book takes its name from one of the component tales which centers round a race of tea clippers from Foochow to London.

In a new account of the famous tea controversy between King George III and the American colonists, Hendrik van Loon commented in his America, New York, 1927:

True enough the tax was very light, only three pennies on the pound, but it was a nuisance, for every time a peaceful citizen made himself a cup of the delectable brew he knew that he was aiding and abetting a law which he felt to be unjust.

In the end, the humble teacups (the proverbial scenes of so many storms) provoked a hurricane that was to rock more than one ocean, and all that for an expected annual revenue of only \$200,000.

The Dream of the Red Chamber, a curious novel of Chinese life written in English by T'sao Hsiieh-chin and Kao Ngoh, and published in 1929, gives us an idea what it means to be a real connoisseur of tea. A nun is offering tea to a couple of guests named Black Jade and Precious Virtue:

The Matriarch asked her what water it was, and the nun answered that it was rainwater saved from the year before. . . The nun then saved from the year before. . . . The nun then took Black Jade and Precious Virtue into another room to make some special tea for them. other room to make some special tea for them. She poured the tea into two cups of different patterns, of the rare Sung period. Her own cup was of white jade. "Is this also last year's rainwater?" Black Jade asked. "I did not think you were so ignorant," the nun said, as if insulted. "Can't you tell the difference? This water is from the snow that I collected from the plum trees five years ago in the Yuan Mu Hsiang Temple. It filled that blue jar Mu Hsiang Temple. It filled that blue jar there.... All this time it was buried under the carth and was opened only this last sum-

⁸ Frank Swinnerton, Summer Storm, George H. Doran Co., New York, 1926. By permission.



⁷ May Sinclair, A Cure of Souls, The Macmillan Company, New York, 1924. By permission.

mer. How could you expect rainwater to possess such lightness and clarity?" 9

Included in a collection of Professor William Lyon Phelps' writings published in New York, 1930, is an "Essay on Tea" containing this pleasant commentary on the English custom of afternoon tea:

At precisely 4:13 P.M. every day the average Englishman has a thirst for the astringent taste of tea. He does not care for hot water or hot lemonade colored with tea. He likes his tea so strong that to me it has a hairy flavor. There are several good reasons (besides bad coffee) for tea in England. Breakfast is often at nine (the middle of the morning to me), so that early tea is desirable. Dinner is often at eight-thirty, so that afternoon tea is by no means superfluous. Furthermore, of the three hundred and sixty-five days in the year in England, very, very few are warm; and afternoon tea is not only cheerful and sociable, but in most British interiors really necessary to start the blood circulating.

There are few more agreeable moments in life than tea in an English country house in winter. It is dark at four o'clock. The family winter. It is dark at four o'clock. The family and guests come in from the cold air. The curtains are drawn, the open wood fire is blazing, the people sit down around the table and with a delightful meal—for the most attractive food in England is served at afternoon tea— drink of the cheering beverage.¹⁰

Agnes Repplier, American essayist, published, in 1932, a charming book of teatable talk entitled To Think of Tea, which records the development of tea-drinking in England since the inception of the practice in the seventeenth century.

In 1933, Mr. Montfort Chamney, a retired tea planter, published The Story of the Tea Leaf, which is a collection of early historical legends concerning tea, written on a Braille writing machine.

What is probably the first discussion ever held on the stage of an American theatre on how to make tea properly is to be found in the play "By Your Leave," by Gladys Hurlbut and Emma Wells, presented in New York in 1934.

Among latter-day British writers Beverly Nichols, author of the American Sketch, writes glowingly of tea, while J. B. Priestly, in his English Journey, bemoans the fact that it should ever be made in slovenly fashion. There is but one dissenter. Bernard Shaw views it with distaste, which might be expected from a



OLD LADY FROM THE COUNTRY: "Oh! is that 'im? wonder 'e ain't married!"

WHY SIR THOMAS NEVER MARRIED

This cartoon by the late Phil May, famous artist on the London Punch and Graphic, so tickled the fancy of Sir Thomas that he had it reproduced to hand out in self-defense when queried as to his confirmed bachelorhood.

confirmed vegetarian and a water-drinker.

Quips and Anecdotes

Greenville says in his journal that when David Garrick was at the zenith of his popularity and lived among the great, Dr. Johnson, who was still obscure, used to say to him: "Davy, I do not envy you your money, nor your fine acquaintance, but I envy you the power of drinking such tea as this."

Dr. Johnson always lived up to his reputation as a "shameless tea drinker." Richard Cumberland, the dramatist, relates an amusing incident at his own home, when Sir Joshua Reynolds ventured to remind Johnson that he had drunk eleven cups of tea. "Sir," replied the doctor, "I did not count your glasses of wine; why, then, should you number my cups of tea?" And then laughing, he added: "Sir, I should have released the lady from further trouble if it had not been for your remark, but you have reminded me that I want but one of the dozen; I must request Mrs. Cumberland to complete the number."

Theodore Hook, 1788-1841, the novelist and dramatist, wrote the following clever epigram on the name "Twining":



⁹ T'sao Hsileh-chin and Kao Ngoh, The Dream of the Red Chamber, Doubleday, Doran & Co., New York, 1929. By permission.

10 William Lyon Phelps, Essays on Things, The Macmillan Company, New York, 1930. By permission.

It seems in some cases kind nature hath planned That names with their callings agree, For Twining the tea-man that lives in the Strand,

Would be "wining" deprived of his T.

One evening when Sydney Smith was at Mrs. Austin's for tea, the servant entered the crowded room with a boiling teakettle in his hand. It appeared impossible that he would be able to make his way among the numerous guests, but as he approached with the steaming kettle the crowd everywhere hastened to make way for him, Mr. Smith among the rest. "I declare," said he, addressing the hostess, "a man who wishes to make his way in life could do no better than go through the world with a boiling teakettle in his hand."

Balzac, the French novelist, was the possessor of a limited quantity of a tea that was both unique and fabulously valuable. He never served it to mere acquaintances; rarely even to his friends. This tea had a romantic history. It had been plucked at dewy dawn by young and beautiful virgins who, singing as they went, carried the leaves to the Chinese Emperor. An imperial gift of the tea had been sent from the Chinese court to the Russian Czar, and it was through a well-known Russian minister that Balzac received his precious This golden tea had, moreover, been further baptized, as it were, in human blood during its transfer to Russia; a murderous assault having been made on the caravan that bore it by a native tribe seeking to seize it. There was also a superstition that more than one cup of this almost sacred beverage was a desecration, and would cost the drinker loss of eyesight. One of Balzac's greatest friends, Laurent-Jan, never drank it without first observing dryly: "Once again I risk an eye, but it's worth it."

Cyrus Field, father of the submarine cable, traveled a great deal, but never failed to take with him his private brand of tea and the utensils for personally brewing it. One day Mr. Field was passing through Front Street, in the tea and coffee district of New York, when his attention was attracted by a tea taster who was infusing and tasting tea in one of the establishments. Mr. Field watched the man carefully and observed his method. Finally, he entered the place and asked the expert, "How long have you been in this business?"

"Thirty-one years," said the tea taster,



By Courtesy of Punch

THE CARTOONIST LOOKS AT TEA

Grocer: "Here's a fine new kind o' tea, Ma'am. We've tried it oursels. It's magneeficent. It taks a firrm grip o' the thirrd Watter."

who was enjoying an annual income close to \$20,000.

"Well, you had better give it up," remarked Mr. Field. "You don't know how to make tea, and you're too old to learn. I will brew you a cup of tea."

The aged philanthropist poured water on some of the leaf from a private parcel which he took from his pocket, let it draw for a few seconds and then asked the tea expert to taste it. The man did so, but immediately spat it out. "The worst ever!" he commented. "Not even properly brewed!" Then Mr. Field turned on his heel and walked away muttering: "If you are an expert, the good lord help some of our tea drinkers!"

After the millionaire was out of sight, the tea taster roared with laughter and said to one of the clerks: "That was Old Field. He's a crank on tea, and drinks the finest that money can buy; pays \$9 a pound for it, and I told him it was no good, just to get his goat."

A classic pun on the word "tea" has been discerned in the line from Virgil's Eighth Eclogue: Te veniente die, te decedente canebat, which may be freely translated, "He sang of thee (tea) day in and day out." It was quoted in this sense by Dr. Johnson. Dr. Parr was not given to tea drinking, but being asked to take tea by a lady, he exclaimed: "Nec, tea

cum possum vivere, nec sine te" [I can neither live with tea, nor without thee]. The Christchurch men became remarkable at an early period for their love of tea, and were pleasantly recommended to adopt as their motto: "Te veniente die, te decdente notamus" [we observe thee (tea) day in and day out].

About 1923 James L. Duff, of San Francisco, wrote an amusing parody called "The Rubaiyat of Ohow Dryyam." The seventh stanza thus touchingly pictures the arid America of that time:

A book of Blue Laws underneath the bough, A pot of Tea, a piece of Toast,—and thou Beside me sighing in the Wilderness— Wilderness? It's Desert, Sister, now!

Among the Anglo-Saxon authors, Lord Byron and Motley were tea-drinkers, and took theirs with cream. Both Victor Hugo and Balzac drank tea when working at night, but they found their later slumbers more peaceful if they mixed brandy in it. German men of letters usually prefer rum in tea

John Ruskin was not only a tea-drinker, but at one time he opened a tea shop in Paddington Street, London, for the purpose of supplying the poor with packets of pure tea as small as they chose to buy. However, the well-meant enterprise was not appreciated; Ruskin records that it had to be terminated because, "the poor only like to buy their tea where it is brilliantly lighted and eloquently ticketed."

The brilliant historian, Justin McCarthy, was a liberal tea-drinker; he found it saved him from headache. Professor Dowden declared that fresh air and tea were the only sure brain stimulants, and Harriet Martineau dearly loved a cup of tea by the fireside.

William Ewart Gladstone, the great English statesman, financier, and orator, was a noted tea-drinker. He once said that he drank more tea between the hours of midnight and four in the morning than any two members of the House of Commons put together. Kant, the philosopher, used to put in long hours fortified by tea and his pipe. Buckle, the historian, was a most fastidious tea-drinker; he insisted that his cup, saucer, and spoon be well warmed before the infusion was poured. Henry W. Longfellow said, "Tea urges tranquillity of the soul," and Wellington told his generals at Waterloo that tea cleared his head and left him with no misapprehensions.

Theodore Roosevelt, the apostle of the strenuous life, preferred tea as his luncheon beverage. He also preferred tea to brandy on his exploratory trips. In one of his published letters dated in 1912, he wrote: "My experience... convinced me that tea was better than brandy, and during the last six months in Africa I took no brandy, even when sick, taking tea instead."



A CHRONOLOGY OF TEA

Dates and Events of Historical Interest in Tradition, Travel, Literature, Cultivation, Manufacture, Trading, and the Preparation and Use of Tea from the Earliest Times to the Present

Explanation of Marks:

* Legendary.

c Circa, or approximate date

- *2737 E. C.—A Chinese legend credits the discovery of tea to the legendary emperor Shen Nung, about the time of the Biblical Adam.
- *A. D. 25-221.—Another Chinese legend says the first tea plants were brought to China from India by Gan Lu, a Buddhist monk, in the Later-Han dynasty.
- *A. D. 221-265.—Tea is discovered in the After-Han Dynasty, according to a fable in Ch'a Pu, written in the Ming Dynasty.
- cA. D. 350.—Kuo P'o publishes the earliest reliable description of the tea tree and manner of making the beverage.
- 386-535.—In the Later-Wei Dynasty, people of the border district between Szechwan and Hupeh make the leaves of the tea plant into cakes, which they bake and pound into powder for infusing.
- *475.—Turks arrive on the Mongolian border of China, where they barter for tea, etc.
- 500.—Tea is more generally used in China; principally as a medicine.
- 589.—Tea is first used as a social beverage at the beginning of the Sui Dynasty.
- c593.—The first knowledge of tea reaches Japan with the introduction of Chinese culture and Buddhism.
- c725.—Tea is given a distinctive ideograph, oh'a, for the first time, in the herbal of Su Kung-t'ang.
- c780.—Lu Yu publishes Oh'a Ohing, the first tea book.
- 780.—A tax on tea is levied in the first year of the Chinese emperor Tih Tsung.
- 805.—The first tea seeds are brought to Japan from China by the Buddhist saint, Dengyo Daishi.
- 815.—The Japanese Emperor Saga orders tea cultivated in five provinces near the capital.
- e850.—The first report of tea published outside of China is the Account of Tea by Two Arabian Travelers, written in Arabic by Soliman.
- 907-923.—During the After-Leang Dynasty the use of tea in China spreads to the lower classes.
- 951.—The tea beverage is used to combat the plague in Japan.
- 960.—Brick tea in gold boxes is sent as tribute to the Chinese emperor.
- c1159.—The Tea Ceremony starts in Japan at the close of the Heinan period.
- 1191.—The Buddhist abbot Yelsai reintroduces tea cultivation in Japan, and publishes the first Japanese book on tea.
- 1200.—Another Buddhist abbot, Myo-e, plants tea near Kyoto and at Uji.
- 1368-1628.—The process of green tea manufacture is invented in China during the Ming dynasty.
- 1473.—The retired Japanese shogun Yoshimasa becomes the patron of the Tea Ceremony and of Shuko, its first high priest.

- 1559.—Giambatista Ramusio, Venice, publishes the first notice of tea in Europe.
- c1560.—Father Gaspar da Cruz, a Portuguese Jesuit, publishes an account of the tea drink of the Chinese.
- 1567.—The first news of the tea plant is brought to Russia by Ivan Petroff and Boornash Yalysheff.
- c1575.—Jo-o, high priest of the Tea Ceremony, in Japan, teaches its principles to the dictator Nobunaga.
- e1582.—The high priest Sen-no Rikyu brings the Tea Ceremony within the reach of the Japanese middle classes.
- 1588.—Father Giovanni Maffei, Rome, describes tea in his latin work, *Historica Indica*, and includes a notice by Father Almeida.
- 1588.—Hideyoshi, military dictator of Japan, holds a grand tea reunion under the pines of Kitano.
- 1589.—Giovanni Botero, Venice, includes a notice of tea in his work On the Causes of Greatness in Cities.
- 1597.—A botanical notice of the tea plant is included in Johann Bauhin's Plantarum.
- 1598.—The first notice of tea in English appears in the *Voyages and Travels*, of Jan Hugo van Linschooten, translated from the Latin, originally published in Holland, 1595-96.
- 1608-07.—Tea is transported from Macao, China, to Java by the Dutch.
- e1610.—Dutch merchants begin the importation of tea into Europe.
- 1611.—The Dutch East India Company is granted the privilege of trading on the island of Hirado, off the coast of Japan, and subsequently the English East India Company establish an agent there.
- 1615.—A letter from Mr. R. L. Wickham, agent for the English East India Company at Hirado, contains the first reference to tea by an Englishman.
- 1618.—A Chinese embassy carries a gift of tea to the czar of Russia.
- 1623.—Tea is mentioned in the Theatri Botanici, by Gaspard Bauhin, Swiss naturalist.
- 1623.—The ceremonial "Tea Journey" is inaugurated by shogun lyemitsu, to bring the Imperial tea from Uji, Japan, to Yeddo.
- 1635.—Simon Paulli, a German physician, writes an attack on the immoderate use of tea and tobacco.
- 1637.—Tea begins to come into use by the people in Holland, and the Dutch East India Company orders "some jars of Chinese as well as Japanese tea with every ship."
- 1638.—Adam Olearius and Albert von Mandelslo write accounts of a German embassy to Persia, in which they state that tea drinking is common in Persia and at Surat, India.
- 1638.—Vassily Starkoff, Russian ambassador at the Court of the mogul Khan Altyn, declines a gift of tea for the czar, Michael Romanov, as something for which he would have no use.

Digitized by Google

- c1640.—Tea becomes the fashionable beverage of society at The Hague.
- 1641.—Dr. Nicolas Dirx ["Nicolas Tulp"], noted Dutch M. D., eulogizes tea in his Observationes Medica.
- 1642.—Dr. Jacob Bontius, a Dutch naturalist, describes tea in Historia Naturalis.
- 1648.—The learned doctor, Guy Patin, Paris, writes of tea as, "the newest impertinence of the century," and says that a thesis favorable to tea by a young doctor Morriset had met with violent condemnation from the profession
- c1650.—Tea occasionally is used in England, at a cost ranging from £6 to £10 the pound weight.
- c1650.—Tea is introduced by the Dutch in New Amsterdam, later known as New York City.
- 1651.—Eleven ships of the Dutch East India Company bring a total of thirty pounds of Japan tea to Holland this year.
- 1655.—Johann Nieuhoff records the use of milk in tea at a banquet tendered to a Dutch embassy in Canton.
- 1657.—Dr. Jonquet indicates a change of attitude toward tea on the part of the French medical profession by describing it as "the Divine herb," and comparing it to nectar and ambrosia.
- 1657.—Tea is first sold publicly in England at Garway's Coffee House, London.
- 1658.—The first advertisement of tea in a newspaper appears in *Mercurius Politicus*, London, September 30, announcing that the tea drink is sold at the Sultaness Head Coffeehouse.
- 1659.—Mercurius Politicus, London, November 14, records that tea, coffee, and chocolate are sold "almost in every street."
- 1660.—The first English tea law places a tax of 8d. on every gallon of tea, chocolate, and sherbet sold.
- 1660.—Samuel Pepys, English diarist, London, records his first cup of tea.
- 1660.—Thomas Garway, London, publishes the "Vertues" of tea in his famous broadsheet.
- c1661.—The abbot Ingen, in the prefecture of Uji, Japan, invents a process of pan-parching called "Ingen tea."
- 1662.—The first eulogy of tea in English verse is written by the poet Waller.
- 1664.—The English East India Company presents 2 lbs. 2 oz. of tea to His Majesty, Charles II.
- 1666.—Lords Arlington and Ossory give a fashionable impetus to tea drinking at the English Court by gifts of the leaf, brought by them from The Hague.
- 1666.—Abbé Raynal, Paris, records that tea sells in London at nearly 70 livres, or about £2 15s. 5d. the pound.
- 1667.—The English East India Company sends its agent at Bantam, Java, an order for "100 lb. waight of the best Tey."
- 1668.—The Duchess of Monmouth sends a gift of tea to relatives in Scotland who boil the leaves and try to eat them.
- 1669.—The English East India Company makes its first direct importation of tea, consisting of 143½ lbs. from Bantam.
- 1669.—Tea importations from Holland are prohibited by English law.
- 1671.—Philippe Sylvestre Dufour publishes at Lyons the first European work devoted exclusively to coffee, tea, and chocolate.
- 1672.—Mihei Kamibayashi, of Yamashiro Province, is the first to use a tea drier in Japan.
- 1672.—Simon de Molinaris, Genoa, publishes Asian Ambrosia, or the Virtues and Use of the Herb Tea.

- 1678.—The English East India Company imports 4717 lbs. of tea from Bantam, glutting the London market.
- 1678.—Jacobus Breynius, the German botanist, describes the tea plant in Exoticarum Plantarum.
- 1678.—In England, Mr. Henry Sayville complains to his uncle, Mr. Secretary Coventry, of friends "who call for tea instead of pipes and a bottle."
- 1679.—Dr. Cornelis Bontekoe, Dutch physician, publishes a commendatory tract on tea.
- 1680.—The Duchess of York introduces the custom of serving tea in Scotland.
- 1680.—Tea is advertised in the London Gasette at 30 shillings a pound. In the American colonies it is selling at \$5 to \$6 a pound for the cheapest qualities.
- 1680.—Madame de la Sablière, wife of the French poet, introduces into France the custom of adding milk to tea.
- 1681.—The English East India Company gives a standing order to its agent in Bantam for "tea to the value of one thousand dollars annually."
- 1684.—The Dutch drive the English out of Java, where they have been obtaining their teas.
- 1684.—Dr. Andreas Cleyer introduces the first tea plants into Java from Japan.
- 1684.—The English East India Company orders its agent at Madras to ship five or six canisters of tea yearly.
- 1689.—The first direct importation of China tea into England arrives from Amoy.
- 1689.—Regular importations of tea into Russia follow the signing of the Nerchinsk Treaty.
- 1690.—Benjamin Harris and Daniel Vernon are licensed to sell tea in Boston.
- 1699.—John Ovington, English ecclesiastic, publishes in London his Essay upon the Nature and Qualities of Tea.
- c1700.—Milk or cream is first used by tea drinkers in the American colonies.
- c1700.—Grocers in England begin to take up the sale of tea, previously sold only by apothecaries and coffee-house keepers.
- 1705.—An Edinburgh goldsmith advertises green tea for sale at sixteen shillings a pound and black at thirty shillings.
- 1710-44.—The shogun Yoshimune puts an end to the annual "Tea Journey."
- 1712.—Zabdiel Boylston, Boston apothecary, advertises "Green and Bohea" and "Green and Ordinary" teas for sale.
- 1712.—Eusebe Renaudot, French orientalist, publishes at Paris a symposium of accounts of India and China, including a translation of Soliman's Arabian tale of two Mohammedan travelers who brought the first news of tea to Arabia about A.D. 850.
- 1715.—Green tea first comes into use in England.
- c1717.—Thomas Twining opens in London the "Golden Lyon," the first exclusive tea shop in England.
- 1721.—The importations of tea into England for the first time exceed a million pounds.
- 1721.—Importations of tea from all parts of Europe into England are prohibited, making the India Company's monopoly complete.
- 1725.—England passes its first law against tea adulteration.
- 1727.—Dr. Engelbert Kaempfer's History of Japan, containing important references to early tea history, is published posthumously in London.
- 1728.—An unproductive recommendation is made to the directors of the Dutch East India Company to grow tea in Java.



- 1728.—Mrs. Mary Delany, English memoirist, writes that Bohea sells in London at prices from twenty to thirty shillings, and green tea from twelve to thirty.
- 1730.—Thomas Short, a Scotch M.D., publishes A Dissertation on Tea, in which it is related that the Dutch exchanged sage for tea on their second voyage to the East.
- 1730-31.—The English Parliament passes a second law against tea adulteration.
- 1734.—A total of 885,567 lbs. of tea are brought to Holland in this year.
- 1735.—Empress Elizabeth of Russia inaugurates the overland tea trade from China.
- 1738.—Soichiro Nagatani invents the process for Japan green-tea manufacture.
- 1739.—Tea for the first time leads in value all other produce brought to Holland from the East Indies.
- 1745.—The *Pemale Spectator*, London, brands tea as "the bane of housewifery."
- 1748.—John Wesley exhorts his followers to stop drinking tea.
- 1748.—The approved custom in New York is to make tea with water from the famous teawater pump.
- 1749.—London is made a free port for teas in transit to Ireland and America.
- 1750.—Black tea gradually supersedes green in Holland, where it also replaces coffee to some extent as a breakfast beverage.
- 1750.—The first Japan tea is exported from Nagasaki, by some Chinese merchants.
- 1753.—Linnæus, the Swedish botanist, classifies the tea plant under two genera, Thea sinensis and Camellia, in his Species Plantarum.
- 1753.—The use of tea spreads to the rural districts of England.
- 1756.—Jonas Hanway, English merchant and philanthropist, writes a philippic against tea.
- 1757.—Dr. Samuel Johnson answers Hanway's attack on tea with a broadside of ridicule.
- 1762.—Linnæus, in a second edition of Species Plantorum, discards the name Thea sinensis for the tea plant, and credits it with two genera—Thea bohea [black] and Thea viridis [green].
- 1763.—The first growing tea plants seen in Europe are brought to Linnæus, at Upsal, Sweden.
- 1768-67.—The penalty for tea adulteration in England is increased to include imprisonment.
- 1767.—The English Parliament passes the Act of Trade and Revenue, imposing duties on tea and other commodities imported by the American colonists. The duties are resisted by the colonists.
- 1770.—All duties imposed under the Act of Trade and Revenue are repealed except the duty on tea. At this time, practically all teas used by the colonists are bootlegged from Holland.
- 1772.—Lettsom, the English botanist, classifies tea under two genera, Thea bohea and Thea viridis; the same as Linnæus.
- 1773.—The English Parliament grants the East India Company permission to ship teas to America, and to appoint agents in the colonies for the purpose of receiving and paying the duty upon such shipments.
- 1773.—Consignments of the East India Company's tea are cleared in chartered ships bound for Boston, Newport, New York, Philadelphia, and Charleston.
- 1773.—On December 16, certain citizens of Boston disguised as Indians dump the entire Boston consignment of the East India Company's tea into the harbor.
- 1773.—On December 26, a tea ship bound for Philadelphia is halted within sight of the city,

- and is sent back to London under threat of burning.
- 1773.—The first of the Charleston tea ships lands its cargo, but without payment of duty; where-upon, the collector seizes the tea and stores it in a damp cellar, where it quickly spoils.
- 1774.—In April, two tea ships arrive at the port of New York. Eighteen chests of tea in a general cargo aboard the smaller ship are dumped into the harbor. The larger ship, with a full cargo of tea, escapes similar treatment by returning to London.
- 1774.—In August, a ship bound for Annapolis with general cargo, including some tea, is sent back to England, and in October the "Peggy Stewart" arrives at Annapolis with 2000 lbs. of tea, and is burned at her anchorage.
- 1774.—On November 1, the "Britannia Ball" arrives at Charleston with eight chests of tea in her cargo, which the owners of the ship break open publicly and dump in the harbor.
- 1774.—On December 22, American colonists at Greenwich, N. J., burn a large consignment of tea stored there.
- 1774.—The first English patent for a tea-making device is granted to one John Wadham.
- 1776.—The American Revolution results from the attempted enforcement of the tea duty without the consent of the colonies.
- 1777.—The English Parliament passes another law against tea adulteration.
- 1779.—An English law compels shopkeepers who sell tea to identify their places by a sign announcing its sale.
- 1780.—Governor General Mr. Warren Hastings of British India sends to George Bogle in Bhutan, Northeast India, "some seeds of Hyson," which were brought from China by captains of Indiamen; he gives others to Colonel Robert Kyd, Calcutta, who raises a few ornamental bushes.
- 1782.—The hong merchants of Canton are reorganized to conduct the foreign tea trade of China.
- 1784.—As the result of a long climb, the English tea duty reaches 120 per cent ad valorem.
- 1784.—Richard Twining, of London, becomes the champion of the retail tea trade, and campaigns against the huge quantities of adulterated teas flooding the market.
- 1784.—Under the ministry of William Pitt, the younger, the English Parliament passes the Commutation Act, reducing the duty on tea to one-tenth of its former amount.
- 1785.—The "Empress of China" arrives in New York with the first shipment of China tea to reach the United States in an American bottom.
- 1785.—This year there are 30,000 wholesalers and retailers registered as tea dealers in England.
- 1785-91.—The average annual tea importation into Holland in this period is 3,500,000 lbs.; representing a fourfold increase in fifty years.
- 1786.—The first Philadelphia ship to enter the China tea trade—the "Canton"—sails this year.
- 1788.—The eminent English naturalist, Sir Joseph Banks, calls attention to the tea-growing possibilities of British India.
- 1788.—The English East India Company discourages the suggestion for starting a tea industry in British India as inimical to its China tea
- 1789.—The United States Government levies its first tea tax of 15¢ a pound on black tea; 22¢ on Imperial; and 55¢ on Young Hyson.
- 1790.—The first tea plants grown in the United States are planted by the French botanist André Michaux at Middleton, near Charleston, S. C.
- 1791-1800.—For the ten-year period at the close of the eighteenth century, the English East

- India Company's tea importations average 3,300,000 lbs. per annum.
- 1793.—Scientists with Lord Macartney's embassy to China send seeds of the tea plant to Calcutta
- 1798.—The Dutch East India Company is dissolved by the Government, which assumes debts of more than fifty million dollars.
- 1802.—Reported failure of a concurrent attempt to grow the tea plant in Ceylon.
- 1805.—Cordiner claims the tea plant is growing wild in Ceylon, but this is denied by later writers.
- c1810.—Chinese from Amoy introduce tea cultivation in Formosa.
- 1810.—An unsuccessful attempt is made to grow tea in Brazil.
- 1813.—Parliament ends the English East India Company's monopoly of the India trade, but continues its monopoly of the China trade for another twenty years.
- 1814.—War time profiteering induces Philadelphians to form a non-consumption association, whose members are pledged to pay no more than 25¢ a pound for coffee and to use no future importations of tea.
- 1815.—Col. Latter calls attention to a wild tea used by aboriginal tribesmen in Upper Assam.
- 1815.—Dr. Govan recommends the introduction of tea cultivation into the northwestern part of Bengal.
- 1815.—The Napoleonic War, ending this year, sends the English tea duty to 96 per cent ad valorem.
- 1823.—Major Robert Bruce discovers indigenous tea in Assam.
- 1824.—Dr. Philipp Franz von Siebold, naturalist with the Dutch embassy in Japan, is instructed to secure seeds of the tea plant and send them to Java.
- 1825.—The London Society of Fine Arts offers a gold medal for the first tea grown and prepared in British territory.
- 1825.—Captain David Scott, agent of the Government in Assam, sends Manipur tea leaves to Calcutta, but their identification as genuine tea is not established.
- 1826.—Tea seeds obtained by Dr. von Siebold in Japan are planted in Java.
- 1826.—John Horniman, founder of Hornimans', London, places the first packet tea on the market.
- 1827.—Dr. F. Corbyn finds indigenous tea growing in Sandoway, Arakan, Lower Burma.
- 1827.—Fifteen hundred tea plants, raised from Japan tea seeds, are planted out in the Government gardens at Buitenzorg and Garoet, Java.
- 1827.—J. I. L. L. Jacobson is commissioned by the Government of Java to secure information on tea cultivation and manufacture in China.
- 1827.—The scientist and author, Dr. J. F. Royle, urges the introduction of tea culture into the northwest district of the Himalaya range, British India.
- 1828.—The first manufactured sample of Java tea is prepared at Buitenzorg, and an experimental cultivation is begun at Wanajasa, province of Krawang.
- 1828-29.—On a second trip to China, Jacobson brings eleven tea shrubs to Java.
- 1830.—The first tea factory in Java, a small one, is built at Wanajasa.
- 1830.—The annual consumption of tea in England is thirty million pounds; that of the balance of the civilized world is twenty-two million.
- 1831.—Captain A. Charlton sends Assam-indigen-

- ous tea shrubs to the Government botanical gardens at Calcutta, but they are thought to be camellias and soon die.
- 1832.—Tea is planted experimentally in the Nilgiris Hills of Southern India by Dr. Christie of the Government Establishment at Madras.
- 1832.—C. A. Bruce calls the attention of the Government commissioner, Captain Francis Jenkins, to the indigenous tea of Assam.
- 1832.—Isaac McKim, Baltimore merchant, builds the Ann McKim, the first sizable clipper ship for the China tea trade.
- 1832.—There are 101,687 licensed dealers in tea in the United Kingdom. They pay 11s. annually.
- 1833.—Jacobson returns from China to Java on his sixth and last trip, bringing seven million tea seeds, fifteen workmen, and a mass of implements.
- 1833.—In recognition of his ability and past services, J. I. L. L. Jacobson is appointed manager of the government tea enterprises in Java.
- 1833.—The English Parliament abolishes the East India Company's monopoly of the China tea trade.
- 1834.—Governor General Lord William Charles Cavendish Bentinck appoints a tea committee to formulate a plan for the introduction of tea culture into British India.
- 1834.—The Indian tea committee dispatches its secretary, George James Gordon, to China for tea seeds, Chinese workmen, and information on the cultivation and manufacture of tea.
- 1834.—The first United States patent for a teapot is granted to W. W. Crossman.
- 1834.—The first tea sale in Mincing Lane is held upon the termination of the East India Company's monopoly.
- 1834.—Captain A. Chariton again sends specimens of Assam tea plants to Calcutta; this time with the fruit, blossoms, and dried leaf for infusing. The result is their identification as genuine indigenous tea.
- 1835.—The first consignment of Java tea reaches the Amsterdam market.
- 1835.—Due to the recognition of the indigenous tea of India, Mr. Gordon is recalled from China, and returns after having sent three shipments of seeds to Calcutta.
- 1835.—As a further result of the discovery of indigenous tea in India, the Governor General appoints a scientific commission to report thereon, and to recommend the most promising locations for experimental tea gardens.
- 1835.—Toku-o, a Japanese tea merchant, invents the process for making Gyokuro tea.
- 1835-36.—The scientific commission in India, by a vote of two against one, favors the introduction of the cultivated tea plant of China; and by a similar vote recommends Upper Assam in preference to the Himalayas as the most promising location for tea gardens.
- 1835-36.—Forty-two thousand tea plants are raised from China tea seeds at Calcutta, and are forwarded to Upper Assam, Kumaon, Sirmore, and Southern India.
- 1835-36.—C. A. Bruce is appointed superintendent of tea culture in Assam. He starts a tea garden at Saikhwa, near Sadiya.
- 1835-36.—Dr. Hugh Falconer becomes superintendent of tea culture in Kumaon and plants two unsuccessful gardens at Bhurtpur and Bhemtal; later, he plants successful gardens in Kumaon, Sirmore, and Garhwal.
- 1835–36.—Two thousand China tea plants are shipped from Calcutta to Southern India, but none survive.
- 1836.—In addition to experimental plantings of China tea, C. A. Bruce starts a nursery devoted solely to indigenous tea, at Sadiya.



- 1836.—Three Chinese black-tea manufacturers are sent to Mr. Bruce in Assam. Upon their arrival, he has them make up a small manufactured sample of indigenous tea from the Matak country, which he sends to Calcutta.
- 336.—Later in the year, Mr. Bruce sends a second sample, five boxes, of Assam tea to Cal-
- 38.—The first export shipment of Assam tea-eight chests—is sent to London.
- -The first importation-eight Assam tea is received and sold at India House in London, with the East India Company as
- 1839.—The first tea seeds—Assam are sent to Ceylon from Calcutta.
- 33.—The Assam Company, India's pioneer tea-planting company, is formed, with a double board of directors; one in London and one in Calcutta.
- 340.—The Assam Company takes over two-thirds of the government tea gardens in Northeastern India.
- 40.—A second shipment—95 packages—of India tea arrives and is sold in London.
- 1840.—The first tea is planted in the Chittagong district of British India.
- 1840.—Some 205 Assam tea plants are received at the Peradeniya Botanic Gardens, Ceylon, from the Botanic Gardens at Calcutta.
- 1841.—Maurice B. Worms returns to Ceylon from a trip to China, bringing tea-plant cuttings, which he plants on Rothschild Estate, Pusselawa. About the same time, a Mr. Llewellyn imports Assam indigenous shrubs from Calcutta and plants them on Penylan Estate, Dolosbage.
- 1841-42.—Garraway's, in London, is the center of a frenzy of tea speculation.
- 1842.—The Dutch Government in Java begins the surrender of its monopoly of tea culture.
- 1842.—The Treaty of Nanking does away with the co-hong system in China, and opens the ports of Shanghai, Ningpo, Foochow, and Amov.
- 1842.—The cultivation of tea is started in Dehra Dun, British India.
- 1842.—Fanny Kemble records that she first became acquainted with "afternoon tea" in this
- 1842.—The English Society of Arts awards a gold medal to C. A. Bruce for the discovery of tea in Assam, and the Horticultural Society of Bengal presents gold medals to Major Jenkins and Captain Charlton for their part in securing its recognition.
- 43.—Dr. Hugh Falconer is succeeded by Dr. William Jameson as superintendent of tea cultivation in Kumaon.
- 1843.—Dr. Falconer arrives in London with the first samples of Kumaon tea, made from China
- 1843.—J. I. L. L. Jacobson publishes a handbook for tea planters.
- 1843.—The British Internal Revenue Department prosecutes many cases involving the redrying and sale of used tea leaves.
- 344.—Tea cultivation is begun experimentally on the island of Mauritius.
- 345.—The "Rainbow," first extreme clipper ship, designed by John Willis Griffiths, is put into the China trade by Howland & Aspinwall of New York.
- 1847 .- The first tea is planted in Russian Trans-
- 1847.—Facing financial disaster, the Assam Com-pany entrusts the management of its affairs to Stephen Mornay, in Assam, and Henry Burkin-young, in Calcutta.

- 48.—The East India Company's Government of India sends Robert Fortune to China for teaplants, expert workmen, and tools. 1848.-
- 1848.—Dr. Junius Smith, Greenville, S. C., makes the first attempt to grow tea commercially in the United States.
- 1850.—Tea is planted experimentally at the Durban Botanical Gardens, in Natal.
- 1850.—The "Oriental" is the first American clip-per ship to carry a cargo of tea from China to London.
- 1850.—"Stag Hound," first of the famous clipper ships built by Donald McKay, is launched.
- -An attempt is made to grow tea in Aus-
- 1850.—Robert Fortune sends 20,000 China tea plants from China to Calcutta, and 12,838 survive the trip.
- 1851.—Robert Fortune returns to Calcutta from China with additional tea plants, tools, and workmen
- 1851.—Prosecutions for manufacturing spurious teas continue in London.
- 1851.—The first privately-owned tea garden in Assam is opened by Col. Hannay.
- 1852.—The Assam Company earns its first 2½ per cent dividend.
- 1852.—The Indian Government now has four tea factories in Northwest Province.
- 1853.—Commodore Perry establishes direct commercial relations between the U. S. A. and Japan, paving the way for future tea trade.
- 1853.—Mme. Kay Oura is the first Japanese tea merchant to send samples abroad.
- 1854.—Dr. Jameson establishes a principal tea nursery at Ayar Toli, near Byznath, district of Kumaon, British India.
- 1854.—The Planters' Association of Ceylon is or-
- 1854.—Charles Henry Olivier is granted an English patent on a tea-drying apparatus.
- -Indigenous tea is discovered in Cachar, British India.
- 1855.—Alfred Savage gets an English patent for a tea cutter, separator, and mixer.
- 1855.—Commercial tea growing shows promise in Formosa.
- 1856.—A British merchant named Ault visits
 Japan and ships 100 piculs [1333 lbs.] of tea,
 which he buys from Mme. Oura.
- 1856.—Indian indigenous tea is found throughout the hills between Sylhet and Cachar; also in the hills of Northeast Sylhet.
- -Tea cultivation starts in Cachar and Darjeeling, British India.
- 1857.—The first tea garden is opened in Sylhet.
- 1858.—The United States Government sends Robert Fortune to China for tea seeds to be planted in the Southern States.
- -The port of Yokohama, gateway to Japan's choicest tea-producing districts, is thrown open to foreign trade, and 400,000 lbs. of tea are exported.
- 1860.-The Government of Java definitely abandons its tea monopoly.
- 80.—England passes a general Act against food adulteration.
- 1861.—First Russian brick-tea factory is built at
- 361-65.—Tea is taxed 25c a pound over the period of the Civil War in the United States.
- 1862.—The first tea refiring godown is established in Yokohama.
- 1862.—Chinese operatives introduce artificial tea-coloring in Japan.

- 1862.—First Terai tea garden is opened in British India.
- 1862-65.—An era of progress in Java tea culture is begun as former Government tea estates are leased to pioneer individual planters.
- 1863.—The bark "Benefactor" brings the first cargo of tea direct from Japan to New York.
- 1863.—The ships "Jacob Bell" and "Oneida," with tea from Shanghai to New York valued at \$2,500,000, are captured by the Confederate steam raider "Florida."
- 1863-66.—A boom in tea lands of British India and period of wild speculation bring a succeeding period of collapse.
- 1864.—David Baird Lindsay of Rajawela, Dumbara, Ceylon, imports and plants some Assam tea seeds.
- 1866.—A sensational race of eleven tea clippers from Foochow to London is won by "Ariel" in ninety-nine days.
- 1866.—Arthur Morice is sent by the Government of Ceylon to visit and report on the tea districts of Assam.
- 1866.—William Martin Leake orders for his firm. Kier, Dundas & Co., the first Assam-hybrid tea seed imported into Ceylon.
- 1867.—Under the supervision of James Taylor, twenty acres on Loolecondera Estate, near Kandy, Ceylon, is cleared and planted with tea.
- 1867.—The commercial export of Formosa Oolong begins this year with trial shipments to Amoy by Dodd & Co. and a Chinese buyer for Tait & Co.
- 1868.—Tea cultivation begins in Shizuoka Prefecture, Japan.
- 1868.—A number of foreign tea firms establish offices and godowns in Kobe, Japan.
- 1868.—Dodd & Co. establish the first refiring plant in Formosa, and import expert workmen from Foochow and Amoy.
- 1868.—An acre of tea is planted experimentally at the Government Station on the island of Jamaica.
- 1869.—The opening of the Suez Canal changes and shortens commercial tea routes from the East.
- 1870.—A. Holle, at Parakan Salak, is first to roll tea mechanically in Java.
- 1870.—The Agricultural Law of Java fixes seventy-five years as the term of land leases. This stimulates tea planting.
- c1870.—Brick-tea manufacture at Foochow starts.
- 1872.—The first tea-refiring plant in Kobe is established this year.
- 1872.—James Taylor sells in Kandy, Ceylon, the first tea made on Loolecondera.
- 1872.—John Bartlett, Bristol, England, patents a tea mixer; thereby starting the business of Bartlett & Sons, Ltd.
- 1872.—William Jackson, pioneer inventor of tea machinery in India, sets up his first mechanical tea roller at Jorhat.
- 1873.—The first export shipment of Ceylon tea, 23 lbs., is sent to London.
- 1874.—Lt. Col. Edward Money, British India, invents a tea drier.
- 1874-75.—Tea planting starts in the Dooars, British India.
- 1875.—Passage of the English Food and Drug Act stops the importation of bad teas.
- 1875-76.—Tea cultivation makes notable progress in Ceylon, following the destruction of the coffee plantations by Hemileia vastatrix.
- 1876.—Two young natives of Sylhet start the first Indian-owned tea estate in British India.

- 1876.—A public refiring factory is built in Tokyo, and private refiring godowns are established in Numazu, Sayama, and Muramatsu.
- 1876.—The administrator of Tjisalak installs the first Jackson tea roller in Java.
- 1876.—The process for making Japan basket-fired tea is discovered by Tamasaburo Akahori and Yesuke Kando.
- 1876.—Japan teas are displayed at the Philadelphia Centennial Exposition.
- 1876.—An unsuccessful attempt is made to form an Indian Tea Association in Calcutta.
- 1877.—Commercial tea planting is begun in Natal.
- 1877.—Samuel C. Davidson invents his first "Sirocco" tea drier.
- 1877.—Java tea planters send samples of their teas to London tea brokers for criticism and advice.
- 1878.—Jonathan Duncan makes the earliest attempt to introduce tea and coffee plants into Nyasaland.
- 1878.—Assam tea seeds and better methods are introduced on Java tea plantations.
- 1878.—Hydraulic pressure is introduced into the manufacture of brick tea at Hankow.
- 1879.—The first competitive exhibition devoted exclusively to tea is opened in Yokohama with 848 exhibitors.
- 1879.—The No. 1 Up-Draft "Sirocco" tea drier, the first of the up-draft type, is placed on the market.
- 1879.—The Indian Tea Districts Association is formed in London.
- 1880.—The first tea-rolling machine manufactured in Ceylon is put out by John Walker & Co.
- 1880.—Captain David Robbie plants tea on the island of Vanua Levu in the Fiji group.
- 1880.—The first Natal tea, 30 lbs., is marketed in London.
- 1881.—S. C. Davidson founds the Sirocco Engineering Works at Belfast.
- 1881.—Congress appropriates funds for promoting tea cultivation in the Southern States of the U. S. A.
- 1881.—The Indian Tea Association is formed in Calcutta.
- 1881.—Japanese black-tea manufacturers amalgamate into a single concern known as the Yokohama Black Tea Company.
- 1881.—The Soekaboemi Agricultural Association is formed in Java.
- 1882.—The first tea-drying machine in Ceylon is erected on Windsor Forest Plantation, Doloshage.
- 1882.—A shop for the sale of India and Ceylon teas is opened in Paris.
- 1882-83.—William Cameron improves the system of pruning tea bushes in Ceylon.
- 1883.—The first Colombo tea auction is held in the office of Somerville & Co.
- 1883.—The first United States Tea Law, intended to prevent the importation of adulterated and spurious teas, is passed by Congress.
- 1883.—The second competitive exposition limited exclusively to tea is held at Kobe, Japan, with 2752 exhibitors.
- 1883.—The Japan Central Tea Traders' Association is formed.
- 1884.—William Jackson produces his first mechanical tea drier.
- 1884.—Col. A. Solovtzoff plants approximately 5½ acres of tea plants at Chakva in Russian Transcaucasia.

- 1885.—Kenzo Takabayashi patents two tea rollers, the first machines for aiding in the manufacture of Japan green teas.
- 1886.—Two Java tea planters visit India and Ceylon to observe modern methods of cultivation and manufacture. One of them, G. Mundt, publishes his observations.
- 1886.—The China tea trade is at its peak.
- 1886.—The Ceylon Tea Syndicate Fund is initiated by H. K. Rutherford, and 67,000 lbs. of tea are distributed abroad.
- 1886.—The Japan Central Tea Traders' Association sends Magoichiro Yokoyama to investigate the Russian market,
- 1886.—The Japan Central Tea Traders' Association sends Kijo Hirao to investigate tea-production methods in China, Ceylon, and India.
- 1886.—A second consignment of Natal tea, 500 lbs., reaches London.
- 1887.—William Jackson introduces his first rollbreaker.
- 1887.—The first tea shrubs are planted in Nyasaland.
- 1888.—William Jackson brings out his first teasorting machine.
- 1888.—The Japan Central Tea Association investigates foreign markets.
- 1888.—The Ceylon Tea Fund, a voluntary cess for propaganda purposes, is started.
- 1888.—Certain American firms are granted a supply of Ceylon tea for distribution as samples.
- 1888.—The London Tea Clearing House is estabtablished.
- 1888.—The Ceylon Association in London is organized.
- 1889.—The policy of granting Ceylon tea for free distribution is extended to South Ireland, Russia, Vienna, and Constantinople.
- 1889.—Ornamental boxes of Ceylon tea are presented to the Duke and Duchess of Fyfe, beginning a policy of similar presentations to royalties and notables.
- c1890.—The first tea estate in Sumatra is started at Deli, but is a failure.
- c1890.—Dr. Charles U. Shepard plants a tea garden and builds a tea factory at Somerville, South Carolina, U. S. A.
- 1890.—Propaganda for Ceylon tea is begun in Russia, with Maurice Rogivue as commissioner.
- 1890.—Assam tea seeds are planted in Minas Geraes, Brazil.
- 1890.—The Ceylon Tea Fund Committee subsidizes and grants sample tea to firms in Tasmania, Sweden, Germany, Canada, and Russia.
- 1891.—Charles Bartlett patents the first teablending machine with an axial discharge.
- 1891.—A record price for tea at the London auction is established when a fine parcel of Ceylon tea sells for £25 10s. the pound.
- 1891.—The manufacture of tablet teas in Kiu-kiang is begun.
- 1892-1901.—Russian firms develop brick-tea manufacture at Kiukiang.
- 1893.—A Government tea cess of 10 Ceylon cents per cwt. on tea exports is begun January 1st in Ceylon.
- 1893.—Intensive propaganda for India and Ceylon teas in the United States is begun at the Chicago World's Fair. Richard Blechynden is appointed commissioner for India and John J. Grinlinton for Ceylon.
- 1893.—The Japan Central Tea Association opens a large tea pavilion at the Chicago World's Fair.
- 1893.—C. S. Popoff plants experimental tea fields near Chakva, Russian Transcaucasia, and the

- Imperial Ministry follows this by planting approximately 600 acres in the same vicinity.
- 1893.—A number of Java tea planters unite in hiring a chemist to make scientific investigations
- 1894.—The Colombo Tea Traders' Association is organized.
- 1894.—The Planters' Association of Ceylon and the Ceylon Chamber of Commerce, jointly, vote to pay a yearly subsidy to Thomas J. Lipton and other exporters of Ceylon tea.
- 1894.—The Ceylon Tea Fund Committee extends its activities to Australia, Perak, Hungary Rumania, Servia, California, and British Columbia.
- 1894.—The Indian Tea Districts Association of London merges with the Indian Tea Association of Calcutta, and its name is changed to the "Indian Tea Association (London)."
- 1894.—A vountary tea cess is started in India, to provide funds for propaganda. It is continuous to and including the year 1902.
- 1894.—The first Sumatra tea is shipped to London from Rimboen Estate, Deli.
- 1894.—A committee of thirty, which becomes known as "the Thirty Committee," is formed to administer the Ceylon tea fund.
- 1894.—The Thirty Committee sends two representatives to America to report on the best method of pushing Ceylon teas.
- 1894.—William Mackenzie is appointed Ceylon tea commissioner in America.
- 1894.—The Ceylon tea-cess rate is raised to 20 Ceylon cents per cwt. of tea exported.
- 1895.—The change from Chinese to Japanese suzerainty in Formosa brings important developments in the line of Government aid to the tea industry.
- 1895.—Ceylon tea commissioner Mackenzie reports that the Americans are green-tea drinkers, and urges increased production of green tea in Ceylon.
- 1896.—A propaganda on behalf of Ceylon tea is begun in Europe, and continues to and including the year 1912.
- 1896.—The Ceylon Thirty Committee decides to pay a bounty of 10 Ceylon cents for every pound of green tea exported from the island. Payments continue to and including 1904.
- 1896.—India and Ceylon teas are advertised jointly in the United States.
- 1896.—The first individual tea-bag patent is issued to A. V. Smith of London.
- 1897.—The second United States Tea Law to prevent the importation of impure and unwholesome teas is passed by Congress.
- 1897.—Japan tea manufacturers begin changing to machine production.
- 1897.—In this year the per capita consumption of tea in the United States reaches its highest point—1.56 lb.
- 1897.—The Russian office of the Ceylon Tea Campaign becomes a limited company to handle Ceylon teas.
- 1897.—Russian brick-tea manufacturers at Kiukiang begin importing tea dust from Ceylon.
- 1898.—The United States imposes a Spanish-American war tax of 10c a pound on tea.
- 1898.—The Ceylon tea commissioner is conducting a special green-tea advertising campaign in the United States.
- 1898.—M. Kelway Bamber is engaged as agricultural chemist by the Ceylon Thirty Committee.
- 1898.—Gensaku Harasaki invents a mechanical refiring pan for Japan green tea.

- 1898.—Propaganda for Japan tea is begun in America, and is continuous to and including the year 1906.
- 1898.—Propaganda for Japan tea is begun in Russia and is continuous, except for three years—1905, 1909, and 1916.
- 1898.—Ceylon-tea advertising grants are extended to Africa.
- 1899.—The Tea Association of New York is incorporated.
- 1899.—A 28-inch rainfall in Darjeeling causes landslides which involve 7 per cent of the tea
- 1899.—Ceylon tea is exhibited at the Paris Exposition.
- 1899.—Following the opening of the port of Shimizu, the center of the Japan tea trade shifts from Yokohama and Kobe to the city of Shizuoka.
- 1900.—India and Ceylon teas become competitors of China tea in Russia.
- 1900.—The bonus paid by the Ceylon Thirty Committee for green-tea exportations is reduced to 7 Ceylon cents a pound.
- 1900.—Tea cultivation is begun in Persia [Iran].
- 1900.—J. H. Renton becomes Ceylon tea commissioner in Europe.
- c1900.—French Indo-China begins to export tea.
 c1900.—Boenga-Meloer has the first withering loft in Java.
- c1900.—Overproduction stops tea planting in Ceylon and India.
- 1900.—The Tocklai Tea Experimental Station of the Indian Tea Association starts with one agricultural chemist.
- 1901.—Japan and Formosa exhibit teas at the Paris Exposition.
- 1901.—The Tea and Coffee Trade Journal is founded in New York.
- 1901.—A tea-planting venture, which subsequently failed, is in process of development in Colleton County, South Carolina.
- 1901.—The Tea Duty Repeal Association, formed in New York, urges removal of the Spanish-American War duty on tea.
- c1902.—Commercial tea planting begins in Nyasaland.
- 1902.—A few estates in British India revive the manufacture of green tea, chiefly for the American market.
- 1902.—A campaign for Ceylon tea is begun in Afghanistan.
- 1902.—Ceylon raises the cess rate to 30 Ceylon cents per cwt. on tea exports.
- 1902.—The Proefstation voor Thee is established at Buitenzorg, Java.
- 1902.—A cess of ¼ pis per pound of tea exported is started by the Government of British India to promote the sale and consumption of India tea in India and elsewhere.
- 1903-04.—A propaganda for British-Indian tea is begun in the United States, and is continuous to and including the fiscal year 1917-18.
- 1903.—The U. S. Congress repeals the duty on tea.
- 1903.—The National Tea Association of the U. S. A. is organized in New York.
- 1903.—The Natal tea industry reaches a peak production of 2,681,000 lbs., in this year.
- 1904.—Ceylon, India, and Japan teas are exhibited at the St. Louis Exposition.
- 1904.—Ceylon investigates the possibility of producing Oolong tea.
- 1904-05.—A propaganda for India tea is begun in the United Kingdom.

- 1905.—Japan tea propaganda, this year, includes distribution of samples in Australia, newspaper advertising in France, and an exhibit at the Belgian Exposition.
- 1905.—Java planters establish the Tea Expert Bureau.
- 1905.—A commission of Chinese tea experts studies methods of tea production in India and Ceylon.
- 1905.—The Anti-Tea-Duty Association is formed in London.
- 1905-06.—India-tea propaganda is begun in Europe.
- 1906.—The San Francisco Fire wipes out nearly all the tea establishments in the city.
- 1906.—W. A. Courtney succeeds William Mackenzie as Ceylon tea commissioner in the United States.
- c1907.—Tea planting in Ceylon and India, stopped by overproduction in 1900, is resumed.
- 1907.—Japan tea propaganda in the United States and Canada is discontinued.
- 1907.—The China Tea Association is formed in London.
- 1908.—The Ceylon tea cess terminates, and Mr. Courtney ceases to act as Ceylon tea commissioner in America.
- 1909.—A "Fine Tea" campaign begins in the United Kingdom.
- 1909-10.—H. Lambe, of the Tea Expert Bureau, Batavia, conducts a propaganda for Java tea in Australia.
- 1910.—Tea planting on a large scale begins in Sumatra
- 1910.—The Japanese Government of Formosa subsidizes a company organized to manufacture black tea.
- 1910.—Tea is planted in Uganda, British East Africa.
- 1911.—Iwao Nishi is appointed commissioner to revive Japan tea advertising in America.
- 1911.—Artificially-colored tea is barred from the United States.
- 1911-12.—An India tea propaganda is conducted in South America.
- 1912.—The Tea Association of New York becomes the Tea Association of The United States of America.
- 1912.—Japan tea propaganda is resumed in America.
- 1914.—Cargoes sunk by the German raider "Emden" include 12 million pounds of tea.
- 1914-18.—During the war years people of Germany have great difficulty in getting tea.
- 1915.—Dr. Charles U. Shepard dies, and the tea gardens at Somerville, South Carolina, fall into neglect.
- 1915.—The World War brings a great revival of the tea trade in China, due to purchases of black leaf for the Russian army.
- 1915.—Sampei Uchida patents the first tea-plucking shears in Japan.
- 1915-16.—Propaganda for India tea is begun in British India, and is continuous hereafter.
- 1917.—H. J. Edwards, of the Tea Expert Bureau, Batavia, visits the United States to promote a market for Java teas.
- 1917.—The British Government establishes the war-time Tea Control, to regulate the handling of tea.
- 1917.—The Russian tea trade collapses after the Revolution.
- 1918.—Russian tea factories at Hankow are idle and many Chinese tea firms go into liquidation.
- 1918.—The Japanese Government of Formosa in-



- augurates a general policy of helpfulness toward the tea industry.
- 1919.—The British war-time Tea Control is removed.
- 1919.—The British Preferential Tariff, giving 24. a pound preference to British-grown teas, goes into effect.
- 1919.—An advance of 100 per cent in the duty checks tea consumption in Germany.
- 1919.—The Tea Association of the U. S. A. takes steps to interest growers, shippers, merchants, and brokers in a national campaign of tea advertising.
- 1920.—The U. S. Board of Tea Appeals is created by an amendment to the Tea Law.
- 1920.—The second severe crisis of overproduction in the present century brings an agreement between British tea planters for restriction of production this year.
- 1921.—German tea imports once more reach their pre-war level.
- 1921.—A policy of finer plucking is adopted by tea planters of India and Ceylon, to reduce production.
- 1921.—The Indian tea-cess rate is raised from ½ pie per pound to 4 annas per 100 pounds.
- 1922.—Iwao Nishi resigns as Japan tea commissioner in the United States.
- 1922.—The Formosan Government begins a newspaper advertising campaign for Formosa tea in the United States.
- 1922.—Restriction of tea output continues in India and Ceylon.
- 1922-23.—A trade propaganda for Java tea begins in America.
- 1922-23.—India-tea propaganda is resumed in the United States and the countries of Europe.
- 1923.—Government tea inspection is established in Formosa.
- 1923.—The Japanese Earthquake destroys approximately three million pounds of tea in store at Tokyo and Yokohama.
- 1923.—Harold W. Newby, Indian Tea Cess commissioner, visits the United States, to ascertain the possibilities for increasing the consumption of India tea.
- 1923.—The Indian Tea Cess Committee decides to spend \$200,000 a year for advertising India tea in the United States, and Sir Charles Higham is appointed advertising director.
- 1923.—The Indian tea-cess rate is raised to 6 annas per cwt. of tea exported.
- 1924.—Nyasaland passes the million mark in tea shipments, with shipments for the year of 1.068.504 lbs.
- 1924.-- A Tea Congress is held at Bandoeng, Java.
- 1924.—Japanese chemists announce the discovery of vitamin-C in the green teas of Japan.
- 1925.—The Union of Soviet Socialist Republics reorganizes tea buying as a Government monopoly in Russia.
- 1925.—Brooke, Bond & Co., Ltd., and James Finlay & Co., Ltd., purchase land and begin planting tea extensively in Kenya, East Africa.
- 1925.—Russia resumes tea buying on a large scale in all markets.
- 1925.—The Tea Research Institute of Ceylon is established, and the Government imposes a cess of ten Ceylon cents per cwt. of tea exported, for its support.
- 1926.—Black-tea production is increasing in Formosa, being approximately 400,000 lbs. per annum.

- 1926.—The Japan Central Tea Association begins a five-year tea-advertising campaign in the United States.
- 1927.—The India Tea campaign in France is discontinued.
- 1928.—The first shipment of Kenya tea is sold in London.
- 1928.—Leopold Beling is appointed India-tea commissioner in the United States.
- 1929.—The 269-year-old English tea duty is removed.
- 1930.—Tea from Uganda is first sold in London.
- 1930.—Tea restriction among British and Dutch tea planters cuts down production 41 million pounds, this year, against an intended reduction of 57 ½ million pounds.
- 1931.—Tea restriction among British and Dutch tea planters is abandoned.
- 1931.—A "Buy British" tea campaign is begun in the United Kingdom, continuing two years.
- 1932.—The Ceylon State Council passes a bill authorizing an export duty of not more than one Ceylon cent per pound and the creation of a Tea Propaganda Board to advertise Ceylon tea at home and abroad. The amount of initial cess is fixed at one-half a cent, providing an annual income of £91,000.
- 1932.—Ceylon prohibits the exportation of rubbishy teas.
- 1932.—The Netherlands Indies Association for Tea Culture is organized at Batavia, Java.
- 1932.—The British tea duty is restored in April with an impost of 4d. on foreign and 2d. on Empire-grown tea.
- 1933.—A five-year plan of tea export regulation is adopted by the governments of British India, Ceylon, and the Netherlands Indies.
- 1933.—Japan exhibits teas and tea novelties at the Chicago World's Fair.
- 1933.—Mr. G. Huxley is appointed chief commissioner in charge of the Ceylon tea advertising campaign.
- 1933.—Propaganda for Ceylon tea is started in Canada by the Ceylon Tea Bureau, Montreal, with Mr. F. E. B. Gourlay in charge.
- 1933.—Propaganda for Ceylon tea is begun in South Africa with Mr. Leslie Dow as resident commissioner.
- 1933.—An International Tea Committee is formed in London as administrator of the five-year plan of tea export regulation adopted by British India, Ceylon, and the Netherlands Indies.
- 1933.—The rate of the Indian tea cess is increased to 8 annas per lb. of tea exported.
- 1933.—Propaganda for Empire-grown teas in the United Kingdom is re-organized under the name of "The Empire Tea Growers."
- 1934.—A new joint campaign is launched in the U.K. by the Empire Tea Growers.
- 1934.—The Governor General of the Netherlands Indies decrees a tea propaganda cess of 39 Dutch cents per cwt. of estate tea and 19½ cents for native-grown tea sold.
- 1934.—A committee of enquiry, consisting of representatives from India, Ceylon, and Java, visits the United States to recommend the best plan for increasing tea consumption in America.
- 1934.—A Code of Fair Competition is adopted by the tea trade of the U.S.A. under the National Recovery Administration.

A DICTIONARY OF TEA

Being a List of Common Names of Various Teas and a Glossary of Difficult, Dialectal, or Technical Words and Expressions Employed in the Tea Producing Countries and in the Tea Trade

agony of the leaves. Tea tasters' expression descriptive of the unfolding of the leaves when boiling water is applied.

alang-alang. Malay. Long wild grass.

Amoy. Name given to Fukien Oolongs marketed at Amoy.

Anhwei, Anhui. "Peace and beauty." One of eighteen provinces in China.

anna. Hindi. The 16th part of a rupee.

Assam. High-grade India tea, grown in Assam Province, Northeast British India.

aste. Hindi for slowly.

autumnal teas. Term applied to India and Formosa teas, meaning teas touched with cool weather.

babu, baboo. Bengali for "Mr."; English-speaking Bengali clerk.

bahadur. Hindi for "brave one."

ball tea. A name applied to China tea compressed into a ball, to protect it against atmospheric changes.

Bancha. A low grade Japan tea made from coarse leaves. It is not exported.

banji. Hindi for "sterile"; two leaves without a bud or dormant bud.

benking. In tasting teas, the retention in the drained leaf of considerable liquor which may only be squeezed out.

bara nadi. Hindi for "big river," meaning the Brahmaputra.

basket-fired. Japan tea which has been cured in baskets by firing.

batti wallahs. Hindi. Men in charge of tea driers.

belati pani. Hindi for "soda water."

Bengal. A province of N. E. India.

bheels. Hindi for flat lands between hills.

Bihar and Orissa. Province of N. E. India.

billy tea. Tea made by the Australian bushman in a billy, or cylindrical tin vessel with separate lid and wire bail.

bitter tea, cha tulch. Tea prepared in Cashmere by boiling in a tinned copper vessel, adding red potash, aniseed and salt, and serving from a teapot of brass or copper, tin lined. Also the seen cha of Turkestan; an ordinary fourminute infusion of green tea.

black tea. Any tea that has been thoroughly fermented before being fired.

blend. A mixture of different growths.

body. Strength of liquor.

boedjang. Javanese carrier, or coolie laborer.

Pohes. Tea from the Wu-i Hills in Fukien Province, China. Originally applied to the best China black tea; subsequently an inferior China black; and now applied to a coarse grade of Java tea consisting mostly of stalks. In the eighteenth century the name also was applied to the tea drink; pronounced "Bo-hee."

bold. Large leaf.

borong. Javanese. Contract labor. Banji leaf.

bouw. Dutch land measure = 1.7537 acres.

boy. Term commonly used in the East and the Far East for a servant.

break. Tea sale term meaning a "lot"; a large break consists of 1000 chests or more, and a lesser quantity is known as a small break.

brick tea. Common grades of China and Japan teas mixed with stalk and dust and molded into bricks under high pressure; for the Mongol and Russian trade.

bright. Sparkling red liquor.

brisk. "Live," not flat liquor.

broken.—Tea that has been broken by rolling or passing through a cutter.

Broken Orange Pekce and Pekce. Mechanical separations of India, Ceylon, or Java teas, comprising the smaller leaves and broken parts with tips.

broker. A tea broker is one who negotiates the sale of tea from one dealer to another for the consideration of a brokerage from the seller. The brokerage in New York usually is 2 per cent on general business and 1 per cent on invoices, and in London it is ½ of 1 per cent on auction teas and 1 per cent for private treaty.

bukit, boekit. Malay. Hill or mountain.

rungalow. From the Hindi bungala. A singlestoried, thatch-roofed house with a verandah.

burra sahib. Hindi for "big master," or European manager.

busti. Bengali for "village."

butter tea. Boiled tea, mixed with salt and soda, which afterwards is strained into a churn containing butter and tsamba [barley, parched and ground] and then churned. A lump of butter sometimes is added in the serving basin.

Cachar. The most common variety of India tea, produced in the Cachar district of Assam.

caffeine. The stimulating constituent in tea.

caffeine content. In a cup of tea, less than 1 grain; in a cup of coffee, 1.5 grain.

cambric tea. Hot water, milk, and sugar flavored with tea.

Campoi. Chinese, meaning "carefully fired"; applied to a selected variety of Congou tea.

campong. See kampong.

Canton. A scented China Oolong tea.

Capers. A highly scented China black, shaped like China Gunpowder.

cash. Chinese coin having a square hole in the center. From the Portuguese caixa, meaning "case."

Cathay. China. Possibly a Persian corruption of "Kitans," a people who ruled Northern China from A.D. 1118 to 1235. Marco Polo speaks of China as "Kitai." Tennyson writes—"Better fifty years of Europe than a cycle of Cathay."

catty. The Chinese pound = 11/3 lb. avoirdupois. catty, or kati, is the Malayan word for a pound.

cavatu. Tamil for "pruning."

Ceylon. Both black and green teas are made in Ceylon, but the blacks predominate. They are known by the name of the district, and are further identified by garden marks.

ch'a. [Chinese]. Tea.

cha-akindo. Japanese for "tea dealer."

chas-sze. Chinese for "tea expert," or tea taster.

chabako. Japanese for "tea chest," or box.

chabatake. Japanese for "tea plantation."

chabento. Japanese. A portable chest in which to carry all necessary utensils for tea making.

chabin. Japanese for "teapot."

chabin-shiki. Japanese for "teapot stand."

chabishaku. Japanese. A ladle used in tea making.

chabon. Japanese for "tea tray."

chabukuro. Japanese for "tea bag."

chadashi. Japanese. A pot used to serve tea.

chado. Japanese. The art of making tea.

chadogu. Japanese. Vessels and utensils used in making tea.

cha-ire. Japanese for "tea caddy."

cha-iri. Japanese. Pan for firing tea.

chairo. Japanese for "tea color."

chajin. Japanese for "tea master."

cha jos. A kettle and teapot combined.

chaki. Japanese. Tea-preparing utensils.

chakoshi. Japanese for "tea strainer."

chall. Hindi for "move along."

chama. Japanese for "tea room."

cha-no-fu. Japanese. Tea price current.

cha-no-ki. Japanese for "tea plant."

cha-no-sosho. Japanese. A professional tea maker.

cha-no-yu. "Hot water tea"; Japanese tea ceremony or party.

character. In tasting teas, any outstanding quality.

chasen. Japanese for bamboo "tea stirrer."

chashaku. Japanese for "teaspoon."

chashi. Japanese for "tea grower."

cha-tsubo. Japanese for "tea jar."

cha tulch. See Bitter Tea.

chaukidar. Hindi for "watchman."

cha-wan. Japanese for "teacup."

chaya. Japanese for "tea store," or tea house.

chayen. Japanese for a "tea garden," or plantation.

chee-chee. An Eurasian [q. v.].

Chekiang. Chinese for "crooked river." One of the eighteen provinces.

chens. Hindi. Burned-over or scrub land.

che-shima. Principal variety of tea plant from which China and Formosa Oolong teas are made.

chest: Original tea package; usually made of wood and lead lined. India and Ceylon teas are packed in "chests" and sometimes in "half chests"; other teas come mostly in "half chests." The official London weights are: India chests, 118 lbs.; India half chests, 70 lbs.; Ceylon chests, 106 lbs.; Ceylon half chests, 70 lbs.; Congou half chests, 64 lbs.; Java chests, 110 lbs.

China. Black, green, and Oolong teas are made in China.

China blacks. Name for the China Congou's.

China greens. Name for several makes of unfermented China teas.

chin-chin. Corruption of a Chinese salutation or "good-bye."

chit. Hindi. A note or letter; also an I.O.U.

chitta. Hindi for "field book."

Chittagong. District and port, India.

cho. Japanese measure = 358 feet, lineal; also 2½ acres.

chools, chuls. Hindi. A brick, charcoal furnace.

chop. From the Hindi chapna, to stamp; a number, mark, or brand. A chop of tea means a certain number of chests of tea all bearing the same brand. A thing is said to be first-chop when it is of first-rate quality. "But oh, you should see her ladyship's behaviour on her first-chop dinner-parties, when Lord and Lady Longears come."—Thackeray.

chop chop. Pidgin English for "make haste."

chota hazri. Hindi. "Little breakfast," or early tea and toast.

chota sahib. Hindi for "little master" or junior European assistant.

chul. Hindi for "work" or to be in motion.

chung. A wooden shed.

chuprassi. Hindi for "overseer."

churned tea. Bitter tea churned with milk.

cold fermented. East Indian type.

collandu. Tamil for "flush," or young tea leaf.

colory. Bright, attractive liquor.

common tea. That which gives the plainest and lightest liquor; thin, of no particular flavor.

compradore. From the Portuguese comprar, to buy. The Chinese agent who acts as intermediary between foreign business firms and Chinese buyers and sellers; also a store keeper or ship chandler.

Congon. Chinese for the "labor" kind of tea. A general term used to describe all China blacks, irrespective of district.

coppery. Bright, "new penny" infusion.

Country Greens. All China greens other than Hoochows and Pingsueys.

creaming down. A milky film rising to the surface of the testing cup, accompanied by a thickening of the liquor in certain high-grade teas; believed to be caused by precipitation of the tannin and caffeine.

cream tea, vumah cha. Turkestan. A boiled decoction of black tea to which cream is added in the making.

creeper. In Ceylon, a novice who sometimes pays a premium for instruction, board, and lodging while learning tea planting.

crepy. Souchong with crimped leaf

cumshaw. Chinese for "grateful thanks." The universal tip. Same as the baksheesh of the Near East.

cups of tea to the lb. Average, black tea, 200 cups; green tea, 150 cups. Tea tasters average, 160 cups.

dandy. From the Hindi dandi, a staff. In India and Ceylon, a kind of hammock transport slung on a pole and much favored by ladies at hill stations and tea estates difficult of access.

Darjeeling. The finest and most delicately flavored of the India teas. Grown chiefly in the Himalaya Mountains at elevations ranging from 2500 to 6500 feet.

Darrang. A tea district of India.

Dehra Dun. A tea district of India.

enaturised tea. Tea which the English Customs deem unfit for consumption, is mixed with lime and asafetida and marked "Denaturized." It is used only for the extraction of its caffeine content for medicine. denaturized tea.

dhool. Hindi for "small bulk"; fine tea.

Dibrugarh. A tea district of India.

Dikoya. A tea district of Ceylon.

Dimbula. A tea district of Ceylon.

direi sany. Tamil for "mistress."

Dooars. Tea grown in the Dooars district, British India.

dull. Liquor not clear and bright.

Dum Duma. A tea district of India.

dust. The smallest siftings resulting from the sieving process, being leaf practically reduced to a fine powder.

nglish Breakfast. A name originally applied to China Congou in the United States, and now used to include blends of black teas in which the China flavor predominates. English Breakfast.

nshu. A district in Japan near Shizuoka, pro-ducing a tea of fine cup quality.

estate. A property or holding, which may com-prise more than one garden or plantation un-der the same management or ownership.

urasian. The offspring of a European father and Asiatic mother. Burasian.

nnings. The small grainy particles of leaf sifted out of the better grade teas. These often are as good in liquor as the whole leaf fannings.

ar Bast. A term which includes China, Japan, the Philippines, Netherlands India, Siam, and the Malay Peninsula.

flaky. Flat leaf, easily broken.

flat. Lacking briskness and pungency.

Flowery Orange Pekoe. Orange Pekoe containing an abundance of tip.

fuff. Thick, hairy down, or bloom, on the tea leaf, which becomes loosened in the sifting process. It is collected and used in the manufacture of caffeine.

flush. Young leaf shoots on tea bushes.

ormosa. Tea produced on the island of Formosa is made into Oolong, Pouchong, and black. [q. v.]. Formosa Oolong tea, being semifermented, has some of the characteristics of black tea, with certain of the cup qualities of green tea. Formosa.

Fukien. Chinese for "happily established." One of the eighteen provinces.

full. Strong tea, without bitterness.

fully fine. Better than fine, as applied to Formosa tea.

fut. Hindi for "broken."

galli karoing. Hindi for "reprimanding."

gamelan. Native Javanese orchestra.

gaping. Hindi for "final firing."

garden. Used interchangeably with "plantation" in some tea countries, but usually referring to

garden mark. arden mark. The mark put on tea chests by the estate to identify its particular product.

gharry. From the Hindi gari; a four-wheel box carriage.

ghat. Hindi for "ferry" or "ford."

Goalpara. A tea district of India.

odown. From the Malay gedong, a warehouse. Originally a cellar or place to which it was necessary to go down. Now, a warehouse. godown.

golden tip. Orange colored tip, black tea. gone off. Moldy or tainted.

Government standards. Grades of teas selected annually as import standards of purity, qual-ity, and fitness for consumption by the United States Board of Tea Experts.

grainy. Term applied to well-made fannings and dust.

green tea. Tea that has not been fermented before firing.

griffia. A new arrival in the Far East; also a racing pony running for the first time.

Gunpowder. A make of young China, India, or Ceylon green tea, each leaf of which is rolled into a pellet.

yokuro. Japanese for "pearl dew." A high-grade tea made by a special process from shaded bushes in the district about Uji, Japan. Gyokuro. It is not an export tea.

A Japan tea used principally by the Japanese.

Haikwan. The superintendent of the Chinese maritime customs.

half chest or K.C. The weight of a half chest of tea varies according to the variety of tea, as follows: Indias and Ceylons, about 60 to 70 lbs.; Monings, about 65 lbs.; Panyongs, about 50 lbs.; Souchongs, about 50 lbs.; Formosas, about 40 to 45 lbs.; Japan Pan Fired, about 80 lbs., Japan Basket Fired, about 70 lbs.

alf a name. Ceylon check-roll expression used by tea-garden superintendents for coolies en-titled to half pay because of sickness or poor half a name. work.

handkerchief tea. From the island of Formosa. It gets its name from the fact that Chinese tea growers bring down from their little gardens or farms very tippy teas, often of thighest quality, in large silk handkerchiefs.

hasri. Hindi for "morning's pay." Literally, breakfast.

high tea. An afternoon or evening meal with meats and other relishes at which tea is the beverage.

ong. A Chinese word similar in meaning to "compound." In the tea trade it includes the offices, tea room, sample room, firing room, and warehouse. Literally, a row or series of rooms; applied to all trades.

hong merchant. In the old days at Canton, the security merchant who, for the privilege of trading with foreigners, became security to the mandarins for their payment of duties and their good behavior. This monopoly was broken up by the Treaty of Nanking, 1842.

Hoochow. A China green tea.

hoppo. The haikwan or superintendent of customs at Canton.

Eunan. Chinese for "south of the [Tung-t'ing] lake." One of the eighteen provinces.

Empeh. Chinese for "north of the [Tung-t'ing] lake." One of the eighteen provinces.

Cyson. Chinese for "flourishing spring." A make of China and other green teas; in the eighteenth century the name was also applied to the tea drink.

Hyson, Young. See "Young Hyson."

Ichang. A grade of North China fermented tea. ichiban-cha. Japanese for "first tea," or first plucking.

Imperial. A make of rolled Java, China, or India green tea of a round, bold character. Made from older leaves after the gunpowder leaves are sifted out.

India. Black and green teas are made in India.

They are known by the name of district from whence they come, and are further identified by garden marks.



invoice. A shipment of tea; generally synonymous with chop.

jannum. Hindi, meaning "birth." The "fish" leaf, which is formed above the junction of the parent leaf with the primary stem, after the second flush develops.

Japan. Most Japan teas are made up to preserve their natural quality, without fermenting or withering and are, therefore, "green teas." They are known as natural-leaf, pan-fired, or basket-fired. A comparatively small proportion are made up as fermented, or "black," teas.

jat. Hindi for "type," as applied to tea.

Java. Teas grown in the island of Java are manufactured as in Ceylon and India, and are almost entirely of the black variety.

Jorhat. A tea district of India.

kabaya. Long, coat-like upper garment worn by Malay women.

kabuse-cha. Japanese for "covered tea"; tea grown under shade.

kago. Japanese. A riding basket; a bamboo palanquin.

Eaisow. A variety of South China Congou tea. **kakemono.** A Japanese hanging picture.

kam. Siamese. Bamboo-tied handful of miang, or wild tea.

kampong. Malay. An enclosure; a village.

kan, ken. Japanese weight = 8.25 lbs

kanacapillai. Tamil for the overseer who keeps the check roll, weighs the leaf, etc.

kangany. Tamil for "overseer."

Eangra. A tea district of India.

Exwans. A small tea district in Japan producing a fine quality small-leaf tea.

Ecomun. A fine grade of North China black-leaf Congou.

khit. Contraction of the Hindi khitmutgar, a table servant.

Eiangsi. Chinese for "west of the river." One of the eighteen provinces.

Eiangsu. One of the eighteen Chinese provinces. **Ein.** Chinese and Japanese weight = 1½ lbs. avoirdupois.

Eintuck. A variety of North China black leaf Congou.

Einkiang. Chinese for nine rivers; a port on the Yangtze, near the outlet of Poyang Lake.

kodal bait. Hindi. Hoe handle.

kubbardar. Hindi for "be careful."

Eumaon. A tea district of India.

kuo. Chinese. A shallow, iron hot-pan set in the top of a brick or clay stove.

kura. Japanese for "godown."

kutcha. Hindi. Unripe, incomplete.

Eutoen. A China black from Kiangse Province.

I.V. Kelani Valley, Ceylon.

Ewangsi. One of the eighteen Chinese provinces.

Eweichow. Chinese for "noble region." One of the eighteen provinces.

lac. lakh. Hindi, "one hundred thousand."

Lakhimpur. A tea district of India.

Lapsang Souchong. A grade of China black tea.

large bulk. Large-leaf tea.

layering. Process of pegging down the lateral branches of a tea bush so they will take root for transplanting.

leafy. Whole leaves in broken grades.

letpet. Native Burmese pickled tea.

 Chinese lineal measure = one-third of an English mile.

liang. The Chinese ounce. A tael.

lie tea. A Chinese mixture of willow and other spurious leaf with genuine tea leaf, frauduently sold as tea.

likin. Chinese inland tax. Thousandth or cash money.

line. One grade of tea in an invoice or chop.

lines. Coolie dwelling quarters.

Local Packs. China teas packed in Shanghai.

lot. All of the tea offered under a single serial number at the London auctions.

Lu Ch'a. "Voyage Tea." Native name for all teas coming to the Shanghai market in a finished state.

mace. The tenth part of a Chinese tast, or ounce.

Madura. A tea district of India.

mahl. Hindi for withered tea.

Malabar. A tea district of India.

Maloo Mixture, Resurrection Tea. Used tea leaves and other rubbish.

malty. Slightly high-fired tea.

mandoer. Malay for overseer or foreman.

Mac Ch'a. "Woolen Tea." Shanghai Chinese for country-fired tea that has not been refined.

maskee. Pidgin English for "never mind."

matti. mutti. Hindi. Soil or earth.

mature. No flatness or rawness.

maund. Hindi. An oriental weight which varies from 19 to 163 lbs. The Indian Government standard maund is 82.286 lbs.

meat tea. See "high tea."

metallic. Coppery taste of some teas.

miang. Stamese for the indigenous or native wild tea. Same as Thea sinensis (L.) SIMS.

mistri sahib. Hindi. European engineer assistant.

Momikiri. "Pretty fingers." A new make of Japan tea.

Moning. A North China black tea.

monster. Dutch for "sample."

Mori. An Enshu, Japan tea.

mow. The Chinese acre = 16th of an English acre.

Moyune. One of the more important China green teas.

musmee. Japanese for "girl"; the waitress in a tea house.

muster. German for "sample." Overland samples of tea for inspection.

musty. Attacked by mildew.

natural leaf. A Japan tea similar to "pan-fired," but with less rolling. Formerly known as "porcelain-fired."

netsuke. Japanese carved button. Small carved figures.

New Make. A species of North or South China tea.

niban-cha. Japanese for "second tea," or second plucking.

Mibs. A Japan tea resembling China Gunpowder in style. A by-product of Japan green tea manufacture.

Milgiri. A tea district of India.

Mingchow. A China tea from Kiangsi Province.

Ming Yong. A China Oolong tea district.

no-name. Ceylon tea-garden expression for coolies not entitled to pay.

nose. The aroma of tea.

Mowgong. A tea district of India.

on fine. Meaning nearly fine as applied to Formosa tea.

Oolong. From the Chinese wu-lung, meaning "black dragon." A semi-fermented tea.

Conam. Tea grown in the Hunan Province of China.

Oonfa. Tea from Anhwei Province, China.

Oopack. Tea grown in the Hupeh Province of China.

Orange Pekoe. A grade of leaf tea resulting from sifting through a sieve having mesh of a certain specified size. It may be broken or unbroken.

paddy. From the Malay padi; rice in the husk.

Padrae. A make of South China, red leaf Congou, originally cultivated by priests.

Paklin. A variety of South China black leaf, Congou tea.

Paklum. The most stylish of the South China Congous.

palanquin. In the Straits, a four-wheeled closed carriage. In India, a litter.

palki. Hindi for "palanquin."

pan-fired. A kind of Japan tea which is steamed and then rolled in iron pans over charcoal fires.

pani. Hindi for "water."

Panyong. A grade of South China tea.

passir. Malay for "ridge."

patana. Sinhalese for "grassy slope," or down.

P.D., periya durei. Tamil for "big master"; manager or superintendent.

peg. In Anglo-Indian usage, a whiskey and soda.

Pekce. Chinese for "white hair"; originally applied to the earliest tea pickings, because of the white down on them. Now a leaf-grade term applied to black teas in general.

Pekce Congou. A South China black tea.

Pekoe Souchong. A leaf grade of black tea between Pekoe and Souchong.

picul, pecul. Malay pikul, a load or burden. The Chinese hundred weight = 1331/3 lbs. avoirdupois.

pidgin English. Macao talk. The jargon affected by foreigners in speaking to native servants, coolies, and shopkeepers.

Pingsuey. One of the most important China green teas.

Pinheads. Small shotty Gunpowder teas.

Point. Brightness and acidity of liquor.

porcelain-fired. See "natural leaf."

Pouchong. Chinese, meaning "folded sort." A kind of scented tea [q. v.], so called from the Cantonese method of packing in small paper packets, each of which was supposed to be the produce of one choice tea plant.

pukks. Hindi for "ripe," complete.

pukka batti. Hindi for "final firing."

pungent. Astringent in the mouth.

punkah. From the Hindi word pankha, meaning a fan.

P.W.D. Public Works Department, Ceylon.

ragged. Uneven leaf.

rasping. Coarse flavor in the cup.

rawness. Bitter taste.

red leaf. South China Congou.

ri. Japanese land measure = 2 1/2 English miles. roughness. Liquor harsh.

samban-cha. Japanese for "third tea," or third plucking.

sahib. Hindi meaning master, lord, sir, or gentleman.

salaam. Greeting. An Arabic term meaning "peace be with you."

sampan. Chinese flat-bottom river boat.

sappy. A large amount of juice.

san-chun. Chinese for "third spring"; applied to third plucking.

sari. Hindi for dress. A sheet worn by Hindu women.

sarong. Gay-colored silk or cotton cloth garment worn by Malays.

Saryune. A large red-leaf tea grown in the Saryune district, China.

Scented Orange Pekoe. A highly scented China Southong tea.

scented teas. Made in China and Formosa by introducing jasmine, gardenia, or yulan blossoms during the firing and packing process.

S.D., sinns durei. Tamil for "little master," or assistant superintendent.

self-drinking. Requiring no flavoring agent.

sen. Japanese $coin = \frac{1}{100}$ yen = $\frac{1}{2}$ cent, U. S.; one farthing, English.

Sencha. Name given to the ordinary export teas of Japan.

shaku. Japanese foot = 11% inches.

Shansi. Chinese for "west of the hills." One of the eighteen provinces.

Shantung. Chinese for "east of the hills." One of the eighteen provinces.

Shensi. Chinese for "west of the passes." One of the eighteen provinces.

shikar. Hindi for "sport"; hunting, shooting.

shing, sheng. A Chinese measure, equal to an English pint.

show-chun. Chinese for "first Spring"; applied to first plucking.

Siantar. A tea district of Sumatra.

Sibsagar. A tea district of India.

silver tip. Silver instead of golden tip.

Silvery Colong. A specially-plucked Foochow Oolong, prepared from the delicate whitish leaves of the first flush.

Singchuen. A China leaf; rather open. Often mixed with dust.

sirdar. Hindi for "foreman."

slendang. Malay for the duck bag used by tea pluckers in Java and Sumatra.

small bulk. Small-leaf tea.

Scekaboemi. A tea district of Java.

soft. Under-fermented.

some ends. Some stalk.

Souchong. Chinese for "small kind," or little sort. The original Souchong tea was made from a small bush whose leaves were permitted to develop to an abnormal size. Hence large leaf, black teas are known as Souchongs.

Sowmee. A small-leaf grade of China tea.

Sperata plucking knife. Invented by the overseer of the Sperata Tea Estate, Java.

Spider Japans. So known because of their long, thin shapes.

spring teas. Formosa teas picked in the April-May season.

squeeze. Originally, the commission which Chinese servants charged their masters on purchases; now, any kind of irregular tax or peculation.

standing up. In tea tasting, a tea is said to "stand-up" when it holds its original color.

stand-out. Liquor above the average.

stewy. Soft liquor, lacking point.

strength. Thick liquor, pungent, and brisk.

string teas. South China teas made into Oolongs.

Sumatra. Tea grown on the island of Sumatra.
Gradings and characteristics are similar to those of Java tea.

summer teas. Formosa teas picked in the June-September season.

sun-dried. Originally used to distinguish Japan teas without color from those with color; however, they were really pan-fired, and as colored teas are no longer shipped, the so-called sundried and pan-fired teas now are identical.

Suruga. A Japan tea district of the Shizuoka Prefecture.

sweet. A light, not undesirable liquor.

sweetish. Term suggesting a taint.

Sylhet. Tea grown in the Sylhet District, Assam,

Szechwan. Chinese for "four streams." Largest of the eighteen provinces.

tablet tea. Small bricks, weighing a few ounces each, and made of fine tea dust of special quality.

tael. An ounce weight of pure silver; there is no such coin.

taipan. Chinese. The foreign manager of a firm. tampir. Javanese. A flat bamboo withering tray.

tannin. An astringent chemical constituent.

tare. The weight of the container. The difference between gross weight and net contents of a package of tea.

tarry. A smoky aroma.

tat. A shelf made of wire or Hessian [burlap] on which green tea leaves are spread for withering.

tatties. Shade mats of thatch used in Indian tea nurseries.

tea. Thea Sinensis (L.) Sims. As defined by the United States Department of Agriculture, "Tea is the tender leaves, leaf buds, and tender internodes of different varieties of Theasinensis L., prepared and cured by recognized methods of manufacture. It conforms in variety and place of production to the name it bears; contains not less than 4 per cent nor more than 7 per cent of ash; and meets the provisions of the Act of Congress approved March 2, 1927, as amended, regulating the importation and inspection of tea."

tes gobber. Slang name for China tea tasters.

tes taster. An expert judge of the cup quality and the leaf. One who judges tea by testing in the cup and in the hand.

teels, tila. Hindi for "little hill," or slope.

Tencha. A powdered Japan tea, known also as *Hikicha*, or ceremonial tea. It is not an export tea.

Terai. Tea grown in the Terai District of Northern India.

tetsubin. Japanese. Tea kettle.

theine. Obsolete name for tea caffeine.

theol. Term sometimes used for the essential oil of tea,

thick. Concentrated, red infusion.

thick teas. Indias, Ceylons, Javas, or Congous possessed of full, strong "draw."

thin. Liquor lacking color and body.

timn. Persian. The mid-day meal; luncheon.

tip. The bud leaf of the tea plant, also known as Pekoe tip.

tippy teas. Teas with white or golden tips.

topes, sols. From the Hindi shola, a pithy reed, and topes, a hat. The sun helmet of sola pith worn in tropical countries.

totam. Tamil. Tea estate.

Travancore. Tea grown in the state of Travancore, Southern India.

tsew-loo. Chinese. "Autumn dew." The fourth and last plucking.

tsubo. Japanese land measure = six feet square.

tuan besar. Malay. "Great master," or head of the establishment.

Tu Ch's. "Earth Tea." Tea manufactured in Shanghai from leaf brought from Hangchow or the vicinity of Shanghai.

Twankay. A low grade of China green tea, originally from T'un-Ch'i, a town in Anhwei; also a grade of Ceylon or India greens.

twelve-anna-fired. Meaning three-quarters fired. urh-chun. Chinese for "second spring," or second plucking.

Uva. A tea district of Ceylon.

V.A., Visiting Agent. A person who visits and makes reports on estates for agents or proprietors.

vast personneel. Dutch for "steady personnel," or permanent labor.

vumah cha. See "cream tea."

wallah. Hindi suffix meaning "occupation."

warm fermented. China Congou type.

wayang. Malay for "theatre"; Javanese puppet show.

weak. Thin liquor.

well-twisted. Indicates a full wither.

weighing in. In tea tasting, the weighing of a like quantity from each tea sample about to be tested.

wiry. Term applied to well-twisted, thin-leaf Orange Pekoe.

Yang Ch'a. "Graded Tea." Various teas brought to Shanghai and there blended, receiving local names on the Shanghai market; known to the export trade as "Shanghai Packed."

yen. Japanese coin = \$0.498 U. S. or 2s. %d. English.

yoban-cha. Japanese for "fourth tea," or final plucking.

Young Hyson. Chinese for "before the rains." A make of China tea so-called because it is plucked early.

Yunnan. Chinese for "south of the clouds." One of the eighteen provinces.

A BIBLIOGRAPHY OF TEA

A Selected List of Historical Writings, Notable Books and Periodical References in the Leading Libraries of Europe and America -Arranged Alphabetically by Authors and Important Titles

- Abel, C., Narrative of a journey in the interior of China, London, 1818.
- Abraham, Jan. a Gehema, Wettstreit des Chinesischen thea mit warmen Wasser, Berlin,
- Aesel, H. and Sawano, M., "Researches on tea leaves," Gun Igaku Kwai Zasshi, Tokyo, 1898, pp. 392-397.
- Ahlenius, Karl, "Kaffe, te och rörsocker, deras ursprungliga hem och viktigaste produktion-somraden," Ymer, Stockholm, 1903, Vol. XXIII, pp. 242-268.
- Aird, J. E., "Hygrometry as applied in the manufacture of tea," Indian Planting and Gardening, Calcutta, Feb. 13, 1904.

 A handbook of tables and memoranda for planters, Calcutta, 1917.
- Albini, Bernard, Disputatis de thea, Frankfort, 1684.
- Alcott, William Alexander, Tea and coffee: their physical, intellectual, and moral effects on the human system, Boston, 1839, and Manchester, England, 1877.
- Almeida, Louis, "A letter from Japan of Father L. Almeida," Maffei's literary selections ex In-dia, Florence, 1588, Lib. IV, p. 425.
- Amiot, P., "Eloge de la ville de Moukden," Verses of the Emperor Ch'ien Lung on Tea, Paris,

- of the Emperor Ch'ien Lung on Tea, Paris, 1779, p. 329.
 Anderson, W. Carrick, "The factors that constitute value in teas," Jour. Soc. Chem. Ind., London, 1909, Vol. XXVIII, pp. 258-288.
 André, A., "Dosage de la caféine dans le thé," Repertoire de Pharmacie, Paris, 1902, Vol. XIV, pp. 356-357.
 Andrews, E. A., "Termites in the Luskerpore Valley," I.T.A. Quar. Jour., Calcutta, 1916, Pt. II, pp. 54-72.

 "Cultural control," I.T.A. Quar. Jour., Calcutta, 1917, Pt. IV, pp. 120-124.

 "Factors affecting the control of the tea mosquito bug," I.T.A. publication, Calcutta, 1923.

 "Tea green fly," I.T.A. Quar. Jour., Calcutta, 1923, Pt. IV, pp. 109-117; also 1927, Pt. II.

 "Uhe Thrips pest of tea in Darjeeling," I.T.A. Quar. Jour., Calcutta, 1928, Pt. IV, pp. 206-219.

 "Red spider," I.T.A. Quar. Jour., Calcutta, 1930, Pt. IV, pp. 15-27.

 "Caterpillar pests of the tea plant; and of green manure plants and shade trees in use on tea estates," I.T.A. Quar. Jour., Calcutta, 1930, Pt. III, pp. 129-138.

 and Tunstall, A. C., "Notes on the spraying of tea," I.T.A. publication, Calcutta, 1915 [reprinted in 1925].

 Andrews, Frank D., The tea-burners of Cumberland County who burned a cargo of tea at
- Andrews, Frank D., The tea-burners of Cumberland County who burned a cargo of tea at Greenwich, New Jersey, December 22, 1774, Vineland, N. J., 1908.
- Andrews, W., Over the tea cups, Hull, 1700.
- Anstead, Rudolph D., "Prevention of soil erosion on tea estates in Southern India," Tropical Agriculturist, Peradeniya, Ceylon, 1923, Vol. LXVI, No. 3.
- Anti-Tea-Duty League. What started the League? London, 1906.
- Antram, C. B., "Bark-eating borers of tea," I.T.A. pub., Calcutta, 1907, No. 5; Meded. Proefst. v. Thee, Buitenzorg, 1912, No. 19. Armstrong, C. Spearman, Tea culture in Ceylon, Colombo, 1884.

- Aroma of tea, The-see W. S. Shaw.
- Art of making tea, The, a poem in two cantos, Cambridge, 1797.

- Art of tea blending, The, W. B. Whittingham & Co., London, 1882, 1893.

 "Art of tea drinking," Louis Windmuller, Forum, Jan. 1908, Vol. XXXIX, pp. 432-436.

 Ash, O. M., Ceylon tea from the bush to the tea pot, Colombo, 1930.
- Ashplant, H., Report on mosquito blight [Helopeltis] of tea in Java. Unit. Plant. Assoc. S. India Bull., Mundakayam, 1924, pp. 21-22.
- Aso, K., "On the rôle of oxydase in the preparation of commercial tea," Bull. Coll. of Agric., Tokyo, 1901, Vol. IV.

 Atteveld, N. van, "Usum frequentem infusionis theae omni carere utilitate negamus," Quest. Med., Rhenum, 1811.

- Med., Rhenum, 1811.

 Aubry-le-Comte, Ch. E., Culture et préparation du thé.—[7], 1865.

 Bachtadze, K., "Tea seed gardens and tea seed in Chakva district" and "The flowering and fruit bearing of the tea plant in Chakva," Bull. of the Research Institute of the Tea Industry in U.S.S.R., Tifits, 1931, No. 2, pp. 35-88.

 Backer, C. A., "Over het nut van de kennis der Javaansche theeonkruiden," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 324-335.
- 335.
- Baildon, Samuel, Tea in Assam. A pamphlet on the origin, culture, and manufacture of tea in Assam; with an appendix, "Rural life amongst the Assamese," Calcutta, 1877.

 The tea industry in India, London, 1882.
- Bailey, E. M., "Tea," in 23rd report on food products and 11th report on drug products, Conn. Agric. Exp. Sta., New Haven, 1919, Bull.
- 210.

 "Comparative tea analyses," The Tea and Coffee Trade Journal, New York, 1926, Vol. L, No. 1, pp. 39-42.
 Bakker, G. J., "Groenbemesting in theetuinen," De Thee, Buitenzorg, 1923, No. 4, pp. 81-82.
 Bald, Claud, Drainage for plantations, Calcutta,

- Indian tea: its culture and manufacture, Calcutta, 1903-1922.
- Balde, Philip, Description of the Island of Ceylon, Malabar, and Coromandel [Dutch], 1672.
- Ball, J. Dyer, Things Chinese, London, 1904. Ball, Samuel, An account of the cultivation and manufacture of tea in China, London, 1848.
- "Ballad on picking tea in the gardens in spring-time," trans. from the Chinese by S. Wells Williams. Chinese Repository, Canton, 1839, Vol. VIII, pp. 195-204. Balmer, Lawrie & Co., Ltd., Calcutta—Bombay, 1867-1927 [History of the firm], London, 1927.
- Balsem, C. F., "Calorische economie in de thee-fabricage," Alg. Landb. Weekbl. v. N. I., Bandong, 1916, Vol. I, No. 25, pp. 1-3.

 "'Het overplanten van oude theeheesters," Alg. Landb. Weekbl. v. N. I., Bandong, 1917, Vol. I, No. 48, pp. 1-2.

 "Een rupsenplaag," Alg. Landb. Weekbl. v. N. I., Bandong, 1918, Vol. II, pp. 516, 704.
- Bamber, E. F., An account of the cultivation and manufacture of tea in India, Calcutta, 1866.
- Bamber, M. Kelway, A text book on the chemistry and agriculture of tea, including the growth and manufacture, Calcutta, 1893.

Report on Ceylon tea soils and their effects on quality of tea, Colombo, 1900.
"What produces the flavour in tea," An interview with M. Kelway Bamber, Indian Planting and Gardening, Calcutta, Nov. 28, 1901.
and Kingsford, See Kingsford.
and Wright, Herbert, "A preliminary note on the enzyme in tea," Proceedings, Pl. Assn., Ceylon, year ending Feb. 17, 1902.
Bandini, P., "Ricerche sul valoré dell'esame istologico delle foglie di thé nelle determinazioni bromatologiche." Riv. d' ig. e san. pubb., Torino, 1903, Vol. XIV, pp. 802-814.
Bannister, Richard, "Sugar, coffee, tea, and cocoa: their origin, preparation, and uses," Jour. Soc. Arts, London, 1890, Vol. XXXVIII, pp. 1017-1036.
Baring, Sir Francis, The principle of the Com-

Baring, Sir Francis, The principle of the Com-mutation Act established by facts, London,

Barker, George M., A tea planter's life in Assam, Calcutta, 1884.

Barry, L., Etude sur le thé, Montpellier, 1890.

Barton, William Eleazar, When Boston braved the king: a story of tea-party times, Boston and Chicago, 1899.

"Basis for tea selection, A," C. P. Cohen Stuart, Bull. du Jardin Bot., Buitenzorg, Sept., 1919, Troisième Série, Vol. I, pp. 193-320. Bastedo, Walter A., Theobromine and caffeine beverages in materia medica, Philadelphia and London, 1915.

Batten, J. H., "Notes and recollections on tea cultivation in Kumaon and Garhwal," Roy. Asiat. Soc. Jour., London, 1878, Vol. X, pp. 131-155.

Baudoin, A., "Influence sur les digestions gas-trique et pancréatique du café des succédanés du café, et du thé—Thèse de Lyon," Pharmacie,

Bauhin, Gaspard, Theatri botanici, Basle [?], 1623, Bk. IV, Sec. 4., p. 147.

Beeching, C. L. T., "Tea," Encyclopædia Britannica, New York and London, 14th ed., Vol. XXI, pp. 857-861.

Beguin, V. M. A., "Over theebereiding," Ind. Mercuir, Amsterdam, 1915, Vol. XXXVIII, pp. 150-151.

150-151.

Belchilgen, Count, An essay on the virtues and properties of ginseng tea, London, 1786.

Bell, A. N., "Tea," Hunt's Magazine, Nov. 1858.
Bell, M. F., Tea planting prospects in the southwestern highlands of Tanganyika. Dept. of Agric., Dar Es Salaam, Tanganyika, East Africa.

Benton, S. F., "Soil bacteria in relation to cultivation and manuring," I.T.A. Quar. Jour., Calcutta, 1927, Pt. III, pp. 115-131.

"The cleaning of fermenting room floors," I.T.A. Quar. Jour., Calcutta, 1930, Pt. IV, pp. 152-150

I.T.A. Q

163-169.
"The greying of tea," I.T.A. Quar. Jour., Calcutta, 1931. Pt. III, pp. 139-144.
"The production of golden tip," I.T.A. Quar. Jour., Calcutta, 1932, Pt. II, pp. 95-100.
Berard, Taschenbuch für Theetrinker, Weimar, 1932.

Bergsma, C. A., Dissertation inauguralis botanicomedica de thea, Rhenum, 1825.

Bernard, Ch., "Over de aanwezigheid van gisten in fermenteerende thee en de eventueelen in-vloed daarvan op de fermentatie." Meded. Proefst. v. Thee, Buitenzorg, 1909, No. 5, pp.

Proefst. v. Thee, Buitenzorg, 1909, No. p. pp. 1-46.

"Observations sur le thé," Bull. Dept. Agric. Ind. Neerl., Buitenzorg, 1909, No. 23, pp. 1-148.

"Verslag over een reis naar Ceylon en Britsch-Indie, ter bestudeering van de theecultuur," Meded. Proefst. v. Thee, Buitenzorg, 1912, No. 20, pp. 1-112.

Verslag van eene reis naar Sumatra's Oostkust en de Pandangsche bovenlanden, Buitenzorg, 1913.

"De door de vorst op de Pengalengansche hoogvlakte veroorzaakte schade," Meded. Proefst. v. Thee, Buitenzorg, 1915, No. 38, pp. 1-11.

1-11.

"De theecultuur op Sumatra," Tijdschr. v.
Nijv. en Landb. in N.I., 1915, Vol. XC, pp. 283292.

- "Groene bemesting," Meded. Proefst. v. Thee, Buitenzorg, 1916, No. 51, pp. 1-34.

"Over eenige ziekten en plagen van de thee op Oostkust van Sumatra," Meded. Proefst. v. Thee, Buitenzorg, 1917, No. 54, pp. 1-21.

"Tea growing in the Dutch East Indies," Revue Générale des Sciences, Paris, 1919, Vol. XX, Nos. 17, 18, pp. 516-521.

"Over 'Red Rust,'" De Thee, Buitenzorg, 1922, No. 3, pp. 85-86.

"Insecten in de theetuinen op Sumatra," De Thee, Buitenzorg, 1922, No. 3, pp. 91-99.

"What is the productive life of a tea garden?" Overdruk uit het Nederlandsch Indisch Rubber en Thee Tijdschrift, Buitenzorg, Jan. 1 and 15, 1923, Vol. VII, Nos. 20-21.

"De geschiedenis van de theecultuur in Nederlandsch-Indie," Gedenkboek der N.I. Theecultuur 1824-1924, Weltevreden, 1924, pp. 1-18.

"Geschiedenis der 'roest'-plaag (Helopeltis)." Gedenkboek der N. I. Theecultuur 1824-1924, Weltevreden, 1924, pp. 96-100.

"La culture du the," Rapport des conferences internationales sur les produits tropicaux de la 7e Exposition Internationale du Caoutchouc et Autres Produits Tropicaux, Paris, 1927; London, 1927.

and Garretsen, A. J., "Over Helopeltis-

1927.

and Garretsen, A. J., "Over Helopeltis-bestrijding met 'Nicine," De Thee, Buitenzorg, 1922, No. 3, pp. 13-20.

and Kerbosch, M., "Voorloopige mededeeling omtrent het verenten van thee," De Thee, Buitenzorg, 1920, No. 1, pp. 97-100.

and Keuchenius, A., "Bestrijding van wortelziekten," De Thee, Buitenzorg, 1920, No. 1, pp. 35-41

ziekten," De Thee, Buitenzorg, 1920, No. 1, pp. 35-41.

and van Leersum, P., "De selectie van de theeplant," Pts. I-III, Meded. Proefst. v. Thee, Buitenzorg, 1913, Nos. 21, 26, and 43.

and Menzel, R., "Over een parasiet van Helopeltis," De Thee, Buitenzorg, 1924, No. 5, pp. 24-29.

and Steinmann, A. "De wortelkraagziekte.

peltis," De Thee, Buitenzorg, 1924, No. 5, pp. 24-29.

— and Steinmann, A., "De wortelkraagziekte, Ustulina maxima (Web) V. Wettstein," De Thee, Buitenzorg, 1924, No. 5, pp. 21-24.

— and Steinmann, A., "Luizenschimmels," De Thee, Buitenzorg, 1925, No. 6.

— and Welter, H. L., "Bibliografisch overzicht," Meded. Proefst. v. Thee, Buitenzorg, 1908, No. 1, pp. 1-32.

— and Welter, H. L., "Apropos de ferments oxydants," Annales du Jardin Botanique, Buitenzorg, 1911, Vol. X, Ser. II, pp. 1-58.

— and Welter, H. L., "Over de aanwezigheid van oxydeerende fermenten in fermenteerende thee en den eventueelen invloed daarvan op de fermentatie," Meded. Proefst. v. Thee, Buitenzorg, 1911, Nos. 12 and 13.

Bernard-Layard, R. de, "The Formosa tea industry," Tropical Agriculturist, Peradeniya, Ceylon, 1902-03, Vol. XXII, pp. 233-238.

Bertling, A., "Iets over kabelbanen, hun aanleg

Bertling, A., "Iets over kabelbanen, hun aanleg en gebruik ten dienste van cultuurondernemingen," De Thee, Buitenzorg, 1921, No. 2, pp. 86-90.

86-90.

Besson, A., "Zur Beurteilung des Tees," Chemiker Zeitung, Cöthen, 1911, Vol. XXXV, pp. 813-815; also, 1916, Vol. XL, pp. 665-667.

"Über Tee Untersuchungen," Mittheilungen Lebensmittel-untersuchungen und Hygiene, 1913, Vol. IV, pp. 213-216.

Best, Hon. S. J., "Romance of the tea industry," The Statesman, Calcutta, Sept. 9, 1925.

Beverages and their adulteration, Harvey M. Wiley, Philadelphia, 1919, Pt. VI, pp. 148-174.

Bibliografie der Ned. Ind. Theecultuur, 1824-1924, C. P. Cohen Stuart, Weltevreden, 1924.

Bie, H.C.H. de, "Over de inlandsche theecultuur."

H.C.H. de, "Over de inlandsche theecultuur," leded. Proefst. v. Thee, Buitenzorg, 1910, Meded.

meded. Profist. v. Thee, Buitenzorg, 1910, No. 11, pp. 1-44.

"De Nederlandsch-Indische theecultuur 1830—1924," Gedenkboek der N. I. Theecultuur, Weltevreden, 1924, pp. 40-59.

and Bernard, Ch., De theecultuur in de Preanger Regentschappen, Buitenzorg, 1910.

Bienkowski, Gustav, Teeproduktion und Teehan-del, mit besonderer Berücksichtigung des Deut-schen Teehandels, Braunsberg, 1913.

schen Teenandels, Braunsberg, 1913.
Biétrix, Antoine, Le thé: botanique et culture, falsifications, richesse en caféine des différentes espèces, Paris, 1892.
Birdwood, Sir George Christopher Molesworth, Birdwood's report on the old records of the India office, London, 1891.

- Bishop, S. O., Sketches in Assam, Calcutta, 1885. Blake, John Henry, Tea hints for retailers, Denver, 1903.
- lanchetiere, "Oxydation et luminescence," Comptes rendus des séances de l'Académie des Sciences, Paris, 1913, Vol. CLVII, pp. 118-121. Blanchetiere,
- Blegny, Nicolas de, Le bon usage du thé, du caffé, et du chocolat, pour la préservation et pour la guérison des maladies, Paris, 1684.
- Bley, J., "Resultaten met diverse leguminosen,"
 N. I. Landb. Syndicaat, Handelingen 10e Congres, 1909, pp. 103-107.

 "Ventilatie in theefabrieken." Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 182-187.

- van het Thee-Congres, Weltevreden, 1924, pp. 182-187.

 Blokzeyl, K. R. F., "The tea industry in the Dutch East Indies," Far Eastern Review, Shanghai, 1924, Vol. XX, pp. 34-38.

 Blume, C. L., "De kofflj-thee," Versamml. Deutscher Naturf. u. Aertzte, Bremen, 1845, Vol. XXII, No. 2.

 Blyth, A. W., "Note on a sample of genuine black tea," Chem. News, London, 1874, Vol. XXX, p. 212.

 "Micro-chemistry as applied to the identification of tea leaves and a new method for the estimation of theine," Analyst, London, 1877-78, Vol. II, pp. 39-42.

 "Analysis and chemical description of tea and its adulterants," Tea Cyclopædia, Calcutta, 1881, p. 19.

 Boedijn, K. B., and Steinmann, A., "Over de op thee en andere cultuurplanten in Ned. Indie optredende helicobasidium en septobasidium-soorten," Archief v.d. Theecultuur, Buitenzorg, Feb. 1930, No. 1, pp. 1-59.

 "Over de roetdauwschimmels van de thee," Archief v.d. theecultuur, Buitenzorg, Feb., 1931, No. 1, pp. 45-48.

 Böhünger, Ch., "Beitrag zur Chemie des Tees," Süddeutsche Apotheker Zeitung, Stuttgart,

- Böhünger, Ch., "Beitrag zur Chemie des Tees," Süddeutsche Apotheker Zeitung, Stuttgart, 1921, Vol. LX, pp. 1040-1041.

 Bonsall, Spencer, "Tea: its culture and manufacture... adapted to the culture of the plant in the United States," U. S. Patent Office Report, 1860, Washington, 1861, pp. 446-467.
- Hepott, 1800, Washington, 1801, pp. 170-167.

 Bontekoe, Cornelis, Tractat van het excellenste kruyd thee, Hague, 1679.

 Gebruik en mis-bruik van de thee, mitsgaders een verhandelinge wegens de deugden en kragten van de tabak, etc., 's Gravenhage, 1686.

 Drey neue curieuse Tractaetgen von dem Trancke Cafe, sinesichen Thé, und der Chocolata, etc., Budissin, 1688 (?).

 Bontius, Jacob, "De herba, feu frutice, quem Chineses the dicunt, "in De Indiae utriusque re Naturali et Medica, by Gulielmo Piso, Amsterdam, 1658.

 Bon usage du thé, du caffé, et du chocolat, Le, Nicolas de Blegny, Paris, 1684; Lyon, 1687.

 Bonynge, Francis, "Tea cultivation," U. S. Patent Office Report, 1850, Washington, 1851.

 The future wealth of America: being a glance at the resources of the United States and the commercial and agricultural advantages of cultivating tea, coffee, etc., New York, 1852.

 Book of tea, The, Okakura Kakuzo, New York,

- Book of tea, The, Okakura Kakuzo, New York, 1906-1928.
- Boorsma, W. G., "Iets over de saponine-achtige bestanddeelen van de zaden der Assamthee," Diss. Univ. Utrecht, Utrecht, 1891, p. 57.
- Booth, W. B., "History and description of the species of Camellia and Thea, and of the varieties of the Camellia Japonica that have been imported from China," Trans. Hortic. Soc., London, 1830, Vol. VII, p. 519.
- Borrichius [Borch], Olaus or Oluf, O. Borrichii de usu plantarum indigena rum in medicina, et sub finem de clysso plantarum et thee specifico enchiridion, Haforiae, 1690.
- osscha, J., "Het onderhoud van theetuinen," Notulen Soekab. Landb. Ver., Batavia, Dec. 20, 1915, pp. 34-44. "Het productie-vermogen van den theestruik," Alg. Landb. Weekbl. v. N.I., Bandong, 1917, Vol. II, pp. 308-309.
- Bosscha, K. A. R. and Brzesowsky, A., "Proefnemingen over het wezen der theefermentatie

- gedaan in het laboratorium Malabar," Meded. Proefst. v. Thee, Buitenzorg, 1916, No. 47, pp. 1-40.
- Bosscha, K. A. R. and Maurenbrecher, A. D., "Proeven met looizuur op Malabar genomen," Meded. Proefst. v. Thee, Buitenzorg, 1913, No. 24, pp. 9-17.
- "Botanicon Sinecum II," E. Bretschneider, Jour. China Branch Roy. Asiat. Soc., Shanghai, 1893, Vol. XXV, pp. 130-131.
- Botero, Glovanni, On the causes of greatness of cities, Venice, 1589; Eng. transl. 1590.

 Boutilly, V., Le thé; sa culture et sa manipulation, Paris, 1898.

 Brace, Tea cultivation in S. India and Ceylon,

- Bradshaw, J. W. H., Tea cultivation in Kenya Colony, Nairobi, 1925.
- Tees," Hell und Gewürz Pflanzen, 1912, Vol. II, pp. 276-278.
 "Verfahren zur Herstellung eines Teeersatzes," German patent, Jan. 23, 1918 and Aug. 23, 1909.
- Braund, H. J. O., "A few points of manufacture of tea for market," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 119-158.
- BRAZIL. Trea growing in Minas Geraes," Tea and Coffee Trade Journal, New York, Aug. 1932, Vol. 63, No. 2, pp. 120-122.
- No. 2, pp. 120-122.

 Bretschneider, E., On the study and value of Chinese botanical works, with notes on the history of plants and geographical botany from Chinese sources, Foochow, 1870.

 Early European researches into the flora of China, Shanghai, 1881.

 "Botanicon Sinecum II," Jour. China Branch Roy. Asiat. Soc., Shanghai, 1893, Vol. XXV, pp. 130-131.

- Breynius, Jacobus, Exoticarum aliarumque minus reynius, Jacobus, Exoticarum anarumque minus cognitarum plantarum centuria prima . . . to which is added Wilhelmi ten Rhyne's [Rhijne] excerpta ex observationibus suis Japonicis physicis, etc. de fructice thee, Dantzig (?), 1678.

- Brinkley, Capt. F., "Tea ceremony," Japan: its history, art, and literature, Boston and Tokyo, 1901, Vol. II, pp. 246-275.

 "Tea," China: its history, art, and literature, Boston and Tokyo, 1902, Vol. X, p. 137.

 Broadbent, Humphrey, The domestick coffee man: shewing the true way of prepairing and making of chocolate, coffee and tea, London, 1722.

 Browne, Edith A., Tea, Peeps at Industries Series, London, 1912, Vol. VIII.

 Bruce, C. A., "Report on the manufacture of tea, and on the extent and produce of the tea plantations of Assam," Trans. Agric. and Hortic. Soc. of India, Calcutta, 1840, Vol. VII, p. 1.
- runotte, C., "De la détermination histologique des falsifications du thé—Thèse de Nancy," Pharmacie, 1883. Brunotte,
- Buc'hoz, Pierre Joseph, Dissertation sur le thé, sur sa récolte, et sur les bons et mauvais effets de son infusion, Paris, 1786.

 Dissertation sur l'utilité, et les bons et mauvais effets du tabac, du café, du cacao et du thé, Paris, 1788.
- Buckingham, Sir J., A few facts about Inctea, London, 1910 [?].
 Bunting's book on breakfast beverages, D. few facts about Indian
- Shillington and John J. Bunting, London, 1920. Burmann, J., "Méthode exacte pour le dosage de la caféine dans les thés et cafés verts et tor-réfiés," Bull. de la Société Chimique de France, Paris, 1910, Vol. IV, pp. 239-244.
- Buschmann, E., "Zur Untersuchung der Entwick-elungsgeschichte von Thea chinensis Sims," Arch. f. Pharm., Berlin, 1914, CCLII, 412-420.
- Butler, Edwin John, Report on some diseases of tea and tobacco in Nyasaland, Issued by the Dept. of Agric., Nyasaland, Zomba, 1928.
 Buttenberg, P., "Über havarlerten bleihaltigen Thee: ein Beitrag zur Überwachung des Verkehrs mit Thee," Zischr. f. Untersuch. d. Nahrungs-u. Genussmittel, Berlin, 1905, Vol. X, pp. 110-117.

- "Caffeine and the other alkaloids found in tea," G. D. Hope, I.T.A. Quar. Jour., Calcutta, 1912, Pt. II, p. 31.
- Camilla and Pertusi, "Sur la présence et le do-sage des bases xanthiques dans le cacao, le thé et le café, etc.," Giornale di Farmacia, di Chimica, e di Scienze Affini, Turin, 1912, Vol. LXI, pp. 337-344, 385-391. Campbell, Donald M., "Tea," Java: past and Present, London, 1915, Vol. II, pp. 944-953.
- Campbell, J., "Tea and how to prepare it," New Health, London, 1928, Vol. III, No. 3, pp. 27-29.
- Campbell, Lute E., Campbell's tea, coffee and spice manual, Los Angeles, 1920.
- Canada Inland Revenue Department Laboratory, "Tea," Results of Analyses—Bulletins. Ottawa, 1891-1909.
- Candolle, Augustin Pyramus de, Prodromus sys-tematis naturalis regni vegetabilis, Paris, 1824, Pt. I.
- Candolle, Alph. de., "Le thé découvert dans une province de l'Inde anglaise," Sciences et Arts, Geneva, 1835, Vol. LIX, p. 201.

- Geneva, 1835, Vol. LIX, p. 201.

 Carpenter, P. H., "Cultivation," I.T.A. Quar. Jour., Calcutta, 1919, Pt. III, p. 71.

 "The control of soil moisture," I.T.A. Quar. Jour., Calcutta, 1924, Pt. III, pp. 167-177.

 "Crop control," I.T.A. Quar. Jour., Calcutta, 1925, Pt. IV, pp. 151-158.

 "Green crops," I.T.A. Quar. Jour., Calcutta, 1926, Pt. IV, pp. 170-175.

 "Tea in Northeast India," in three parts, I.T.A. Quar. Jour., Calcutta, 1929, Pts. II, III, and IV.

 "Report on Kapara Valland."
- and IV.

 "Report on Kangra Valley," I.T.A. Quar.
 Jour., Calcutta, 1930, Pt. I, pp. 2-14.

 and Cooper, H. R., "Factors affecting the
 quality of tea," I.T.A. Quar. Jour., Calcutta,
 1922, Pt. II, p. 44.

 "The cultivation experiment plots at Borbhetta," I.T.A. Quar. Jour., Calcutta, 1927, Pt.
 IV. pp. 133-166.

 "Control of bacterial infection in tea factories," Home and Colonial Mail, London, Feb.
 19, 1932.

- Carpenter, P. H., Cooper, H. R., and Harler, C. R., "Soil acidity and the use of lime on tea soils," I.T.A. Quar. Jour., Calcutta, 1925, Pt. I.
- 1.T.A. Quar. Jour., Calcutta, 1925, Pt. 1.

 Carpenter, P. H., and Harler, C. R., "Variation in the composition of the tea leaf throughout the season in Assam," I.T.A. Quar. Jour., Calcutta, 1923, Pt. I, p. 1.

 "Important points in tea manufacture," I.T.A. Quar. Jour., Calcutta, 1926, Pt. I, pp. 13-23, and Pt. II, pp. 73-82.

 "The chemistry and pharmacology of a cup of
- Carpenter, P. H., and Harrison, C. J., The manufacture of tea in Northeast India, I.T.A. publication, Calcutta, 1927.
- arroll, T. H. J., Notes on the cultivation and manuring of tea, London, 1926.
- "Caterpillar pests of the tea plant and of green manure plants and shade trees in use on tea estates." E. A. Andrews, I.T.A. Quar. Jour., Calcutta, 1929, Pt. III, pp. 133-145.
- Cave, Henry William, Golden tips: a description of Ceylon and its great tea industry, London, 1900-05.
- CEYLON. Account of tea cultivation in Ceylon. J. A. Henderson. Colombo. 1893 and 1920.
 - Ceylon Planter's Vade Mecum, The. An every-day reference on the relations between plantation superintendents and Government departments, with a digest of coolic court cases and the three labor ordinances, Colombo, 1891.
 - Rutherford's planters' note book, H. K. Rut erford, nine editions, Colombo, 1887-1931.
- Sixty-four years in Ceylon, Frederick Lewis, Ceylon, 1926.
- "Tea in Ceylon," C. R. Harler, I.T.A. Qu Jour., Calcutta, 1924, Pt. IV, pp. 193-226.
- "Tea planting enterprise in Ceylon," J. Ferguson, Ferguson's Handbook and Directory, Colombo, 1898.

- Tea Planting in Ceylon, T. C. Owen, Colombo,
- Trip to Ceylon, William H. Ukers, Little Journey Series, New York 1925-26.
- Ch'a Ching [Book of Tea], Lu Yu, China, ca. A.D. 780.
- Chagyo Hitsuyo [important knowledge about the tea industry], Motokichi Tada, Japan, 1875.
- tea industryj, Motokichi Tada, Japan, 1875. Chagyo Yoran [general outline of tea industry], Shizuoka, Japan, 1902. Chalot, C., "L'avenir du thé d'Indo-Chine," L'Agronomie Coloniale, Paris, 1918-19, Vol. IV, pp. 152-162.

 "La consommation du thé en France," L'Agronomie Coloniale, Paris, 1924-25, Vol. II, pp. 71-75.
- pp. 71-75.

 "Analyse et dégustation de thés d'Indo-Chine," L'Agronomie Coloniale, Paris, 1924-25, Vol. II, pp. 150-151.
- L'Agronomie Coloniale, Land, pp. 150-151.

 "La consommation du thé en Afrique du Nord, en Syrie et en Afrique Occidentale Francaise," L'Agronomie Coloniale, Nogent-sur-Marne, April, 1931, pp. 101-104.

 Chamberlayne, John, The natural history of thee, coffee, etc., London, 1682.

 The manner of making of coffee, tea and chocolate, tracts on tea and coffee translated from the French by Jacob Spon, London, 1685.

- Chamney, Montfort, The story of the tea leaf, Calcutta, 1933.
- Chancellor, Charles Williams, Light wines and table-tea as moral agents,—[?], 187-.
- table-tea as moral agents,—[?], 187-.

 Chandler, Stafford Edwin, "Home of the tea plant,"
 Bull. Imp. Inst., London, 1899, Vol. II, p. 257.

 and McEwan, John, "Tea: its cultivation, manufacture and commerce," Bull. Imp. Inst., London, 1913, Vol. II, pp. 252-307.

 Ch'a P'u, Wang Shih Hsein [posthumously named Ku-Yuan-Ch'ing], China, Ming Dynasty, 1368-1628.
- Chatin,
- Chatin, A., "Le thé de Java," Moniteur des Hopitaux, Paris, 1853, Vol. I, p. 399. "Chemical signs of tea quality," O. W. Wilcox, The Tea and Coffee Trade Journal, New York, 1926, Vol. L, No. 1, pp. 42-46.
- Chemistry and agriculture of tea, M. Kelway Bamber, Calcutta, 1893.
- 'Chemistry and pharmacology of a cup of tea, The," P. H. Carpenter and C. R. Harler, I. T. A. Quar. Jour., Calcutta, 1932, Pt. I, pp. 9-30.
- Chemistry of green tea, Tea Experimental Station Publication, Kanaya, Japan, 1923.

- tion Publication, Kanaya, Japan, 1923.

 "Chemistry, physiology, and æsthetics of a cup of tea," The Lancet, London, Dec. 2, 1911, Vol. I, pp. 46-49; and Jan. 7, 1911, Vol. II, p. 1573. Chevalier, A., "Introduction de theirs améliores en Indo-Chine," Bull. Agric. de l'Inst. Scient. d. Salgon, 1919, Vol. I, p. 51.

 Chijs, J. van der, "Nederl.-koloniale thee versus Engelsche dito in verband met den Roepijkoers," Arch. v.d. Landb. der Bergstreken in N.I., 1899, Vol. I, pp. 273-274.
- Chijs, Jacobus Anne van der, Geschiedenis van de gouvernements thee-cultuur op Java, zamengesteld voornamelijk uit officiëele bron-nen, Batavia, 1903.
- CHINA. An account of the cultivation and manufac-ture of tea in China, Samuel Ball, London, 1848.
 - China: as it was and is, with a glance at the tea and opium trades, New York, 1846.
 - China as a tea producer, Boris P. Torgasheff, Shanghai, 1926.
 - Trip to China, William H. Ukers, Little Jour-ney Series, New York, 1925-26.

- Christison, Geo. W., "Tea planting in Darjeeling," Jour. Soc. Arts, London, 1896, Vol. ing," XLIV.
- Chronicles of the East India Company trading

to China, The, 1635-1834, 5 vols., Hosea Ballou Morse, Cambridge, Mass., 1926.
Clautriau, G., Nature et signification des alcaloïdes végétaux, Bruxelles, 1900.

"Cochinchine, Le thé de," Bull. Econ. de l'Indo-Chine, Tonkin, 1900, No. 30, p. 753.

Code, Tea manufacturers', Lloyd, Matheson & Carritt, London, 1906.

"Coffee and tea from Uganda," Bull. Imp. Inst.,
London, Jan.-Mar., 1918, pp. 24-29.
Cohen Stuart, C. P., "Voorbereldende onderzoekingen ten dienste van de selektie der theeplant," Meded. Proefst. v. Thee, Buitenzorg,
1916, No. 40, p. 1-328.

"Basis for tea selection," Bull. du Jardin Bot.
Buitenzorg, Sept. 1919, Vol. I, No. 4, pp. 193320

320.

"Le nom scientifique de la plante de thé,"
Bull. Agric. de l'Inst. Scient. de Saigon, 1919,
pp. 358-361.

"Die Zuechtung der Teepflanze," Zeitschr. f.
Pflanzenzuechtung, 1920, Vol. VII, pp. 157-

"De theezaadtuinen van Java en Sumatra," Meded. Proefst. v. Thee, Buitenzorg, 1921, No. 75, pp. 1-32.
"Experiments on the decapitation of tea shoots." Meded. Proefst. v. Thee, Buitenzorg, 1922, No. 79.
"Proeven over decapitation of tea shoots."

1922, No. 79.
"Proeven over den theesnoel." Meded. Proefst.
v. Thee, Buitenzorg, 1922, No. 79.
"Tee, Camellia theifera (Griff.) Dyer," Fruwirth, Handbuch d. Landwirtschaftl. Pflanzenzuechtung, Berlin, 1923, Vol. V, pp. 131-

zenzuechtung, Bernin, 1924, 142.

"Bibliografie der Ned. Ind. Theecultuur, 1824—1924," Weltevreden, 1924.

"Camellia theifera of Thea sinensis," De Thee, Buitenzorg, 1924, No. 5, pp. 137-138.

"Het begin der theecultuur op Java," Gedenkboek Ned. Ind. Theecultuur, 1824-1924, Weltevreden, 1924, pp. 19-39.

"Assam contra China," Gedenkboek Ned. Ind. Theecultuur, 1824-1924, Weltevreden, 1924, pp. 88-95.

88-95.

"De selectie der theeplant," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 359-

"Inlandsche theecultuur," De Thee, Buiten-

"Inlandsche theecultuur," De Thee, Buitenzorg, 1926, No. 3, p. 115.
"Aanleg van geselecteerde theezaadtuinen," Archief v. d. Theecultuur, Buitenzorg, 1928, 2de Jrg., pp. 7-14.
"Onderzoekingen over het bladproduktievermogen van theeplanten," Archief v. d. Theecultuur, Buitenzorg, Dec. 1929, No. 5/6 and Dec. 1930, No. 4/5/6.
Bernard, Ch., and Deuss, J. J. B., "De theecultuur in verschillende landen," Meded. Proefst. v. Thee, Buitenzorg, 1917, No. LVII, pp. 1-40.

1-40.

pp. 1-40.

and Cooper, H. R., "Proeven over den theesnoel," Meded. Proefst. v. Thee, Buitenzorg, 1922, No. LXXIX, pp. 1-36.

, Hamakers, E., and Siahaija, E. L., "Proeven over den theepluk," Meded. Proefst. v. Thee, Buitenzorg, 1919, No. 65, pp. 1-79.

and Menzel, R., "Het slechte theezaad," De Thee, Buitenzorg, 1923, No. 4, pp. 7-8.

Collin, E., "De l'application du microscope à la détermination des feuilles de thé, de maté et de coca, et des falsifications qu'on leur fait subir," Jour. de Pharmacle, Anvers, 1886.

Comerarius, Elias, In disputationibus de thea et coffea, Tubingae, 1694.

Come to tea with us, Herbert Compton, Anti-tea-duty League, London, 1905.

Committee of tea dealers: a narrative of the conduct of tea dealers during the late sale of teas at the East India House, London. 1785.

Compton, Herbert, Come to tea with us, London,

Cooper, H. R., "Tea nurseries," I.T.A. Quar. Jour., Calcutta, 1924, Pt. III, pp. 150-167.

— "The effect on tea crop of a leguminous crop while growing," I.T.A. Quar. Jour., Calcutta, 1925, Pt. IV, pp. 127-137.

— "Shade trees," I.T.A. Quar. Jour., Calcutta, 1926, Pt. III, pp. 83-102.

— "The use of artificial manures," I.T.A. Quar. Jour., Calcutta, 1928, Pt. II, pp. 63-79.

— "Effect on tea crop of different applications

of nitrogen as manure, in single and in divided doses," I.T.A. Quar. Jour., Calcutta, 1931, Pt. I, pp. 1-23.

"Plucking experiments," I.T.A. Quar. Jour., Calcutta, 1932, Pt. IV, pp. 163-175.

"Pruning experiments," I.T.A. Quar. Jour., Calcutta, 1932, Pt. III, pp. 120-149; Pt. IV, pp. 179-187.

pp. 179-187.

and Harler, C. R., "Soil survey notes—Darrang district," I.T.A. Quar. Jour., Calcutta, 1923, Pts. I, II, and III.

and Harler, C. R., "The effect of manuring on the quality of tea," I.T.A. Quar. Jour., Calcutta, 1930, Pt. IV, pp. 198-209.

and Sen Gupta, P. B., "Trials of phosphatic manures," I.T.A. Quar. Jour., Calcutta, 1926. Pt. IV, pp. 176-183.

Cornaillac, G., El café, la vainilla, el cacao y el té, Barcelona, 1903.

Corporaal, J. B., "Schadelijke insecten in de thee op Sumatra's Oostkust 1920-21," De Thee, Buitenzorg, 1921, No. 2, pp. 113-114.

Cottam, H., Tea cultivation in Assam, Colombo,

Coulombier, F., L'arbre à thé, Paris, 1900. Crandall, Irene Jean, Tea in politics, a comedy, Chicago, 1920.

Chicago, 1920.

Crole, David, Tea, a text book of tea planting and manufacture, London, 1897.

Crook, W., A new relation of the use and vertue of tea, London, 1685.

"Crop control," P. H. Carpenter, I.T.A., Quar. Jour., Calcutta, 1925, Pt. IV, pp. 151-158.

ruz, Gaspar da, "Description of the Chinese drink called cha," quoted in a symposium of many writers, compiled by Samuel Purchas, entitled "Purchas His Pilgrimes," London, 1625, Chap. III, p. 180.

Cultivation and manufacture of tea, The, Lt. Col. Edward Money, London, 1878, 3rd ed.
Cultivation and manuring of tea, Notes on, T. H. J. Carroll, London, 1926.
"Cultural control," E. A. Andrews, I.T.A. Quar. Jour., Calcutta, 1917, Pt. IV, pp. 120-124.
Culture and marketing of tea, C. R. Harler, London, 1933.

"Culture and preparation of tea," Allom & Wright's China: its Scenery, Architecture, etc., Vol. I, 1858.

vol. 1, 1695.
Cunningham, James, "On several sorts of tea,"
The Philos. Trans. Roy. Soc. of London, London, 1809, Vol. IV, from 1694-1702.
Cup of tea, A, a comedietta, C.L.E. Truinet and J. Derley, New York, 187-, Dewitt's Acting Plays, No. 52.

Plays, No. 52.

"Custom of tea drinking," Outlook, Jan. 19, 1907, Vol. LXXXV, pp. 113-115.

Dana, C. L., "Tea-tasters and the healthfulness of their pursuit," Med. Rec., New York, 1880, Vol. XVII, pp. 85-87.

Davidson, J. W., The island of Formosa past and present, London-New York, 1903.

Davidson, R., "Enzymes and tea soils," Indian Planting and Gardening, Calcutta, Dec. 19, 1901.

Day, Samuel Phillips, Tea, its mystery and history, London, 1878.

tory, London, 1878.

Deane, H., "Indian and Ceylon green teas... glazing without adulteration... the Chinese facing fake exposed," Planting Opinion, Madras, Mar. 8, 1902.

"Colouring matter for green teas," Indian Planting and Gardening, Calcutta, May 8, 1902.

"Hulle de thé," Jour. d'Agric. Tropicale, Paris, Sept. 30, 1904, and Mar. 31, 1905.

and Judge, "Green tea manufacture," Planting Opinion, Madras, Oct. 4, 1902.

Deas, Francis T. R., The young tea-planter's companion: a practical treatise on the management of a tea-garden in Assam, London, 1886.

ment of a tea-garden in Assam, London, 1886.

Deuss, J. J. B. "Voorloopige mededeeling over
de theelooistof," Meded. Proefst. v. Thee,
Buitenzorg, 1913, No. 27, pp. 1-24.

— "Beknopt overzicht over de onderzoekingen
van Dr. P. van Romburgh, C. E. J. Lohmann en
Dr. A. W. Nanninga 1892-1906," Meded. Proefst.
v. Thee, Buitenzorg, 1914, No. 31, pp. 1-58.

— "Over theezaadolie," Meded. Proefst. v. Thee.
Buitenzorg, 1914, No. 33, pp. 1-13.

- "Over het coffeine-gehalte van Java thee,"
 Chemisch Weekblad, Amsterdam, 1915, Vol.
 XII, pp. 938-943.

 De theecultuur, Haarlem, 1915.

 "Over enkele factoren in eventueel verband met de kwaliteit de thee," Meded. Proefst. v. Thee, Buitenzorg, 1915, No. 42.

 "Het aschgehalte van de thee," Chemisch Weekblad, Amsterdam, 1916, Vol. XIII, pp. 692-707.

- Weekblad, Amsterdam, 1970, vol. 211, pp. 692-707.

 "Beknopte geschiedenis van de theecultuur," Teysmannia, 1916, Vol. XXVII, pp. 410-425.

 "Verfiensen en de daartoe gebruikte inrichtigen," Meded. Proefst. v. Thee, Buitenzorg, 1919, No. 66, pp. 1-37.

 "Tea manufacture in Java and Sumatra," Sluyter's Monthly, Batavia, 1921.

 "Een nieuwe controle voor de verfiensing," De Thee, Buitenzorg, 1922, No. 3, p. 100.

 "Mededeeling over de theelooistof," Handelingen 2e Ned. Ind. Natuurwetensch. Congres, Bandoeng, 1922, pp. 94-99.

 "Oxydeerende fermenten in de thee," Chemisch Weekblad, Amsterdam, 1923, Vol. XX, pp. 253-254.
- Weekbisd, Amsterdam, 254.

 "L'huile grasse des graines de thé," L'Agronomie Colon., Paris, 1923, Vol. VIII, pp. 161-171.

 "Tea growing past and present, 1830-1922," Overdruk uit het Nederlandsch Indisch Rubber en Thee, Buitenzorg, 1923, 7e Jrg., Nos. 22, 23, and 24
- Overdruk uit het Nederlandsch Indisch Rubber en Thee, Buitenzorg, 1923, 7e Jrg., Nos. 22, 23, and 24.

 "Sur la presence de la quercitrine dans la feuille de Camellia theifera et dans le thé prepare," Recueil de Trav. Chim. des Pays-Bas, Leyde, 1923, Vol. XLII, pp. 623-624.

 "Note sur le tanin du thé." Recueil de Trav. Chim. des Pays-Bas, Leyde, 1923, Vol. XLII, pp. 496-498: 1053-1054.

 "Stellingen omtrent theebereiding; toelichting bij deze stellingen," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 189-192.

 "Iets uit de geschiedenis der theebereiding," Gedenkboek Ned. Ind. Theecultuur 1824-1924, Weltevreden, 1924.

 "Over de theegronden van Java en Sumatra," Meded, Proefst. v. Thee, Buitenzorg, 1924, No. 90, pp. 1-126.

 "L'analyse chimique du thé en rapport avec sa qualité," L'Agronomie Coloniale, Paris, 1924, No. 30, pp. 41-47.

 "Aluminium verpakking voor thee," Meded. Proefst. v. Thee, Buitenzorg, 1926, No. 96, pp. 1-21.

 "Iets over theemachines," De Bergcultures,

- Proefst. v. Thee, Buitenzorg, 1926, No. 96, pp. 1-21.

 "Iets over theemachines," De Bergcultures, Buitenzorg, 1927, Jrg. 1, No. 29.

 "Een poging de tegenwoordige methoden van grondonderzoek eenvoudig uiteen te zetten," Archief v. d. Theecultuur, Buitenzorg, 1927, le Jrg., No. 2.

 "Rapport over metingen te Tanara," Archief v. d. Theecultuur, Buitenzorg, June, 1928, Nos. 1 and 2, pp. 105-110.

 "Over enkele bestanddeelen van het theeblad gedurende een periode van snoei tot snoei," Archief v. d. Theecultuur, Buitenzorg, June, 1928, Nos. 1 and 2, pp. 124-133.

 "Pneumatische sortatie," Archief v. d. Theecultuur, Buitenzorg, 1928, Zde Jrg., p. 169.

 "Enkele beschouwingen over moderne theefabrieken," Archief v. d. Theecultuur, Buitenzorg, April-June, 1929, Nos. 2/8, pp. 111-121.

 "Le culture et la preparation du thé aux Indes Néerlandaises," Revue Internationale des Produits Coloniaux, Paris, April 1929, No. 40.

 "Eenige nieuwigheden op het gebied van de culture en bereiding van thee," De Indische Mercuur, Amsterdam, 1931, Vol. LIV, No. 10, p. 183.

 "Theepluk in verband met bereiding," De Bergcultures, Batavia, Sept. 17, 1932, No. 38, pp. 1009-1012.

 and Brzesowsky, A., "Thee-fermentatie," Meded. Proefst. v. Thee, Buitenzorg. 1916.

- and Brzesowsky, A., "Thee-fermentatie," Meded. Proefst. v. Thee, Buitenzorg, 1916. and Brzesowsky, A., "Fermentatie proeven te Kertasarie en Malabar genomen," Meded. Proefst. v. Thee, Buitenzorg, 1916, No. 45.
- Dieu-Stierling, J. G. E. G. de, "Korte mededeelingen over Ceylon thee en nog wat," Notulen Soekab. Landb. Ver., Batavia, Dec. 22, 1903, pp. 15-46.

 "Le thé soluble de Ceylan," Ind. Mercuur, Amsterdam, Jan. 26 and Mar. 22, 1902, and Jour. d'Agric. Tropicale, Paris, Mar. 30, 1904, No. 33.
- Dillard, Richard, The historic tea party of Edenton, Oct. 25, 1774, Edenton, N. C., 1898-1925.

- DIRECTORIES [TEA AND TEA COMPANIES].
 Ferguson's Ceylon directory, The Ceylon Observer, Colombo.
 - Planting directory of Southern India, The United Planters' Association of Southern India, Madras.

 - Thacker's Calcutta directory, Thacker's Press & Directories, Ltd., Calcutta.

 Thacker's directory of the chief industries of India, Burma, and Ceylon, Thacker's Press & Directories, Ltd., Calcutta.
 - Times of Ceylon Green Book, Colombo.
 - Ukers' Tea and Coffee Buyer's Guide, The Tea and Coffee Trade Journal Co., New York.
- "Discovery of the genuine tea plant in Upper Assam," N. Wallich, Jour. Asiat. Soc. of Bengal, Calcutta, 1835, Vol. IV, pp. 42-49.
 Diseases of the tea bush, The, Thomas Petch,
- Diseases of the tea bush, The, Thomas Petch, London, 1923.

 D'Israeli, Isaac, "Introduction of tea, coffee and chocolate," Curiosities of Literature, London, 1839, pp. 287-288.
- Dissertation sur le thé, sur sa récolte, et sur les bons et mauvais effets de son infusion, Pierre Joseph Buc'hoz, Paris, 1786.
- Docteur, A., Du thé et de son acclimatation dans nos contrées, botanical pamphlets, Bordeaux, 1855, Vol. XII, No. 3.
- Dold, H., Über die Lebensdauer von Typhus und Paratyphusbacilien in Tee, Kaffee und Kakao, —[?], 1921.
- —[7], 1921.

 Domerque, A. and Nicolas, Cl., "Recherches sur le thé," Jour. de Pharmacle et de Chimie, Paris, 1922, Vol. XXV, pp. 302-306.

 Doolittle, Roscoe Edward, and Woodruff, F. O., Review of methods for analysis of tea, U. S. Dept. of Agriculture, Bureau of Chemistry, Washington, 1907, Bull. No. 105, pp. 46-50.
- Dowling, A. F., Indian tea, Calcutta, 1880.

 Tea notes, Calcutta, 1886.
- Drake, Francis Samuel, Tea leaves, Boston, 1884.

 Duchartre, P., Plantes alimentaires; de l'usage du café, du thé, et du chocolat, Lyon, 1671.

 Duchesne, A. E., "Tea and education," Empire Rev., Sept. 1915, pp. 342-349.

 Indian Tea: a lecture, Indian Tea Association, London, 1910.

 Dudgeon, Gerald G., "Observations on the colouring or 'finishing' of green teas," Indian Planting and Gardening, Calcutta, May 28, 1904.

 Dudgeon, John, "Tea," The beverages of the Chinese, Tientsin, 1895, pp. 1-18.

 Dufour, Philippe Sylvestre, De l'usage du caphé, du thé, et du chocolat, Lyon, 1671.

 Traitez nouveaux et curieux du café, du thé, et du chocolat, Lyon, 1685; The Hague, 1685 and 1693.

 The manner of making coffee, tea, and chocolate of the Coloure of the Capacitate Capacitate. Drake, Francis Samuel, Tea leaves, Boston, 1884.

- The manner of making coffee, tea, and chocolate, Eng. transl. from the French, Lon., 1685.
- Duhalde, Jean Baptiste, Discript de l'Empire de la Chine, Paris [?], 1735.
- Duncan, Daniel, Wholesome advice against the abuse of hot liquors, particularly coffee, tea, chocolate, brandy, and strong waters, London, 1706.
- Dvorkovitsch, P., "Izsledov. Kitayskich tchaev" [Researches on Chinese teas], J. Russk. Fiz. Chim. Obsh., St. Petersburg, 1890, Vol. XXII, pp. 558-568.
- Dybowski, J., "Le thé de l'Indo-Chine," La Nature, Paris, March, 1925, Vol. LIII, Pt. 1, pp. 152-154.
- Early history of the tea industry in North East India, Harold Hart Mann, reprinted from the Bengal Economic Journal, Calcutta, 1918.
- EASTERN BENGAL. Report on tea culture in Eastern Bengal and Assam, 1905-10, Eastern Bengal and Assam Agricultural Dept.
- Eberbach, "Obachovom i kirpitchnom tchae" [Black tea and tea in cakes], Med. Pribav. k. Morsk. Sbornikn, St. Petersburg, 1875, Vol. XV, pp. 247-270.
- Eberhardt, Philippe, "Le thea sinensis a l'Etat Spontane au Tonkin." Bull. Econ. de l'Indo-Chine [new series], Tonkin, 1907, No. 64, p. 505. "Le thé en Indochine, Hanoi-Haiphong, Im-

primerie d'extreme-orient." Congres d'agric. Coloniale, Paris, 1918, Bulletin No. 9.

Eden, T., "Cultivation and soil improvement,"
The Tea Quarterly, Talawakelle, Ceylon, May, 1931, Vol. 1V, Pts. 1 and 2, pp. 22-26.

— "Studies in the yield of tea; the experimental errors of field experiments with tea." Jour. Agric. Science, 1931, Vol. 21, pp. 547-573; 1932, Vol. 22, pp. 386-395.

— "Soil erosion," Tea Quarterly, Talawakelle, May, Aug., and Nov. 1933.

— "The manuring of tea," Tea Quarterly, Talawakelle, June 1934, Vol. VII, Pt. II, pp. 61-75.

— "The cultivation of shade trees, green manures and cover crops," Tea Quarterly, Talawakelle, Vol. VII, Pt. II, June 1934, pp. 93-98.

Edwards, H. J., "Java tea," Essays Netherl. E. I.; for the San Francisco Committee, Semarang, 1914.

— Report on markets for Java teas in the United

- Report on markets for Java teas in the United States of America and Dominion of Canada, Batavia, 1917.

Elliott, E. C., and Whitehead, F. J., Tea planting in Ceylon, Colombo, 1926, 1931.

Ellis, John, and Lettsom, J. C., see Lettsom. Emerson, Ralph Waldo, "Boston," a poem on the Tea Party, Boston, 1883.

Erh Ya, ancient Chinese dictionary, by Kuo-P'o, ca. A.D. 350.

Essay on the nature, use and abuse of tea, in a letter to a lady: being a mechanical account of its action upon human bodies, by a physician, London, 1722 and 1725.

Essay on tea, An, Jonas Hanway, London, 1756. Etting, Frank M., The Philadelphia tea party of 1773, Philadelphia, 1873.

1773, Philadelphia, 1873.

Evans, D. I., "Tea withering," The Tea Quarterly, Nuwara Eliya, Ceylon, August 1928, Vol. I, Pt. 3.

"Chemical wither," The Tea Quarterly, Nuwara Eliya, Nov. 1928, Vol. I, Pt. 4.

"A few observations on modern tea factories," The Tea Quarterly, Nuwara Eliya, Nov. 1929, Pt. 4, pp. 135-138.

"Air conditioning and some of the principles involved," Tea Quarterly, Nuwara Eliya, Aug. 1929, pp. 89-95 and Nov. 1929, pp. 115-121.

"Tea fermentation," The Tea Quarterly, Nuwara Eliya, 1930, Pts. 1, 2, 3, 4; 1931, Pts. 1 and 2.

1 and 2.

- Tea manufacture in Ceylon, Tea Research Institute, Talawakelle, Ceylon, 1932, Bull. No. 9.

- "The moisture content of made tea," Tea Quarterly, Talawakelle, May 1932, Vol. V, Pt. II, pp. 54-58.

pp. 54-58.

"Certain aspects of tea manufacture," Tea Quarterly, Talawakelle, Feb. 1933, Vol. VI, Pt. I, pp. 37-47.

Evolution of the tea pot," Edward Wenham, International Studio, New York, July 1928, Vol. "Evolution of the XC, pp. 51-55.

"Evolution of the tea set," Edward Wenham, Antiquarian, New York, June 1927, Vol. VIII, No. 5.

Exposition spéciale des cafés, cacaos, thés, et sucres, à Marseille, Brochure in 8 de 67 pp. publiée par l'Institut Colonial de Marseille en 1914, No. 11. [Traduction de deux conférences sur le thé, faites à Deventer, en 1912, par Nonning 1. Nanninga.]

"Factory requirements for the making of good tea," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1929, Pt. I, pp. 11-20.

Falconer, H., "On the aptitude of the Himalayan range for the culture of the tea plant," Jour. Asiat. Soc. of Bengal, Calcutta, 1834, Vol. III, pp. 178-188.

ramous coffee and tea drinkers," Cur Literature, New York, December, 1901, XXXI, p. 743. "Famous coffee

Farrand, Max, "The taxation of tea, 1767-1773," Amer. Hist. Rev., New York, 1897, Vol. III, pp. 266-269.

Feistmantel, O., Die Theekultur in Britisch-Ost-Indien, Prague, 1888.

Ferguson, A. M. and J., Planter's notebook [Ceylon] with everyday information for the tea planter, Colombo, 1887.

Ferguson, J., "The tea planting enterprise in

Ceylon," Ferguson's Handbook and Directory, Colombo, 1898.

- Limited companies in Ceylon for tea and other plantations, Colombo, 1898.

- The rise of tea planting enterprise and trade in Ceylon tea, Kandy, 1900, and Wellington, 1908

"Fermentation, Tea," D. I. Evans, Tea Quarterly, Nuwara Eliya, 1930, Pts. 1, 2, 3, 4; 1931, Pts. 1 and 2.

1 and 2.
Ferreira Cabido, Annibal Gomes, A Indústria do chá nos Açores, Coimbra, 1913.
Fielder, C. H., "On tea cultivation in India," Jour. Soc. Arts, London, 1869, Vol. XVII, No. 852.
"Firing of tea, The" C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1930, Pt. II.

Jour., Calcutta, 1930, Pt. II.

Fischer, B., "Untersuchung von II Theesorten,"
Jahresbericht des chemischen Untersuchungsamtes der Stadt Breslau für die Zeit vom 1
April 1901 bis 31 März 1902.

Fisher, Richard D., The arson of the "Peggy
Stewart" and the Annapolis, Md., mob of October 19, 1774, Baltimore, 1905-08.

"Five o'clock cup," Donald Culross Peattie, Cargoes and Harvests, New York-London, 1926, pp. 80-109.

Flockhart. W. B., Pure Indian tea, Rosemount Press, 1905.

FORMOSA. Formosa colong tea, Bureau of productive in-dustries, government of Formosa, Taihoku, 1904.

Report on the tea industries of Java, Formosa and Japan after a special visit to these countries in 1904, by Arthur Charles Kingsford and M. Kelway Bamber, Colombo, 1907.

Japan and Formosa, William H. Ukers, Little Journey Series, New York, 1925-26.

Fortune, Robert, Report upon the tea plantations in the North Western Provinces, Agra, 1851.

A journey to the tea countries of China; including Sung-Lo and the Bohea Hills, London,

1852.

Two visits to the tea countries of China and the British tea plantations in the Himalaya; with a narrative of adventures, and a full description of the culture of the tea plant, London, 1853.

Fortune telling tea cup (The): wonderful combinations in the tea leaves, John Wm. Hanley, New York, 1898.

EANCE. Commerce, Ministere du, Commerce et consommation du thé dans le monde, Paris, 1902.

Francius, Peter, In laudem thiæ sinensis anacreontica duo, Amsterdam, 1680 (?).

Franke, Erwin, Kakao, Thee und Gewürze, Wien and Leipzig, 1914.

Franklin, Alfred Louis Auguste, La vie privee d'autrefois, le café, le thé, et le chocolat, Paris, 1893.

FRENCH INDO-CHINA.

"Tea industry of French Indo-China [native tea plant Thea viridis], Jour. Roy. Soc. Arts, London, Oct. 4, 1918, pp. 717-718.

"The fungus diseases of the tea leaf," A. C. Tunstall and Bose, I.T.A. Quar. Jour., Calcutta, 1919-1922.

stall and Bose, I.T.A. Quar. Jour., Calcutta, 1919-1922.

Gadd, C. H., Red rust on tea, Colombo, 1920.

"Some diseases of the tea bush, Tropical Agriculturist, Peradeniya, Ceylon, April 1927, Vol. LXVIII, No. 4, pp. 213-219.

"Tea and soil acidity: water culture experiments, I." Tea Quarterly, Nuwara Eliya, Ceylon, 1928, Vol. I, Pt. 1, pp. 2-6.

"The relationship between food reserves of the tea bush and disease," Tea Quarterly, Nuwara Eliya, May 1929, pp. 54-60.

"What is the Diplodia root disease of tea?" Tea Quarterly, Nuwara Eliya, 1930.

"The armillaria root disease of tea," Tea Quarterly, Talawakelle, Ceylon, 1930, Vol. III, Pt. 4, pp. 109-113.

"Pruning of tea in relation to disease." The Tea Quarterly, Talawakelle, May 1931, Vol. IV. Pts. 1 and 2, pp. 45-50.

"Tea cider," Tea Quarterly, Talawakelle, Feb. 1933, Vol. VI, Pt. I, pp. 48-53.

and Jepson, F. P., Effect of manures on shothole borer of tea, Colombo, 1922.

- Gajon, Mariano, El té, sus diferentes generos, especies y variedades, caracteres botanicos, cultivo y explotación, propriedades medicinales, Mexico, 1914.
- Garnier, Antoine, Quaestio medica... discutienda in Scholio Medicorum...J. F. Couthier, Præside, an Parisinis, frequens potus thé, frequenti potu caffé salubrior? Paris, 1749.

 Garretsen, A. J., "Het optreden van Eriboea in Albizzia," De Thee, Buitenzorg, 1923, No. 4, pp. 56-57.

- Albizzia. De 1100, Duttender, Du Thee, pp. 56-57.

 "Groenbemesters en Helopeltis," De Thee, Bultenzorg, 1923, No. 4, pp. 57-58.

 "Enkele aanteekeningen over grondbedekkers," De Thee, Bultenzorg, 1923, No. 4, pp. 83-85.

 "Bezoek aan eenige theedistricten in Br. Indie," De Thee, Bultenzorg, 1924, No. 5, pp. 66-72.

 "Nachtvrosten," De Thee, Bultenzorg, 1926, No. 1, p. 16.

- 66-72.

 "Nachtvrosten," De Thee, Buitenzorg, 1926, No. 1, p. 16.

 "Verslag over een bezoek aan British-Indie in verband met het Helopeltis-vraagstuk," Archief v. d. Theecultuur, Buitenzorg, July 1927, No. 1.

 "Bemesting van theetuinen," Archief v. d. Theecultuur, Buitenzorg, 2de Jrg., 1928, p. 220.

 "Een en ander over nieuwere cultuurmaatregelen bij thee," De Bergcultures, Buitenzorg, 1931, Vol. V, No. 4, p. 102.

 and Bakker, G. J., "Restauratie van theetuinen in het algemeen o.m. door den invloed van leguminosen," De Bergcultures, Buitenzorg, Aug. 11, 1928, 3de Jrg., No. 6, pp. 160-163.

 "Plantverband en uitdunning bij theecultuur," Archief v. d. Theecultuur, Buitenzorg, April, 1931, No. 2, pp. 63-95.

 Gebhardt, K., "Verfahren zur Herstellung von Extracten aus Kaffee, Thee, Früchten und dgl.," German patents, 1911 and 1916.

 Gedenkboek der Nederlandsch Indische Theecul-

- dedenkboek der Nederlandsch Indische Theecultuur, 1824-1924, a report of the tea congress at Bandoeng, 1924, containing several important papers on Java tea and a tea bibliography, Weltevreden, 1924.

 Geisler, J. F., "Analysis of a pekoe Ceylon tea," Jour. Amer. Chem. Soc., New York, 1891, Vol. XIII, p. 237.
- Genge, J. M., De thee, Francofurti ad Oderam, 1684.
- entle art of tea drinking, The, English and Scottish Joint Cooperative Wholesale Society, Ltd., London, Dec. 1930. Gentle
- Geschiedenis van de gouvernements theecultuur op Java, zamengesteld voornamelijk uit of-ficiëele bronnen, Jacobus Anne van de Chijs, Batavia, 1903.
- "Geschiedenis van de theecultuur in Neder-landsch-Indie," Ch. Bernard, Gedenkboek der Nederlandsch Indische Theecultuur, 1824-1924, Weltevreden, 1924.
- Ghosh, H. H., The sphere of tea, Calcutta, 1933.
- Gildemeister, R. and Hoffmann, F., Les huiles essentielles, Leipzig-Paris, 1900.
- Gill, Owen A., Toasted leaves, or "tudoces fragrans"; an essay on the origin of tea, by the shade of Charles Lamb, London, 1890.
- Girard, A. L., Les sucres, le café, le thé, le chocolat, Paris, 1907.
- Glover, F. A., "Report of the discovery of the tea plant in the District of Sylhet," Jour. Hortic. and Agric. Soc. of India, Calcutta, 1855, Vol. LX, pt. 1, p. 207.
- Golden tips, Henry William Cave, London, 1900.
- Gordon, G. J., "Memorandum of an excursion to the tea hills, which produce the description of tea known in commerce under the description of Ankoy tea," Jour. Asiat. Soc. of Bengal, Calcutta, 1835, Vol. IV, pp. 95-106.

 Gorkom, Karel Wessel van, De Oost-Indische cultures, in betrekking tot handel en nijverheid, Amsterdam, 1880-81.

 Thee, Haarlem, 1882.

 Gortner Rose Alton "The color of the culture of the c
- Gortner, Rose Alken, "The origin of the custom of tea drinking in China," Science, New York and Lancaster, Pa., 1918, Vol. XLVII, pp. 269-
- Goubeaux, J., "Le thé aux Indes Néerlandaises," Bull. Econ. de l'Indo-Chine, Hanoi, 1927, No. 189, pp. 601-641.

- "Notes sur le théier au Laos," Agric. Prat. Pays Chauds 3, 20, pp. 89-102, 1932.
 "Notes sur la production du thé vert en Chine et au Japon," Bull. Econ. de l'Indo-Chine, Hanoi, 1933, No. 36, pp. 972-998.
 Gourdin, H., "Le thé à Ceylan," Nature, Paris, 1901-02, Vol. XXX, Pt. 2, pp. 403-406.
 Gracey, Samuel L., "Tea trade of China in 1900," Consular Reports, Vol. 66, p. 477.
 Gray, Arthur, Little tea book, New York, 1903.

- GREAT BRITAIN. Anno quadragesimo primo Georgii III, Reigs.
 Cap. VIII. An act for granting to his Majesty certain additional duties on paper, pasteboard, millboard, and scaleboard, made in or imported into Great Britain; and on tea...
 London, 1802, pp. 41-48.
 Copy of diagrams showing the consumption from 1856 to 1888 of tea, coffee, cocoa, and chicory, of alcoholic beverages, and of tobacco, compared with the increase of population, London, 1889.

 - Report by the food council to the president of board of trade on wholesale tea prices, Lon-don, 1926.
 - Tea report, Imperial Economic Committee, London, 1931.
- "Green crops," P. H. Carpenter, I.T.A. Quar. Jour., Calcutta, 1926, Pt. IV, pp. 170-175.
- Green, Edward Ernest, Insect pests of the tea plant, Colombo, 1890.

 and Mann, Harold H., "The Coccidae attacking the tea plant in India and Ceylon," Memoirs of the Dept. of Agriculture in India, Entomological Series, Calcutta, 1907, Vol. I,
- Green tea, Charles Judge, Calcutta, 1920.
- Green tea, Charles Judge, Calcutta, 1920.

 "Green tea as a source of vitamin C." H. E. Munsell and H. B. Kifer, Jour. of Home Economics, Baltimore, 1929, Vol. XXI, p. 514.

 "The green tea of Japan," Japan Magazine, Tokyo, 1927, Vol. XVII, pp. 247-250, 365-369.

 "Green tea manufacture," Judge and Deane, Planting Opinion, Madras, Oct. 4, 1902.

 "Green tea, The manufacture of," C. J. Harrison, I.T.A. Quar. Jour., Calcutta, 1927, Pt. III, pp. 87-93.

- 87-93.
 Gribble, Henry, "The preparation of Japan tea," Trans. Asiat. Soc. of Japan, Yokohama, 1885, Vol. XII, pp. 1-32.
 Griebel, C., "Die microskopische Untersuchung der Thee-und Tabakersatzstoffe," Ztschr. f. Untersuch. d. Nahrungs u. Genussmittel, Berlin, 1920, Vol. XXXIX, pp. 225-297.
 Griffith, William, "Report on the tea plant of Upper Assam," Trans. Agric. and Hortic. Soc. of India, Calcutta, 1838, Vol. V, pp. 95-180.
 —"A few incidental notations on tea," Journals of Travels in Assam, Burma, Bootan, Afghanistan, and the Neighboring Countries, Calcutta, 1847.

- Notulae ad plantas asiaticas, Calcutta, 1847-54. Guérin, P., "Culture et préparation du thé au Japon," Bull. d. Sciences Pharmacol., Paris, 1907, Vol. XIV, pp. 720-722.
- Guigon, C. A., Le thé: histoire, culture, prépara-tion, pays producteurs, importations, statis-tiques générales, prix, classifications et mélanges, Paris, 1901.
- Guillaume, M., "Le commerce du thé en Indo-chine," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 291-296.
- Gupta, Tea makers' pocket guide, 1901.
- Haan, A. Bierens de, "Java thee op de Amsterdamsche markt," Ind. Mercuur, Amsterdam, 1900, Vol. XXIII, p. 253.
- Haan, Pieter de, Gedachten over den Chinahandel en den theehandel, strekkende ten betoge, dat alle belangen zich vereeniging tot de oprigting van eene sociëteit op vereenigd kapitaal handelende, aan welke bij uitsluiting die takken van commercie overgedragen worden, Rotter-dam, 1824.

 Invoer van thee, ter overwegen voorgesteld,
- Leyden, 1827.
- Halewijn, E., "Bestrijding van dan toutboorder der Albizzia," De Thee, Buitenzorg, 1924, No. 5, pp. 132-133.

- Hall, A. H., and Dickson, T. Glen, "A cold withering experiment," Tea Quarterly, Talawakelle, Ceylon, Sept. 1934, Vol. VII, Pt. III, pp. 118-128.
- Hamaker, C. M., "Het beheer eener theeonder-neming," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 46-51.
- Hamaker, J. Th., "Het fermenteeren van thee op temperatuur," Notulen Soekab. Landb. Ver., Batavia, June 22, 1903, pp. 64-76.
- Hamlin, Edward, Pruning and kindred subjects, Colombo, 1903, 1905, 1913.
- Handboek voor de kultuur en fabrikatie van thee, J. I. L. L. Jacobson, Batavia, 1843.
- Handboek voor het sorteeren en afpakken van thee, J. I. L. L. Jacobson, Batavia, 1845.

- thee, J. I. L. L. Jacobson, Batavia, 1845.

 Handbook of rupee companies, The Colombo
 Brokers' Assn., Colombo.
 Investor's India year book, Place, Siddons &
 Gough, Calcutta.

 Tea and coffee producing companies, De Zoete
 & Gorton, London.
 Tea facts and figures, Fredc. C. Mathieson &
 Sons, London.
 Tea producing companies [incorporating Stephen's tea share manual], Indian Tea Share
 Exchange, Ltd., and Mincing Lane Tea &
 Rubber Share Brokers' Assn., London.
 Wilkinson's Tea Share Manual, The Investor's
 Chronicle, London.
 Handbook of Information, I.T.A. Scien. Dept.,
- Handbook of in Calcutta, 1929. information, I.T.A. Scien. Dept.,
- Hanley, Maurice P., Tales and songs from an Assam tea garden, Calcutta and Simla, 1928.
- Hanway, Jonas, An essay on tea, London, 1756.

 A journal of eight days journey, etc., to which is added, "An essay on tea," London, 1757, 2nd ed.
- Harden, G. H., A treatise from a medical point of view on various facts relating to tea, London, July 1931.
- Hardy, Jacques, and Lenormand, Chas., "Comment les Chinois font leur thé," Tour le Monde, Paris, 1906, N. S., Année 12, pp. 177-
- Harington, John E. M., Tea in Europe, Hitchin, Hertfordshire, 1904.

- Harington, John E. M., Tea in Europe, Hitchin, Hertfordshire, 1904.

 Harler, C. R., "Tea in Japan," I.T.A. Quar. Jour., Calcutta, 1924, Pt. I, pp. 1-46.

 "Tea in Ceylon," I.T.A. Quar. Jour., Calcutta, 1924, Pt. IV, pp. 193-226.

 "Meteorological observations in Assam, 1924," I.T.A. Quar. Jour., Calcutta, 1925, Pt. I, p. 10; also for 1927, pub. in 1928.

 "Tea in Java," I.T.A. Quar. Jour., Calcutta, 1928, Pt. I, pp. 1-44.

 "Moisture changes during the manufacture of black tea," I.T.A. Quar. Jour., Calcutta, 1928, Pt. II, pp. 90-98.

 "Factory requirements for the making of good tea," I.T.A. Quar. Jour., Calcutta, 1929, Pt. I, pp. 11-20.

 "The Lakhimpur District," I.T.A. Quar. Jour., Calcutta, 1939, Pt. III, pp. 101-133.

 "The firing of tea," I.T.A. Quar. Jour., Calcutta, 1930, Pt. II.

 "Tea in Ranchi and Dehra-Dun," I.T.A. Quar. Jour., Calcutta, 1930, Pt. IV, pp. 147-162.

 "The Withering of tea leaf," I.T.A. Quar. Jour., Calcutta, 1931, Pt. IV, pp. 147-162.

 "The Sibsagar District," I.T.A. Quar. Jour., Calcutta, 1931, Pt. II, pp. 28-48.

 "Tea tasters' terms," I.T.A. Quar. Jour., Calcutta, 1932, Pt. II, pp. 78-94.

 "Tea tannin and cup quality," I.T.A. Quar. Jour., Calcutta, 1932, Pt. II, pp. 78-94.

 "Tea tannin and cup quality," I.T.A. Quar. Jour., Calcutta, 1932, Pt. III, pp. 701-119.

 Culture and marketing of tea, London, 1933.

 Harreveld, J. van, "De theecultuur in Rusland," Econ. Stat. Ber., 1931, Vol. XVI, No. 783, p. 10.

- Harreveld, J. van, "De theecultuur in Rusland," Econ. Stat. Ber., 1931, Vol. XVI, No. 783, p. 10.
- Harris, M., "English tea," North American Review, Feb. 1922, No. 215, pp. 229-235.

 Harrison, C. J., "Packing and storage of tea seed," I.T.A. Quar. Jour., Calcutta, 1926, Pt. III., pp. 126-133.
- arrison, C. J., "Packing and storage of tea seed," I.T.A. Quar. Jour., Calcutta, 1926, Pt. III, pp. 126-133.

 "The manufacture of green tea," I.T.A. Quar. Jour., Calcutta, 1927, Pt. III, pp. 87-93.

 "Methods for conducting experiments on fac-tors affecting the quality of tea," I.T.A. Quar. Jour., Calcutta, 1927, Pt. IV, pp. 189-198.

 "The acidity of tea soils of North East In-dia," I.T.A. Quar. Jour., Calcutta, 1930, Pt. IV,

- pp. 170-189; 1932, Pt. II, pp. 70-77; Pt. IV, pp. 189-199.
- Hartwick, C. and Pasquier, P. A. du, "Beiträge zur Kenntnis des Thees," Apotheker Zeitung, Berlin, 1909, Vol. XXIV, pp. 109-110, 119-121, 130-131, 136-137.

 Hauser, I. L., Tea: its origin, cultivation, manufacture and use, Chicago and New York, 1890.
- Hautefeuille, L., and Judge, Charles—see Judge. Hawkes, James [supposed author], A retrospect of the Boston tea-party, etc., by a citizen of New York, New York, 1834. Haworth, Tea in Cachar, 1867.
- Heal, Ambrose, London tradesmen's cards of the eighteenth century, London, 1925. Hearn, Lafcadio, "The tradition of the tea plant," Some Chinese Ghosts, Boston, 1922, pp. 117-
- 142
- Heckheler, J., Dissert. med. de potu thee, Argentorati, 1691.
- Heinenoord, L. A. van den Bergh van, and Laer, A. van Jr., "Het planten van thee in Oost-Java," Nieuwe Gids, 1902-03, Vol. IV, pp. 563-589.
- Hellsten, Axel Fredrik, Über den Einfluss von Alkohol, Zucker und Thee auf die Leistungs-fähigkeit des Muskels, Leipzig, 1904.
- "Helopeltis, Anatomische waarnemingen bij,"—see J. K. de Jong.

- HELOPELTIS—See E. A. Andrews and R. Menzel.
 Henderson, J. A., Account of tea cultivation in
 Ceylon, Colombo, 1893 and 1920.
 Hergesheimer, J., "Tea houses," Saturday Evening Post, Philadelphia, March 4, 1922, No.
 194, pp. 8-9.
- Herrichen, J. G., De Thea, doricum melydrion, Leipsic, 1645.
- "Het begin der theekultuur op Java," C. P. Cohen Stuart, Gedenkboek der Nederlandsch Indische Theecultuur, 1824-1924, Weltevreden,
- Hill, J., Exotic Botany, London, 1759.
- Hill, John, and Rutherford, H. K .- see Rutherford.
- History of tea, A, anonymous, Bath, 1900.

- History of tea, A, anonymous, Bath, 1900.

 History of the tea plant; remarks on imitation tea, anonymous, London, ca. 1830.

 Hoch, A., and Kraepelin, E., "Über die Wirkung der Theebestandtheile auf körperliche und geistige Arbeit," Psychol. Arbeiten, Leipzig, 1896, Vol. I, pp. 378-488.

 Hoedt, G. E., and Keuchenius, A. A. M. N., "Biedt het uitplanten van dikke theestumps voordeelen bij den aanleg van pluktuinen"?, De Bergcultures, Batavia, Nov. 7, 1931, 5de Jrg. No. 45, pp. 1245-1248. Bergcultures, Batavis No. 45, pp. 1245-1248.

- No. 45, pp. 1245-1248.

 Hoekstra, J., "Eenige aanteekeningen over fermentatie van thee," De Bergcultures, Buitenzorg, 1930, Vol. IV, No. 52, p. 1403.

 Holland, A. L., "The effect of tea on digestion," The Tea and Coffee Trade Journal, New York, May, 1928, Vol. LIV, No. 5, pp. 638-639.

 Holland, T. H., "Manuring tea under a cover crop." Tropical Agriculturist, Peradeniya, Ceylon, July, 1927, pp. 33-34.

 "Experience in the use of creeping crops in tea cultivation, with special reference to Indigofera endecaphylla," Tropical Agriculturist, Peradeniya, May 1928, LXX, No. 5, pp. 288-318.
- "The green manuring of tea, coffee, and cacao," Tropical Agriculturist, Peradeniya, Aug. 1931, Vol. LXXVII, No. 2, pp. 71-98; Sept. 1931, No. 3, pp. 139-166; Oct. 1931, No. 4, pp. 197-218.
- Holle, K. F., "Verslag betreffende de thee-onderneming Waspada in het Regentschap Limbangan [Preanger] onder ultimo Julij 1868," Tijdschr. v. Nijv. en Landb. in N. I., 1869, Vol. XIV, pp. 10-44.
- Hollingworth, H. G., List of the principal tea districts in China, and notes on the names applied to the various kinds of black and green tea, Shanghai, 1876.

 Holme, Charles, "The pottery of the cha-no-yu," Trans. and Proc. Japan Soc., London, 1909, Vol. VIII, Pt. II, pp. 163-186.
- Holmes, Oliver Wendell, Dorothy Q, together

with a ballad of the Boston tea party and Grandmother's story of Bunker Hill battle, Boston and New York, 1893.

Hoofd-Kommissie, Staat van den landbouw, op Java, onder het bestuur van den Burggraaf Du Bus De Gisignies, Brussels, 1846.

Hooper, D., "The seed of tea," Pharmaceutical Jour. and Trans., London, 1894-95, Vol. XXV, pp. 587-588 and 605-606.

Hope, G. D., Experiments on the quality of tea, I.T.A. publication, Calcutta, 1910, No. 2, also No. 31.

No. 31.

Notes on the cultivation of tea soils, L.T.A. publication, Calcutta, 1910, No. 5.

"The firing of tea," I.T.A. Quar. Jour., Calcutta, 1911, Pt. I.

"Caffeine and the other alkaloids found in tea," I.T.A. Quar. Jour., Calcutta, 1912, Pt. II, p. 31.

"The propagation of tea plants by grafting," I.T.A. Quar. Jour., Calcutta, 1912, Pt. II, p. 45.

I.T.A. Quar. Jour., Carotton, 45.

- "The value of leguminous trees," I.T.A. Quar. Jour., Calcutta, 1912, Pt. III, p. 64.

- "The cultivation of tea in the Caspian provinces of Persia," I.T.A. Quar. Jour., Calcutta, 1914, Pt. II, p. 41; also in Meded. Proefst. v. Thee, Buitenzorg, 1915, Nos. 34 and 36.

- "The cultivation of tea in Trans-Caucasian Russia," I.T.A. Quar. Jour., Calcutta, 1914, Pt. III, p. 77.

- Report on certain aspects of the industrian Calculation Calc

Russia," I.T.A. Quar. Jour., Calcutta, 1914, Pt. III, p. 77.

Report on certain aspects of the tea industry of Java and Sumatra, I.T.A. publication, Calcutta, 1916, No. 2.

Papers on soil denudation, I.T.A. publication, Calcutta, 1917.

Memorandum on the use of artificial manures on the tea estates of Assam and Bengal, decay on the tea estates of Assam and Carpenter P. H. Report on disease in tea and Carpenter P. H. Report on disease in tea.

and Carpenter, P. H., Report on disease in tea seed nurseries, I.T.A. publication, Calcutta,

seed nurseries, I.T.A. publication, Calcutta, 1909.

— and Carpenter, P. H., Some aspects of modern tea pruning, I.T.A. publication, Calcutta, 1914.

— and Carpenter, P. H., Suggestions for manurial treatment of tea soils, I.T.A. publication, Calcutta, 1915.

— and Cooper, H. R., "Experiment to determine the most suitable distance apart for planting in nurseries," I.T.A. Quar. Jour., Calcutta, 1915, Pt. II, p. 36.

— and Petch, Thomas, Disease in nurseries and root disease, 1908-1910.

— and Tunstall, A. C., "Green manures," I.T.A. Quar. Jour., Calcutta, 1912, Pt. IV, 1913, Pts. I, II, III, 1914, Pt. III, 1915, Pts. I, III, IV. Horsfall, J., "Handling of young tea," Tropical Agriculturist, Peradeniya, Ceylon, July 1927, pp. 35-38.

pp. 35-38.

Horsfield, Thos., [transl.] Essay on the culture and manufacture of tea in Java, London, 1841. Houssaye, J. G., Monographie du thé: description botanique, torréfaction, composition chimique, propriétés hygiéniques, de cette feuille, Paris, 1843.

Huc, Père Evarist Régis, Souvenir d'un voyage dans la Tartarie, le Thibet, et la Chine, 2 vols., Paris, 1852.

Huet, Pierre Daniel, "Thea," Poemata, Paris, 1709.

ulett, A. S. L., "Tea culture in Natal," re-printed from Science in South Africa, 1905, pp. 439-447. Hulett,

Hunter, Sir William W., Crisis in tea cultivation, a brief history of the Indian peoples, Oxford,

Huntington, E. H. M., Huntington's tea manual for China and Japan, Boston, 1881.

Hutchinson, C. M., Report on investigations made as to the causes of taints in packed teas, 1908, I.T.A. publication, Calcutta, 1909, No. 1.

"A modified method of green manuring," Agric. Research Inst., Pusa, Calcutta, 1916, Bull. No. 63.

Hutchinson, Thomas, "The destruction of the tea," History of Massachusetts Bay, Boston, 1896.

Hutchison, Woods A. M., "Worth of a cup of tea," Los Angeles Examiner, Los Angeles, Oct. tea," Los 26, 1924.

Hutchison, James, Report on the cultivation and

manufacture of Formosa Oolong tea, Calcutta, 1904. - Indian tea for Tibet; report on a mission to Sauchuan, Calcutta, 1906.

Hutson, J. C., "Some insect pests of tea in Ceylon," Tropical Ariculturist, Peradeniya, April, May, June, July, Aug., and Sept. 1932.

Ibbetson, A., Tea from grower to consumer, London, New York, 1910 and 1926.

"Iets uit de geschiedenis der theebereiding," J. J. B. Deuss, Gedenkboek der Nederlandsch In-dische Theecultuur, 1824-1924, Weltevreden,

Importation and inspection of tea, U. S. Dept. of Agriculture, miscellaneous circular No. 9, Washington, 1923.

Washington, 1923.

INDIA.

"Notices respecting the culture and manufacture of tea at Cachar, Munneepore and Darjeeling," Jour. Agric. and Hortic. Soc. of India, Calcutta, 1855, Vol. IX. Pt. I, p. 201.

Papers on tea cultivation in Brit. India, parliamentary papers, Govt. Blue Book, Calcutta, 1839.

Report on the production of tea in India, Calcutta, 1906-19.

"Report of the tea and tobacco industry in India," Blue Book, Calcutta, 1874.
"Reports on the visit of the Ceylon delegation to the tea districts of North India," F. A. Stockdale, M. L. Wilkins, and J. Horsfall, Tropical Agriculturist, Peradeniya, Ceylon, 1926, Vol. LXVI, No. 2.

"Tea cultivation in India," C. H. Fielder, Jour. Soc. Arts, London, 1869, Vol. XVII, No. 852.

"Tea in Northeast India," serial by P. H. Carpenter, I.T.A. Quar. Jours, Calcutta, 1929 and 1930.

Trip to India, William H. Ukers, Little Journey Series New York, 1925-26.

and 1930. rip to India, William H. Ukers, Little Jour-ney Series, New York, 1925–26.

Assam: sketch of its history, soil, and productions; with the discovery of the tea plant, and of the countries adjoining Assam, London, 1839.

Papers relating to tea cultivation in Assam, Calcutta, 1861. [Selections from the records of the Government of Bengal, No. 37].

Tea in Assam, Samuel Baildon, Calcutta, 1877. Report of tea culture in Assam for the year 1933, J. N. Chakravartry, Government Press, Shillong, 1934.

Bengal. Papers regarding the tea industry in Bengal, Bengal Agri. Dept., Calcutta, 1878, Vol. XXVIII.

Darjeeling.
"Tea planting in Darjeeling," Geo. W. Christison, Jour. Soc. Arts, London, 1896, Vol. XLIV.

Himalayas.

"Report on the progress of the culture of the China tea plant in the Himalayas from 1835 to 1847, J. Forbes Royle, Roy. Asiat. Soc. Jour., London, 1850, Vol. XII, Art. IV, pp. 125-152.

Northwestern Provinces.

orthwestern Provinces.

Report upon the present condition and future prospects of tea cultivation in the Northwest provinces and in the Punjab, by the Home Department, Calcutta, 1857, No. 23.

"Tea plantations (1851-63)," selections from the records of the Government, Northwestern Provinces, new series, Allahabad, 1869, Vol. V, No. 5, pp. 401-443.

Indian tea, by A. F. Dowling, Calcutta, 1880.

Indian tea: its culture and manufacture, Claud Bald, Calcutta, 1903-22.

Indo-China

"Commerce du thé en Indochine, Le," M. Guillaume, Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 291-296.

"L'Extension de la culture de thé au Tonkin," by the Administrateur-résident de Hung-Hoa, Bull. Econ. de l'Indo-Chine, Tonkin, 1901, No. 34, p. 350.

"Thé de la Province Hung-Hoa, Le," by the Administrateur-résident de Hung-Hoa, Bull. Econ. de l'Indo-Chine, Tonkin, 1900, No. 28, p. 591; and 1902, No. 9, p. 672.

Jacobson, Ed., "Java-thee," Ind. Mercuur, Amsterdam, 1889, Vol. XII, p. 569.

Jacobson, J. I. L. L., Handboek voor de kultuur en fabrikatie van thee, Batavia, 1843; Eng.

en fabrikatie van thoe, trans., 1873.

— Handboek voor het sorteeren en afpakken van de thee, Batavia, 1845.

— "Bijdrage tot de theekultuur," Tijdschr. v. N.I., 1846, Vol. VIII, No. 1, pp. 191-217.

James Robert. Translation of Simon Paulli's Treatise on tobacco, tea, coffee, and chocolate, Treatise on to London, 1746.

ameson, William, Report on the government tea plantations in Kumaon and Gurwahl, Cal-Jameson.

tea plantations in Kumaon and Gurwahl, Calcutta, 1848.

— Suggestions for the importation of tea makers, implements, and seeds, from China, into the Northwestern Provinces, Agra, 1852.

Janssen, Sir. S. T., The whole state of the tea importation, consumption, and revenue, from midsummer 1745 to new Christmas 1763, London, 1763 and 1767.

Japan.
Chagyo yoran [general outline of tea industry], Shizuoka, 1902.
Japan and Formosa, William H. Ukers, Little Journey Series, New York, 1925-26.
"Japan's tea industry and trade," I. Takano, Trans-Pacific, Tokyo, 1920, Vol. II, pp.

"Japan's tea industry and trace, Trans-Pacific, Tokyo, 1920, Vol. II, pp. 72-75.

Nippon chagyo-shi [history of the Japan tea industry], Japan Central Tea Association, Tokyo, 1914.

"Reports on the production of tea in Japan," Great Britain Parliament Sessional Papers, London, 1873, Vol. LXVI.

Report on tea culture in Japan, Gerald Hastings Phipps, London, 1905.

Report on the tea industries of Java, Formosa, and Japan after a special visit to these countries in 1904, Arthur Charles Kingsford, and M. Kelway Bamber, Colombo, 1907.

Seicha taiyo [general method of preparing tea], Shizuoka.

"Tea in Japan," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1924, Pt. I, pp. 1-46.

"Japanese tea manufacturing electrified," Far Eastern Review, Shanghai, Aug. 2, 1926, Vol. XXII, p. 370.

Jardine, N. K., The tea tortrix—Homona coffearia Niet., Colombo, 1918.

"The control of tea tortrix," Year-book Dept. of Agric, Ceylon, 1925, pp. 4-6.

JAVA AND SUMATEA.

of Agric, Ceylon, 1925, pp. 4-6.

JAVA AND SUMATEA.
Essay on the cultivation and manufacture of tea in Java, anonymous, trans. from Dutch by Thomas Horsfield, London, 1841.
Tea in Java, J. I. L. L. Jacobson, 1873.
Report on the tea industries of Java, Formosa, and Japan after a special visit to these countries in 1904. Arthur Charles Kingsford and M. Kelway Bamber, Colombo, 1907.

De theecultuur in de Preanger regentschappen, Department van landbouw, nijverheid en handel, Buitenzorg, 1910. "Report on certain aspects of the tea industry of Java and Sumatra," G. D. Hope, I.T.A. publication, Calcutta, 1916, No. 2.

publication, Calcutta, 1916, No. 2.

Java tea, Department van landbouw, nijverheld en handel, Buitenzorg, 1917[?].

Java and Sumatra, William H. Ukers, Little Journey Series, New York, 1925-26.

"Tea in Java," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1928, Pt. I, pp. 1-44.

Jepson, F. P., "Tea termites in Ceylon," I.T.A. Quar. Jour., Calcutta, 1926, Pt. III, pp. 134-142.

and Gadd, C. H., "Manuring in relation to the control of shot-hole borer of tea," Dept. of Agric. Peradeniya, Ceylon, Dec. 1926, Bull.

No. 78.

— and Gadd, C. H., The control of shot-hole borer of tea—xyleborus fornicatus, Eichh., Dept. of Agric., Colombo, 1925, Bull. No. 72.

Jones, A. C., Thea viridis, or Chinese tea plant, and the practicability of its culture and manufacture in the United States, U. S. Dept. of Agric., Washington, 1877, Special Report

Jong, J. K. de, "Enkele proeven met paradichloor-

benzol ter bestrijding van den Albizziaboorder Kystrocera festiva PASCOE," Archief
v. d. Theecultuur, Buitenzorg, Feb. 1931, No.
1, pp. 8-12.

"Verslag over de periode 1921-30 en toekomstige ontwikkeling der thee-selectie," Archief
v. d. Theecultuur, Buitenzorg, 1931, No. 2.

"Bijdragen tot de anatomie van de theeplant,"
De Bergcultures, Batavia, Sept. 24, Oct. 1, and
Dec. 31, 1932; Feb. 4, Feb. 18, March 11, and
May 6, 1933.

"Anatomische waarnemingen bij Helopeltis,"
Archief v. d. Theecultuur, Buitenzorg, 1934, No.
1, pp. 38-57.
idge, A. S., "The production of tea in the Em-

1, pp. 38-57.

Judge, A. S., "The production of tea in the Empire and its relation to the tea trade of the world, Bull. Imp. Inst., London, Oct.-Dec. 1920, Vol. XVIII, No. 4, pp. 490-523.

Judge, Charles, "De quoi depend la grandeur des feuilles de thé," Jour. d'Agric. Trop., Paris, 1902. No. 12.

— "Fabrication du thé noir; conditions et rôle du fiétrissage," Jour. d'Agric. Trop., Paris, 1903, No. 23.

— Green tea Calcutta 1920

1903, No. 23.

- Green tea, Calcutta, 1920.

- and Deane—see Deane.

- and Hautefeuille, L., "Sur le thé soluble de Ceylan," Jour. d'Agric. Trop., Paris, Oct. 31, 1904, No. 40.

Jumelle, Henri Lucien, "Le thé en Russie," Jour. d'Agric. Trop., Paris, 1913, pp. 260-262.

— "Plantes à sucre, café, cacao, thé, maté," Les Cultures Coloniales, Paris, 1913-16, Vol. III.

Kalshoven, L. G. E., "Schade door hout-boeboek, speciaal in verband met de theecultuur," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 58-72.

Kämpfer, Engelbert, The history of Japan to-gether with a description of the Kingdom of Slam, trans. in Eng. by J. G. Scheuchzer, London, 1727.

Karsen, H. Th., "Java-thee te Amsterdam," Ind. Mercuur, Amsterdam, 1900, Vol. XXIII, pp. 253-254.

Katayama, T., "Sur l'arome du thé noir," Bull. Imp. Central Agric. Exper. Stat. of Japan, Tokyo, 1907, Vol. I, pp. 149-152.

Tokyo, 1907, Vol. 1, pp. 149-152.

Keiko, Kato, Cha setsu shu jo, [treatise on the cultivation and use of tea], Vol. II, chuan 2-3.

Keiler, P. A., "The relationship between manuring and callus formation in tea," Tropical Agriculturist, Peradenlya, May 1928, LXX, No. 5, pp. 312-318.

Keller, "Die Bestimmung des Caffeins im Thee," Berichte d. Deut. Pharmaceut. Gesell., Berlin, 1897, Vol. VII, pp. 105-112.

Kempski, Karl E., Die Theekultur unter be-sonderer Berücksichtigung der Verhältnisse in Niederländisch-Indien, Berlin, 1913.

Kenya.

Tea cultivation in Kenya colony, J. W. H.
Bradshaw, Nairobi, 1925.

Kerbosch, M., "Eenige gegevens omtrent groenbemesting voor hooggelegen ondernemingen,"
Handelingen van het Thee-Congres, Weltev,
reden, 1924, pp. 347-359.

Kerkhoven, A. E., "Leguminosen-bemesting toegepast op de theecultuur," Teysmannia, Ba-tavia, 1902, Vol. XIII, pp. 15-21.

erkhoven, A. R. W., "Eenige observaties betreffende de 'Red rust' op theeheesters," Meded. Proefst. v. Thee, Buitenzorg, 1914, No. 32, pp. 35-40. Kerkhoven,

Meded. Proefst. v. Thee, Buitenzorg, 1914, No. 32, pp. 35-40.

"De toekomst van de theecultuur op Java," Alg. Landb. Weekbl. v. N.I., Bandong, 1917, Vol. I, No. 31, pp. 1-3; also No. 32, pp. 1-2.

"Wash in tea gardens," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 202-211.

and Bernard, Ch., and Deuss, J. J. B., "Ontginning en onderhoud der tulnen van een theeonderneming" [Bodemcongres Djokjakarta 1916], 1920, Pt. II, pp. 149-168.

Kerkhoven, R. A., "Voorheen en thans: beschouwingen over de ontwikkeling van het theebedrijf," Alg. Landb. Weekbl. v. N.I., Bandong, 1916, Vol. I, No. 3, pp. 1-7; No. 12, pp. 1-4; No. 18, pp. 5-6.

"Brandstof-besparing in de theeindustrie," Notulen Soekab. Landb. Ver., Batavia, March 19, 1917, pp. 21-30.

Keuchenius, A., "Aanteekeningen omtrent den theesnoel te Kertasarle en daaraan annexe cul-tuurbijzonderheden," De Thee, Buitenzorg, 1921,

No. 2, pp. 69-77.

- "Aanteekeningen omtrent den theesnoei te Sedep en daaraan annexe cultuurbijzonderheden," De Thee, Buitenzorg, 1922, No. 3, pp. 5-11. "Crotalaria

5-11.

"Crotalaria anagyroides als groenbemester,"
De Thee, Buitenzorg, 1922, No. 3, pp. 71-74.

"Deguelia microphylla—Derris microphylla—als schaduwboom en groenbemester in theetuinen," De Thee, Buitenzorg, 1922, No. 3, pp.

74-78.

"De vegetatieve voortplanting van thee," Meded. Proefst. v. Thee, Buitenzorg, 1923, No. 84, pp. 1-48; also in English, "The vegetative propagation of tea," Meded. Proefst. v. Thee, Buitenzorg, 1923, No. 85, pp. 1-16.

"Ervaringen met Indigofera endecaphylla," De Thee, Buitenzorg, 1926, No. 1, p. 8.

"Indigofera endecaphylla in de praktijk," De Thee, Buitenzorg, 1926, No. 2, p. 63.

"Overzicht der ziekten en plagen op thee op ondernemingen in Zuid-en West-Sumatra," De Bergcultures, Buitenzorg, 1931, Vol. V, No. 8, p. 204.

Kiefer, A., lefer, A., "Die Theeindustrie Indiens und Cey-lons," Abhandlungen der K.K. Geographischen Gesellschaft in Wien, Vienna, 1902, Vol. IV,

No. 3.

King, C. B. Redman, "Control of insect pests,"
The Tea Quarterly, Talawakelle, Ceylon, May
1931, Vol. IV, Pts. 1 and 2, pp. 34-38.

"The tea tortrix (Homona coffearea Nietn),"
Tea Quarterly, Talawakelle, Nov. 1933, Vol. VI,
Pt. IV, pp. 153-175.

King, C. C., "The China tea trade," Financial
Times China Supplement, June 27, 1932.

Kingma, J. L., "Eenige opmerkingen omtrent de
bedrijfs controle in de meer moderne theefabrieken," De Bergcultures, Buitenzorg, 1931,
Vol. V, No. 2, p. 29.

Kingsford, Arthur Charles, and Bamber, M. Kel-

Vol. V, No. 2, p. 29.

Kingsford, Arthur Charles, and Bamber, M. Kelway, Report on the tea industries of Java, Formosa, and Japan after a special visit to these countries in 1904, Colombo, 1907.

Kinzel, W., "Über die Erhaltung des normalen Frischezustandes in den eingesammelten Heil-Gewürz- und Theepfianzen," Heil- und Gewürz- Pfianzen, 1919, Vol. 111, p. 65.

Kircher, Athanasius, China illustrat, cum figura fruct, theae, 1658.
"Tea," Theatrum Chinensis, Amsterdam, 1668.

— "Tea," Theatrum Chinensis, Amsterdam, 1668. Kitcha Yojoki [Book of tea sanitation], by Abbott Yelsai, Kyoto [?], ca. 1191.
Knight, G. W., "Determination of prussian blue in tea." Jour. Industrial and Engineering Chemistry, Easton, 1914, Vol. VI, pp. 909-910. Kochs, J., "Uber die Gattung Thea L. und den chinesischen Thee," Engler's Bot. Jahrb. f. Syst. etc., Leipzig, 1900, Vol. XXVII, pp. 577-635.

ock, A. H. W. de, "Resultaten met groene bemesting in theetuinen met clitoria cajanae-folia Benth.," N. I. Landb. Syndicaat [Han-delingen 10e congres], 1909, pp. 127-131. Kock.

delingen 10e congres], 1909, pp. 127-131.

Koning, A. de, "Over snoelen, plukken en nog wat," Alg. Landb. Weekbl. v. N.I., Bandong, 1916, Vol. I, No. 16, pp. 4-8; No. 18, pp. 7-8; No. 25, pp. 3-5; 1917, Vol. II, No. 39, pp. 5-7; 1919, Vol. IV, pp. 69-72, 283-291.

Koningsberger, J. C., "Ziekten van rijst, tabak, thee en andere cultuurgewassen, die door insecten worden veroorzaakt," Meded. 's Lands Plantentuin, Buitenzorg, 1903, No. 64.

Kosai, Y., "Researches on the manufacture of various kinds of tea," Bull. Imp. College of Agric., Tokyo, 1890, No. 7.

Kränsel, Paul Franz, Entwicklung und gegen-

Kränsel, Paul Franz, Entwicklung und gegen-wärtiger Stand des Chinesischen Theehandels, Berlin, 1902.

Krasnov, A. N., Tchainyia strany Asii [On the tea producing districts of Asia], Petrograd, 1897.

Kruyff, G. de, "Een moderne theefabriek [Soe-jadi in de Preanger-Regentschappen]," Weekbl. v. Indie. 1913, Vol. 1X, pp. 986-989.

Kuo P'o, Erh ya, ancient Chinese dictionary, ca. A.D. 350.

Kursner [Kursnerus], Christian, De potu theae, Marburg, 1681.

Ku-Yuan-Ching [Wang Shih Hsein], Ch'a p'u, China, Ming Dynasty, 1368-1628. Kvarazkhella, T. K., "Vegetative propagation of the tea plant," Tropical Agriculturist, Peraden-iya, Ceylon, 1934-35.

Laan, J. H Marinus. J. H. van der, and Marinus, J. H .-

Lambe, G., "Proof met de Savage-snijmachine," De Thee, Buitenzorg, 1925, pp. 123-124.

Lambe, H., Report on Java teas in Australia 1909-10, Batavia, 1910. Langegg, Ferdinand Adalbert Junker von, Japa-nische Thee-Geschichten [Fu-so cha-wa], Wien, 1884.

Laufer, B., "Chinese tea [Camellia theifera]," Sino-Iranica, Chicago, 1919, p. 553.
Layard, R. de B., "The Formosa tea industry," Tropical Agriculturist, Peradeniya, Oct. 1, 1002 1902.

Leake, Wm. Martin, "Events of eleven years, 1863-1873," Jubilee of the Planters' Assn. of Ceylon, 1854-1904, Colombo, 1904.

Lecomte, Louis, Memoirs and observations made in a late journey through the Empire of China, Paris, 1696; Eng. transl. London, 1698.

Lecoq, L. M., Nouvelle découverte, de la culture du thé et de sa preparation en France à l'instar des Chinois, suivie d'un traité de la confiture d'oseille, autre découverte du même auteur, Paris, 1845.

Leefmans, Salomon, "Over Helopeltis in theetuinen," Meded. Proefst. v. Thee, Buitenzorg, 1916, No. XLVI, pp. 1-21.

— "Bijdrage tot het Helopeltis-vraagstuk voor de thee," Meded. Proefst. v. Thee, Buitenzorg, 1916, No. 50.

"Bildrage to be between the control of the control o

de thee," Meded. Prociss. v. 2005, 1916, No. 50.

"Bijdrage tot het vraagstuk der bladrollers van de thee," Meded. Procist. v. Thee, Buitenzorg, 1921, No. XXVII.

"De snuitkeverlarf in theebladeren [Eugnamptus hirsutus Voss]" Archief v. d. Theecultuur, Buitenzorg, Feb. 1931, No. 1, p. 5.

Leersum, P. van, "Verenten van thee," Meded. Procist. v. Thee, Buitenzorg, 1911, No. XIV, pp. 1-7

Lees, William Nassau, Tea cultivation, cotton and other agricultural experiments in India; a review, London, 1863.

— A memorandum written after a tour through the tea districts of eastern Bengal in 1864-65,

Calcutta, 1866.

Lefèvre, J. François, De natura, usu, et abusu coffeae, theae, chocolatae, Vesuntione, 1737.

Lehman, Karl Bernhard, and Rohrer, Georg, "Besitzen die flüchtigen Bestandteile von Thee und Kaffee eine Wirkung auf die Respiration des Menschen?" Archiv. f. Hygiene, München, Vol. XLIV, pp. 203-213.

Lehman, Karl Bernhard, and Tendlau, Berthold, "Kommt den flüchtigen aromatischen Bestand-theilen des Thees (Theeöl) eine nachweisbare Wirkung auf den Menschen zu?" Archiv. f. Hygiene, München, 1898, Vol. XXXII, pp. 327– 352.

Lekkerkerker, C., "The centenary of tea plantation in the Dutch Fast Indies," Commercial Holland, 1925, Vol. V, pp. 19-29.

Lekkerkerker, T. J., "De Kampongtheecultuur in de Preanger en de Indische overheid," Kol. Studiën, 1917, Vol. I, No. 2, pp. 287-328.

— and Wolff, J., "Kort verslag omtrent hetgeen in het belang der Inlandsche theecultuur in de Preanger Regentschappen is verricht," Jaarboek Dept. v. Landb. Nijv. en Handel over 1911, 1912, pp. 115-123.

endner, A., and Rehfous, L., "La microscopie des succédanés du thé, du maté, et du café," Handelingen van het Thee-Congres Bandoeng, 1924, Weltevreden, 1924, pp. 217-290. Lendner, A.,

"Leppett tea," Kew Bull. of Misc. Inf., London, 1896, p. 10.

e Roy, "Le thé," Revue Indo-Chinoise, Illus., June, 1894, pp. 114-125.

Lethbridge, Sir R., "The tea duties," Oriental Institute, Woking, Eng., 1906, p. 11.

Lettsom, John Coakley, The natural history of the tea tree, with observations on the medical qualities of tea, and effects of tea drinking. London, 1772 and 1799.

— and Ellis, John, Geschichte des Thees und Kaffees, Leipzig, 1776.

Lewis, Frederick, Sixty-four years in Ceylon,

1926. ers of the Ceylon planting industry, Ceylon, 192 - Pioneers

Colombo, 1927.

Light, S. Stuart, "Mites as pests of the tea plant," Tropical Agriculturist, Peradeniya, Ceylon, April 1927, Vol. LXVIII, No. 4, pp. 229-238.

238.

"A review of the present situation regarding tea tortrix in Ceylon, Tropical Agriculturist, Peradeniya, Ceylon, June 1927, pp. 349-362.

"Pests of tea nurseries; a warning," Tea Quarterly, Nuwara Eliya, 1928, Vol. I, Pt. 1, pp. 19-22.

Linde, F., Tea in India, Calcutta, 1879.

Lindgren, Oscar, The trials of a planter, Kalimpong, 1933.

Link, H. F. Enumeratio plantarum horti regii botanici Berolinensis, Berolini, 1821-22, Vol.

Linnæus [von Linné], Charles [Carl], Genera plantarum, Batavia, 1737. — Species plantarum, Holmiae 1753 and 1762; Berolini, 1797-1810 [with Wildenow].

Linschooten, Jan Hugo van, Navigatio ac itinera-rum, Rostock, 1595-96.

— Discours of voyages, London, 1598, Eng. trans. by the author.

Little tea book, The, Arthur Irving Gray, New York, 1903.

Lochner, Michael Friedrich, De thee et café, Norib, 1717.

Norib, 1717.

Lodian, L., "Some tea curiosities; interesting facts concerning compressed tea, Russian dry cup of tea, tea tablets, etc.," The Tea and Coffee Trade Journal, New York, 1905, Vol. VIII, pp. 212-214.

— "Chinese presentation tea," description of packages of tea used as gifts in China, The Tea and Coffee Trade Journal, New York, 1905, Vol. IX, pp. 75-78.

Lohmann, C. E. J., "Iets over de theecultuur in Brazilie," Archief v.d. Theecultuur, Buitenzorg, 1928, 2de Jrg., p. 183.

Lohmeler, Dissertatio de herbae exoticae theae infuso, Erford, 1722.

Lombard, "L'Industrie du thé en Annam," Jour. d'Agric. Trop., Paris, 1902, No. 10, pp. 107-109.

London Genuine Tea Company, A brief account of the tea plant, London, 1790.

London Genuine Tea Company, History (The) of the tea plant; from the sowing of the seed to its package for the European market, etc., London, 1820 [?].

London, 1820 [?].

Losch, Fr., and Stehli, G., Deutscher Thee; Deutscher Kaffee-Ersatz, Stuttgart, 1921 [?].

Lubbock, Basil, "The great tea race of 1866," The Tea and Coffee Trade Journal, New York, 1926, Vol. LII, pp. 27-29.

Lulofs, C., "Sumatra-thee," Tijdschr. Binn. Bestuur, 1914, Vol. XLIV, pp. 229-230.

— "Volkstheecultuur," Tijdschr. Binn. Bestuur, 1917, Vol. LI, pp. 328-230

1917, Vol. LI, pp. 326-330.

Luther, Carl Frid., De potu theae, Kiel, 1712.

Lu Yu, Ch'a Ching [Book of Tea], China, ca. A.D. 780.

Lylle, P. de, "Procede pour différencier les infusions de thé de celles du maté," Annales de Chimie Analytique, Paris, 1912, Vol. XVII,

ynn, E. F., Drying and withering tea by electricity, Sessional paper XIII of 1931, Ceylon Government Press.

Lythgoe, Hermann Charles, "Report on tea and coffee," U.S. Dept. of Agriculture, Bureau of Chemistry, Washington, 1905, Bull. No. 90, pp. 38-45.

aas, J. G. J. A., "De ontwikkeling van de theeoculaties," De Thee, Buitenzorg, 1922, No.

McClelland, J., Assam tea plant, 1837.

McEwan, John, "Geographical distribution of the tea plant," Verhand. Siebenten Inter. Geog. Kong. Pt. II, pp. 449-456.

"Tea," Encyclopædia Britannica, New York and London, 1911, Vol. XXVI, 11th ed., pp. 475-476.

and Lo 476-483

and Chandler, S. E .- see Chandler.

McGowan, Alexander Thorburn, Tea planting in the outer Himalayah, London, 1860.

McMaster, L., and Smith, E. H., "Extraction of tannin from tea," Washington University Studies, July 1923, Vol. XI, pp. 29-34.

McNamara, John J., Tea: its mythical and physical history, pub. by Grand Union Tea Co., Brooklyn, N. Y., 1921.

McPherson, James, The Neilgherry tea planter, Madras, 1870.

McRae, William, "Report on the outbreak of blister blight on tea in the Darjeeling disrtict in 1908-1909," Agricultural Research Inst., Pusa, Calcutta, 1910, Bull. No. 18.

Macfarlane, J. J., "Tea trade of the wo Commercial America, Philadelphia, 1909, VI, No. 3.

Maclaren, W. A., "Rubber, tea and cacao."

aclaren, W. A., "Rubber, tea and cacao," The Resources of the Empire Series, London, 1924, Vol. VI.

Macmillan, H. F., "Tea," Tropical Gardening and Planting, Colombo, 1925, Chap. XXIV, Sec. 4, pp. 349-352.

Maffei, Giovanni Pietro, Historica Indica, Rome,

Maillard, "La culture du thé en Chine," Revue Indo-Chinoise, Illus., July 1894, pp. 162-171.

Main, F., "La manutention du thé en Europe," Jour. d'Agric. Trop., Paris, Dec. 31, 1904, No.

alaya, Prospects for tea growing in, M. J. Kennaway, Ipoh, F.M.S., 1928. Malaya,

Malaya, Tea cultivation in the Highlands of, — see H. A. Tempany and E. H. Curtler.

see H. A. Tempany and E. H. Curtier.

Mandelslo. Johann Albert von, Morgenlandische Reise-Beschreibung, 1656, Lib. 1, Cap. XI.

— Travels into the East Indies, 1633-39, Eng. transl. by Davies, London, 1669.

Mann, Harold Hart, The tea soils of Assam, and tea manuring, I.T.A. publication, Calcutta, 1941.

tea manuring, 1901.

tea manuring, I.T.A. publication, Calcutta, 1901.

The tea soils of Cachar and Sylhet, I.T.A. publication, Calcutta, 1903.

Blister blight of tea, I.T.A. publication, Calcutta, 1906.

Green manuring in tea culture in India, I.T.A. publication, Calcutta, 1906.

The fermentation of tea, in 2 parts, I.T.A. publications, Calcutta, 1906 and 1907.

Tea soils of Northeast India, I.T.A. publication. Calcutta, 1907.

Individual and seasonal variations in helopelitis theivora, Waterhouse, with description of a new species of helopelitis, Agric. Research Inst. of Puss, Calcutta, 1907.

The factors which determine the quality of tea, I.T.A. publication, Calcutta, 1907.

Experiments in heavy pruning in Assam, I.T.A. publication, Calcutta, 1907, No. 3.

The early history of the tea industry in Northeast India, Calcutta, 1918.

Report by Dr. H. H. Mann on his visit to Tocklai in April, 1927, I.T.A. publication, Calcutta, 1927.

The Indian tea industry in its scientific aspects, Jour. Roy. Soc. Arts, London, April 3, 1931, Vol. LXXIX, No. 4089.

"Notes on Soviet Russian Tea Industry," Tea and Coffee Trade Journal, New York, April 1932, Vol. 62, No. 4, pp. 378-381.

"The recent tea developments in Georgia," I.T.A. Quar. Jour., Calcutta, 1932, Pt. II, pp. 55-69.

"Report on tea cultivation and its developments in Nurseland" which is the publication.

I.T.A. Quar. Jour., Calcutta, 193z, Fl. 11, pp. 55-69.

- "Report on tea cultivation and its development in Nyasaland," pub. by The Crown Agents for the Colonies, London, 1933.

- "Report on tea cultivation in the Tanganyika Territory and its development." pub. by The Crown Agents for the Colonies, London, 1933.

- "The climatic and soil requirements of tea," Empire Journal of Experimental Agriculture, London, Sept. 1933, Vol. I, No. 3.

- and Hutchinson, C. M., "Cephaleuros virescens,

Digitized by Google

- Kunze: the 'red rust' of tea," Memoirs of the Dept. of Agric. in India, Botanical Series, Calcutta, 1907, Vol. I, No. 6. and Watt, Sir George—see Watt.
- Manner of making coffee, tea, and chocolate, The, Philippe Sylvestre Dufour, London, 1685. Eng. transl. by John Chamberlayne.

Manuring of tea-see T. Eden.

- Marinus, J. H., and van der Laan, J. J., Veertig jaren ervaring in de Deli-cultures, Amsterdam,
- Marquis, F., Du thé . . . orné de gravures faites d'après nature et d'après les peintures orig-inales de la Chine, Paris, 1834.
- Marshall, W. B., "Tea," Amer. Jour. Pharm., Philadelphia, 1903, Vol. LXXV, pp. 79-93.
- Martin, "Culture du thé vert en Chine," Ann. Agronomiques, May, 1887.
- Martin, Robert Montgomery, The past and present state of the tea trade of England, and of the continents of Europe and America, etc.,
- London, 1832.

 Mason, J. W., Report on the tea-mite and the tea-bug of Assam, London, 1884.
- Mason, Simon, The good and bad effects of tea considered, London, 1745.
- considered, London, 1745.

 Massachusetts Hist. Soc. proceedings of a special meeting Dec. 16, 1873; being the one hundredth anniversary of the destruction of the tea in Boston harbor, Boston, 1874.

 Masters, J. W., "The Assam tea plant, compared with the tea plant of China," Jour. Agric. and Hortic. Soc. of India, Calcutta, 1844, Vol. III.

 Mattill, H. A. and Pratt, A. D., "Note on tea as a source of vitamin C." Proc. Soc. for Experimental Biology and Medicine, 1928, Vol. XXVI, pp. 82-85.
- pp. 82-85.
- pp. 82-85.

 Maurenbrecher, August Daniel, I, Untersuchungen einiger Pflanzenstoffe—Kakao, Tee, etc.—auf darin erhaltene Bestandteile; II Über die Einwirkung von Diphenylhydrazin auf eine Reihe von Aldehyden..., Göttingen, 1906.

 "Een kopje thee; zijn chemie, physiologie en aesthetica," Teysmannia, Batavia, 1912, Vol. XXIII, pp. 492-507; also in English, "Cup of tea: its chemistry, physiology, and aesthetics," Scientific American Supple., New York, 1912, Vol. LXXIII, pp. 88-87.

 and Tollens, B., "Über die Kohlehydrate der Theeblätter," Berichte d. deut. chemischen Gesell., Berlin, 1906, Vol. XXXIX, pp. 3381-3582.
- Medhurst, Walter Henry [the elder], A glance at the interior of China, obtained during a journey through the silk and green tea coun-tries, London, 1850.
- Meisner, L. F., De caffe, chocolate, herbe thee ac nicotianae, natura et abusu anacrisis, medico-historico-diaetetica, Norimbergae, 1721.
- Melchior, J., De thee, Francofurti, a. O., 1784. Memorie Boek van Pakhuismeesteren van de thee te Amsterdam 1818-1918 en de Nederlandsche thee-handel in den loop den tijden, Amster-
- Mennell, Robert Oscar, Tea, an historical sketch, London, 1926.
- Mennell & Co., R. O., Tea, London, Dec. 1932.

dam. 1918.

- Menzel, R., "Over het voorkomen van een zeer nuttige parasietvlieg—Compsilura concinnata Meig.—op Java," De Thee, No. 4, Buitenzorg, 1923, pp. 89-90. "Over de in Helopeltis parasiteerende sluip-wesp," De Thee, Buitenzorg, 1924, No. 5, pp.
- wesp," I 115-120. "Uber
- Wesp., De Thee, Buttensorg, 1327, No., pp. 115-120.

 "Über Theeschädlinge in Niederländisch-Indien und ihre Bekämpfung," Zeitschr. f. angew. Entomol., Berlin, 1925, Bd. X, H. 1, pp. 67-74; 1926, Bd. XII, H. 2, pp. 340-356.

 "Nadere beschrijving van Stictopisthus javensis, Ferr. parasiet van euphorus en hyperparasiet van Helopeltis," De Thee, Buitenzorg, 1926, Vol. VII, No. 4, pp. 153-155.

 "Die Theekultur in Niederländisch-Indien und ihre tierischen Schädlinge." Verh. Naturf. Ges. Basel, 1927, Bd. 38, pp. 341-354.

 "Zur welteren Kenntnis des Capsidenparasiten Euphorus helopeltidis Ferriere." Zeitschr. f. angew. Entomol., Berlin, 1928, Bd. XIV, H. 1, pp. 86-90.

- "Bestuivingsproef vanuit een vliegtuig op de theeonderneming Malabar," Archief v. d. Theecultuur, Buitenzorg, 1928, 2e Jrg., pp. 1-9.

 "De plagen van de thee in Nederlandsch-Indie [Java en Sumatra] en hare bestrijding." Archief v. d. Theecultuur, Buitenzorg, 1929, 3e Jrg., No. 1, pp. 1-60.

 and Steiner, G., "Mermithiden als parasieten van Helopeltis," Meded. Proefst. v. Thee, Buitenzorg, 1925, No. XCIV, pp. 1-16.
- Duitenzorg, 1925, No. XCIV, pp. 1-16.

 Mérat, Dr., Mémoire sur la possibilité de cultiver le thé en pleine terre et en grand en France, avec des observations sur la préparation de ses feuilles, Paris, 1844.

 Michaelson, M. B., and Schröder, Ludwig H. O., Der teehandel, Kriegsernährungsamt, Berlin, 1918.

- Milburn, William, Oriental commerce, London, 1813, Vol. II.

 Miller, H. Eric, "L'avenir de l'industrie du thé,"
 Revue Economique Internationale, Bruxelles, 1924, Annee 16, Vol. IV, pp. 333-347.

 Miramon-Fargues, "Les districts de thé à Ceylan," Correspondant, Paris, 1903, Vol. CCXI, pp. 1202-1211.

- pp. 1202-1211.

 Mitchell, George Frederick, "Home-grown tea,"
 U.S. Dept. of Agric., Farmers' Bull. No. 31,
 Washington, 1907.

 "The cultivation and manufacture of tea in
 the United States," U.S. Dept. of Agric., Bureau of Plant Industry, Bull. No. 234, Washington, 1912.

 "Tea law of the United States," Handelingen
 van het Thee-Congres, Weltevreden, 1924, pp.
 158-161.

- van het Thee-Congres, Weltevreden, 1924, pp. 158-161.

 Mitchell, Helen S., "Vitamin C in green tea," Tea & Coffee Trade Journal, New York, May 1929, Vol. LVI, No. 5, pp. 756-60.

 Miura, Masataro, "On the effects of the temperature of water applied for the infusion of Japanese green tea upon its anti-scorbutic potency," Abstracts from Rikwagaku-kenkyu-jo Iho [The Bulletin of the Institute of Physical and Chemical Research], Tokyo, June 1929, Vol. VIII, No. 6.

 and Okabe, Nagayo, "A study on the anti-scorbutic potency of commercially sterilized milk and Japanese green tea," Publ. Assoc. Tea Merchants, Tokyo, Feb. 1926.

 and Tsujimura, Michiyo, "Vitamin C in green tea," Proc. Japanese Assoc. of Agric. Chem., 1924 and 1926.

 Mobson, R. R., Forty-five years' history of the tea trade, London, 1881.

 "Moisture changes during the manufacture of black tea," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1928, Pt. II, pp. 90-98.

 Moisture content of made tea, The," D. I. Evans, Tea Quarterly Talawakelle Ceylon May 1932

- Moisture content of made tea, The," D. I. Evans, Tea Quarterly, Talawakelle, Ceylon, May 1932, Vol. V, Pt. II, pp. 54-58.
- Molinaris, Simon de, Ambrosia Asiatica, seu de virtute et usu herbæ the, sive cia, Genuæ, 1672.
- Money, Edward, The cultivation and manufac-ture of tea, Prize [India, 1872] essay, London, 1878, 3d ed.

 The tea controversy: Indian versus Chinese teas, London, 1884.
- Monographie du thé, J. G. Houssaye, Paris, 1843. Monographie du thé, J. G. Houssaye, Paris, 1843.
 Montuori, A., and Pollitzer, R., "Su di alcum mezzi chimici di defesa contro il freddo," Atti Della Reale Accademia del Lincei, Rome, 1916, Vol. XXIV, pp. 543-548.
 Moore, Ch. van der, "Aanteekeningen betreffende de theecultuur," Ind. Opmerker, 1885.
 — Assam-thee: haar cultuur en bereiding op Java, Batavia-'s Gravenhage, 1898.
 Moppet, H. J., Tea manufacture: its theory and practice, Colombo, 1922; 1931.

- Morisset, Philibert, Ergo thea Chinensium menti confert, Paris, 1648. Dissertation on tea, Paris, 1668.
- Morooka, T., Tea drinking habit proved effective in health improvement, Tokyo, 1933.
- Morse, H. B., The chronicles of the East India Company trading to China 1635-1834, Cam-bridge, Mass., 1926, 5 vols.
- Motteux, Pierre Antoine, A poem on tea, London,

- Mowbray, E. G. B. de, Notes on tea manufacture, Colombo, 1934.
- Mulder, "Chemische Untersuchung des chinesis-chen und javanischen Thees," Annalen d. Physik u. Chemie, Leipzig, 1838, Vol. XLIII, Physik u. C pp. 161-180.
- Müller, J. H., "Electrische luchtdrogers." Han-delingen van het Thee-Congres, Weltevreden, 1924, pp. 102-109.
- Munday [Mundy], Henry, De parergis in victu et choclatu, thea, coffea, tobacco, Leyden, 1685.
- Mundt, G., Ceylon en Java: aanteekeningen van en theeplanter, Batavia, 1886.

 "'Ondergrondsche mishandeling van den thee-heester." Tijdschr. v. Nijv. en Landb. in N.I., 1995, Vol. LXXII, pp. 1-8.
- Munro, D. G., "Report on tour in Assam for 1924-25." U.P.A.S.I. Scient. Dept. Bull., Madras, 1925.

- Madras, 1925.

 Munsell, Hazel E., "Vitamin content of green tea negligible," U. S. Daily, Washington, March 8, 1930.

 and Kifer, H. B., "Green tea as a source of vitamin C." Journal Home Economics, Baltimore, 1929, Vol. XXI, pp. 514-518.

 Murlin, J. R., "Tea as an anti-scorbutic," Tea & Coffee Trade Journal, New York, Nov. 1927, Vol. LIII, No. 5, pp. 1257-1260.

 Namsulk [Klusman], J. A., De theecultuur, met Soendan. Gesprekken voor den planter. Praktische handleidung voor den theejonker, Weltevreden, 1912. tevreden, 1912.
- Nanninga, A. W., Onderzoekingen betreffende de bestanddeelen van het theeblad en de veranderingen welke deze stoffen bij de fabrikatie ondergaan, Batavia, 1901.

 "Beschouwingen over de theefabrikatie," Tijdschr. v. Nijv. en Landb. in N. I., 1902, Vols. LXIV and LXV; also 1903, Vol. LXVI.

 Invloed van den bodem op de samenstelling van het theeblad en de qualiteit der thee, Batavia, 1903-04.

 "Bemesting van theetuinen," Teysmannia, Batavia, 1904, Vol. XV, pp. 259-270 and 306-317; also in Ind. Mercuur, Amsterdam, 1907, Vol. XXX, pp. 113-114 and 134-135.

 "De scheikundige bestanddeelen van het theeblad," Ind. Mercuur, Amsterdam, 1907, Vol. XXX, pp. 149-150, 167-169, 201-202, 236-237, 283-284.

 "Theefabrikatie op Java," Cultura, 1909, p.

- Theefabrikatie op Java," Cultura, 1909, p. 269.
- 269.
 "De theecultuur op Java," Baarn, 1915.
 "De theecultuur in Nederlandsch-Indie," Amsterdam, 1916.
 Lohmann, C. E. J., and van Romburgh, P., "Negen verslagen over de onderzoekingen betreffende Java gecultiveerde theeen," 's Lands Plantentuin te Buitenzorg, Batavia, 1893-1901.
- Narrative of the conduct of the tea dealers, during the late sale of teas at the India House; by the committee of tea dealers, London, 1785.
- Natterer, W., Verfahren zur Herstellung eines teinfreien schwarzen Thees aus dem Blättern geeigneter einheimischer Pflanzen insbesondere Brombeerblättern, German patent.

 Natural history of coffee, thee, chocolate, to-bacco, anonymous, collected from the writings of the best physicians and modern travellers, London, 1682.
- Natural history of tea, coffee, etc., by Juniper Berries, an Englishman, 1683.
- Nelson, Knute, Export duty on coffee and tea, list of countries, with statistics, Washington, 1909.
- NETHERLANDS. The [Netherlands] tea trade, by the Dep. van Landbouw, Nijverheid en Handel, Leiden,

- NETHERLANDS INDIES. See Java and Sumatra.

 Netscher, H. J. Th., "Mededeelingen over de theeplant in China," Tijdschr. v. Nijv. en Landb. in N.I., 1890, Vol. XL, pp. 401-402.

 and Holle, A. A., Verslag eener reis, naar de theedistricten van Britsch-Indie, ondernomen door de heeren . . in opdracht van de Cultuurmijt. Parakan-Salak, Batavia, 1903.
- Neuhof, Wilhelm, Der Kaffee und Thee, wie deren sämmtliche Surrogate oder Ersatz- und Ergän-zungsmittel, Weimar, 1861.

- Neuville, H., "La culture du thé aux Açores," Jour. d'Agric. Trop., Paris, 1902, No. 15, pp. Jour. d' 283-284.

- 283-284.

 "La fermentation du thé," Jour. d'Agric. Trop., Paris, 1902, No. 18, pp. 363-369.

 "Les thés d'Extrème-Orient," Jour. d'Agric. Trop., Paris, 1903, No. 21, pp. 83-85.

 "La fleur de thé," Jour. d'Agric. Trop., Paris, 1903, No. 25, pp. 200-201.

 "La consommation du thé au Maroc," Jour. d'Agric. Trop., Paris, 1903, No. 26, pp. 236-237
- Technologie du thé: composition chimique de la feuille, récolte et manipulation, procédés Europeens, procédés Asiatiques, Paris, 1905 and 1926.
- Newton, C. R., "Oxydising enzymes," Inc Planting and Gardening, Calcutta, Nov.
- "The fermentation of the tea leaf," Indian Planting and Gardening, Calcutta, Dec. 19,
- 1901.

 "The new process for fermenting tea," Trocal Agriculturist, Peradeniya, Jan. 1, 1902.
- Newton, E. E., Twinings in the Strand, London, 1922.
- Niermeyer, F., "Rollerklok met pers-aanwijzing voor gesloten rollers," Alg. Landb. Weekbl. v. N.I., Bandong, 1918, Vol. III, pp. 187-188. Nieuhoff, Jean, The embassy of the Oriental Company of the United Provinces to the Emperor of China, Amsterdam, 1865.
- Nippon Chagyo shi [history of the Japan industry], Japan Central Tea Assn., To
- ogueira, A. F., Memoria sobre a cu preparação do cha, Rio de Janeiro, 1845. Nogueira. cultura e

- preparação do cha, Rio de Janeiro, 1845.

 Norris, R. V., "Some problems relating to tea,"
 Tea Quarterly, Nuwara Eliya, Aug. 1930, Vol.
 III, Pt. 3, pp. 87-93.

 "Establishment of tea seed gardens," Tea
 Quarterly, Talawakelle, Nov. 1931, Vol. IV,
 Pts. 3 and 4, pp. 98-99.

 "Cooled rollers," Tea Quarterly, Talawakelle,
 1931, Vol. 4, Pts. 3 and 4, pp. 88-91.

 "McKercher C.T.C. roller," Tea Quarterly,
 Talawakelle, Feb. 1932, Vol. V, Pt. I, pp. 27-28.

 and Eden, T., "Memorandum on soil erosion," Tea Quarterly, Nuwara Eliya, 1929.
 "Nyasaland, Tea from," Bull. Imp. Inst., London,
 Oct. 1931; Oct. 1932; Jan. and Oct. 1933; April
 1934.
- Nyasaland—cultivation report—see H. H. Mann. Nye, Gideon, "Tea and the tea trade," Parts 1-III, first published in Hunt's Merchants' magazine, New York, 1850.
 "Observations on the treatment of fungus diseases," A. C. Tunstall, I.T.A. Quar. Jour., Calcutta, 1926.
- Ode on tea, An. Prose translation of part of an ode on tea written by Kien-Long [Ch'ien Lung], 1710-1799. The Public Advertiser, Lon-don, Sat. July 14, 1770.
- Okakura Kakuzo, The book of tea, New York,
- "Old English tea pots in the collection of Colonel and Mrs. Bulwer," Mrs. Willoughby Hodgson, Connoisseur, London, July 1921, Vol. LX, No. 239, pp. 146-152.
- Olearius [Oelschläger], Adam, Beschreibung der Muscowitischen und Persischen Reise, Schles-
- wig, 1647. Travels of the ambassadors, Eng. transl. by Davies, London, 1662; 2nd ed. 1669.
- Oliver, Francis Wall, The exploitation of plants, by various writers, including "Tea-making," by S. E. Chandler, London, 1917, Chap. VIII.
- Oliver, George Watson, "The propagation of tropical fruit trees and other plants," U. S. Dept. of Agric., Bureau of Plant Industry, Bull. No. 46, Washington, 1903.
- nda, Shigenobu, "The natural physiological action of tea," Tokyo, Nov. 15, 1885, No. 175. Onda. history and Iji Shinbun,
- Onderzoekingen betreffende de bestanddeelen van het theeblad en de veranderingen welke deze stoffen bij de fabrikatie ondergaan, A. W. Nan-ninga, Batavia, 1901.
- "Oolong teas and their manufacture," Scientific

American Suppl., New York, 1906, Vol. LXI, No. 25497.

Otani, Kahel, Japanese green tea, a treasure of the world, booklet issued by the Japan Central Tea Association, Tokyo.

Ovington, John, An essay upon the nature and qualities of tea, London, 1699.

Owen, T. C., Tea planters' manual, Colombo,

- Tea planting in Ceylon, Colombo, 1891.

Page-Croft, J., A talk on tea, London, 1928.

rea pianting in Ceylon, Colombo, 1891.
Page-Croft, J., A talk on tea, London, 1928.
Pakhuismeesteren van de Thee, Memorie Boek van Pakhuismeesteren van de Thee te Amsterdam 1818-1918 en de Nederlandsche theehandel in den loop der tijden, Amsterdam, 1918.
Pan, S. L., "Decline of China's tea trade with America," China Weekly Review, Shanghai, Aug. 23, 1924, Vol. XXIX, pp. 402-408.
"Papers on soil denudation," G. D. Hope, I.T.A. publication, Calcutta, 1917.
Paske, Edward H., Tea cultivation in the Kangra district, Lahore, 1869.
Pasquier, A. du, "Belträge zur Kenntnis des Thees," Thèse de Zurich [Sciences], 1908.
Pasquier, R. du, "Renseignements sur les théiers d'Indo-Chine et leur culture," Handelingen van het Thee-Congres, Bandoeng, 1924, Weltevreden, 1924, pp. 297-302.
"Note sur le théier et sa culture au Tranninh," Bull. Econ. de l'Indo-Chine, new series, Tonkin, 1924, Vol. VI, pp. 605-619.
— Principales maladies parasitaires du théier et du Cafeier en Extreme-Orient, Hanoi, 1933.
"Remarques sur la preparation du thé," L'Agronomie Coloniale, Sept. 1934, No. 201, pp. 65-76.
Paul, B. H., and Cownley, "Chemical notes on Teau."

Paul, B. H., and Cownley, "Chemical notes on tea." Pharm. Jour. and Transac., London, 1887-88, Vol. XVIII, pp. 417-419.

"Amount of thein in tea," Pharm. Jour. and Transac., London, 1891-92, Vol. XXI, p. 61.

Paulli, Simon, A treatise on tobacco, tea, coffee, and chocolate, translation of the author's "Commentarius de abusu tabaci Americanorum veteri, et herbæ theé Asiaticorum in Europa novo," Argentorati, 1665, written originally by Simon Paulli and now translated by Dr. James, London, 1746.

Pearson, Ralph Sneyd, Note on the tea-box in-dustry in Assam, Calcutta, 1913.

Peat, S. E., Tea bug of Assam, 1873.

Pechlin, Johann Nicolaus. Theophilus bibaculus, sive de potu theae dialogus (Latin). Frankfurt, 1684.

Pekelharing, N. R., Systematisch-anatomisch onderzoek van den bouw der bladschiff in de familie der theacae, Utrecht and Groningen, 1908.

Péligot, E., "Recherches sur la composition chimique du thé, Annales de Chimie et de Physique, Paris, 1844, Vol. XI, pp. 129-150.
Pellens, A., "Über Thee Untersuchungen," Pharmaceutische Zentralhalle für Deutschland, Berlin, 1903, Vol. XLIV, pp. 605-610.
Pelletler, Eugène and Auguste, Le thé et le chocolat dans l'alimentation publique, Paris, 1861

1861.

Penny, Mrs. Fanny Emily [Farr], Fickle fortune in Ceylon, Madras, 1887.

— The tea planter, London, 1906.

PERIODICALS DEVOTED WHOLLY OR IN PART TO TEA.

Agricultural Journal of India, about six numbers annually, Calcutta.

Archief voor de theecultuur, about six numbers annually, Proefstation West Java,

bers annually, Proefstation West Java, Buitenzorg.
De Bergcultures, weekly, Algemeen Landbouw Syndicaat, Batavia.
Home and Colonial Mail, weekly, London.
Indian Tea Association Scientific Department publications, Calcutta.
Indian Trade Journal, weekly, Government of India, Calcutta.
Planters' Chronicle, weekly, United Planters' Association of Southern India, Madras.
Planters Journal and Agriculturist, fortnightly, Calcutta.

Calcutta.

Rubber & Tea Quarterly, Wm. J. & H. Thompson, London.

Spice Mill, monthly, New York.

Tea and Coffee Trade Journal, monthly, New

Tea and Conee Trade Services, York.

Tea Journal, The, monthly, Shizuoka Tea Guild, Shizuoka.

Tea Quarterly, Tea Research Institute of Ceylon, Talawakelle, Ceylon.

lon, Talawakelle, Ceylon.

Perk, M. C., "De sortatle der Assamtheeonderneming 'Gedeh." De Thee, Buitenzorg,
1921, No. 2, pp. 122-125.

Perrot, E., "Le thé en Chine et en l'Indo-Chine,"
Trav. du Lab. Matière Médicale de l'École de
Pharmacie de Paris, Paris, 1908.

— "Le thé: origine, culture, préparation, commerce," Office Nationale des Matières Premières Végétales, Paris, 1923.

— and Goris, A., "La fieur de thé," Bull. d.
Sciences Pharmacologiques," Paris, 1907, Vol.
XIV, pp. 392-396.

PRESIA [Han].

PERSIA [IRAN]. The cultivation of tea in the Caspian provinces of Persia," G. D. Hope, I.T.A. Quar. Jour., Calcutta, 1914, Pt. II, pp. 41-48.

Pests and blights of the tea plant, The, Sir George Watt, Calcutta, 1898, 2d ed. with Har-old H. Mann, Calcutta, 1903. "Pests of tea in Ceylon, Some insect,"—see J. C.

Petch, Thomas, The diseases of the tea bush,

London, 1923.

- "Cover plants." Tropical Agriculturist,
Peradeniya, 1924, Vol. LXIII, No. 6.

- "The parasitism of tea root disease fungi,"
Tea Quarterly, Nuwara Eliya, 1928, Vol. I, Pt.

Tea Quarterly, Nuwara Eliya, 1928, Vol. 1, F.. 1, pp. 10-15.

"Tea tortrix." Tea Quarterly, Nuwara Eliya, 1928, Vol. I, Pt. 1, p. 23.

"The absorption of moisture by made tea," trans. fr. J. J. B. Deuss, Tea Quarterly, Nuwara Eliya, 1928, Vol. I, Pt. 1, pp. 24-26.

"Blister blight in India," Tea Quarterly, Nuwara Eliya, 1928, Vol. I, Pt. 3, pp. 75-77.

and Light, S. S., "Diseases and pests of tea in Nyasaland" Tea Quarterly, Nuwara Eliya, 1928, Vol. I, Pt. 3, pp. 80-82.

Petit, A., and Terrat, C., "Sur le dosage de la caféine dans le thé," Jour. de Pharmacie et de Chimie, Paris, 1896, Vol. III, pp. 529-534.

Petit, Pierre, Latin poem on tea, 1685.

Pett, George Thornton, The Ceylon tea-makers hand book, Colombo, 1899.

— "Moyens d'éviter que le thé ne tourne au rouge ni au gris," Revue des Cultures Coloniales, Paris, 1900, Vol. VI, pp. 84-85.

Phelan, Thomas A. Some secrets of tea, pub. by The Nat. Tea Assoc. of the U. S. A., New York,

1905.

The book of tea secrets: being a little treatise on "the cup that cheers," New York, 1910.

Phelps, William Lyon, "Tea," Essays on Things, New York, 1930.

Philippe, E., "Die Bestimmung des Kaffeins in Thee nach dem Sublimierverfahren," Mitthellungen Lebensmitteluntersuchungen und Hygiene, Bern, 1915, Vol. VI, pp. 177-191, and 1916, Vol. VII, pp. 37-42.

Phinns Gerald Hastings. Report on tea culture

Phipps, Gerald Hastings, Report on tea culture in Japan, London, 1905.

Pierre, T., Flore forestière de la Cochin-Chine et du Cambodge, Paris, 1882-88 [?].

Piso, Gulielmo, De Indiae utriusque re naturali et medica, Amsterdam, 1658.

"Planting in new districts in Ceylon; down the Kalu-ganga and through the Kalutara tea districts," anonymous, Tropical Agriculturist, Peradeniya, 1885–86, Vol. V, pp. 848–853.

Playne, Somerset, Southern India: Its History, People, Commerce, and Industrial Resources, London, 1914-15.

Plucking experiments--see H. R. Cooper.

Pokrovsky, L. N., "Material dealing with the characteristics of foreign jats of the tea plant tested at Chakva Experimental Station," Bull., Research Institute of the Tea Industry in U.S.S.R., Tiflis, 1931, No. 2, pp. 3-33.

Poore, George Vivian, Coffee and tea; a lecture given at the Parkes Museum on Dec. 6, 1883, London, 1883.

Power, F. B., and Chesnut, V. K., "Caffein,"
Jour. Amer. Med. Soc., 1919, Vol. V, p. 1300.

— "An improved method for the quantitative de-

termination of caffein in vegetable material," Jour. Amer. Chem. Soc., Easton, 1919, Vol. XLI, pp. 1298-1306.

Practical points for tea planters, Allen Bros. & Co., Ltd., Calcutta, 1924 [?].

Prescott, A. B., "Chemistry of tea and coffee," Popular Science Monthly, New York, Vol. XX, p. 359.

p. 359.
- "Preservation and storing of green tea," Tea
Experimental Station Bulletin, Makinohara, Japan, 1923.

Prillwitz, P. M. H. H., "De invloed van zwavelbemesting op de bodemreactie en den groei van thee," Archief voor de Theecultuur, Buitenzorg, 1930, No. 2.

— "De invloed van groenbemesters op de bodemvochtigheid," De Bergcultures, Buitenzorg 1930

bodemvochtigheid," De Bergcultures, Bultenzorg, 1930.

"Het gebruik van asphaltpapier bij de theecultuur," De Bergcultures, Bultenzorg, 1931.

"Albizzia Sumatrana, als schaduwboom in theetuinen," Archief voor de Theecultuur, Bultenzorg, 1931, No. 3.

"Resultaten van eenige veldproeven bij de theecultuur," De Bergcultures, Bultenzorg, Aug. 22, 1931, No. XXXIV, pp. 924-928.

"Bemestingsproeven bij de theecultuur—L. Proeven op jongvulcanische gebergtegronden," Archief v. d. Theecultuur, Bultenzorg, Sept. 1932, No. 1.

"De invloed van den basentoestand van den grond op de ontwikkeling van de theeplant," Archief v. d. Theecultuur, Bultenzorg, Oct. 1932, No. 2/3.

Archief v. d. Theecultuur, Buitenzorg, Con. 1827, No. 2/3.

— "Pluktermen en plukmethoden," Archief v. d. Theecultuur, Buitenzorg, 1933, No. 1/2.

— "Eenige beschouwingen omtrent den invloed van den pluk op den theeheester." Archief v. d. Theecultuur, Buitenzorg, 1933, No. 1/2.

— "Beschouwingen over den theesnoel." De Bergcultures, Buitenzorg, 1934, Vol. 8, No. 35.

Prudhomme, Émile, "La production du thé dans le monde entier," L'Agriculture Pratique des Pays Chauds, Paris, 1913, pp. 403-413.

Pruning and kindred subjects, Edward Hamlin, Colombo, 1903-1913.

Pruning of tea—see H. R. Cooper and F. R.

Tubbs.

Pryce & Co., J., "Overzicht van de Java-thee prijzen te Londen en te Amsterdam gedurende de jaren 1886-1891," Tijdschr. v. Nijv. en Landb. in N. I., 1894, Vol. XLVII.

P'u-Erh tea," Kew Bull. of Misc. Inf., London, 1889, Pt. I, p. 118; and Pt. II, p. 139.

Purchas, Samuel, Purchas, his Pilgrimes, London, 1625, p. 587.

Quellmaltz, S. T., (Pr) de infuso foliorum theae, Lipsiae, 1747.

Rahusin, M. A., "Verhalten der moosbeerenpresslinge gegen gasförmige Ammonlak- und verdünte Alkalien; versuch der Bereitung eines Tee-Ersatzes," Chemiker Zeitung, Cöthen, 1922, Vol. XLVI, p. 7.

Ramos, Plinio, O Cha; legeiras notas sobre sua

Ramos, Plinio, O Cha; legeiras notas sobre sua cultura e beneficiamento, Minas Geraes, 1929.

Ramusio, Giambattista, Navigatione et viaggi, Venice, 1559, Vol. II.

Raynal, Guillaume Thomas François, L'Histoire philosophique et politique des établissements et due commerce des Européens dans les deux Indes, Amsterdam, 1770, Eng. transl. Edinburgh, 1804.

Reade, Arthur, Tea and tea drinking, London, 1884.

Rector, George, "Tea for two billion," Saturday Evening Post, Philadelphia, Aug. 4, 1934. Rees, J. Aubrey, "Story of tea," The Grocery Trade, London, 1910 and 1932, Vol. II, Chaps. 1, 2, and 4.

Rees, J. D., "Tea and taxation," Jour. East India Assoc., London, 1905, Vol. XXXVII, pp. 33-51. Reid, Charles, The planting engineer, Colombo,

Reid, Sir W. J., "Tea gardens of India," Empire Review, London, pp. 260-264.

"Remarks on the tea plant translated from Chinese authors," Chinese Repository, Canton, 1849, p. 13.

enaudot, Abbé Eusèbe, Ancient account of India and China by two Mohammedan travel-Renaudot.

lers who went to those parts in the ninth century, transl. from the Arabic, Paris, 1712; London, 1733.

London, 1733.

REFORTS, ASSOCIATION ANNUAL.

Calcutta Tea Traders' Association Yearly Report, Calcutta.

Ceylon Association in London Yearly Report, London.

Indian Tea Association (London) Yearly Report, London. Proceedings, Calcutta.

Indian Tea Planters' Association (Jalpaiguri) Annual Report, Jalpaiguri.

Planters' Association of Ceylon Year Book, Kandy, Ceylon.

South Indian Association in London Committee's Yearly Report, London.

Tea Research Institute of Ceylon Yearly Report, Kandy, Ceylon.

United Planters' Association of Southern India Executive Committee's Report, Madras.

Repplier, Agnes, To think of tea, Boston, 1932.

Executive Committee's Report, Madras.
Repplier, Agnes, To think of tea, Boston, 1932.
Revnst, A. E., "Theecultuur op kleine schaal,"
Meded. Proefst. v. Thee, Buitenzorg, 1913, No.
24, pp. 2-8.

"Het productievermogen van den theeheester,"
Meded. Proefst. v. Thee, Buitenzorg, 1915, No.
37, pp. 11-13.

"De lamtoro in onze theetuinen," Alg. Landb.
Weekbl. v. N.I., 1916, Vol. I, No. 2, pp. 10-11.

Een beknopt overzicht van thee als cultuur,
handels, en consumptieproduct, Amsterdam,
1928.

1928.

"Verbetering van de theemarkt door een rationeelen pluk," De Ind. Mercuur, Sept. 30, 1931, Vol. LIV, No. 39, pp. 839-41.

Rhodes, Father Alexander de. Voyages et missions apostoliques, Paris, 1653.

Riant, Aimé, Le café, le chocolat, le thé, Paris, 1875.

Ricci, Matteo, Anna della Cina del 1606 e 1607 del Padre M. Ricci, collected and published by Padre Nicholas Trigault, Rome, 1610.

Richards, Lenore, and Treat, Nola, Tea room recipes, a book for home makers and tea room managers, Boston, 1925.

Riche and Collin, "Falsification du thé en Chine," Jour. de Pharmacie et de Chime, Paris, 1890, Vol. XXI, pp. 6-21.

Rijks, A., "De consumptie van Chineesche thee in Ned. Indie in vergelijk met die van Java-thee, 1892-1901," Notulen Soekab. Landb. Ver., Batavia, Dec. 23, 1902, pp. 36-38.

Rings from a Chota Sahib's Pipe, by Fraser, Calcutta, 1901.

Robinson, W., The tea plant of Assam, 1841.

Rochleder, "Über die Boheasäure und Gerbsäure der Blätter von Thea bohea," Annal. d. Chemie u. Pharmacie, Heidelberg, 1847, Vol. LXIII, pp. 202-212.

Roepke, W., "De bloemknop-wants van de thee-heesters, Hyalopeplus smaragdinus Rpk.," Meded. Proefst. v. Thee, Buitenzorg, 1920, No. 67, pp. 1-10.

Röhrig, A., "Ein Beitrag zur Untersuchung des schwarzen Thees," Ztschr. f. Untersuch. d. Nahrungs u. Genussmittel, Berlin, 1904, Vol. VIII, pp. 730-734.

Romance of tea, The, The English & Scottish Joint Cooperative Wholesale Society, Ltd., Joint C London.

Romance of tea, The, Irwin-Harrisons-Whitney, Inc., New York, Philadelphia, Chicago, 1935.

Inc., New York, Philadelphia, Chicago, 1935.

Romburgh, P. van, "Over den onverzadidgen alcohol mit den aetherische olie van versch gefermenteerd theeblad," Verslag omtrent den staat van s'Land Plantentuin te Buitenzorg, Batavia, 1835-96, p. 119 and p. 168.

— "Een woord ter opwekking tot het nemen van bemestingsproeven bij de theecultuur," Notulen Soekab. Landb. Ver. Batavia, Feb. 14, 1899, pp. 12-25.

— "Studien over thee op Ceylon," Teysmannia, Batavia, 1901, Vol. XII, pp. 258-265.

— and Lohmann, C. E. J., "Onderzoekingen betreffende op Java gecultiveerde theeen." Verslag omtrent den Staat van s'Land Plantentuin te Buitenzorg, Batavia, 1894-99.

Rosherger, J. C. A. "Bestridding van bileud

Rosberger, J. C. A., "Bestrijding van hileud badjera, Setora nitens," De Thee, Buitenzorg, 1923, No. 4, pp. 47-48.

- Roselius, F., "Kaffee, Thee, Kakao in der Kriegs-wirtschaft," Beiträge zur Kriegswirtschaft,
- Rosthorn, Arthur Edler von, On the tea cultiva-tion in western Ssüch'uan, and the tea trade with Tibet via Tachienlu, London, 1895.
- Rottenhöfer, J., Der elegante wohlservirte Kaffee und Theetisch, München, 1864. Rous, Thomas Bates, An explanation of the mistaken principle on which the Commutation Act was founded, London, 1790 [?].
- John Forbes, Productive resources of India, 1840.
- "Rubber, tea, and cacao," W. A. Maclaren, The Resources of the Empire Series, London, 1924, Vol. VI.
- Vol. VI.

 RUSSIA.

 "Cultivation of tea in Trans-Caucasion Russia, The," G. D. Hope, I.T.A. Quar. Jour., Calcutta, 1914, Pt. III, pp. 77-92.

 "Russland: Theehandel im Jahre 1899/1900," Deut. Handels-Archiv, 1901, p. 26.

 "Tea growing in Russian Transcaucasus," Tea and Coffee Trade Journal, Nov. 1928, Vol. 55, No. 5, pp. 550-554.

 "Theecultuur in Rusland, De," J. van Harreveld, Econ. Stat. Ber., 1931, Vol. XVI, No. 783, p. 10.

 "Rapid progress of the Soviet tea industry," Tea and Coffee Trade Jour., New York, July, 1931, Vol. 61, No. 1, pp. 16-19.

 "Notes on Soviet Russian Tea Industry," H. M. Mann, Tea and Coffee Trade Journal, New York, April 1932, Vol. 62, No. 4.

 "The flowering and fruit bearing of the tea plant
- "The flowering and fruit bearing of the tea plant in Chakva"—see K. Bachtadze. in Chakva"
- Rutherford, H. K., Rutherford's planters' note book, Colombo, nine editions, 1887-1931.

 and Hill, John, Ceylon tea planters' note book, Colombo, 1902-03.
- Rutter, Frank Roy, "Rice and tea in Japan,"
 U. S. Bureau of Foreign and Domestic Commerce, Trade Information Bull. No. 41, Washington, 1922.
- Sacramento, F. Leandro de, Memoria economica sobre a plantção, cultura, e preparação do cha, Rio de Janeiro, 1825.
- Saint-Arroman, A., De l'action du café, du thé, et du chocolat sur la santé et de leur influence sur l'intelligence et le moral de l'homme, Bruxelles, 1845; Eng. transl. Philadelphia,
- anderson, H., "Fermentation," Indian Planting and Gardening, Calcutta, Nov. 28, 1901. "Withering and withering houses," Indian Planting and Gardening, Calcutta, Jan. 24, Sanderson.
- Satyr against tea, A, or Ovington's essay upon the nature and quality of tea... dissected and burlesqued, John Waldron, Dublin, 1733.
- Saunders, William, "Tea culture as a probable American industry," U. S. Dept. of Agric., special report No. 18, Washington, 1879.

 An experiment in tea culture; a report on the tea gardens of Dr. C. U. Shepard, Pinehurst, S. C., U. S. A., Washington, 1897.
- wamura, S., "Chemische Zusammenstellung von Theeblättern in verschiedenen Stadlen der Entwickelung," Bull. Imp. Central Agric. Ex-per. Sta. of Japan, Tokyo, 1907, Vol. I, pp. 145-147. Sawamura.
- "Investigation on the manufacture of tea," Bull. Imp. Central Agric. Exper. Sta. of Japan, Tokyo, 1914, Vol. II, No. 1, pp. 75-63.
- Scheltema, A. M. P. A., "De uitbreiding van de theecultuur in Nederlandsch-Indie," De Bergcultures, Buitenzorg, Sept. 30 and Oct. 7, 1933.
- Schiller, August, Der Chinesische Thee und seine Verfälschungen, Ansbach, 1881.
- vertaisenungen, Ansbach, 1881.

 Schilling & Co., A., Eola tea advertisements, series I, San Francisco, 1884.

 The "pure tea" question, as handled at Uncle Si's grocery, Oak Flat, San Francisco, 1884.

 A flattering tribute to the excellence of Perfection canned teas from the trade, published for the Japan tea syndicate, San Francisco, 1884.
- Schimmel et Cie., "Pour l'essence de thé," Bull. Semestriel d. Laboratoires Schimmel et Cie., Leipzig-New York, 1897, pp. 43-44; 1898, p. 51.

- Schipek, I., De thea sinensi et japonica ejusque usu diaetetico, Pragae, 1836. Schlegel, Gustave, "First introduction of tea into Holland," Toung Pao Archives, Leide, 1900, Vol. I, Ser. 2, pp. 468-472.
- Schleinkofer, Otto F., Der Tee, München, 1924.
- Schoenherr, E. W., and Firstoff, A. P., Tea tasting and its part in the tea manufacture [in Russian], Tiflis, 1931.

 Schmole, J. F., "Een bemestingsproef op Sumatra's Oostkust," De Thee, Buitenzorg, Schmole, J. F., "Een bemestingsproef op Sumatra's Oostkust," De Thee, Buitenzorg, 1925, No. 6, pp. 8-9. Schotel, G. D. J., Letterkundige bijdragen tot de geschiedenis van tabak, de koffij en de thee, 's Gravenhage, 1848.
- Schoupach, Michel, Usage du thé ordonné par le médicin de la montagne, Michel Schoupach. Précédé de la description physique de cet arbrisseau et de son usage en Chine, Langnan et Paris, 1775.
- choyer, E. A., Tea studies, series of booklets, Chicago, 1907-08, Nos. 1-8. Schoyer, E.
- Chicago, 1907-08, Nos. 1-8.

 Schulte im Hofe, A., "Die Cultur und Fabrication von Thee in British-Indien und Cevlan. mit Rücksicht auf den wirtschaftlichen Werth der Theecultur für die deutschen Kolonien," Beihefte zum Tropenpflanzer, Berlin, May, 1904.

 "Das Wesen der Tee, Kakao, und Kaffee Fermentationen," Ztschr. f. Untersuch. d. Nahrungs- u. Genussmittel, Berlin, 1914, Vol. XXVII, pp. 209-225.

 Schütt. K. E. "De snoel on Nielindoorg" De
- Schütt, K. E., "De snoei op Njalindoeng,"
 Thee, Buitenzorg, 1925, No. 6, pp. 129-130.
 Schwartzkopf, Der Tee, Halle, 1881.
- Seeman, Berethold, "Synopsis of the genera Camellia and Thea," Trans. Linnaean Soc., London, 1859, Vol. XXII, p. 337.
- Segura Lago, A., "Contribucion al estudio del te," Rev. Espec. Med., Madrid, 1914, Vol. XVII, pp. 621-625.

- pp. 621-625.

 Seicha taiyo [general method of preparing tea], Shizuoka, Japan.

 Seligman, H. J., "Tea and art," Nation, Jan. 16, 1924, No. 118, p. 68.

 Semedo, Father F. Alvarez, The history of the great and renowned monarchy of China, Rome, 1643; French transl. Paris, 1645; Eng. transl. London, 1655.

 Serière, G. de, "De Japansche theeboom," Ind. Magazijn, 1845, Vol. II, Nos. 5 and 6, pp. 119-120.

 "Mededeeling omtrent de resultaten der jongste veilingen van Java-thee," Tijdschr. v. N.I., 1864, Pt. 1, pp. 85-87.

 Shard, J. L., "The tea industry of Ceylon and

- Shard, J. L., "The tea industry of Ceylon and tea culture in India and other British posses-sions," Roy. Col. Inst. Proc., 1887-88. Shaw, C., "Remarks on the tea plant," Chinese Repository, Canton, 1849, Vol. XVIII, pp.
- 13-18.
- Shaw, W. S., The principles and practical con-siderations involved in tea manuring, Madras
- siderations involved in tea manuring, Madras [?], 1927.

 Observations on Helopeltis [tea mosquito] for South Indian tea planters, Madras, 1928.

 The tannin principles of tea, U.P.A.S.I. Tea Scient. Dept. Bull., Madras, 1930.

 "The adulteration of tea," Planters' Chronicle, Madras, Dec. 5, 1931, Vol. XXVI, No. 25, pp. 591-600; and Dec. 19, Vol. XXVI, No. 26, pp. 624-631.

 "The aroma of tea," Planters' Chronicle, Madras, Nov. 17 and Dec. 1, 1934.
- "The aroma of tea," Planters' Chronicle, Madras, Nov. 17 and Dec. 1, 1934.
 and Jones, K. B. W., "Theotannin: a contribution to the chemistry of tea," U.P.A.S.I. publication, Madras, 1932.
- Shen Nung's Pen ts'ao, China, A.D. 25-219.
- Shepard, "Vitamin B in Herald, March 10, 1922. in green tea," Duluth
- Shepard, Charles U., Special report on tea raising in South Carolina, U. S. Dept. Agric., Washington, 1893.
- washington, 1893.

 Tea culture: the experiment in South Carolina, report of U. S. Dept. Agric., Washington, 1899, No. 61.

 Pinehurst tea gardens, Summerville, S. C.,
- 1905.
- Shillington, D. F., The position of Indian tea, London, 1920, Vol. XVI, pp. 652-661.

- Shipp, H. A., The cultivation and manufacture of tea in Cachar, prize essay, Calcutta, 1865. Shiver, F. S., "A chemical study of the tea industry in South Carolina," Bull. Agric. Exper. Sta., South Carolina, 1905, No. 96.

- Short, Thomas, A dissertation upon tea, explaining its nature and properties, including a natural history of tea, London, 1730.

 —Discourses on tea, sugar, milk, made wines, etc., London, 1750, Vol. XI, No. 21.

 "Shot-hole borer of tea (Xyleborus fornicatus, Eichh.), The control of," by F. P. Jepson and C. H. Gadd, Bull. Dept. Agric., Colombo, 1925, No. 72.
- Shot-hole borer of tea; damage caused to the tea bush, E. R. Speyer, Colombo, 1922.
 Siahaija, E. L., "Een vergelijking van keprisan en schoonsnoei," De Thee, Buitenzorg, 1921, No. 2, pp. 45-48.
- SIAM. "Report Report on the cultivation of miang." The Record, Ministry of Commerce, Bankok, 1923.
- Siebold, Ph. F. von, "The culture of the tea plant in Japan," Chinese and Japanese Reposi-tory, Canton, 1832, Vol. II, pp. 54-58. "Anbau des Theestrauches und Bereitung des Thees auf Japan," Nippon, Archiv zur Beschreibung auf Japan, Leyden, 1852, Bk. V,
- Sigmond, George Gabriel, Tea: its effects, medic-
- inal and moral, London, 1839.

 The tea table companion, 1839.

 Silva, J. B., An senibus, the, quaestio medica, Paris, 1712.
- Sims, J., "Thea Chinensis var. B. Bohea tea tree," Curtis's Bot. Magaz., 1807, Vol. XXV, ' 998. tab.
- Sinclair, W. J., "Beverages: water, tea, coffee, cocoa, etc.", Health Lectures, Sanitary Assoc., Manchester, 1881, Vol. IV.
- Skrine, E. H., and Brownen, G., The tea we drink: a demand for safeguards, London, 1901.
- Slevogt, J. H., (Pr.) de thea romana et hungarica, sive silesiaca, allisque ejus succedaneis, Jena, 1721.
- Slotemaker, "De geschiedenis van de thee cultuur ter Oostkust van Sumatra," Weekbl. v. Indie, 1918, Vol. XV, pp. 468-470.
- Hande, 1918, Vol. XV, pp. 468-410.

 Slotemaker, A. C., "Ventilatie in theefabrieken," Handelingen van het Thee-congres at Bandong, 1924, Weltevreden, 1924, pp. 162-181.

 Small, W., Petch, T., and Gadd, C. H., "Rhizoctonia bataticola," Tropical Agriculturist, Peradeniya, May 1928, Vol. LXX, No. 5, pp. 342-350.
- May 1928, Vol. LXX, No. 5, pp. 342-350.

 Smith, Harold Hamel, The fermentation of cacao, with which is compared the results of experimental investigations into the fermentation, oxidation, and drying of coffee, tea, etc. for shipment, London, 1913.

 Smith, H. L., "Nature of tea infusions," The Lancet, London, 1913, Vol. I, p. 846.

 "The determination of tannin in tea," Analyst, London, 1913, Vol. XXXVIII, pp. 312-316.

 "Tea infusions and their constitutents," Pharmaceut, Zeitung, Berlin, 1913.

- Pharmaceut. Zeitung, Berlin, 1913.
- Smith, Hugh, An essay on the nerves . . . to which is added an essay on foreign teas, etc., London, 1780 [?].
- Educon, 1780 [?].

 Smith, Junius, Essays on cultivation of the tea plant in the U. S. A., New York, 1848.

 "Cultivation of the tea plant in the United States," U. S. Patent Office Report, 1849, Washington, 1850, pp. 402-404.

 Smith, J. Russell, "Tea," Industrial and Commercial Geography, New York, 1913, pp. 296-303.
- Smith, W. Harding, "The Cha-no-yu," Japanese Soc. Transac. and Proc., London, 1898, Vol. V, pp. 42-72.
- Smits, J. P., "Keprisan en schoonsnoei." Notulen Soekab. Landb. Ver., Batavia, Sept. 20, 1920, Soekab. I pp. 46-48.
- Soares, E. d'Oliveira, Verfahren zur Herstellung eines komprimierten zuckerhaltigen Tee- oder Kaffee-Extractes, a German patent, 1920-21.
- "Soil acidity and the use of lime on tea soils," P. H. Carpenter, H. R. Cooper, and C. R. Harler,

- I.T.A. Quar. Jour., Calcutta, 1925, Pt. I, pp. 1-11.
- Soltau, H., "The Chinese province of Yunnan, Proc. Roy. Geogr. Soc., London, 1881, New Proc. Roy. Geogr. Series III, p. 564.
- Some aspects of modern tea pruning, G. D. Hope and P. H. Carpenter, I.T.A. publication, Calcutta, 1914.
- Sonan, Jinhaku, Insect pests of the tea plant in Formosa, Taihoku, Formosa, 1924.
 Sornay, P. de, "Le thé," Revue Agricole de l'Ile Maurice, Port Louis, Ile Maurice, July-August, 1928, pp. 158-163.
- Southern India: its history, people, commerce, and industrial resources, Somerset Playne, London, 1914-15.
- Sparnaay, D. W. "Electrificatie van theeonder-nemingen," Handelingen van het Thee-Congres, Weltevreden, 1924, pp. 93-101.
- Spencer, Guilford Lawson, and Ewell, Ervin E.,
 "Tea, coffee, and cocoa preparations," U. S.
 Dept. Agric., Div. of Chem., Washington, 1892,
 Bull. No. 13, Vol. VII, pp. 875-1014.
 Speyer, E. R., Shot-hole borer of tea: damage
 caused to the tea bush, Colombo, 1922.
- Spon, J., De l'usage du caphé, du thé, et du chocolate, Lyon, 1671.
- "Spurious tea," Med. Times and Gaz., London, 1871, Vol. II, p. 655.
- Stables, William Gordon, Tea, the drink of pleasure and of health, London, 1883.
- Stackmann, A., "Kaukasischer Thee oder Kutaïs."
 Zischr. f. Analytische Chemie, Wiesbaden,
 1895, Vol. XXXIV, pp. 49-50.
- Stanton, A. G., "British-grown tea," Jour. Soc. Arts, London, 1904, Vol. LII, pp. 605-624.

 Staub, W., "Weitere Untersuchungen über die im fermentierenden Thee sich vorfindenden Mikroorganismen," Bull. du Jardin Bot., Buitenzorg, 1912, Ser. II, No. 5, pp. 1-56.
- Staunton, Sir George Leonard, An authentic account of an Embassy from the King of Gt. Britain to the Emperor of China, from the papers of the Earl of Macartney, London, 1797.
- Staveacre, F. W. F., Tea and tea dealing, London, 1929.
- Steinmann, A., "Over het optreden van een nieuwe luizenschimmel bij de thee (Nectria coccidophthora Zimmermann)," De Thee, Buitenzorg, 1926, No. 2, p. 49.

 "Over het optreden van de grijze dadapschimmel en andere op thee voorkomende Septobasidium-soorten," De Thee, Buitenzorg, 1926, No. 4, p. 156.

- mei en andere op thee voorschammens zepte basidium-soorten," De Thee, Buitenzorg, 1926, No. 4, p. 156.

 "De zwarte wortelschimmels van de thee," Archief voor d. Theecultuur, Buitenzorg, July, 1927, No. 1, pp. 65-72.

 "Over het verband tusschen het optreden van wortelschimmel en de zuurgraad van den grond," De Bergcultures, Buitenzorg, Sept. 1927, p. 296.

 "Over de Diplodia-wortelziekte van de thee," Archief v. d. Theecultuur, Buitenzorg, 1928, 2de Jrg., p. 59.

 Voorloopige mededeeling omtrent het optreden van Rhizoctonia bataticola op Java en Sumatra, Archief v. d. Theecultuur, Buitenzorg, 1928, 2de Jrg., p. 74.

 "Over het gebruik van chemische middelen bij de bestrijding van wortelschimmels," De Bergcultures, Buitenzorg, March 1930, p. 223.

 "Over Cassia-soorten," De Bergcultures, Buitenzorg, Oct. 1930.
- "Over Cassia-Boorten," De Bergcultures, Bulten-zorg, Oct. 1930.

 "Over een nieuwe ziekte van de dadap (Ery-thrina subumbrans) in Nederlandsch-Indie," De Bergcultures, Bultenzorg, 1931, Vol. V, No. 11. p. 282.
- 11. p. 282.

 "De hedendaagsche theecultuur in Zuid-China,"
 De Bergcultures, Batavia, Sept. 24, 1932, No. 39,
 pp. 1027-1030.
- Stevens, Patrick William Joseph, Russia; report on the cultivation of tea in the Caucasus, Gt. Brit. Foreign Office Diplomatic and Consular reports, London, 1905, Miscell. Series, No. 628.
- Stevenson, James. Treatise on tobacco, tea, cof-fee and chocolate, London, 1758.
- Stirton, J., On vegetable parasites on the tea

plant, more especially that of Assam, Glasgow, 1881.

Stockdele, F. A., Wilkins, M. L., and Horsfall, J., "Reports on the visit of the Ceylon delegation to the tea districts of North India, 1925, Tropical Agriculturist, Peradeniya, 1926, Vol. LXVI, No. 2.

LXVI, No. 2.

Stoker, T. G., Notes on the management of the tea plant, Calcutta, 1874.

Summary of the laws and regulations in force in Ceylon in respect of plant pests and diseases, anonymous, Colombo, 1921.

Sumner, John, A popular treatise on tea: its qualities and effects, Birmingham, 1863.

Sutten, G. W., "Improved system of drying green leaf," Indian Planter's Gazette, Calcutta, 1903.

Suzuki, N., "Contribution to the physiological knowledge of tea plant," Bull. Coll. Agric., Tokyo, 1901, Vol. IV, No. 4.

"On the localization of theine in the tea leaves," Bull. Coll. Agric., Tokyo, June 1901, Vol. IV, No. 4.

T..., "The possible causes of flavour in tea,"
Indian Planting and Gardening, Calcutta, Dec. 19, 1901.

Tada, Motokichi, Chagyo hitsuyo, Japan, 1875.

Takano, I., "Japan's tea industry and trade,"
 Trans-Pacific, Tokyo, 1920, Vol. II, pp. 72-75.
 Tales and songs from an Assam tea garden, Maurice P. Hanley, Calcutta and Simla, 1928.

Maurice P. Hanley, Calcutta and Simia, 1928.
Talmage, T. de Witt, Around the tea table, London, 1870.
Tammes, T., "Einige Korrelationserscheinungen bei Bastarden," Recueil d. Trav. Bot. Neerl., 1913, Vol. X, p. 69.
Tanabe, I., "Tea industry in Formosa," Handelingen van het Thee-congres, Bandong, 1924, Weltevreden, 1924.

Tanganyika-cultivation report-see H. H. Mann. Tasse à thé, La, A. Kaempfen [Henri Este], Paris, ca. 1860.

Tate, Nahum, Panacea, London, 1700.
 A poem upon tea: with a discourse on its sov'rain virtues, London, 1702.

Tatlock, R. R. and Thomson, R. T., "Analysis of tea and tea infusions," Analyst, London, 1910, Vol. XXXV, pp. 103-111.

Taylor, Thomas, "Tea and its adulterations," U. S. Dept. Agric. Report, Washington, 1889, pp. 192-195.

Taylor's maps of the following tea districts:
Darjeeling, Terai, Jalpaiguri and Dooars, Darrang, Golaghat, Jorhat, Nowgong, Sibsagar, Lakhimpur, Dibrugarh, Cachar, Sylhet, with complete index to all tea gardens, by G. Hutton Taylor, Calcutta, 1910.

ton Taylor, Calcutta, 1910.

Té, El: sus diferentes generos, especies y variedades, caracteres botanicos, cultivo y explotación, propriedades medicinales, Secretaria de Agric. y Colonización, Mexico, 1914.

Tea: a poem, Margaret Widdemer, Independent, New York, Dec. 21, 1918, No. 96, p. 381.

Tea, a poem in three cantos, London, 1743.

Tea, The, poem by the author of "The Bouquet," London, 1819.

"Tea," J. Dyer Ball, Things Chinese, London, 1904.

Tea, Edith A. Browne, London, 1912.

"Tea, a brief history," Times of Ceylon Green Book, Colombo, 1932, pp. 193-201.

Tea, an historical sketch, Robert O. Mennell, London, 1926.

Tea, a text book of tea planting and manufac-ture, David Crole, London, 1897.

Tea and politics: a comedy in Jean Crandall, Chicago, 1920. in one act, Irene

Tea and tea blending, by a member of the firm of Lewis & Co., London, 1894, 4th ed.

Tea and tea dealing, F. W. F. Staveacre, London, 1929.

Tea and tea drinking, Arthur Reade, London, 1884.

"Tea beer: a new use for tea," Tea and Coffee Trade Journal, New York, Aug. 1932, Vol. 63, No. 2, pp. 180-182.

Tea blending as a fine art, Joseph M. Walsh, Philadelphia, 1896.

Tea buying and blending, Kearley & Tonge, London, 1901,

"Tea caddies," Olive Milne Rae, Connoisseur, London, 1906, Vol. XV, pp. 218-224.

"Tea caddles," Edwin Foley, The Book of Decorative Furniture, London, 1910-11.
"Tea caddles," G. M. Vallois, Antiques and Curios, New York, 1912, pp. 103-110.
"Tea caddles, Notes on," M. M. Wilson, House Beautiful, New York, Oct. 1913, Vol. XXXIV, p. 143. p. 143.

"Tea caddies, Collection of," R. L. Ames, American Home, New York, Aug. 1914, Vol. XI, pp. can Hon 278-281.

"Tea caddies, Old English quaint and beautiful," G. C. Rothery, Arts and Decorations, York, Aug. 1927, Vol. XXVII, pp. 56-57.

"Tea caddies, Old English," G. B. Hughes, House Beautiful, New York, Sept. 1928, Vol. LXIV, p. 261.

"Tea Fea ceremony," Chinese Repository, Canton, 1849, Vol. XVIII, p. 169.

"Tea chest manufacture in India," Scientific American, New York, April 27, 1918, No. 118,

"Tea cider," C. H. Gadd, Tea Quarterly, Tala-wakelle, Ceylon, Feb. 1933, Vol. VI, Pt. I, pp. 48-53.

"Tea, coffee, wines, etc., in the U. S. since 1870, Consumption of," U. S. Dept. Agric. Yearbook, Washington, 1895-98.

Tea cultivation in Southern India and Ceylon. Brace, 1880.

"Tea culturation and manufacture in Assam from the seed to the cup," by an Assam planter in collaboration with the most successful planters in the Northeastern districts, Indian Planters' Gazette, Calcutta, Jan. 5, 1924.

"Tea culture in the United States, On the practicability of the," U. S. Patent Office Report 1857, Washington, 1858, pp. 166-181.

"Tea culture in the United States," U. S. Dept. Agric. Report 1869, Washington, 1870, pp. 235-242.

Teacup fortune-telling, Minetta, Philadelphia,

Teacup reading and the art of fortune-telling by tea leaves, by a Highland Seer, Toronto, 1920.

Tea cyclopaedia, The, a volume of articles on tea reprinted from the Indian Tea Gazette, Calcutta, 1881, London, 1882.

Tea drinking: a fragment in verse. Part of some work, title unknown, Dublin, 1752.

Tea for six, a comedy, Walton Butterfield, Mount Morris, 1926.

Tea for three: an angle on the triangle, Roi Cooper Megrue, Boston, 1924. Tea from China, short sea tales, Frederick William Wallace, London, 1927.

Tea from grower to consumer, A. Ibbetson, London, Bath and New York, 1910 and 1926.

"Tea from the Caucasus," L'Agronomie Coloniale, Paris, Jan.-Feb., 1919, new series, Vol. III, No. 22, pp. 125-216.

Tea garden wagtails, anonymous, Calcutta, 1900. "Tea growing past and present, 1830-1922," overdruk uit het Nederlandsch Indisch Rubber en Thee, in three parts: Feb. 1, 1923; Feb. 15, 1923; and Mar. 1, 1923.

Tea hints for retailers, John Henry Blake, Denver, 1903.

"Tea houses," a story, J. Hergeshelmer, Saturday Evening Post, Philadelphia, March 4, 1922, Vol. CXCIV, pp. 8-9.

"Tea in English literature," Russell E. Smith, Tea and Coffee Trade Journal, New York, Mar. 1920, Vol. XXXVIII, No. 3.

Tea in a nutshell, William H. Ukers, New York,

Tea in prose and poetry, John Patrick Donovan, London, 1929.

"Tea in the novels," Carisabel, Current Litera-ture, London, May 1901, Vol. XXX, p. 621.

- "Tea intoxication," M. A. Starr, Med. Rec., New York, 1921, Vol. XCIX, pp. 463-465.
- "Tea: its cultivation, manufacture and merce," S. E. Chandler and John McBull. Imp. Inst., London, 1913, Vol. I com-McEwan,
- Tea: its early history and the three American tea parties. Katherine Raynolds McCormick, Baltimore, 1914.
- Tea: its history and mystery, Jos. M. Walsh, Philadelphia, 1892.
- Tea: its mystery and history, Samuel Phillips Day, London, 1878.
- Tea: its mythical and physical history, John J. McNamara, pub. by Grand Union Tea Co., Brooklyn, N. Y., 1921.
- Tea: its origin, cultivation, manufacture and use, I. L. Hauser, Chicago and New York,
- Tea leaves, Francis Samuel Drake, Boston, 1884. Tea leaves, Francis Samuel Drake, Boston, 1884. "Tea leaves, The," a story, J. P. Marquand, Saturday Evening Post, Philadelphia, May 8, 1926, Vol. CXCVIII, pp. 18-19. Tea machinery and tea factories, Alexander James Wallis-Tayler, London, 1900. Tea manual for beginners, A, J. W. S., Colombo, 1909.

- Tea manufacture: its theory and practice, H. J. Moppet, Colombo, 1922; 1931.
- Tea manufacture, Notes on, E. G. B. Mowbray, Colombo, 1934.
- "Tea master of Kyoto, The old," Antoinet Rotan Peterson, Asia, New York, Jan. 1920. Antoinette
- Tea planters' compendium, Planters' Stores & Agency Co., Ltd., Calcutta, 1895.
 Tea planter's life in Assam, A, George M. Barker, Calcutta, 1884.
- Tea planter's vade mecum, The: articles, correspondence and information regarding tea, tea blight, cultivation and manufacture, etc., Calcutta, 1885; London, 1886; Colombo, 1891.

 Tea planting in Ceylon, E. C. Elliott and F. J. Whitehead, Colombo, 1926 and 1931.
- "Tea planting in Kenya," Tropical Agriculture, Jan. 1925, Vol. LXIV, pp. 8-12.
- Tea planting prospects in the south-western Highlands of Tanganyika, M. F. Bell, pub. by Dept. Agric., Dar Es Salaam, Tanganyika Territory, East Africa.
- "Tea production in Northeast India," P. H. Carpenter, Agric. Jour. of India, Calcutta, 1928, Vol. XXIII, Pts. 1, 2, and 4, pp. 5-15, 156-165, and 256.
- Tea purchaser's guide, London, 1785.
- Tea Report, Imperial Economic Committee, London, 1931.
- Tea room and cafeteria management, Ralph Nelson Elliott, Boston, 1926.
- Tea room business, J. Ware, Jour. Home Economics, Baltimore, Oct. 1924, Vol. XVI, pp. nomics, 565-569.
- Tea selection—see C. P. Cohen Stuart and S. J. Wellensiek.
- Wellensiek.

 "Tea sets of the Georgian period," Edward Wenham, International Studio, New York, Oct. 1928, Vol. XCI, pp. 24-29.

 "Tea ships: a poem," Thomas J. Murray, Nation, N. Y., April 5, 1919, No. 108, p. 502.

 "Teas of the nations," Planters' Journal & Agriculturist, Calcutta, May 1, 1928.

- Tea shop in Limehouse, A, short stories, Thomas Burke, Boston, 1931.
- Tea studies, E. A. Schoyer, series of booklets, Chicago, 1907-08, Nos. 1-8.
- "Tea table: a poem," Hartley Coleridge, Fraser, No. 55, p. 113.

- Tea table dialogues between a governess and Mary Sensible, London, 1796.

 Tea table miscellany, The, A. Ramsay, songs, Scotish and English, Glasgow, 1875.

 Tea talks, J. C. Whitney Co., Chicago and New York, 1919-25, Nos. 1-12.
- "Tea tannin and cup quality," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1932, Pt. III, pp. 101-119.

- "Tea tasters and the healthfulness of their pursuit," C. L. Dana, Med. Rec., New York, 1880, Vol. XVII, pp. 85-87.
- "Tea tasters' terms," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1932, Pt. II, pp. 78-94.
- Tea tasting and its part in the tea manufacture, E. W. Schoenherr and A. P. Firstoff, Tiflis, 1931.
- Tea testing, the Tea Exper. Sta. Bull., Makinohara, 1923.
- Tea: the drink of pleasure and health, William Gordon Stables, London, 1883.
- Tea tortrix—see C. B. Redman King.
 Tebb, W. S., Tea and the effects of tea drinking,
 London, 1905.
- Technologie du thé, H. Neuville, Paris, 1905 and
- Tee, Der, by Otto F. Schleinkofer, München, 1924. Tempany, H. A., and Curtler, E. H., "Tea Cultivation in the Highlands of Malaya," Tropical Agriculturist, Peradeniya, Ceylon, Dec. 1933, Vol. LXXXI, No. 6, pp. 366-371.
- Ten Rhyne [Rhijne], Wilhelmi, "Excerpta ex observationibus suis Japonicis physicis, etc., de fruitice thee," in J. Breynii Exoticarum Aliarumque Minus Cognitarum Plantarum Centuria Prima, Gedani, 1678.
- Texeira, Pedro, An account of the Kings of Persia and Ormuz, first written in Spanish, 1610; Eng. transl., 1715.

 Thatcher, Benjamin Bussey, traits of the teaparty: being a memoir of George R. T. Hewes, New York, 1835.
- Thé, Le, Les Monographies de la Depeche Coloniale, Paris, 1926, No. 3.
- The et le chocolat dans l'alimentation publique, Le, E. and A. Pelletier, Paris, 1861.
- Thé, Le, V. Boutilly, Paris, 1898.
- Thee-congres met Tentoonstelling, Ban 1924, proceedings of the Tea Congress, tevreden, 1924. Bandong,
- Theecultuur in Nederlandsch-Indie, De, A. W. Nanninga, Amsterdam, 1916.
- Theecultuur op Java, De, A. W. Nanninga, Baarn,
- "Thee-erzeugung und Verbrauch in den l sächlichsten Ländern der Welt," Österr. schaftspolitisches Archiv., 1901, Vol. I.
- scnartspoitusenes Archiv., 1901, Vol. I.

 "Theo tannin: a contribution to the chemistry of
 tea," W. S. Shaw and K. B. W. Jones, U. P. A. S.
 I. pub., Madras, 1932.

 Thiebault, V., "La culture du thé au Caucase,"
 Jour. d'Agric. Pratique, Paris, 1913, p. 510.

 Three ships in azure [a novel], Irvin Anthony,
 London, 1927.

- Tichomirow, W. A., "Zur frage über die Expertise von gefälschtem und gebrauchtem Thee," Pharm. Ztschr. f. Russland, St. Petersburg, 1890, Vol. XXIX.

 "Die cultur und Gewinnung des Thees auf Ceylon, Java, und in China," Pharm. Ztschr f. Russland, St. Petersburg, Vol. XXXI.
- Tillaeus, Peter C., Potus theae: quem disserta-tione medica, praeside C. von Linné, . . . pub-lico submittit examini T., Upsaliae, 1765 [?].
- Tillman, Benjamin Ryan, Import duty on tea...data relating to the growing of tea in the United States and import duty on tea; also reports from government tea inspectors... Washington, 1909.
- Tim Twisting to Dick Twining, or, A seaman to a teaman, London, 1785.
- Tirebuck, J. and I., The tea plant, its history and uses, London, 1860.
- Toohey, C., Tea cost tables showing the laid-down cost free to dock at San Francisco.
- Torgasheff. Boris P., China as a tea producer, Shanghai, 1926.
- Traitez nouveaux et curieux du café, du thé et du chocolate, Philippe Sylvestre Dufour, Lyon, 1684; The Hague, 1685 and 1693; Eng. 1685.
- Travers, John Ingram, A few words on the tea duties, London, 1853. Travers & Sons, Ltd., Joseph, A few records of an old firm, London, 1924.

Treatise on tea, A, Henry Turner, London, 1880. Treatise on the inherent qualities of the teaherb, being an account of the natural virtues of the bohea, green and imperial teas, by a gentleman of Cambridge, from Pechlinus, London 1750 don, 1750.

don, 1750.

Tregligas, F. J., "A lecture on tea," Grocer and Oil Trade Review, London, Jan. 30, 1926.

Treub, M., "Brief aan de Soekab. Landb. Ver. over voortzetting van het chemisch thee-onderzoek," Notulen Soekab. Landb. Ver., Batavia, July 14, 1896, pp. 25-28.

— "Thee van Formosa," Teysmannia, Batavia, 1900, Vol. XI, pp. 402-410.

Trifon, Ugarte, "Nouvelle méthode de dosage de la caféine dans le maté, le café, le thé, la noix de kola et le guarana." Jour. de Pharmacie et de Chimie, Paris, 1921, Vol. XXIV, pp. 387-389. 389.

rigault, Nicolas, Dve lettere annve della cina del 1610 e del 1611 scritte al M.R.P. Clavdio Acquaviva dal Padre Nicolo Trigaut, Rome, 1615, [see Ricci].

Trotzig, Ida, Cha-no-yu: Japernas Teceremoni, Stockholm, 1911.

Trimen, H., A handbook to the flora of Ceylon. London, 1893.

True, Rodney H., "Tea culture in the United States," Review of Reviews, London, September 1906, Vol. XXXIV, pp. 327-332.

— and Richtmann, W. D., "Tea culture investigations," Ann. Rep. Dept. Agric., Washington, 1903, p. 136.

Tschirch, A., Indische Heil- und Nutzpfianzen und deren Cultur, Berlin, 1892.

unu deren Cuitur, Berlin, 1892.

Tsiology: a discourse on tea. Being an account of that exotic; botanical, chymical, commercial and medical, with notices of its adulteration, the means of detection, tea making, with a brief history of the East India Company, etc., by a tea dealer, London, 1826-27.

Tsujimoto, Mitsumaru, "Japanische Teeöl," Chem. Rev. Fett- und Haz. Ind., 1908, Vol. XV, p. 224.

Tsujimura, Michiyo, and Miura, Masataro, "Vita-min C in green tea," Proc. Japanese Assoc. Agric. Chem., 1924-26.

Agric. Chem., 1924-26.

Tubbs, F. R., "Physiological aspects of pruning,"
The Tea Quarterly, Talawakelle, Ceylon, May
1931, Vol. IV, Pts. 1 and 2, pp. 40-44.

"The introduction of tea into Ceylon," Tea
Quarterly, Talawakelle, Nov. 1931, Vol. IV,
Pts. 3 and 4, pp. 108-116.

"Recovery from pruning," Tea Quarterly, Talawakelle, Feb. 1933, Vol. VI, Pt. I, pp. 11-24.

"The pruning of tea," Tea Quarterly, Talawakelle, June 1934, Vol. VII, Pt. II, pp. 75-83.

Tulpius, Nicolas, Observationes Medicae, Amsterdam, 1641, Lib. IV, Cap. LX, p. 380.

sterdam, 1641, Lib. IV, Cap. LX, p. 380.

Tunstall, Arthur C., Tea roots, I.T.A. publications, Calcutta, 1916, No. 1; and 1918, No. 1.

— A stem disease of tea caused by Nectria cinnabarina (Tode) Fr., I.T.A. publication, Calcutta, 1918, No. 3.

— "Observations on microorganisms associated with tea fermentation," I.T.A. Quar. Jour., Calcutta, 1923, Pt. IV, pp. 126-131.

— "Some notes on tea diseases caused by Corticium spp.," I.T.A. Quar. Jour., Calcutta, 1925, Pt. II, pp. 53-59.

— "Pruning in relation to disease of tea in the Surma Valley," I.T.A. Quar. Jour., Calcutta, 1926, Pt. III, pp. 103-107.

— "Observations on the treatment of fungus diseases, I.T.A. Quar. Jour., Calcutta, 1926, Pt. IV, pp. 155-169.

— "An outbreak of blister blight in the Surma Valley," I.T.A. Quar. Jour., Calcutta, 1927, Pt. I, pp. 10-15.

— "Vegetables parasites of the tea plant: the blighter" I T.A. A Communication of the surma the plant of the pla

Valley, 1.1.A. Quar. Jour., Calcutta, 1927-30.

- "Vegetables parasites of the tea plant: the blights," I.T.A. Quar. Jour., Calcutta, 1927-30.

- "Some observations on tea leaves," I.T.A. Quar. Jour., Calcutta, 1930.

- "Some observations on tea leaves," I.T.A. Quar. Jour., Calcutta, 1930, Pt. III, pp. 113-119

119.

"A note on the propagation of tea by green shoot cuttings," I.T.A. Quar. Jour., Calcutta, 1931, Pt. I, pp. 49-51.

"Heavy pruning and stem disease," I.T.A.

Quar. Jour., Calcutta, 1931, Pt. III, pp. 145-

- and Bose, "The fungus diseases of the tea leaf," I.T.A. Quar. Jour., Calcutta, 1919-22. Turner, Henry, A treatise on tea, London, 1880.

Twining, Richard, the elder, Observations on the tea and window act, and on the tea trade, London, 1785.

Remarks on the report of the East India directors, respecting the sale and prices of tea, London, 1785.

Twinings in three centuries, The: annals of a London tea house, R. Twining & Co., London, 1910.

Twinings' in the Strand, E. E. Newton, London, 1922.

Twining, Stephen H., Two hundred and twenty-five years in the Strand, London, 1931.

Ukers, William, H., "Better teas and coffees," Good Housekeeping, New York, 1911, Vol. LIII, pp. 495-498.

Ukers' tea and coffee buyers' guide, New York, 1911-35.

"All about tea in a nutshell." Ukers' Tea and Coffee Buyers' Guide, New York, 1924-35.

Little journey series of five booklets: Trip to India; Trip to Ceylon; Trip to China; Japan and Formosa; Java and Sumatra, New York, 1925-26.

"Twenty-five years of tea and coffee," Tea and Coffee Trade Journal, New York, 1926, Vol. LI, pp. 299-303.

Tea in a nutshell, New York, 1926.

What everyone should know about tea, New York, 1926.

UNITED STATES.

York, 1926.

UNITED STATES.

Courts: Circuit Court of Appeals: 2 Circuit, George H. Macy, Oliver C. Macy, George S. Clapp, T. Ridgway Macy, and Irving K. Hall, doing business as co-partners under the name of Carter, Macy & Co., complainants-appellants, against George Stewart Brown, E. C. Hay and S. B. Cooper, as general appraisers of the U. S. designated by the Secretary of the Treasury of the U. S. as the Tea Board respondents-appellees; brief for respondents-appellees, Washington, 1913 [?].

Statistics published by U. S. Departments of Agriculture and of Commerce, Washington. Statutes: A bill to prevent the importation of impure and unwholesome tea, as reported by Mr. Payne, Feb. 23, 1897, Washington, 1897.

Treasury Department. Story of the exclusion

1897.
Treasury Department. Story of the exclusion of colored tea by the Treasury Department, January 12, 1912, Washington, 1912.
Unzer, J. A., "Vom thee," Arzt, Hamburg, 1769, Vol. II, pp. 57-70.

Usage du caphé, du thé, et du chocolat, De l', Philippe Sylvestre Dufour, Lyon, 1671.

Valentijn [Valentyn], Francis, Ancient and mod-ern East Indies, Dordrecht and Amsterdam, 1724-26, Vol. V, p. 190.

Veertig jaren ervaring in de Deli-cultures, J. H. Marinus and J. J. van der Laan, Amsterdam, 1929

"Vegetable parasites of the tea plant," A. C. Tunstall, I.T.A. Quar. Jour., Calcutta, 1927, Pt. 1V, pp. 173-182.

Vegetatieve voortplanting van thee, De," A. A. M. N. Keuchenius, Meded. Proefst. v. Thee, Buitenzorg, 1923, No. 84.

Vegetative propagation of the tea plant—see T. K. Kvarazkhelia.

Velde, A. J. J. van de, "Le thé," Medécin, Brussels, 1903, Vol. XIII, p. 364. Vie privee d'autrefois, La: le café, le thé, et le chocolat, Alfred Franklin, Paris, 1893. Vilbouchevitch, J., "L'hulle de thé," Jour. d'Agric. Trop., Paris, 1901, No. 3.

Virey, L'usage du thé vert, etc., 1815.

Visscher, W. Canter, "Bestrijding Helopeltis," Alg. Landb. Weekbl. v. N.I., Bandong, 1920, Vol. V, pp. 265-267.

Vloten, O. van., "Helopeltis-bestrijding." Meded. Proefst. v. Thee, Buitenzorg, 1919, No. 64, pp.

"Voorbereidende onderzoekingen ten dienste van

- de selektie der theeplant," C. P. Cohen Stuart, Meded. Proefst. v. Thee, Buitenzorg, 1916, No. 40, pp. 1-328.
- Voûte, Robert, Korte beschouwing van den daadlyken toestand van den theehandel, zo in Europa in het algemeen, als in deze republiek in het byzonder, Amsterdam, 1792.
- in net byzonder, Amsterdam, 172.

 Vroon, L. J., "Tea crops of Suangcheng, Anhwei,"
 Rev. Intern. d. Prod. Colon., Paris, Nov. 1928,
 Vol. III, No. 35, p. 403.

 "Tea culture in Southern Rhodesia," Rhodesia
 Agric. Jour., Dec. 1928, Vol. XXV, No. 12.

 "Thee in Nyassaland," Alg. Landb. Weekbl.
 v. N. I., Bandong, Dec. 22, 1928, Vol. XIII, No.
- 26, p. 926.
- Vuuren, O. van, "The tea culture in the Nether-lands Indies," Sluyters' Monthly, 1920, Vol. I, pp. 44-53.
- Waddington, H., "Historical notes on the early days of the planting industry in Southern India," Planting Directory of S. India, Madras,
- Wade, Frank B., "Some scientific aspects of tea drinking," Proc. Indian Acad. of Science 1905, Indianapolis, 1906, pp. 35-39.
- Waldron, John, A satyr against tea, or Ovington's essay upon the nature and quality of tea . . dissected and burlesqued, Dublin, 1733.
 Waldschmidt, Wm. Ulrich, De usu et abusu theae in genere, Kiel, 1692.

- wall, Caleb Arnold, The historic Boston tea party of Dec. 16, 1773, Worcester, Mass., 1896.
 Wallich, N., "An account of a new species of a camellia growing wild at Napal," Asiatick Researches, 1820, Vol. XIII, p. 428.

 "Discovery of the genuine tea plant in Upper Assam," Jour. Asiat. Soc. of Bengal, Calcutta, 1835, Vol. IV, pp. 42-49.
- Wallis-Tayler, Alexander James, Tea machinery and tea factories, London, 1900.
 Walsh, Joseph M., "A cup of tea," containing a history of the tea plant, Philadelphia, 1884.

 Tea: its history and mystery, Philadelphia,
- Tea blending as a fine art, Philadelphia, 1896. Wanklyn, James Alfred, Tea, coffee and cocoa, London, 1874.
- Warburg, Otto, and Brand, J. van Someren, Kulturpflanzen der Weltwirtschaft, Chap. VII, "Tee," A. J. Resink, Leipzig, 1908 [?].
- Warmelo,
- "Tee," A. J. Resink, Leipzig, 1908 [7].

 "Timelo, H. van, "Een Sumatra-theecultuur,"

 Ind. Mercuur, Amsterdam, 1910, Vol. XXXIII,
 p. 643.

 "Vigna oligosperma als grondbedekker in de
 thee," De Thee, Buitenzorg, 1921, No. 2, pp.
 103-105; also in Handelingen van het TheeCongres, Weltevreden, 1924, pp. 211-213.
- Watson, H. E., Sheth, K. M., and Sudborough, "Die Extraktion des Caffeines," Jour. Ind. Inst. of Science, 1923, Vol. V, pp. 177-207. Watson, J. F. W., Cultivation and manufacture of tea in India, Calcutta, 1871.
- Watt, Sir George, Dictionary of the economic products of India, London-Calcutta, 1889-1893, Vol. II, p. 65, sub camellia; Vol. VI, p. 417, sub tea; also "Commercial products of India," being an abridgement of the preceding work, London-New York, 1908, p. 209, sub camellia
- The pests and blights of the tea plant, Cal-cutta, 1898; 2nd ed. with Harold H. Mann, cutta.
- cutta, 1898; 2nd ed. with Harold H. Mann, Calcutta, 1903.

 "Tea and the tea plant," Jour. Roy. Hortic. Soc., London, June 1907, Vol. XXXII, pp. 64-96.
 and Mann, Harold H., "The principle of tea pruning," Agric. Ledger, Vegetable Product Series No. 73, Calcutta, 1903, No. 1.
- Wedgewood, G. R., The history of the tea cup, London, 1878 [?].
- Weiss, R. F., "Zur Verwendung heimischer Theepfianzen," Therap. d. Gegenw., Berlin, 1923, Vol. LXIV, pp. 137-140.
- Wellensiek, S. J., "Verslag over de periode 1921-1930 en toekomstige ontwikkeling der thee-selectie," Archief v. d. Theecultuur, Bulten-zorg, April 1931, No. 2, pp. 100-109. "Onderzoekingen over quantitatieve theeselectie I." Archief v. d. Theecultuur, Bultenzorg, 1934, No. 1, pp. 9-37.

- "De aanleg van geselecteerde theezaadtuinen," De Bergcultures, June 24, 1933, No. 25, pp. 712-717.
- Welter, H. L., "Invloed van het drogen op de kwaliteit der thee," Meded. Proefst. v. Thee, Buitenzorg, 1909, No. 4, pp. 1-25.

 "Een nieuwe theeroller." Meded. Proefst. v. Thee, Buitenzorg, 1910, No. X, pp. 1-16.

 "Observations sur le thé," Bull. du Dép. de l'Agric aux Ind. Néerl., Batavia, 1910, No. 27, pp. 1-24.
- pp. 1-24.

 "Verdere onderzoekingen over een in theeblad voorkomend oxydeerend ferment," Meded. Proefst. v. Thee, Buitenzorg, 1911, No. 15, pp. 1-34.

 "Eene nieuwe verflensmachine," Meded.
- and Bernard, Ch.,—see Bernard.
- Wesley, John, A letter to a friend concerning tea, Bristol, 1749, London, 1825.
- West, F., "Der Nachweis von Preussischblau im Thee," Jour. Indust. and Engin. Chem., Easton, 1912, Vol. IV, p. 528. Weyrich, Rudolf, Ein Beitrag zur Chemie des Thees und Kaffees, Thése de Dorpat, 1872.

- What everyone should know about tea, William H. Ukers, New York, 1926.
 Whitaker, C. F., "The tea industry," The Official Ceylon Handbook, British Empire Exhibition at Wembley, 1924, Colombo, 1924.
- white, J. Berry, "The Indian tea industry: its rise, progress during fifty years, and prospects considered from a commercial point of view,"

 Jour. Soc. Arts, London, 1887, Vol. XXXV, p. 734.
- Whitehead, F. J., Notes on the artificial withering of tea leaf, Colombo, 1923.

 and Elliott, E. C.—see Elliott.
- Whitney Co., J. C., Tea talks, Chicago and New York, 1919-25, Nos. 1-12.
- Wiesebron, Ir., "Pneumatische theesortatie, meer speciaal theewannen," De Bergcultures, Batavia, Aug. 6, 1932, No. 37, pp. 838-840.
- Aug. 6, 1932, No. 31, pp. 838-840.

 Wight, W., "Structure and growth of the teabush," I.T.A. Quar. Jour., Calcutta, 1932, Pt. III, pp. 150-161; Pt. IV, pp. 200-217.

 Wilcox, O. W., "Chemical signs of tea quality."
 Tea & Coffee Trade Journal, New York, 1926, Vol. L, No. 1, pp. 42-46.

- Wiley, Harvey M., Beverages and their adulteration, Philadelphia, 1919, Pt. VI, pp. 148-174.
 Wilkinson's Tea Share Manual, "The Investors' Chronicle," London.
- Chronicle," London.
 Williams, S. Wells, "Description of the tea plant, etc.," Chinese Repository, Canton, 1839, Vol. VIII, pp. 132-164.

 "Chun yuen tsae cha sze; shan sheih show," a ballad on picking tea in the gardens in Springtime, Chinese Repository, Canton, 1839, Vol. VIII, pp. 195-204.

 The middle kingdom, New York, 1883, 2 vols.
- Williamson, William, "Tea: its cultivation and preparation for the market," Trans. Edinburgh Field Naturalists and Microscopical Soc., Edinburgh, 1901, Vol. 1V, pp. 263-272.
- Withering experiment, A cold—see A. H. Hall and T. Glen Dickson.
- "Withering of the tea leaf, The," C. R. Harler, I.T.A. Quar. Jour., Calcutta, 1930, Pt. IV. Wylie, Alexander, "Tea books (Chinese)," Notes on Chinese Literature, Shanghai, 1902, Vol. on Chin XXXIX.
- "Xanthin in tea and coffee." L. Williams, Tea & Coffee Trade Journal, New York, July 1928, Vol. LV, No. 1, pp. 25-27.
- Yeisai, Kitcha Yojoki [Book of tea sanitation], Kyoto [?].
- Young tea-planter's companion, Francis T. R. Deas, London, 1886.
- Zeverijn, S. W., "De toestand van de Amsterdamsche theemarkt in vergelijking met de Londensche usances," Notulen Soekab. Landb. Ver., Batavia, July 13, 1902, pp. 3-16.
- Zimmermann, A., "Die parasiten des thees." Centralbl. f. Bakteriol., Jena, 1902, Vol. VIII, Pt. 2, pp. 16-46.

The Items in This Index Refer—Unless Otherwise Specified—to the General Subject of Tea—Thea sinensis. Thus, "Adulteration" Refers to the Adulteration of Tea

Explanation of Marks: biog. biographical. \mathcal{U} . illustration. q. quoted. t. tea. Titles of publications and scientific terms are italicized.

PAGE	PAGE	PAGE
		Aluminum lining in chestsI. 292
A. & P. Stores \$\tau_1II. 263, 264 Aalst, C. J. K. vanI. 111; II.	—Handbills ill	Alvord, Clarence Walworth q I. 79
113, 115	—Newspaper	Amboyna, massacre of I. 29
Abbey & CocksII. 162	42, 47; II. 295, 296; ill.	America, qII , 497
Abbey & CocksII. 162 Abbott, A. HII. 141, 175	298, 300, 314, 318, 331	American Coffee CorpII. 263
Abbott, C. E	—PamphletsII. 315; ill. 317, 325	American Journal of Pharmacy
Abe t	PostersII. ill. 304-8, 311,	q
Aborn, Albert CII. 272	317-18, 325-29	American Journal Physiology
Aborn, BenjaminII. 272	—RadioII. 322, 323, 328, 330 —Show-cards illII. 302	q. I. 543
Aborn, Edward II. 272	-Window display ill	American Stores CompanyII. 287 American Tea Growing CoI. 214
Absolom, Edward HerbertII. 187 Absoloms, LtdII. 197	II. 316, 329	Amherst, LordI. 114, 135
Abyssinian t	Advertising, History of II. 295-331	Amoenitates Exoticarum I. 495
Account of Aliments aI. 493, 494	—America	Amoy Congou t
Account of Aliments qI. 493, 494 Account of the Island of Ceylon	—BooksII. 296-97	Amoy Oolong t I. 232
I. 174	—CeylonII. 12, 299, 303-313	Amsterdam
Account of the Kings of Persia	—China	L'Analyse chimique du thé en
and Ormuz, An, qI. 25	—CooperativeII. 327	rapport avec sa qualité q. I. 509
Accounts of India and China by	—Formosa II. 299, 303 —India II. 299, 313-26 —Japan	Analysis and Chemical Descrip-
Two Mohammedan Trav-	—Japan II 216 299-303	tion of Tea and its Adul-
elers, etc. qI. 5	— Java and Sumatra II 299 325-26	terants q
Acid, not productive of I. 559 Acidity I. 531	-InternationalII. 329	Analysis of finished teaI. 508-11
Acidity	-SamplesII. 302, 321, 326	Analyst q
Ī. 544	-SchoolsII. 321, 323	Anamalai t
Acreage	— International II 329 — Samples II 302, 321, 326 — Schools II 321, 323 Advocaat, II. II. 117	Anderson, Adam qI. 45
-British MalayaI. 454;	Advocant & Brester II. 117	Anderson, Charles PeterI. 196
II. 346	Acrated Bread Company, Ltd II. 171, 414	Anderson, G. GI. 169; II. 139 Anderson, Geo. GrayII. 190
—Burma I. 450 —Ceylon I. 173, 179, 201, 419; II. 338-39 —Formosa II. 342-43	Aeroplanes, tea in illII. 417	Anderson George Shelton. I. 196
201 419: II 338.39	African Highlands Produce Co.	Anderson, James Ferrier II. 190
-Formosa	I. 213	Anderson, S. G
-French Indo-ChinaI. 452;	African Lakes Corporation, Ltd.	Anderson, T. CI. 185
II. 344	I. 212, 457	Anderson, James Ferrier II. 190 Anderson, S. G II. 139, 172 Anderson, T. C I. 185 Anderson & Co., Ltd., Robert.
—IndiaI. 133, 143, 144, 375, 380, 386; II. 337-38	African t	11, 100
375, 380, 386; 11. 337-38	Afternoon tes, origin of II. 405	Anderson, Gallagher & CoII. 285 Andrews, Frank D
-Iran (Persia)I. 454; II. 346	Agony of the leavesI. 244	AnecdotesII. 498
—JapanI. 309, 311; II. 341-42	Agrarian ActI. 119 Agricultural and Horticultural	Anglo-American Direct Tea Trad-
— Java. I. 126, 342, 369 — Kenya. I. 239, 460; II. 345 — Natal. I. 209, 211, 238, 455; II. 344	Society of BengalI. 145	ing Co.
-NatalI. 209. 211. 238.	Agricultural and Horticultural	—JapanII. 228
455; II. 344	Society, MadrasI. 142	—FormosaII. 234 —New YorkII. 286
Netherlands Indies11. 339-40	L'Agronomie Coloniale qI. 509, 526	New York
-NyasalandI. 211, 212, 457,	Ahrens, Paul DII. 222, 227	—Canada
458; II. 345	Aitchison, W	Co., Ltd. I. 178, 189, 194, 203
—Port. E. AfricaI. 239, 459; II. 346	Aizawa, KiheiII. 219, 227 Akahori, TamasaburoII. 216	Anglo-Dutch Plantations Co. of
-Rhodesia I. 212	Akahori, Tamasaburo11. 216	JavaI. 129, 130
-Rhodesia	Alarm q	Ang-shima
1. 206, 207, 462; 11. 345	Alexander-Katy	Anhwa t (see Oonfa)
—SumatraI. 126, 132, 342 —TanganyikaII. 345	Algemeen Landbouw Syndicaat	Ankoi t
—TanganyikaII. 345	I. 122, 295, 370	Annam t
—Uganda II. 345 —World III. 333	A. V. R. O. SI. 131, 370	Annapolis Tea PartyI. 64
Act 3 and 4, William IV, c. 85	Algerian t	Annapolis Tea PartyI. 64 Annua della Cina del 1606 e
I. 75	Allen, Frank AII. 268, 276	1607 del Padre M. Ricci
Act XXI, Charles II	Allen, Stillman BII. 268, 276	q
Adams G. H	Alleyn, H. M. AI. 484, 485	Anstead, R. D 1. 171
Adams, Geoffery PowellII, 149	Alliance Tea Company of Ceylon, Ltd I. 203	Anthocyan test
Adams John 7	Allied Suppliers, LtdII. 197	Antisoporific
Adams, SamuelI. 56, 57, 58 Adams & CoII. 244 Addison, JosephI. 48 Addison Gallery of American Art	Allson, A. S	E, The q
Addison Joseph T 48	Almeida, Father LouisI. 25	Anti-Tea Duty League II. 125, 320
Addison Gallery of American Art	Alston, G. H	
I. 89	Aleton Tohn II 184	Antrobus of the Strand II. 162 Apothecaries I. 32; ill. II. 129
Adlon Hotel, Berlin IIIII. 425	Alston, Norman DouglasII. 188 Alston, RowlandII. 163, 207	ApothecariesI. 32; ill. 11, 129
Adulterants	Alston, Scott & CoI. 183, 207	Apparatus (see also Machinery) —Early Chinese ill
AdulterationII. 121	Altitudes	
Adulteration ActII. 123	—Caylon I 270 421	Appleton, B. WII. 170
Advertisements. II. ill. 296, 297, 299 —BroadsidesII. ill. 294;	—China	Appleton, Vivia B. q I. 547
295 403	-FormosaI. 270, 330	Appleton, B. W
—Car-cards ill	Ceylon	Appleton, Machin & Smiles, Ltd.
—Car-cards illII. 303, 308 —FilmsII. ill. 319; 323,	-Java	II. 170
324, 330-31	-Uganda and KenyaI. 459	Arabian t

Arbuthnot, G. C II. Arbuthnot, Keith Fraser II. Arbuthnot, Latham & Co., Ltd	135 188
Archibald, W. G	166 186 518
Argentina tI. Arlington Lord I	267
Arnold, Sir Edwin qII.	495
Arnold & AbornII.	272
Aron & Co., Inc., JII.	288
Art, tea in	-481 460
—Western pictorialII. Art collections	462
-British MuseumIIBulwerII. 474.	461 475
ClearwaterIIHunterian MuseumII.	478 462
Kyoto Municipal Museum . II.	461
—Liverpool MuseumII.	476
-Metropolitan Museum of Art	478
	466
-Victoria and Albert Museum	464
1 - 1 1 1 1 D 11 1	
Art potteries (see Pottery) Arthur, James	102
Ash in tea leafI.	433 526
Ashton, H. SI. 164, 169;	147
Asiatic Journal q	318 146
197.	235
Aso, K. q	528 197
Assam Co. Ltd. I. 141, 147-51	379
Assam Co. Ltd. I. 141, 147-51 154, 162; II. 208, Assam hybrid tea seed. I. 179,	209
Assam indigenous tea bush ill.	184 499
Assam jat	184 166
Assam Labour BoardI. Assam. Old Days in	160 156
Assam Pules of 1854I.	147 154
Assam souchongI.	147
Assam tea garden illII.	383
Assam jat	278
Associations —Amsterdam	9-51
-China	25
—IndiaI. 164, 411; II.	5
—JavaI. 122, 370; II. 17.	111
—SumatraI. 132; II.	17
Astor, John Jacob. 11. 249, 250, Astor Library	50
Atcherley & DawsonII. Atkinson, Gerald	500
Attareekhat Tea Co., Ltd.1. 161, Atwood, C. EII. 227,	169 260
Auckland, Lord,	145
—AmsterdamII. 47; ill. —CalcuttaII. ill. 2;	3.5
	10
₩. 128,	101
Ault & CoII. 211,	131 224
Ault & Co	224 195 266
Austin, G. D	224 195 266 266
Austin, Robert F II. Austin, Nichols & Co., Inc II. Australian t	224 195 266 266
Austin, Robert F II. Austin, Nichols & Co., Inc II. Australian t	224 195 266 266 504 485 233 228
Austin, G. D	224 195 266 266 504 485

Backer, C. AI.	127
Bacon, John	81
Bacteria	254 536
Bad Nauheim #1II. Badulla districtI.	425 419
Bagelen Tea and Cinchona Com-	110
Bags (see Containers)	110
Bailtsu, Yamamoto	145
Baillie & ThompsonI. Baines, JamesI.	476 95
Bakhovan W P ill	549
Bakker & Co., G. NII.	117
Baled tea	307
Balimbingan factoryI. Ball, Samuel qI.	368 1, 3
Ball tI. 228, 237, 260, Ballad of the Boston Tea Party.	307
qI. Ballantyne & Co. J. II.	58 419
Balmer, S II.	139
I, 162, 163, 169, 170,	100
Balzac, Honoré deII.	499
Bamber, M. Kelway. I. q. 134, 156, 189, 194, 333, 358;	
483, 511; q. 518, 523, 526, 528.	530
Bamboo-leafed	332
316, 322,	324
Banks, Sir Joseph I. 134; ill.	135
Bannister, Richard qI. 74 BantamI. 28	, 75 , 73
Baragora (Sylhet) Tea CoI.	558 160
Barbary tI. Barbary Sin Fairless	504
Barbers' Teas, LtdII.	162
Barham, G. TitusII.	172
Backer, C. A. I. Backhouse, H. W	489
Barlow & CoII.	138 138
Barnes, Sir EdwardI. 174,	175 556
Barnes, R. L II.	313
Barr, PeterII.	245
Barre, Col. Isaac	165
Barrow, Richard Cadbury II. 165,	174
Barroweliff M	165 209
Barry, James HewettI. 164,	141
Barry, John BoyleI. 163,	170
469; 11. 141, Barry, T. B	153
Barry & CoI. 163, 165,	164
469; II. Barry & Son, J. BII.	141 173
Bartleet, WiltonII.	152 152
Bartleet, Wilton	485
Bartlett, C. P	485 480
480,	485
Basil, C. O II. Basis for Tea Selection q. I. 6,	172
134.	156
Basket-fired tI. 234; ill. 235; 322, 324; II.	216
Basket-firing process al. I. 322,	335
BataviaI. 29; II. Batavia Commercial Association	14
11.	17
Batavia Tea Buyers' Association II. 17,	111
Bataviasche Courant qI. Bateman C. S	114 486
Bataviasche Courant qI. Bateman, C. SI. Bateman, H. FI. 165; II. Bateman, Ltd., J. & WII.	142 244

Bateman's automatic combined tea milling and stalk ex- tracting machineI. ill.	
486; 1	487 107 107 203 202 139 548 118
Beard, EliII. 252,	254
Beauchamp, W. G	254 202 225 405 258 258 258 257 91 135
Begg, H. C I. 169, 170; II. Begg, J	137 485
165, 169; II. Begg, Roberts & Co II. 16 Beith, B. D. F II. Belawan Deli II. 16 Beling, Leopold II. 282, 285,	137 33-84 105 3, 17
Bell, E. M	260 92 185 460 245
Belawan Deli	554 149 504 174 267 267 les 151 137
Bernard, Ch I. , q. 121; biog. 124; 126, 130, 357, 359, 512, 528, 529, 530,	504
Bernardini q	541 91 272 174 403
chen und Persischen Reiseq. I. Reschweing van t' Gesandeshan	494
der Nederlandsche, etc I. Best. Samuel J I. 143. 170:	31
Heuler, J	318 468 142 488
Beverages of the Chinese, qI. Bheels	380 127
Bidloo	32 113 113 464 383
Bijutsu Shuyei I. "Billy" can II. Biography of Wei Yao q. I. Bird, A. U. II. Bird, George I. 175. Bird, Henry I.	13 420 20 277
Bird, A. U	182 178 185
71, 72 Bishop, A. H	2, 85 177 140 177



"Bite and stir" boxesII. 406 Black tI. 49, 223; II. 123, 453		
Black t I 49 223 II 123 453	Book of Tea SanitationI. 8, 9	-Kaye's combination teapot II. 444
	Book of Tea SecretsII. 298	-Lowenstein's teapotII. 444
-Chemical changes during prep-	Booth-Smith, J. GII. 140	—Lumsden's teapotII. 441
Chemical changes during prep-	Dowler A D T 014	
aration	Borden, A. P I. 214	-Marzetti's automatic electric
Constituents of	Borgmann, EdwardII. 197	teapot
-Manufacture of I. 302, 317;	Bosanquet, Richard Arthur	-Morales Clockwork timerII. 443
ill. 321, 337	II. 147, 188	Obdyke's inset percolatorsII. 441
### ### ### ### ### ### ### ### #### ####	Bosanquet & Co	—Ogle's biggin
—AzoresI. 239	Bosanquet & Skrine Ltd II 147	-Olsen's teapotII. 444
D I 027 084	Bosenquet Treill & Co II 188	-Richheimer's tricolator
—BurmaI. 237, 264 —CeylonI. 200, 220, 224	Dosanquet, Italii & Co	Iticintelmer B Gricolator
—Ceylon	DOSSCHE, J	II. ill. 442; 443
ChinaI. 228-230, 254-258	Bosscha, K. A. R 1. 123, biog.	-Royle's self-pouring ill 11. 443
—Fiji Islands	125, 126; 128, 283, 363,	-Russell's combination teapot
—Fiji Islands	367. 486: a. 520. 529. 530	II. 444
11 931	Boston Post q	
Manager T. J. (1): T. 000	Become 2 con qui i i i i i i i i i i i i i i i i i i	-Tea-ball teapotsII. 441
-French Indo-ChinaI. 236	Boston Public LibraryI. 59	-TeaketII. 444
—IndiaI. 225	Boston Tea PartyI. 57; ill.	-Wadham's tea fountainII. 439
—JapanII. 215	59; 79, 93	Worsnop & Chappell's tea urn
-Java and SumatraI. 237	Botanical descriptionI. 499	II. 444
	-MicroscopicI. 505-7	Brewing methods II. 449-458; 455
-Mauritius	microscopic	Diewing methods 449.456; 455
—NyasalandI. 238, 459	Botanical Magazine, London	AfricaII, 434
—Tonkin	q1, 524	-Asiatic countriesII. 432-34
Blackmore, S. P	Botanicon Sinecum III. 2; q. 492	Australia
Blake, John Henry. II. 256, 288, 298	Botany and HistologyI. 497-507	-British IslesII. 409
Bland, Wm. & Jas	Botany Bay t	—Canada
Diante, Will. of Pas		
BlankaertI. 32	Botero, GiovanniI. 25	ChinaII. 429
Blanke, Cyrus FII. 276, 278	Botts, William 1. 68	-France
Blanke, Richard HII. 278	Bour, J. M	Germany
Blanke Tea & Coffee Co., C. F.	Bourbon t	-IrelandII. 418
II. 278	Bousfield, P. EII. 222	—Japan
	Dougland T M T 499.	
Blantyre and East Africa Ltd.	Boustead, J. MI. 482;	-NetherlandsII. 421
I. 211, 456	II. 149, 193	New Zealand
Blechynden, RichardII. 283,	Boustead, R. C. I. 489; II. 149, 193	—RussiaII. 427
309, 315, 321	Boustead BrosII. 149, 193	—TibetII. 432; ill. 433
Bleecker, RussellII. 234, 256,	Bowen, Frank C	—U. SI. 49; II. 423
Dicecker, 1848861111. 204, 200,	Dowen O W II 999	Brewster & Company, Inc II. 107
269, 285, 289	Bowen, O. WII. 288	
Bleecker, T. BacheII. 282 Bleecker & Simmons, IncII. 282	Bowers, Dan	Breynius, Jacob
Bleecker & Simmons, IncII. 282	Bowie, William TaitI. 211	Bricket, RII. 463, 464 Brick teaI. 223, 228, 233, 259, 294, 305; II. 26, 55
BlendingII. 59-63, 121	Bowl	Brick tea I. 223, 228, 233.
Combinations II 60.62	-Mode of holding illII. 377	259 294 305 II 26 55
—CombinationsII. 60-62 —CompetitionsII. ill. 92; 93	Boycott	—ChinaII. 337
-Competitions	David Tamas a II 407	Tadia T 400
—Mechanics of	Boyd, James q. II. 497 Boyd, Thomas Deas III. 233 Boyd, Thomas Morgan II. 233 Boyd & Co. III. 233	—IndiaI. 402 —Press illII. 97 —RussiaI. 305; II. 96; ill. 98 —Tibet I 306; II. 26 98
—RetailII. 91	Boyd, Thomas Deas	Press ut
-To suit the waterII. 59	Boyd, Thomas MorganII. 233	RussiaI. 305; II. 96; ill. 98
-WholesaleII. 58-9, 132	Boyd & Co	—TibetI. 306; II. 26, 95
Blending machinery (see under	Boylston, ZabdielI. 49; II. 297 Brady, John S	
	Drade John Q II 267	Drindler I H II 190
Machinery)	Drauy, Julii G	Delayer Main Mr. 17
Blends, all countriesI. 63-65;	Drady, Dr. Micholas V 11. 400	Bringley, Major W. H
II. 453-54	Brady, William qI. 557 Brahmaputra Tea CoI. 157	Brinker, M. F
Bley, G. F. J	Brahmaputra Tea Co	Brinkley, Capt. F. q 1. 494; 11. 214
Blights (see Diseases)	Brahmaputra Valley 1. 380	Britannia Engineering CoI. 488
Bliss, George Cecil	Braid, Tuck & Co., LtdII. 292	Britannia Iron WorksI. 157
	Brain-fag, cure for	
Blister blight (see Diseases)	Drain-lag, cure for	British Chamber of Commerce
Blodgett, AlbroII. 277	Brandenstein, Max JII. 225, 273, 276	for the N. E. I
Blodgett-Beckley CoII. 277	273, 276	British Deli & Langkat Tobacco
Blokzul, MaxII. 469	Brands (see Packet Tea Brands)	Co., LtdI. 130; II. 112
Blue Mountain t I. 267, 504	Bransten, EdwardII. 53, 225,	British free trade
	273, 280	Dritish free trade
Blue Peter, The qI. 101, 103, 106		British in Tea, History of
Blue Ribbon, LtdII. 292	Brash, ThomasII. 189	II. 121-34
Blume Dr C L I 110 114	Brash, W. R. AII. 189	II. 121-34
Blume Dr C L I 110 114	Brash, W. R. AII. 189 Brash BrothersII. 189	II. 121-34 British MuseumI. 80-81; II. 461
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tee Experts II # 53: 279	Brash, W. R. AII. 189 Brash BrothersII. 189 Braund. H. J. OI. 126:	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tee Experts II # 53: 279	Brash, W. R. AII. 189 Brash BrothersII. 189 Braund. H. J. OI. 126:	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tee Experts II # 53: 279	Brash, W. R. A II. 189 Brash Brothers II. 189 Braund, H. J. O I. 126; II. 17, 111	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tee Experts II # 53: 279	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; II. 17, 111 Brazilian t. I. 502, 504	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts II. 42, 53; 279 Boardman, Lot. II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William	Brash, W. R. A	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex I. q. 539; 540; q. 544, 545
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts II. 42, 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William II. 257	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts II. 42, 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William II. 257	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34 British Museum I. 80-81; II. 461 British North Borneo Company British Pharmaceutical Codex I. q. 539; 540; q. 544, 545 British Tea Merchants II. 155-97 Broadbent, Humphreyq. I. 46;
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William II. 257 Bodhidharma (see Daruma)	Brash, W. R. A	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. & 53; 279 Boardman, Lot II. 253 Boardman, William II. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend 7	Brash, W. R. A	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403 Brock, Lt. Col. C. HI. 171
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William II. 257 Bodhidharma (see Daruma) Bodhidharma Legend 7 Boedjangs I. 116	Brash, W. R. A. II. 189 Branh Brothers. II. 189 Braund, H. J. O. I. 126; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex. I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403 Brock, Lt. Col. C. HI. 171 Broken leafI. 322, 323
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts II. & 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sona Co., William II. 257 Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory & 11.	Brash, W. R. A	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex. I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403 Brock, Lt. Col. C. HI. 171 Broken leafI. 322, 323
Blume, Dr. C. L	Brash, W. R. A. II. 189 Branh Brothers. II. 189 Braund, H. J. O. I. 126; Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 "Breaks" I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific conclusions I. 551	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex. I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403 Brock, Lt. Col. C. HI. 171 Broken leafI. 322, 323 Broken orange pekoe \$U.\$ I. 225,
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William II. 257 Bodhidharma (see Daruma) Bodhidharma Legend	Brash, W. R. A	II. 121-34 British Museum I. 80-81; II. 461 British North Borneo Company British Pharmaceutical Codex I. q. 539; 540; q. 544, 545 British Tea Merchants II. 155-97 Broadbent, Humphrey q. I. 46; II. 296, 403 Brock, Lt. Col. C. H I. 171 Broken leaf II. 322, 323 Broken orange pekoe Ul. II. 225, 226, 237
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts II. & 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sona Co., William II. 257 Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory & II. 441 Bogle, George I. 134 Bogle, George I. 134 Bogue Forts I. 75, 76	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 226; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex. I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403 Brock, Lt. Col. C. HI. 171 Broken leafI. 322, 323 Broken orange pekoe ül. I. 225, 227 Brokers
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts II. & 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sona Co., William II. 257 Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory & II. 441 Bogle, George I. 134 Bogle, George I. 134 Bogue Forts I. 75, 76	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 226; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 252, 257 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 226; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34 British MuseumI. 80-81; II. 461 British North Borneo Company I. 216 British Pharmaceutical Codex. I. q. 539; 540; q. 544, 545 British Tea MerchantsII. 155-97 Broadbent, Humphreyq. I. 46; II. 296, 403 Brock, Lt. Col. C. HI. 171 Broken leafI. 322, 323 Broken orange pekoe ül. I. 225, 227 Brokers
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253 Boardman, William II. 252, 257 Boardman, William III. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. III. 278 Bohea Hills. I. 6, 11	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 26; Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Bodhidharma (see Daruma) Bodhidharma Legend 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts	Brash, W. R. A	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 344 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea L I. 29, 49, 73, 499, 501	Brash, W. R. A. II. 189 Branh Brothers. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1399 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 400, 401; II. 99 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Scientific. II. 449-52 — Scientific conclusions. I. 551 Brewing devices (see also Teapots) II. 436-48 — Adkins and Bromwich's. II. 444 — "Anti-Tannic" tea infuser. II. 441 — Bachelder's "London Tea Bob". II. 441	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman, William II. 257 Boardman & Sons Co., William II. 257 Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts . I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill I. 468	Brash, W. R. A	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 252 Boardman, William . II. 252, 257 Boardman, William . II. 252, 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts . I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill 1 468 Bohea var I. ill. 496; 500	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. W. I. 399 "Breaks" I. 400, 401; II. 9 Brewing II. 2; q. 492 Brewing II. 456 —Quantity II. 456 —Scientific II. 449-52 —Scientific conclusions I. 551 Brewing devices (see also Teapots) —Adkins and Bromwich's II. 4436-48 —"Anti-Tannic" tea infuser II. 441 —Bachelder's "London Tea Bob" II. 441 —Barratt's teapot II. 444 —Brewster's teapot II. 444	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 344 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea L I. 29, 49, 73, 499, 501	Brash, W. R. A	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253 Boardman, William III. 252, 257 Boardman, William III. 252, 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend II. 75 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. III. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. III. 278 Bohea t. I. 29, 49, 73, 499, 501 Bohea tea manufacture ill. I. 468 Bohea var. I. ill. 496, 500 Boheic acid. I. 509	Brash, W. R. A. II. 189 Branh Brothers. II. 17, 11 Braund, H. J. O. I. 26; II. 17, 11 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific II. 449-52 — Scientific conclusions II. 551 Brewing devices (see also Teapots) II. 436-48 — Adkins and Bromwich's. II. 444 — "Anti-Tannic" tea infuser. II. 441 — Bachelder's London Tea Bob" II. 441 — Barratt's teapot II. 444 — Bristol's teapot II. 441	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William . II. 252, 257 Boardman & Sons Co., William III. 257 Boardman & Sons Co., William Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George . I. 134 Bogue Forts . I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 503 Boheniat I. 503	Brash, W. R. A. II. 189 Brand Brothers. II. 189 Braund, H. J. O. I. 126; Brazilian t. I. 502, 504 Breaking the leaf. W. I. 399 "Breaks" I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 —Quantity II. 456 —Scientific II. 449-52 —Scientific conclusions I. 551 Brewing devices (see also Teapots) II. 436-48 —Adkins and Bromwich's II. 441 —Bachelder's "London Tea Bob" II. 441 —Barratt's teapot II. 441 —Bristol's teapot II. 441 —Bristol's teapot II. 441 —Carey's muslin strainer II. 439	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend II. 257 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C. III. 278 Bohea Hills II. 6, 11 Bohea Importing Co. III. 278 Bohea L. II. 29, 49, 73, 499, 501 Bohea tea manufacture ill. II. 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 509 Bohes Hoarles Gordon. III. 188	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 26; Braund, H. J. O. I. 126; Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific conclusions I. 551 Brewing devices (see also Teapots) II. 436-48 — Adkins and Bromwich's. II. 444 — "Anti-Tannic" tea infuser. II. 441 — Bachelder's "London Bob" II. 441 — Brewater's teapot II. 441 — Brewater's teapot II. 441 — Brewater's teapot II. 441 — Carey's muslin strainer. II. 433 — Cox's counterweight II. 443	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend II. 257 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C. III. 278 Bohea Hills II. 6, 11 Bohea Importing Co. III. 278 Bohea L. II. 29, 49, 73, 499, 501 Bohea tea manufacture ill. II. 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 509 Bohes Hoarles Gordon. III. 188	Brash, W. R. A. II. 189 Brand Brothers. II. 189 Braund, H. J. O. I. 126; III. 17, 111 Brazilian t. 1. 502, 504 Breaking the leaf. W. I. 399 "Breaks". I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific conclusions I. 551 Brewing devices (see also Teapots) II. 436-48 — Adkins and Bromwich's II. 444 — "Anti-Tannic" tea infuser II. 441 — Bachelder's "London Tea Bob" II. 441 — Barratt's teapot II. 441 — Bristol's teapot II. 441 — Bristol's teapot II. 441 — Cox's counterweight II. 439 — De Belloy II. 443	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. II. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea t. I. 29, 49, 73, 499, 501 Bohea tea manufacture ill. 1, 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 503 Bois, Charles Gordon II. 188 Bois, Henry II. 145 Bois, Henry III. 145	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; Breaking the leaf.	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tes manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 503 Bois, Charles Gordon . II. 188 Bois, Charles Gordon . II. 188 Bois, Henry Gordon II. 145	Brash, W. R. A. II. 189 Brash Brothers. II. 17, 11 Braund, H. J. O. I. 26; Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449.52 — Scientific II. 449.52 — Scientific conclusions I. 551 Brewing devices (see also Teapots) II. 435.48 — Adkins and Bromwich's II. 444 — "Anti-Tannic" tea infuser II. 441 — Bachelder's "London Tea Bob" II. 441 — Brewster's teapot II. 441 — Bristol's teapot II. 441 — Car's counterweight II. 439 — Dundonald's tip-over teapot II. 441	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tes manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 503 Bois, Charles Gordon . II. 188 Bois, Charles Gordon . II. 188 Bois, Henry Gordon II. 145	Brash, W. R. A. II. 189 Brand Brothers. II. 189 Braund, H. J. O. I. 126; Breaking the leaf. 21, 139 "Breaks" I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific II. 436-48 — Adkins and Bromwich's II. 441 — Brewing "London Tea Bob" II. 441 — Barratt's teapot II. 441 — Brewster's teapot II. 441 — Bristol's teapot II. 441 — Carey's muslin strainer II. 439 — Cox's counterweight II. 439 — Dundonald's tip-over teapot II. 441 — Enright's steam pressure tea-	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tes manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 503 Bois, Charles Gordon . II. 188 Bois, Charles Gordon . II. 185 Bois, Henry Gordon II. 145	Brash, W. R. A. II. 189 Brand Brothers. II. 189 Braund, H. J. O. I. 126; Breaking the leaf. 21, 139 "Breaks" I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific II. 436-48 — Adkins and Bromwich's II. 441 — Brewing "London Tea Bob" II. 441 — Barratt's teapot II. 441 — Brewster's teapot II. 441 — Bristol's teapot II. 441 — Carey's muslin strainer II. 439 — Cox's counterweight II. 439 — Dundonald's tip-over teapot II. 441 — Enright's steam pressure tea-	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tes manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 503 Bois, Charles Gordon . II. 188 Bois, Charles Gordon . II. 185 Bois, Henry Gordon II. 145	Brash, W. R. A. II. 189 Branh Brothers. II. 17, 111 Braund, H. J. O. I. 26; Braund, H. J. O. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 Scientific. II. 449-52 —Scientific conclusions. I. 551 Brewing devices (see also Teapots) II. 436-48 —Adkins and Bromwich's. II. 441 —Bachelder's 'London Tea Bob' II. 441 —Brewater's teapot. II. 441 —Brewater's teapot. II. 441 —Bristol's teapot. II. 441 —Cor's counterweight. II. 439 —Dundonald's tip-over teapot. II. 441 —Erright's steam pressure teapot. II. 441	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot 11. 252 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend . I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogle, George I. 134 Bogue Forts . I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill I. 468 Bohea var I ill. 496; 500 Boheir acid	Brash, W. R. A. II. 189 Brand Brothers. II. 189 Braund, H. J. O. I. 126: Brazilian t. 1. 502, 504 Breaking the leaf. ill. 1, 399 'Breaking the leaf. ill. 1, 399 'Bretschneider, E. I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 443-52 — Scientific II. 446-48 — Adkins and Bromwich's II. 441 — Bachelder's 'London Tea Bob" II. 441 — Barratt's teapot II. 441 — Bristol's teapot II. 441 — Bristol's teapot II. 443 — De Belloy II. 439 — Cox's counterweight II. 439 — Dundonald's tip-over teapot II. 443 — Enright's steam pressure teapot II. 444 — Cox's counterweight II. 444 — Cox's counterweight II. 441 — Cox's counterweight II. 442	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. I. 441 Bogle, George. I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. III. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea to. II. 29, 49, 73, 499, 501 Bohea tea manufacture ill. 1, 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 503 Bois, Charles Gordon II. 188 Bois, Henry II. 145 Bois, Henry Gordon II. 145 Bois, Henry Gordon II. 145 Bois, Herbert. I. 202 Bois, Percy. II. 150 Bois Bros. & Co., Ltd. I. 202; Bois Bros. & Co., Ltd. I. 202;	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; Brazilian t. I. 502, 504 Breaking the leaf.	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. I. 441 Bogle, George. I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. III. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea to. II. 29, 49, 73, 499, 501 Bohea tea manufacture ill. 1, 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 503 Bois, Charles Gordon II. 188 Bois, Henry II. 145 Bois, Henry Gordon II. 145 Bois, Henry Gordon II. 145 Bois, Herbert. I. 202 Bois, Percy. II. 150 Bois Bros. & Co., Ltd. I. 202; Bois Bros. & Co., Ltd. I. 202;	Brash, W. R. A. II. 189 Brand Brothers. II. 189 Braund, H. J. O. I. 126; Breaund, H. J. O. I. 126; Breaking the leaf.	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot. II. 253 Boardman, William II. 252, 257 Boardman & Sons Co., William III. 257 Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. II. 441 Bogle, George II. 134 Bogue Forts. I. 75, 76 Bohack, H. C. II. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea t. I. 29, 49, 73, 499, 501 Bohea tea manufacture ill. I. 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemiant I. 503 Bois, Charles Gordon II. 188 Bois, Henry Gordon II. 145 Bois, Henry Gordon II. 145 Bois, Henry Gordon II. 145 Bois, Herbert I. 202 Bois, Percy. II. 150 Bois, Sir Stanley. II. 150, 188, 309 Bois Bros. & Co., Ltd. I. 202; Bollman, W. II. 150 Bollman, W. II. 262 Bond, F. A. III. 147	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126; Breaking the leaf. 21, 139 "Breaks" I. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 — Quantity II. 456 — Scientific II. 449-52 — Scientific II. 436-48 — Adkins and Bromwich's II. 443 — "Anti-Tannic" tea infuser II. 441 — Bachelder's "London Tea Bob" II. 441 — Barratt's teapot II. 441 — Brewster's teapot II. 441 — Bristol's teapot II. 443 — Cox's counterweight II. 439 — Cox's counterweight II. 439 — Dundonald's tip-over teapot II. 441 — Enright's steam pressure teapot II. 444 — Gibson's teapot II. 444 — Gibson's teapot II. 444 — Holland's teapot II. 441	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. II. 441 Bogle, George. II. 134 Bogue Forts. I. 75, 76 Bohack, H. C. III. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. III. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. III. 278 Bohea to. II. 29, 49, 73, 499, 501 Bohea tea manufacture ill. I. 468 Bohea var. I. ill. 496; 500 Boheic acid. II. 509 Bohemian t. I. 509 Bohemian t. I. 509 Bohemian t. I. 509 Bois, Henry Gordon III. 188 Bois, Henry Gordon III. 188 Bois, Henry Gordon III. 188 Bois, Herbert. I. 202 Bois, Percy. III. 150 Bois, Ri Stanley. II. 150, 188, 309 Bois Bros. & Co., Ltd. I. 202; Bollman, W. III. 262 Bond, F. A. III. 147 Bontekoe, Cornelis. I. 32, 33;	Brash, W. R. A. II. 189 Brash Brothers. II. 17, 111 Braund, H. J. O. I. 26; Braund, H. J. O. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 20, 492 Brewing II. 456 Scientific. II. 449-52 —Scientific. II. 449-52 —Scientific conclusions. I. 551 Brewing devices (see also Teapots) II. 435-48 —Adkins and Bromwich's. II. 441 —'Anti-Tannic' tea infuser. II. 441 —Bachelder's 'London Tea Bob' II. 441 —Brewater's teapot. II. 441 —Bristol's teapot. II. 439 —Dundonald's tip-over teapot. II. 442 —Bright's steam pressure teapot. II. 444 —Gibson's teapot. II. 444 —Gibson's teapot. II. 444 —Gloson's teapot. II. 443 —Holland's teapot. II. 441	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 252 Boardman, William II. 252, 257 Boardman & Sons Co., William Boardman & Sons Co., William II. 257 Boardman & Sons Co., William Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 509 Bohemian I. 503 Bois, Charles Gordon . II. 188 Bois, Henry Gordon . II. 145 Bois, Herbert I. 202 Bois, Fercy II. 150 Bois, Sir Stanley . II. 150, 188, 309 Bois Bros. & Co., Ltd . I. 202; Bollman, W II. 147 Bontekoe, Cornelis . I. 32, 33; II. 296	Brash, W. R. A. II. 189 Brash Brothers. II. 17, 111 Braund, H. J. O. I. 26; Braund, H. J. O. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 20, 492 Brewing II. 456 Scientific. II. 449-52 —Scientific. II. 449-52 —Scientific conclusions. I. 551 Brewing devices (see also Teapots) II. 435-48 —Adkins and Bromwich's. II. 441 —'Anti-Tannic' tea infuser. II. 441 —Bachelder's 'London Tea Bob' II. 441 —Brewater's teapot. II. 441 —Bristol's teapot. II. 439 —Dundonald's tip-over teapot. II. 442 —Bright's steam pressure teapot. II. 444 —Gibson's teapot. II. 444 —Gibson's teapot. II. 444 —Gloson's teapot. II. 443 —Holland's teapot. II. 441	II. 121-34
Blume, Dr. C. L I. 110, 114 Blyth, A. W. q I. 509 Board of Tea Experts.II. ill. 53; 279 Boardman, Lot II. 252 Boardman, William II. 252, 257 Boardman & Sons Co., William Boardman & Sons Co., William II. 257 Boardman & Sons Co., William Bodhidharma Legend I. 7 Boedjangs I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C II. 278 Bohea Hills I. 6, 11 Bohea Importing Co II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill I. 468 Bohea var I. ill. 496; 500 Boheic acid I. 509 Bohemian I. 503 Bois, Charles Gordon . II. 188 Bois, Henry Gordon . II. 145 Bois, Herbert I. 202 Bois, Fercy II. 150 Bois, Sir Stanley . II. 150, 188, 309 Bois Bros. & Co., Ltd . I. 202; Bollman, W II. 147 Bontekoe, Cornelis . I. 32, 33; II. 296	Brash, W. R. A. II. 189 Brash Brothers. II. 17, 111 Braund, H. J. O. I. 26; Braund, H. J. O. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 20, 492 Brewing II. 456 Scientific. II. 449-52 —Scientific. II. 449-52 —Scientific conclusions. I. 551 Brewing devices (see also Teapots) II. 435-48 —Adkins and Bromwich's. II. 441 —'Anti-Tannic' tea infuser. II. 441 —Bachelder's 'London Tea Bob' II. 441 —Brewater's teapot. II. 441 —Bristol's teapot. II. 439 —Dundonald's tip-over teapot. II. 442 —Bright's steam pressure teapot. II. 444 —Gibson's teapot. II. 444 —Gibson's teapot. II. 444 —Gloson's teapot. II. 443 —Holland's teapot. II. 441	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George. I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. II. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill. 1, 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 503 Bois, Charles Gordon II. 188 Bois, Henry Gordon II. 145 Bois, Henry Gordon II. 145 Bois, Herbert I. 202 Bois, Perev. II. 150 Bois, Sir Stanley. II. 150, 188, 309 Bois Bros. & Co., Ltd. I. 202; Bollman, W. II. 150 Bollman, W. II. 262 Bond, F. A. III. 147 Bontekoe, Cornelis. I. 32, 33; Bontius, Jacob. II. 32	Brash, W. R. A. II. 189 Brash Brothers. II. 17, 111 Braund, H. J. O. I. 26; Braund, H. J. O. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 1, 400, 401; II. 99 Quantity. II. 2; q. 492 Brewing II. 449-52 —Scientific. II. 449-52 —Scientific. II. 445-62 —Scientific. II. 435-48 —Adkins and Bromwich's. II. 441 —Brewing devices (see also Teapots) II. 441 —Bachelder's London Tea Bob' II. 441 —Brewiter's teapot. II. 441 —Brewiter's teapot. II. 441 —Brewiter's teapot. II. 443 —De Belloy. II. 439 —Dundonald's tip-over teapot. II. 441 —Erright's steam pressure teapot. II. 444 —Gibson's teapot. II. 444 <tr< td=""><td> II. 121-34 </td></tr<>	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George I. 134 Bogue Forts I. 75, 76 Bohack, H. C. III. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. III. 278 Bohea t. II. 29, 49, 73, 499, 501 Bohea tea manufacture ill. I. 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Boheic acid. I. 509 Boheiman t. I. 503 Bois, Charles Gordon II. 188 Bois, Henry Gordon II. 188 Bois, Henry Gordon III. 145 Bois, Henry Gordon III. 145 Bois, Henry Gordon III. 150 Bois, Percy. III. 150 Bois, Bis Ctanley. III. 150, 188, 309 Bois Bros. & Co., Ltd. I. 202: Bollman, W. II. 262 Bond, F. A. III. 147 Bontekoe, Cornelis. I. 32, 33; II. 296 Bontius, Jacob. I. 328 Bonus, Ceylon green. I. 200; II. 308	Brash, W. R. A. II. 189 Brash Brothers. II. 189 Braund, H. J. O. I. 126: III. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. il. 1, 399 "Breaks". II. 400, 401; II. 9 Bretschneider, E. I. 2; q. 492 Brewing II. 456 —Scientific II. 449.52 —Scientific conclusions II. 456.48 —Adkins and Bromwich's. II. 444 —"Anti-Tannic" tea infuser. II. 444 —"Anti-Tannic" tea infuser. II. 441 —Barratt's teapot. II. 441 —Barratt's teapot. II. 441 —Bristol's teapot. II. 441 —Carey's muslin strainer. II. 439 —Cox's counterweight. II. 443 —De Belloy. II. 439 —Dundonald's tip-over teapot. —pot. II. 441 —Enright's steam pressure teapot. II. 444 —Gibson's teapot. II. 444 —Grimwade's teapot. III. 444 —III. 443 —Johnson's "Cube' safety teapot. III. 444	II. 121-34
Blume, Dr. C. L. I. 110, 114 Blyth, A. W. q. I. 509 Board of Tea Experts. II. ill. 53; 279 Boardman, Lot. II. 253; 257 Boardman, William III. 252; 257 Boardman, William III. 252; 257 Boardman & Sons Co., William Bodhidharma (see Daruma) Bodhidharma Legend I. 7 Boedjangs. I. 116 Bogawantalawa tea factory ill. Bogle, George. I. 134 Bogue Forts. I. 75, 76 Bohack, H. C. II. 278 Bohea Hills. I. 6, 11 Bohea Importing Co. II. 278 Bohea t I. 29, 49, 73, 499, 501 Bohea tea manufacture ill. 1, 468 Bohea var. I. ill. 496; 500 Boheic acid. I. 509 Bohemian t. I. 503 Bois, Charles Gordon II. 188 Bois, Henry Gordon II. 145 Bois, Henry Gordon II. 145 Bois, Herbert I. 202 Bois, Perev. II. 150 Bois, Sir Stanley. II. 150, 188, 309 Bois Bros. & Co., Ltd. I. 202; Bollman, W. II. 150 Bollman, W. II. 262 Bond, F. A. III. 147 Bontekoe, Cornelis. I. 32, 33; Bontius, Jacob. II. 32	Brash, W. R. A. II. 189 Brash Brothers. II. 17, 111 Braund, H. J. O. I. 26; Braund, H. J. O. II. 17, 111 Brazilian t. I. 502, 504 Breaking the leaf. ill. 1, 399 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 400, 401; II. 99 'Breaks''. I. 1, 400, 401; II. 99 Quantity. II. 2; q. 492 Brewing II. 449-52 —Scientific. II. 449-52 —Scientific. II. 445-62 —Scientific. II. 435-48 —Adkins and Bromwich's. II. 441 —Brewing devices (see also Teapots) II. 441 —Bachelder's London Tea Bob' II. 441 —Brewiter's teapot. II. 441 —Brewiter's teapot. II. 441 —Brewiter's teapot. II. 443 —De Belloy. II. 439 —Dundonald's tip-over teapot. II. 441 —Erright's steam pressure teapot. II. 444 —Gibson's teapot. II. 444 <tr< td=""><td> II. 121-34 </td></tr<>	II. 121-34

Brown, W	Buyers	Capper, Frank
Brown & Co I 481 483	—AmsterdamII. 49	Capper, H. H I. 200
Brown & Co., Ltd., LewisII. 149	—Calcutta II. 6. 7	Capper, JohnI. 200: II. 303
Brown & Bell 1, 89	—ChinaII. 18, 26	Capper, JohnI. 200; II. 303 CaramelizationI. 290, 536
Brown-Lawrence & Co., Ltd. II. 242	Colombo II. 11-14	Caravan route, overland I. 32; II. 25
"Brown tip"	-Formosa	Caravan tea shop
Browne, SamuelI. 134 Brownell, Field & CoII. 278	—JapanII. 32; ill. 222	Caravan trade in RussiaII. 235
Brownell, Field & CoII. 278	-Java and SumatraII. 18	CarbohydratesI. 525-26
Browning, Mrs. qII. 490 Browning, Robert qII. 490	Buyers' homes ill. II. 14, 18, 32, 233	Carbonated tea beverage
Browning, Robert qII. 490	Buying and selling	II. 323, 458
Bruce. Cantain	-BataviaII. 15, 16	Carill, A. J. H
Bruce, C. AI. 135, 139, 140, 142, 144, 146, 149	CalcuttaII. 5	Carlyle, Dr. Alexander qII. 405
142, 144, 146, 149	—China	Carlyon, G. W
Bruce, Major Robert 135, 145	—ColomboII. 13	Carmichael, L. T II. 138, 165
Bruce, Robert HII. 231, 232	—FormosaII. 35	Carney, J. E
Brucksieker, R. FII. 274	—JapanII. 28	Carolina Tea Co. of Ceylon, Ltd.
Bryans, A	Buying forward II. 16	I. 203
Bryans, ArthurII. 125, 182,	—ČeylonII. 11	Carpenter, P. H. I. 167, biog.
199, 201	—ChinaII. 22	168; 393, 509, 510; q.
Bryer, Albert C	—Japan	517, 525, 532
Brzesowsky, A., q	—Java	Carr, Sir H. W I. 170; II. 140
Buchanan, P. R II. 182	Byatt, L. G I. 202; II. 150	Carritt, A
Buchanan BrosI. 212	Bydendyk, G II. 114, 117	Carritt, T 1. 164; 11. 142
Buchanan & Co., P. RII. 182	Byoritsu Agricultural Associa-	Carritt, Moran & Co II. 3, 142
Buckfield, R. R	tion, FormosaI. 208 Byrde, H. C. (see H. C. Bird)	Carson, R. D II. 146
Buckingham, Sir James. I. 160;	Byrde, H. C. (see H. C. Bird)	Carson & Co., Ltd I. 192,
II. 202, 298	Byron, LordII. q. 489; 500	203; II. 146
Buckinghamshire, Earl of I. 79	0 11 B TT 010	Carter, Oliver S II. 261 Carter, Macy & Co II. 218,
Buckle (historian)II. 500	Cable, E	Carter, Macy & Co 11. 218,
Buckworth, Charles Montagu. I. 199	Cable, E	219, 225, 261
Buddhist priests spread culture I. 7-8	Ut T 006 050	—Formosa1I. 233 Carter Macy Tea & Coffee Co.
Budgett Henry Hill II 160	Cachar tI. 226, 250 Cadbury, JohnII. 165, 174 Le Café, le Thé, et le Chocolat,	II. 261
Budgett, Henry Hill II. 162 Budgett & Co., Ltd., Samuel. II. 162 Bugbird, F. H	T. Coff to The state Chapter	Comboons T 50. TT 400 400
Bushind F H II 992	Is Care, to The, et is Chocount, I. 33	CartoonsI. 56; II. 498, 499 Cary, M. JI. 202 Cassatt, MaryII. 465
Buhle, H. C		Casest Mawr II 485
Buitenzorg t	Caffeine I. 241, 242, 323, 509, 510, 513, 535, 555-56	CassiaI. 174
Buker, Clarence HII. 254	-Content in tea and coffee	Carria auriculata I 174
Bulk teas, % of	I. 539-40, 551; II. 452	Cassing I 503
	-Content in tea fluffI. 295	Cassia 1.174 Cassia auriculata 1.174 Cassina 1.503 Caswell, George 1.1.275 Caswell Company, Geo. 1.275 "Cat and cheese" 1.80 Catalogues, sale 11.130 — Amsterdam 11.40
—Canada II. 70 —England II. 59	-Effects on human system	Caswell Company Geo W II 275
BulkingI. 291, 400; ill. II.	I. 539-42; II. 449	"Cat and cheese" I. 80
11, 41	-Elimination from the bodyI. 543	Catalogues, sale illII. 130
-Colombo ill	-Extraction from tea	—AmsterdamII. 48
—India I. 400	I. 521-22, 550-51	—ColomboII. 9, 10
—London ill	-In the tea leaf	-New York ill
Bulkley. Edward I. 134	-Variation in content of	Catch pits for waterI. 350, 354
Bulletin Agricultural College, Tokyo q I. 528	I. 522, 523	Catherine of BraganzaI. 43;
Tokyo q	Caffeine a Normal Stimulant. I. 556	i/l. 44: 72: II. 402, 486
Buustin au Jarain Botaniqus	Codeine Plimination of a 1 543	Catherwood, John HII. 259, 260 Catto, Sir Thomas SII. 139, 173
I. 6, 134; q. 523	Caffeine-free teas I. 543, 544, 551	Catto, Sir Thomas SII. 139, 173
Bulletin of the Imperial Insti-	Caffeine-free teas I. 543, 544, 551 Caine, W. Ralph Hall	Caucasian t
tute		Ceanothus Americanus I. 495, 503
Bulletin of the Institute of	CalcuttaII. ill. viii; 1	Centlivre, Susannah (Mrs.) q. I. 41
Physical and Chemical	Calcutta Courter q 138	Central Travancore tI. 227
Research, Tokyo q I. 549	Calcutta Port Commissioner II. 1	Centrosoyus II. 55, 236
Bulow, N	Calcutta tea firmsII. 135	Cerebration, promotesI. 554
Dund The (Hankow) 21 II 07	Calcutta tea men, 1883 ill. II. 138	Ceremonial teaI. 235, 309, 317, 324
Bund The (Shanghai) ill II 24 04	Calcutta Tea Traders' AssociationI. 169; II. 3, 5, 144	-Manufacture of
Runting Rernard I. II 106	Uon1. 109, 11. 5, 5, 144	Cess
Bunting, Bernard L II. 196 Bunting, John J II. 196, 207	Calories in tea	-CeylonI. 195, 203; II. 12,
Bunting & Co. Ltd H 196	Calumet Tea & Coffee Co II. 289 Camellia drupifera	306, 307, 310, 311
Burbidge, Sir Richard II. 170	Camellia kissa	-India I. 166. 412: II.
Burbidge, Pritchard & Bartleet	Camellia L I. 498	—IndiaI. 166, 412; II. 5, 316, 318
II. 170	Camellia Thea LinkI. 498	Cevion, an Account of the
Bureau of Chemistry Bulletin,	Cameron V. G	Osylon, an Account of the Island, Physical, Histori-
U. S. $qI.$ 540, 543	Cameron, V. G II. 245 Cameron, William I. 175, 481	cal, and Topographical,
Bureau of Home Economies. I. 549	Camomile tea	I. 173
Bureau v. d. Theepropaganda	Campbell, A II. 143	Ceylon & Indian Planters' As-
II. 51	Campbell, D. A I. 169; II. 137	sociation, Ltd I. 203
Burger, Dr. H I. 116	Campbell, J I. 96; q. 558 Campbell, J. N I. 188, 189 Campbell, Matthew II. 172	Ceylon and Its CapabilitiesI. 174
Burgon, IsaacII. 170, 174	Campbell, J. N	Ceylon and Java
Burgons, LtdII. 170	Campbell, MatthewII. 172	Ceylon Association in London
Burgundies of China teasI. 228	Campbell, WilliamI. 56 Campbell, William Dixon	I. 183, 185-89, 194, 196,
Burke, EdmundII. 163	Campbell, William Dixon	198, 200, 202.5
Burkinyoung, HenryI. 151 Burma tI. 237, 264	II. 190, 203	—List of officersII. 205 —MembersII. 203; ill. 204
Burma tea estateül. I. 452	Campbell & Co., Ltd., Alexander	Ceylon Chamber of Commerce.
Burning of the Peggy Stewart	II. 21, 106	I. 182, 193, 202;
ill. I. 64	Camphuijs, Gov. Gen. J I. 109 Canada Tea Co., Ltd II. 293	II. 10, 11, 13
Burns, C. SI. 202, 203; II. 146	Canada Tea Co., Ltd 11. 293	Ceylon Company, Ltd I. 178
Burns, Robert (poet) qII. 489	Canadian tea firmsII. 292-3	Ceylon Estates Investment Asso-
Burns, RobertI. 485	CantonII. 23-24	ciation. LtdI. 203
Burns & Sons, Inc., Jabez1. 485	-Foreign factories at	Covion Estates Proprietary As-
Busby, H. H., q	ill. I. 69, 77; II. 249	sociationI. 181, 195, 201-3, 296, 444
Rugh # I 504	Canton t I. 232, 259	201-3, 296, 444
Bush Terminal Co. II. 51 Bushes. ill. I. 499 —World's largest. ill. I. 432	Canton ()olong $t1.232, 258, 307$	Ceylon Golfing Society . ill II. 204 Ceylon Land & Produce Co.,
Bushes	Canton Register	Ceylon Land & Produce Co.,
-World's largest	Canton Scented Caper t I. 233	Ltd 1. 203
Buszard, Ltd., W. & G 11. 171	Canton Scented Orange Pekoe t	Ceylon ObserverI. 200 Ceylon Planters' American Tea
Butler, SamuelII. 145, 171	I. 233	Ceylon Planters' American Tea
Butler, Sir William I. 483	Canton Scented Pekoe tI. 233	Co II. 305 Ceylon Planters Note Book
Butler Grocery Co., James. II, 289 Butter t I 134 432 # 433	Cantonensis lour	I. 198; q. 428
Butter t I. 134; 432; ill. 433 Buttfield, W. J II. 289	Cantor Lecture on Tea, q I. 75	Ceylon Proprietary Tea Estates
Buy British Tea Campaign. II. 320	Cape t	Co., Ltd

Ceylon tea1, 219, 224, 246-	Charleston Tea Pa Charlton, Lt. And
Ceylon tea I. 219, 224, 246- 249; II. 454 Ceylon Tea Bureau II. 331 Ceylon tea estate il	
Cevion Tea Fund II. 304, 305	Chase, Geo. C
Cevlon tea kiosk II. 306, 311	Chase & Co., Geo.
Ceylon Tea Plantations Co., Ltd.	Chase & Sanborn
I. 188, 203	Chase, Caleb Chase, Geo. C Chase & Co., Geo. Chase & Sanborn Chater Collection, Chatham St. Tea-
I. 203; II. 12, 313	
Ceylon Tea Research Scheme 194	Cha-tsumi
Ceylon Tea Soils	Chaw
Certag Parks Traders Assn1. 193	Charle T O
Cevlon tea-tree I 174	Cheek, J. O Cheek-Neal Coffee
Ch'a. I. 1. 2. 3. 15. 20. 21. 25.	Chekiang t
32, 38, 72, 492-95	Chekyon
Cha	Chemistry and Ag
Chaa I. 27, 37	$q \dots I$.
Chabua (see Chubwa)	Chekiang t Chekyon Chemistry and Ag qI. Chemical Analysis
Ch'a Ching 1. 2, 4, 11-22; w.	negara to
14; q. 495; 11. 95, 285, 307 482 405	Chemistry of Gree
-Translation Digest of I. 13:22	Chemistry of green
Ch'a Ling T'u Ching q I. 21	ture
Cha Machi, illII. 28	Chemistry of the
Ch'a PuI. 2, 3, 5; q. 493	nins, The
Ch'a-sze	Chemistry of tea.
Ch'a-ye	ture Chemistry of the nins, The Chemistry of tea. Chemistry of tea.
Cuaggi Memet (see rialli wis.	thetics of a
Chah T. 494, 495	Chena
hommed) Chah. I. 494, 495 Chai I. 494, 495 Chai Catai I. 23 Chaicupravlenie II. 55, 236 Chai-Gruzia I. 462, 463 Chain stores II. 58, 86; 41. 88, 90 Chaishiu t I. 258 Chakva tea estate, U. S. S. R. (see under Estates) Chalmers T. A. I. 488	Chena
Chai Catai	Cheongshukai t
Chaieupravlenie II. 55, 236	Cheribon t
Chai-GruziaI. 462, 463	Che-shima
Chain stores11. 58, 86; 11. 88, 90	Cheribon t
Chalma to estate II S S R	Chests, V. K. Q
(see under Estates)	Chests
Chalmers, T. A	('hine
Chaloner & Co I. 96	-Formosa
Chambers, Robert qI. 47	
Chamney, Montfort	—Japan —Java and Suma
Champagnes of teas I. 262	—Label of 1835
Champney Walter R II. 270	Chewing teaI.
Chancellor, C. W., qI. 552	=
Chandler, E. Beresfordq. II. 389	Chi
Chandler S E	
7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Ohiana Mana
Chang Meng-yang. I. 4; q. 492;	Chicago Ton Bag
(see under Estates) Chalmers, T. A. I. 488 Chalmers, T. A. I. 96 Chambers, Robert q. I. 47 Champer, Montfort. II. 498 Champer, Tea Co. I. 161 Champagnes of teas. I. 262 Champney, Walter R. II. 270 Chancellor, C. W., q. I. 552 Chandler, E. Berestord. q. II. 389 Chang Meng-yang. I. 4, 492 Chang Sheo Chieh II. 484 Chang Sheo Chieh II. 255	Chiang Tung q Chicago Tea Bag Ch'ien Lung q
Ohana Ohan Ohiah A T 955	Chia
Ohana Ohan Ohiah A T 955	Chiang Tung q. Chicago Tea Bag Ch'ien Lung q. Chin Shu. China and the China Ch
Ohana Ohan Ohiah A T 955	China and the Ch
Ohana Ohan Ohiah A T 955	China and the Ch
Chang Sheo Chieh t	China and the Ch
Chang Sheo Chieh t	China and the China Clippers q. China Congous China exchange China: Its Histo Literature
Chang Sheo Chieh t	China and the China Clippers q. China Congous China exchange China: Its History Literature China. monument
Chang Sheo Chieh t	China and the China Clippers q. China Congous China exchange China: Its History Literature China. monument
Chang Sheo Chieh t	China and the China Clippers q. China Congous China exchange China: Its History Literature China. monument
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the China Clippers q. China Congous China exchange China: Its Histo Literature
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the China Clippers q. China Congous China exchange China: Its History Literature China, monument qua profan China China tea I. 228
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the China Clippers q. China Congous China exchange China: Its Histe Literature China, monument qua profan China C
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the Chema Clippers q. China Gongous China exchange China: Its History China, monument qua profan China Oolong t China tea I. 228 China Tea Associ
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the China Clippers q. China Congous China exchange China: Its Hinte Literature China, monument Qua profan China China tea I. 228 China Tea Associ China tea at Chut China Tea Compa
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the Chema Clippers q. China Gongous China exchange China: Its History China, monument qua profan China Oolong t China tea I. 228 China Tea Associ
Chang Sheo Chieh t. I. 255 Changsha t. I. 255 Changyang t. I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 371 Cha-no-yu II. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes II. 365, 370 — Tea Room II. 366; 4ll. 370, 371, 372, 373 — Utensils. II. 4ll. 367, 368;	China and the Chemical China Clippers quantification Congous China exchange China: Its History China, monument qua profan China Colong t China teaI. 228 China Tea Associ
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changyang t I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 361 Cha-no-yu II. 362, 365-78 —Flower arrangements. II. 368, 372 —Modes II. 368, 370 —Tea Room. II. 366; 370, 371, 372, 373 —Utensils II. 31. 367, 368; 373; 371, 372, 373 Utensils II. 367, 368; 373; 373; 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics II. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 221, 266 —Asiatic I. 222, 267 —Burma I. 237, 264	China and the China Clippers q. China Congous China exchange China: Its Hinte Literature China, monument Qua profan China China tea I. 228 China Tea Associ China tea at Chut China Tea Compa
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changyang t I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 361 Cha-no-yu II. 362, 365-78 —Flower arrangements. II. 368, 372 —Modes II. 368, 370 —Tea Room. II. 366; 370, 371, 372, 373 —Utensils II. 31. 367, 368; 373; 371, 372, 373 Utensils II. 367, 368; 373; 373; 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics II. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 221, 266 —Asiatic I. 222, 267 —Burma I. 237, 264	China and the Chemical China Clippers quantification of the China exchange China: Its History of the China exchange Thina China China China China tea. I. 228 China Tea Associ China tea the China Tea Compa China tea in En China tea growing Chinese Classics quantification of the China tea growing Chinese Chinastes Illustics quantification of the Chinastes Chinastes Illustics quantification of the Chinastes of th
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changyang t I. 254 Cha-no-yu, or Tea Ceremony, The q. II. 361 Cha-no-yu II. 362, 365-78 —Flower arrangements. II. 368, 372 —Modes II. 368, 370 —Tea Room. II. 366; 370, 371, 372, 373 —Utensils II. 31. 367, 368; 373; 371, 372, 373 Utensils II. 367, 368; 373; 373; 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics II. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 221, 266 —Asiatic I. 222, 267 —Burma I. 237, 264	China and the Ch. China Clippers q. China Congous China exchange China: Its Histe Literature China, monument qua profan China Colong t China tea China tea at Chul China Tea Compa China tea in En China tea growing Chinese Glassics q Chinese gris plu Formosa
Chang Sheo Chieh t. I. 255 Changsha t I. 254 Changyang t I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. III. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes III. 368, 370 — Tea Room. II. 366, 370 — Tea Room. II. 366, 371 — Utensils. II. 31. 367, 368; 373; 31. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics. II. 223-67; II. 453 — African I. 221, 266 — Asiatic I. 237, 264 — Ceylon. I. 220, 221, 246-249 — China I. 220, 221, 246-249 — China I. 220, 221, 246-263 — French Indo-China, I. 220, 263-264	China and the Chemical China Clippers quantification of the China exchange China: Its History of the China exchange Thina China China China China tea. I. 228 China Tea Associ China tea the China Tea Compa China tea in En China tea growing Chinese Classics quantification of the China tea growing Chinese Chinastes Illustics quantification of the Chinastes Illustics quantification of the Chinastes of Chinese girls plus china tea in En Chinastes Chinastes Illustics quantification of the Chinastes
Chang Sheo Chieh t. I. 255 Changsha t I. 254 Changyang t I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. III. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes III. 368, 370 — Tea Room. II. 366, 370 — Tea Room. II. 366, 371 — Utensils. II. 31. 367, 368; 373; 31. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics. II. 223-67; II. 453 — African I. 221, 266 — Asiatic I. 237, 264 — Ceylon. I. 220, 221, 246-249 — China I. 220, 221, 246-249 — China I. 220, 221, 246-263 — French Indo-China, I. 220, 263-264	China and the Chemical China Clippers quantification on Sous China exchange China: Its Hister Literature Quantification of China tea I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En China tea growing Chinese Glassics quantification of Chinase Chin
Chang Sheo Chieh t. I. 255 Changsha t I. 254 Changyang t I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. III. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes III. 368, 370 — Tea Room. II. 366, 370 — Tea Room. II. 366, 371 — Utensils. II. 31. 367, 368; 373; 31. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics. II. 223-67; II. 453 — African I. 221, 266 — Asiatic I. 237, 264 — Ceylon. I. 220, 221, 246-249 — China I. 220, 221, 246-249 — China I. 220, 221, 246-263 — French Indo-China, I. 220, 263-264	China and the Chemical China Clippers quantification Congous China exchange China: Its History China exchange China Its History China China China China China China tea China tea China tea at Chut China Tea Compa China tea in En China tea in En China tea in En China tea in En Chinases Classics quantification Chinese girls plus Formosa Chinese random Chinese Repositor;
Chang Sheo Chieh t. I. 255 Changsha t I. 254 Changyang t I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. III. 362, 365-78 — Flower arrangements. II. 368, 372 — Modes III. 368, 370 — Tea Room. II. 366, 370 — Tea Room. II. 366, 371 — Utensils. II. 31. 367, 368; 373; 31. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Characteristics. II. 223-67; II. 453 — African I. 221, 266 — Asiatic I. 237, 264 — Ceylon. I. 220, 221, 246-249 — China I. 220, 221, 246-249 — China I. 220, 221, 246-263 — French Indo-China, I. 220, 263-264	China and the Chemical China Clippers quantification Congous China exchange China: Its History China exchange China Its History China China China China China China tea China tea China tea at Chut China Tea Compa China tea in En China tea in En China tea in En China tea in En Chinases Classics quantification Chinese girls plus Formosa Chinese random Chinese Repositor;
Chang Sheo Chieh t	China and the Chemical China Clippers quantities of the China exchange China: Its Hinterature China on China on China China China China China China tea. I. 228 China Tea China tea at Chulchina Tea Compa China tea growing Chinese Classics quantities of the China tea compa China tea growing Chinese Classics quantities of the China tea China Chi
Chang Sheo Chieh t	China and the Chemical China Clippers quantification of the China exchange China: Its Hister China, monument quantification of the China tea. I. 228 China Tea Associ China tea at Chut China tea at Chut China tea in En Chinases Classics quantification of the Chinase Chinese Chinese Chinese random Chinese Repositor; Chinago t
Chang Sheo Chieh t	China and the China Clippers q. China Congous China exchange China: Its History Ghina China exchange China Its History Ghina China China China China China tea. I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En China tea in En China tea growing Chinese Glassics q Chinese girls phormosa. Chinese random Chingwo t Chinaholm, J. M Chittagong Chittagong t Chlorophyll
Chang Sheo Chieh t	China and the China Clippers q. China Congous China exchange China: Its Hinte Literature Ohina, monument qua profan China tea I. 228 China Tea Associ China tea at Chut China Tea Compa Chinese Chinese girls plus Formosa. Chinese random Chinese Repositor Chingwo t Chisholm, J. M Chittagong Chittagong t Chiorophyll Chorolate
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Chanoyau, or Tea Ceremony, The q. III. 371 Cha-no-yu., or Tea Ciremony, The q. III. 362, 365-78 —Flower arrangements. II. 362, 365-78 —Flower arrangements. II. 363, 370 —Tea Room. II. 366, 41. 370 —Tea Room. II. 366, 41. 370 —Utensils. II. ill. 367, 368; 373; ill. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Charpman, A. C. I. 168; q. 519 Characteristics. II. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 221 —Azores and Mauritius. I. 239, 267 —Burma I. 220, 221, 246-249 —China I. 220, 221, 246-249 —China I. 220, 221, 246-249 —China I. 220, 221, 262-263 —French Indo-China. I. 220, 263-264 —India I. 220, 221, 262-263 —French Indo-China. I. 220, 263-264 —India I. 220, 221, 262-263 —French Indo-China. I. 220, 263-264 —India I. 220, 221, 260-262 —Java and Sumatra I. 220, —Java and Sumatra I. 220, —Java and Sumatra I. 220, —Malay States I. 266-267 —Complete reference table	China and the China Clippers q. China Congous China exchange China: Its Hinte Literature Ohina, monument qua profan China tea I. 228 China Tea Associ China tea at Chut China Tea Compa Chinese Chinese girls plus Formosa. Chinese random Chinese Repositor Chingwo t Chisholm, J. M Chittagong Chittagong t Chiorophyll Chorolate
Chang Sheo Chieh t	China and the Chemical China Clippers questions. China exchange China: Its Hintercure China exchange Its Hintercure China China China China China China tea. I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En Chinase Classics questions to the China Chinase Chinese China Chinase Repositor Chingwo t. Chisholm, J. M. Chittagong t. Chiorophyll
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changyang t I. I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. II. 362, 365-78 —Flower arrangements.II. 368, 372 —Modes III. 373 —Rules of III. 365, 370 —Tea Room. II. 366; 481. 370, —Tea Room. II. 366; 481. 370, —Utensils. II. 48. 367. 368; —Utensils. II. 48. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 223. 67; II. 453 —African I. 223. 67; II. 453 —African I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-264 —India I. 220, 221, 262-264 —India I. 220, 221, 262-264 —Japan I. 220, 221, 262-262 —Java and Sumatra I. 220, 264-264 —Japan I. 220, 221, 264-264 —Malay States I. 266-267 —Complete reference table —Chardin, Jean Baptiste. II. 462 Charges	China and the Ch. China Clippers q. China Congous China exchange China: Its Histe Literature qua profan China Oolong t China tea I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En Chinases Glassics q Chinese girls plus Formosa Chinese random Chinese Repositor; Chingwo t Chisholm, J. M Chittagong t Chilorophyll Chocolate Cho-jiro Land and Cholo Land and China dand change Essential China China China Chiland and Chiland and China China China China China China Cholo Land and China
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changyang t I. I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. II. 362, 365-78 —Flower arrangements.II. 368, 372 —Modes III. 373 —Rules of III. 365, 370 —Tea Room. II. 366; 481. 370, —Tea Room. II. 366; 481. 370, —Utensils. II. 48. 367. 368; —Utensils. II. 48. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 223. 67; II. 453 —African I. 223. 67; II. 453 —African I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-264 —India I. 220, 221, 262-264 —India I. 220, 221, 262-264 —Japan I. 220, 221, 262-262 —Java and Sumatra I. 220, 264-264 —Japan I. 220, 221, 264-264 —Malay States I. 266-267 —Complete reference table —Chardin, Jean Baptiste. II. 462 Charges	China and the Chemical China Clippers questions. China exchange China: Its Hintercure China exchange Its Hintercure China China China China China China tea. I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En Chinase Classics questions to the China Chinase Chinese China Chinase Repositor Chingwo t. Chisholm, J. M. Chittagong t. Chiorophyll
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changyang t I. I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. II. 362, 365-78 —Flower arrangements.II. 368, 372 —Modes III. 373 —Rules of III. 365, 370 —Tea Room. II. 366; 481. 370, —Tea Room. II. 366; 481. 370, —Utensils. II. 48. 367. 368; —Utensils. II. 48. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 223. 67; II. 453 —African I. 223. 67; II. 453 —African I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-264 —India I. 220, 221, 262-264 —India I. 220, 221, 262-264 —Japan I. 220, 221, 262-262 —Java and Sumatra I. 220, 264-264 —Japan I. 220, 221, 264-264 —Malay States I. 266-267 —Complete reference table —Chardin, Jean Baptiste. II. 462 Charges	China and the Chemical China Clippers quantification of the China exchange China: Its Hister China exchange Its Hister China China China China China China tea. I. 228 China Tea Association of the China China Tea Compa China tea in En Chinase girls phe Formosa. Chinese random Chinese Repositor; Chingwo the China Chinase China
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changyang t I. I. 254 Chanoyu, or Tea Ceremony, The q. III. 371 Cha-no-yu. II. 362, 365-78 —Flower arrangements.II. 368, 372 —Modes III. 373 —Rules of III. 365, 370 —Tea Room. II. 366; 481. 370, —Tea Room. II. 366; 481. 370, —Utensils. II. 48. 367. 368; —Utensils. II. 48. 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 223. 67; II. 453 —African I. 223. 67; II. 453 —African I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-263 —French Indo-China. I. 220, 221, 262-264 —India I. 220, 221, 262-264 —India I. 220, 221, 262-264 —Japan I. 220, 221, 262-262 —Java and Sumatra I. 220, 264-264 —Japan I. 220, 221, 264-264 —Malay States I. 266-267 —Complete reference table —Chardin, Jean Baptiste. II. 462 Charges	China and the Chemical China Clippers quantification of the China exchange China: Its Hister China exchange Its Hister China China China China China China tea. I. 228 China Tea Association of the China China Tea Compa China tea in En Chinase girls phe Formosa. Chinese random Chinese Repositor; Chingwo the China Chinase China
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changsha t I. 254 Chanoyau, or Tea Ceremony, The q. II. 371 Cha-no-yu. II. 362, 365-78 —Flower arrangements. II. 368, 372 —Modes III. 373 —Rules of III. 365, 370 —Tea Room. II. 366; 41. 370, —Tea Room. II. 366; 41. 370, —Utensils. II. 41. 367. 368; —Utensils. II. 41. 367. 368; —Utensils. II. 41. 367. 368; —Other arrangements. II. 223-67; II. 453 —African I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 223-67; II. 453 —African I. 220, 221, 246-249 —China I. 220, 221, 246-249 —China I. 220, 221, 262-263 —French Indo-China. I. 220, 262-263 —French Indo-China. I. 220, 221, 262-264 —India I. 220, 221, 249-252 —Iran (Persia) I. 266-267 —Java and Sumatra I. 226 —Malay States. I. 263 —Other countries I. 266-267 —Complete reference table —Complete reference table —Complete reference table —China II. 21. 462 Charges —Amsterdam II. 48 —Calcutta II. 5 —China II. 21 —Japan II. 31-32 —Vara III. 16	China and the Ch. China Clippers q. China Congous China exchange China: Its Histe China, monument qua profan China China tea I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En China tea in En Chinases Glassics q Chinese girls plus Formosa Chinese random Chinese Repositor, Chingwo t Chisholm, J. M Chittagong t Chiorophyll Cholo Land and pany's Est Cholwell, George Chops Chiops Chiops Chicken Chops Chicken Chicke
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changsha t I. 254 Chanoyau, or Tea Ceremony, The q. II. 371 Cha-no-yu. II. 362, 365-78 —Flower arrangements. II. 368, 372 —Modes III. 373 —Rules of III. 365, 370 —Tea Room. II. 366; 41. 370, —Tea Room. II. 366; 41. 370, —Utensils. II. 41. 367. 368; —Utensils. II. 41. 367. 368; —Utensils. II. 41. 367. 368; —Other arrangements. II. 223-67; II. 453 —African I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 223-67; II. 453 —African I. 220, 221, 246-249 —China I. 220, 221, 246-249 —China I. 220, 221, 262-263 —French Indo-China. I. 220, 262-263 —French Indo-China. I. 220, 221, 262-264 —India I. 220, 221, 249-252 —Iran (Persia) I. 266-267 —Java and Sumatra I. 226 —Malay States. I. 263 —Other countries I. 266-267 —Complete reference table —Complete reference table —Complete reference table —China II. 21. 462 Charges —Amsterdam II. 48 —Calcutta II. 5 —China II. 21 —Japan II. 31-32 —Vara III. 16	China and the Ch. China Clippers q. China Congous China exchange China: Its Histe China, monument qua profan China China tea I. 228 China Tea Associ China tea at Chut China Tea Compa China tea in En China tea in En Chinases Glassics q Chinese girls plus Formosa Chinese random Chinese Repositor, Chingwo t Chisholm, J. M Chittagong t Chiorophyll Cholo Land and pany's Est Cholwell, George Chops Chiops Chiops Chicken Chops Chicken Chicke
Chang Sheo Chieh t. I. 255 Changsha t I. 255 Changsha t I. 254 Changyang t I. I. 254 Chano-yu, or Tea Ceremony, The q. III. 371 Cha-no-yu III. 362, 365-78 —Flower arrangements. II. 363, 372 —Modes III. 363, 370 —Tea Room. II. 366, 370 —Tea Room. III. 366, 370 —Tea Room. III. 366, 371 —Utensils. III. 313, 374-76, 470-71 Chaplin, A. W. C. I. 168; q. 519 Chapman, A. C. I. 168; q. 519 Characteristics. I. 223-67; II. 453 —African I. 221, 266 —Asiatic I. 221 —Azores and Mauritius. I. 239, 267 —Burma I. 230, 221, 246-249 —China I. 220, 221, 246-249 —China I. 220, 221, 246-263 —French Indo-China. I. 220, 252-260 —Formosa I. 220, 221, 262-263 —French Indo-China. I. 220, 263-264 —India I. 220, 221, 260-262 —Iran (Persia) I. 264 —Japan I. 220, 221, 260-262 —Java and Sumatra I. 264 —Japan Sumatra I. 266 —Malay States I. 264 —Chardin, Jean Baptiste II. 462 Charges —Amsterdam II. 48 —Calcutta II. 55 —China II. 21 —Colombo III. 10, 13	China and the Chemical China Clippers quantification China exchange China: Its Hister Literature China, monument quantification China tea. I. 228 China Tea Associ China tea. I. 228 China Tea Compa China tea at Chub China tea in En China tea in En China tea growing Chinese Glassics quantification Chingwo t. Chinawa Ch

rieston Tea Party I 60	Christie, Dr
rleston Tea PartyI. 60 rlton, Lt. AndrewI. 137, se, CalebII. 266, 267 se, CalebII. 266, 267 se, Geo. CII. 272 se & Co., Geo. CII. 272 se & SanbornII. 266 ter Collection, TheI. 77 tham St. Tea-Water Pump ### ##############################	Christie, E. W II. 323, 325
139, 145, 216	Christie, T. NorthI. 187, 188
se, CalebII. 266, 267	Chronicles of the East India
se, Geo. C	China T 73 85
se & Sanhorn	Ch'uan
er Collection, The I. 77	ChubwaI. 141, 143-44, 149
tham St. Tea-Water Pump	Ch'uen I. 493
ill. I. 51	Chu-i, Po q
usumi T 27 40 71 79	Chules Tas Company I 162
r	Chun Uck ChaoII. 106
tsumi	Chunge (see Withering)
k Neal Coffee Co II. 282	Churchill, Charles q II. 488 Churned tea of Tibet. II. 400, 434 Cia
Clark to	Churned tea of Tibet 400, 434
nistry and Agriculture of Tea	Cibber Colley a II 493
aI. 134, 156, 194, 511	Cinchona
qI. 134, 156, 194, 511 nical Analysis of Tea with Regard to Quality, qII. 398	Civil Service Supply Association,
Regard to Quality, q II. 398	Ltd., TheII. 172
mistry of Green Tea q I. 511, 546	Cinchona I. 177 Civil Service Supply Association, Ltd., The II. 172 Civil War II. 255 Clapham Junction of the East
mister of groom too manufac.	II. 9
ture	Clarets of China teasI. 229
nistry of the Natural Tan-	Clark, Arthur H
nins, The q I. 514, 515	Clark, Charles Heath
mistry of tes 508-551	Clark Hastings A I. 196
thetics of a Cup of Tea. I. 510	Clark, John William II. 186
	Clarets of China teas. I. 229 Clark, Arthur H. I. 89 Clark, Charles Heath II. 167-68 Clark, Harold Haydon II. 186 Clark, Hastings A. I. 196 Clark, John William II. 186 Clark & Co. J. W. II. 186 Clark & Host Co. II. 289 Clarke, F. G. I. 170; II. 141, 175-76, 318
na <u>I</u> . 420	Clark & Host Co
nyuan t	Clarke, F. G 1. 170; 11. 141, 175-76, 318
1 Shou	
shimaI. 330, 332, 333	Clarke & Sons, RichardI. 169
shire, S. H II. 183	Classification of teas
nut, V. K. q	—CeylonI. 219, 224 —ChinaI. 219, 228-33, 308;
eylon I. 291	
hina I. 305	-FormosaI. 219, 235-36
ormosa	-French Indo-China. I. 219, 236-37
ndia I. 401 Apan I. 323	
pan	—Formosa. I. 219, 235-36 —French Indo-China. I. 219, 236-37 —India. I. 219, 225-27 —Japan. I. 219, 233-35, 324 —Java and Sumatra. I. 219, 237-38 Cleaning
abel of 1835 ill	Cleaning
wing ton I 208 222 227	Clearing of land for teaI. 271
264, 449 264, 449 264, 495 27, 494, 495 28, 125, 37, 38 28 or Tea Bag Co	
T 95 27 28	Tava I 348
ing Tung qI. 3	Clegg. Robert EdwardI. 211
ago Tea Bag CoII. 287	Cleyer, Andreas
en Lung q II. 485	Clifford, Sir HughII. 203
s Shu	Clifton, C. Walter
a Clippers a I 101	Climate —Bost I. 270
as CongousI. 228	
a exchange problem II. 21-2	—China
na: Its History, Arts, and	Formosa 1 380
Literature q I. 494 na, monumentis qua sacris	— India
a, monuments qua sucris qua profanis, illustrata I. 30 la Oclong tI. 232, 258, 305 la teaI. 228-233, 252-260; al. 499; II. 454 la Tea AssociationII. 20, 25, 326	Java
a Oolong tI. 232, 258, 305	-Natal I. 455
as teaI. 228-233, 252-260;	—Natal
ut. 499, 11. 404	255; ill. 491
25, 326	"Ann McKim". I. 87; ill. 88,
a tea at Chubwa ill I. 141, 143	89. 91
na Tea CompanyII. 106	"Ariel"
I. 147	_'Chas-sze''I. 96; ill. 104; 105
1. 147	- "Chaa-sze"I. 96; ill. 104; 105 - "Cutty Sark"I. 95-6, 98;
na tea growing illI. 299, 300	-"Chaa-sze"I. 96; ill. 104; 105 -"Cutty Sark"I. 95-6, 98;
na tea growing illI. 299, 300	Blackader I. 96; #1. 104; 105 "Chas-sze". I. 96; #1. 104; 105 "Cutty Sark". I. 95-6, 98; #1. 99, 108 "Glyage Rapublic" I 01: #1. 95
na tea growing illI. 299, 300	
na tea growing illI. 299, 300	
na tea growing ill I. 299, 300 mess Classics q I. 2 lense girls plucking tea in Formosa	
ta tea growing ill I. 299, 300 Less Classics q I. 2 Lene girls plucking tea in Formosa	- Chas-sze' . I. 96; ill. 104; 105 - "Cutty Sark" . I. 95-6, 98; ill. 99, 108 - "Flying Cloud" . I. 91, 93; ill. 94 - "Great Republic" . I. 91; ill. 95 - "Houqua" . I. 89; ill. 90, 91, 93 - "Lightning" . I. 95, 104 - "Oriental" . I. 91; ill. 92, 93 - Races . I. 100-101
ta tea growing ill. I. 299, 300 wese Classics q	
ta tea growing ill. I. 299, 300 wese Classics q	"Flying Cloud" . I. 91, 93; 4ll. 94 "Great Republic" . I. 91; 4ll. 95 "Houqua" . I. 89; 4ll. 90, 91, 93 "Lightning" I. 95, 104 "Oriental" . I. 91; 4ll. 92, 93 Races I. 100-101 "Rainbow" . I. 87-8; 4ll. 89, 91 "Sir Lancelot" . I. 95-6; 4ll. 108
ta tea growing ill. I. 299, 300 wese Classics q I. 2 tesse girls plucking tea in Formosa II. 334 tesse random tea planting . ill. I. 271 tesse Repository, q I. 493 tgwo t I. 229, 257 holm, J. M II. 140, 176-77 tagong	"Flying Cloud" . I. 91, 93; 4ll. 94 "Great Republic" . I. 91; 4ll. 95 "Houqua" . I. 89; 4ll. 90, 91, 93 "Lightning" I. 95, 104 "Oriental" . I. 91; 4ll. 92, 93 Races I. 100-101 "Rainbow" . I. 87-8; 4ll. 89, 91 "Sir Lancelot" . I. 95-6; 4ll. 108
ta tea growing ill. I. 299, 300 wese Classics q I. 2 tesse girls plucking tea in Formosa II. 334 tesse random tea planting . ill. I. 271 tesse Repository, q I. 493 tgwo t I. 229, 257 holm, J. M II. 140, 176-77 tagong	"Flying Cloud" . I. 91, 93; 4ll. 94 "Great Republic" . I. 91; 4ll. 95 "Houqua" . I. 89; 4ll. 90, 91, 93 "Lightning" I. 95, 104 "Oriental" . I. 91; 4ll. 92, 93 Races I. 100-101 "Rainbow" . I. 87-8; 4ll. 89, 91 "Sir Lancelot" . I. 95-6; 4ll. 108
ta tea growing ill. I. 299, 300 wese Classics q I. 2 tesse girls plucking tea in Formosa II. 334 tesse random tea planting . ill. I. 271 tesse Repository, q I. 493 tgwo t I. 229, 257 holm, J. M II. 140, 176-77 tagong	"Flying Cloud" . I. 91, 93; 4ll. 94 "Great Republic" . I. 91; 4ll. 95 "Houqua" . I. 89; 4ll. 90, 91, 93 "Lightning" I. 95, 104 "Oriental" . I. 91; 4ll. 92, 93 Races I. 100-101 "Rainbow" . I. 87-8; 4ll. 89, 91 "Sir Lancelot" . I. 95-6; 4ll. 108
ta tea growing ill. I. 299, 300 wese Classics q I. 2 tease girls plucking tea in Formosa I. 334 tese random tea planting	
ta tea growing ill. I. 299, 300 Less Classics q I. 2 Less girls plucking tea in Formora	
ta tea growing ill. I. 299, 300 wese Classics q I. 2 tease girls plucking tea in Formosa I. 334 tese random tea planting	
ta tea growing ill. I. 299, 300 Lesse Classics q I. 2 Lesse girls plucking tea in Formora	
ta tea growing ill. I. 299, 300 Lesse Classics q. I. 2 Lesse girls plucking tea in Formora. Ill. I. 334 Lesse random tea planting. Ill. I. 271 Lesse Repository, q. I. 493 Lesse Repository, q. I. 493 Lesse Repository, q. I. 383 Lesse Repository, q. I. 493 Lesse Repository, q. II. 493 Lesse Repository, q. I. 493 Lesse Reposit	
ta tea growing ill. I. 299, 300 Less Classics q I. 2 Lesse girls plucking tea in Formora	
ta tea growing ill. I. 299, 300 Less Classics q I. 2 Lesse girls plucking tea in Formora	
ta tea growing ill. I. 299, 300 tess Classics q. I. 2 tesse girls plucking tea in Formora. Ill. I. 334 tesse random tea planting. Ill. 271 tesse Repository, q. I. 493 tesse Repository, q. I. 493 tesse Repository, q. I. 383 tagong t. I. 152, 154, 226 trophyll. I. 524, 533, 536 rolate I. 41 jiro I. 11, 471 to Land and Rubber Company's Estate I. 212, 458 well, George C. II. 272, 276, 289 twell, George C. II. 271 twell & Co., George C. II. 271 twell & Co., George C. II. 271 tagong I. 155, 106; II. 22 ta Nagpur t. I. 154, 227, 251 ta Kung. I. 152, 20 mes, W. B. II. 177	
ta tea growing ill. I. 299, 300 Less Classics q I. 2 Lesse girls plucking tea in Formora	
ta tea growing ill. I. 299, 300 tess Classics q. I. 2 tesse girls plucking tea in Formora. Ill. I. 334 tesse random tea planting. Ill. 271 tesse Repository, q. I. 493 tesse Repository, q. I. 493 tesse Repository, q. I. 383 tagong t. I. 152, 154, 226 trophyll. I. 524, 533, 536 rolate I. 41 jiro I. 11, 471 to Land and Rubber Company's Estate I. 212, 458 well, George C. II. 272, 276, 289 twell, George C. II. 271 twell & Co., George C. II. 271 twell & Co., George C. II. 271 tagong I. 155, 106; II. 22 ta Nagpur t. I. 154, 227, 251 ta Kung. I. 152, 20 mes, W. B. II. 177	
ta tea growing ill. I. 299, 300 tess Classics q. I. 2 tesse girls plucking tea in Formora. Ill. I. 334 tesse random tea planting. Ill. 271 tesse Repository, q. I. 493 tesse Repository, q. I. 493 tesse Repository, q. I. 383 tagong t. I. 152, 154, 226 trophyll. I. 524, 533, 536 rolate I. 41 jiro I. 11, 471 to Land and Rubber Company's Estate I. 212, 458 well, George C. II. 272, 276, 289 twell, George C. II. 271 twell & Co., George C. II. 271 twell & Co., George C. II. 271 tagong I. 155, 106; II. 22 ta Nagpur t. I. 154, 227, 251 ta Kung. I. 152, 20 mes, W. B. II. 177	
ta tea growing ill. I. 299, 300 tess Classics q. I. 2 tesse girls plucking tea in Formora. Ill. I. 334 tesse random tea planting. Ill. 271 tesse Repository, q. I. 493 tesse Repository, q. I. 493 tesse Repository, q. I. 383 tagong t. I. 152, 154, 226 trophyll. I. 524, 533, 536 rolate I. 41 jiro I. 11, 471 to Land and Rubber Company's Estate I. 212, 458 well, George C. II. 272, 276, 289 twell, George C. II. 271 twell & Co., George C. II. 271 twell & Co., George C. II. 271 tagong I. 155, 106; II. 22 ta Nagpur t. I. 154, 227, 251 ta Kung. I. 152, 20 mes, W. B. II. 177	

·		a . a . a
Clubs	Confucian reference, allegedI. 2	Cooper & Co.'s StoresII. 177 Cooper Tea Packet CoII. 288
-Evolution of	Congou t	Cooperatieve Groothandelsvereeni-
—Long-Room, Boston I. 56 —Whig	Congreve, William qII. 493	ging "De Handelskamer"
Cobb. James I. 85	Connell & Co., John II. 244	II. 120
Cobbett, ThomasII. 167	Connell & Co Glasgow I 96	Cooperative storesII. 84; ill. 86
Cochin-China Green tI. 237,	Conseequa's home illII. 102	Cooperative Wholesale Society
263, 453	Consolidated Tea CompanyII. 281	II. 55
Cochius, F. DI. 124, 125	Consoo House	Cope, Stuart R II. 127, 320
Cockerell, Samuel PepysI. 83	Consumption	Copeland, Royal S. q I. 558
Cocks, Richard	-Africa, North	Copeman, H. J
CocoaI. 23		Copeman, JohnII. 161
Code of Tea	Australia	Copeman & Sons, JohnII. 161
Coffee I. 41, 51	AustriaII. 355	Corbet, R. J
-Failure in Ceylon. I. 173-75, 177	CanadaII. 353	Corbyn, Dr. F 1. 135
—Vs. tea in Java	—ChileII. 356	Cordiner, James g I. 173, 174
Coffee Estate in Ceylon ill. I. 174	China	Cornell Medical College Clinic. I. 559
Coffee houses	—ColombiaII. 356	Cornwall, Sir EII, 171
—Decline of	CzechoslovakiaII. 355	Compat Tan Duaming a II 450
-First English	—EgyptII. 356	Coughlin, R. G
—London ill	FormosaII. 347	Country Green t 1 230, 308
Garraway'sI. 36; ill. 38	-FranceII. 355	Coughlin, R. G
— — Jacob's 41	—GermanyII. 354	Courtney, W. A II. 285, 310, 311
——JamaicaII. 129	—GreeceII. 355	Courtney & Co., Ltd., W. A II. 285
— — Jerusalem II. 129 — — Jonathan's I. 41	-GuatemalaII. 356	Cover crops (see Soil Covers)
— Jonathan's 41	—India	Covered tes
— — Sultaness Head I. 41 — — Tom's I. 46	-Iran (Persia)	Cover plants I. 427
——Tom'sI. 46	—JapanII. 347	Cowan, B. C II. 234
-New York	MoroccoII. 356	Cowan, B. C
——Bank I. 50 ——Merchants I. 63 ——Tontine ill I. 63	—NetherlandsII. 355 —New ZealandII. 353	Com, J. U II. 193
— — Merchants	— Doland II 254	Cox, Richard
— Tonune u	—PolandII. 354 —RussiaI. 463; II. 351	Cox, Ritchie & Co II. 193
Coffee Houses in England, Early		Cozzens, JohnII. 161
History of	—Spain II. 355 —Tunis II. 356	Cozzens, Frederic SI. 92
History of	—TurkeyII. 355	Crabbe, George q II. 489
I. 174	-Union of S. AfricaII. 353	Crayen House
Coffee mania	-United KingdomII. 349	Crawford, T. CI. 170; II.
Coffee Planters' ManualI. 182	-United States	140 180 219
Cohen Stuart, C. P q. I. 6,	VenezuelaII. 386	140, 160, 318
111-13. 116: 126-27: q.	-Table-Principal tea import-	Cream tea
134, 142; 156; q. 358, 498, 500, 507, 519	ing countriesII. 349	Creaser A J II 244
498, 500, 507, 519	Consumption per capita	Creepers
Co-hong systemI. 75	-ArgentinaII. 356	Crescent Manufacturing Co II. 277
Co-hongs of Canton II. 100	—AustraliaI. 538; II. 352	Cresswell, W. S II. 138, 139
Colburn-Hohmeyer & Co II. 233	AustriaII. 355	Cresswell & Co., W. SII. 3, 139
Cold fermented t	—British Malaya II. 346 —Canada II. 353	Crewe, Col
Coloridge, Harney Q	—Chile	Crewe, Col
Coleridge, Hartley q II. 489 Coleridge, Samuel Taylor I. 48 Coles, J. B	—China	Crichton-Browne, Sir James q.
Collier (4nv	—CzechoslovakiaII. 355	I. 556, 558
Colman, E. R 11, 139, 172	-EgyptII. 356	Crisis (Ceylon)I. 200
ColomboII. 7; ill. 8, 9, 145	-Formosa	Criticism of tea
Colombo Brokers' Association	-France	Crostian t
II. 13. 153	GermanyII. 354	Croll, GeorgeII. 151, 168
Colombo Club I. 186	Greece	Cromwell, Oliver
Colombo Commercial Co., Ltd	—IndiaII. 347	Crone. B. B I. 128
Colombo Club I. 186 Colombo Commercial Co., Ltd I. 478, 488; II. 147, 178	-Iran (Persia)II. 355	Crone, B. B I. 128 Crone, B. B. J I. 120, 122;
Colombo ObserverI. 200 Colombo Tea Traders' Associa-	-Irish Free StateII. 350	ill. 129
Colombo Tea Traders Associa-	—JapanII. 347	Crone, H. G. ThII. 111, 114, 115
tion II. 13, 153	—MoroccoII. 356 —NetherlandsI. 538; II. 355	Crooks, Samuel II. 275, 276
Color of infused teaI. 241 Coloring, artificialI. 293, 305	-NewfoundlandII. 354	Crooks, Samuel II. 275, 276 Crooks, Thomas & Co. II. 275 Crosby House I. 80
Colquhoun, Sir R. D I. 138	-New ZealandII. 353	Crosby HouseI. 80
Colvin, J. R	PolandII. 354-55	Crostald George Theodore II 167.8
Combe, Barbour & CombeI. 159	-RussiaII. 354	Crosfield, Hugh TII. 196
Come to Tea With UnII. 298	—SpainII. 355	Crosneid, James B 167-8
Commentarius de Abusu Tabaci	—TunisII. 356	Crostield, Joseph
et Herbae Thee q I. 30	—TurkeyII. 355	Cross, Frederick E II, 187, 207
Commercial Importing Co II. 278	-Union of S. AfricaII. 353	Cross, Thomas JohnII. 187
Commercial Products of India	-United Kingdom I. 538;	Cross, Sons & AbsolomII. 187
I. 147, 156, 379, 498;	11. 349, 409	Crowell, TheodoreII. 51 "Crown and Three Sugar
q. 500	-United StatesII. 351	
Commercial sale rooms, London	Containers	Loaves" ill II. 157 Crowther, T. W. B I. 199
I. 147	Content of tea as variously	Cruickshank, D I. 164, 169;
Commercial tea chartI. 221	brewed	II. 137, 144
Commercial teas of the world I. 219-267	Controversies —Continental	Cruikshank, GeorgeII. 468, 469
-ClassificationsI. 219	—Continental	Cruikshank, GeorgeII. 468, 469 Culin, JohnII. 234
Commissary storesII. 83	Early EnglishI. 47	Cullen, General q
Committee re Tea ExpertI. 125	Conveyors	Cultivation and Manufacture
Commonniace Rook a II. 404	Conway, Oliver J II. 285	I. 269-280
Commutation Act. II. 122, 124	Conway-Reagan Co II. 285	-Azores
	Cook, C. A	—Brazil
Compagnie Franco Africaine,	Coolie labor (see Labor)	-British Malay StatesI. 454
Compagnie Franco Africaine, Ltd	Coolie lines	—BurmaI. 450, 451
Complete reference table 240-201	—CeylonI. 443; ill. 445	—CeylonI. 417-447 —Early attemptsI. 173
Composition of a cup of tea. I. 546		— Early attempts
Compressed China t I. 233, 259 Compton, H I. 479	Caslie Ace transport III T 409	— Beginning I. 11
Compton, H	— Lordia	——Ch's Ching
Compton, Herbert. II. 127, 298, 320 Compton, Robert II. 287-292	Coombe William I 202.3 II 146	-Early
Coffee, Tea and Chocolate, Con-	Coombe, William. I. 202-3; II. 146 Cooper, Sir Alfred II. 166, 174	—Early
cerning the Use of	Cooper, ColinII. 182	——Introduction intoI. 208 —French Indo-ChinaI. 452
"Conditions of Sale" II. 160	Cooper, Colin	-French Indo-ChinaI. 452
Cone, Helen Gray, q II. 490	509; q. 518, 532	-India



	Davies, James R	Dhendai Tea Co.
DarumaI. 5; II. ill. 359, 361, 362, 363, 466, 467 Darwin, Erasmus qII. 489 D. A. R., North Carolina 65 Daukes, W. H	Description of Ceylon, A., q I. 174 Description of Journeys in Muskovy and Persia I. 134 Deshima	Dixon, Charles 1. 95 Doake, R. B. I. 153 Dodd, John II. 230-32 Dodd & Co. II. 230, 232
399, 484	Dharma (see Daruma)	-ShanghaiII. 104

Does Tea Increase Mentality!.I. 33 Dolby, Sir George AI. 161	—High I. 289 —IndiaI. ill. 396, 398; 399; ill. 466, 470	——Old I. 72, 8 ——Oldest record of trade . I. 7
Domestic Annals of Scotland q. I. 47	—Japan 1. 318; w. 319, 331	——PrivilegesI. 7 ——ProfitsI. 69, 7
Domestick Coffee Manq. I. 46; II. 296, 403	—Java and SumatraI. 365-67 —KuoI. 288, 293, 302-4	——Revolt against
Dooars I. 382 Dooars Planters' Assn I. 162		——Tea notes from the Com-
Dooars t 226, 250	Redrying I. 320 Russia ill I. 448	pany's Records I. 71, 7
Dooars Tea Co., Ltd I. 160	—Russia ut	——Trade mark ill
Dooars tea garden illI. 378 Doom Dooma Tea CoI. 414	—Sun-dryingI. 290	—French
Doremus. George WII. 275	-TemperatureI. 289, 439	-Portuguese
Dottridge, Edwin Thomas II. 156	du Pasquier, P. A. q 1. 522-23	-Prussian 6
Doremus, George W	du Pasquier, R I. 127, 519 Duchesne, A. E. q I. 555; II. 320	—ScottishI. 6
Douglas, Robert	Dudgeon, Dr. John qI. 492-94	—Spanish I. 6 —Swedish I. 68; II. 9
Dow. Leslie	Duff, James L. q II. 500	East India Co. officer saluting
Dowling, A. F I. 154	Duffa GaumI. 146	ül. I. 8
Downall, Reginald BI. 154	Dufour, Phillipe Sylvestre	East India Co.'s ship "Water-
Dragendorff	I. 35; II. 296	loo"
Drainage I 425	Duhalde, Jean BaptisteII. 494 Duke of Chou (see Chou Kung)	East India fleets, earlyI. 6
—Japan I 314	Duluin Beraid	67. 81. 82. 84: II. 11
—Ceylon I. 425 —Japan I. 314 —Java I. 350	Duncan James I 193 197	East India House, q I. 81, 8
Drake, Francis S 1. 49, 54	Duncan, Jonathan	67, 81, 82, 84; II. 11 East India House, q
Drake, Samuel Francis II. 495	Duncan, W. A 170; II. 138 Duncan, Walter and William.	East Indiamenl. 68, 87; ill.
Dream of the Red Chamber q. II. 497	II. 138, 165	Eastabrooks Co Ltd T H II 29
Drew J C II 185	Duncan & Co., WalterII. 165 Duncan Bros. & Co., Ltd	Eastern Produce & Estates Com-
Dreyfus & Co., Ltd II. 242	Duncan Bros. & Co., Ltd	pany, Ltd I. 178, 203;
Driersl. 288; m. 337, 366,	I. 162, 170; II. 138	II. 15
472-75, 478	Dundas, G. H I. 183 Dunkerley, Thos. q II. 413	Eaton, Mary E I. opp. iii, 49
—Barber's	Dunlop, RobertII. 137	Eckburg, CaptainI. 20 Eckford, WalterII. 16
ill. 478	Dunn, Theodore Douglas q I. 85	Edelston, T. D 11. 13
Colombo	Dunne, ThomasII. 283	Eden, T
Davidson"Sirocco"	Dunne Co., Thos II. 283 Durand-McNeil-Horner Co II. 268	Edenton Tea PartyI. 64- Edmands Coffee CoII. 26
———Air heaterI. 159, 477 ————Automatic endless webI. 482	Durrant C C	Edwards, Edward II. 463, 46
Double down-draftill. I. 482	Dust	Edwards, H. J II. 111, 279, 32
	Importation into ChinaII. 97	Edwards, J. H
439; ill. 481	Dusting (see Spraying) Dutch East India Co. (see East	Edwards, Martin
Duplex Tilting tray Pressure I. ill. 488; 490	India Companies)	Edwards, R. C
- Enclosed Tilting tray Pres-	Dutch illustration of a tea gar-	Edwards Ensign Tea Pty., Ltd.
sure	den	II. 24
	Dutch New YorkI. 49 Duties	Eekhout, G. W. I. 12 Ee-wo I. 10
482: <i>ill.</i> 489	—Cevlon	Effects of Caffeine on the Cir-
— End-slide Up-draft . I. ill. 473 — Tilting Tray I. 473, 482 — Up-draft . I. 159, 399; ill.	—CeylonII. 11, 12 —ChinaI. 308; II. 19, 20	culatory and Muscular
— — Tilting Tray I. 473, 482	—Germany II. 237 —Japan II. 31	SystemsI. 54
	Notherlands II 40.47	Effects of tea On digestion
—Gibbs and Barry I. 164, 469, 473 —Hoare's "Multi-flu"I. 488;		—On human bodyI. 540, 552.5
Hoare's "Multi-flu"I. 488;	Townshend duties 74, 77, United Kingdom I. 74, 77, 79; II. 39, 124 United States I. 54; II. 219, 248, 279	Effects of Tea, Good and Bad.
ill. 490 Tackson's T 399 478	-United States I. 54: II.	II. 49
—Jackson'sI. 399, 478 ——"Britannia"I. 474 ——"Empire"I. 158, 399,	219, 248, 279	Effects of the Temperature of Water Applied for the In-
"Empire"I. 158, 399,	Dutt D. N	fusion of Japanese Green
474-5, 486; ill. 487 ——Imperial Venetianill. I.	Dwight, John II. 473 Dwinell, James F II. 252, 257	Tea upon its Anti-
289, 399	Dwinell-Wright Co II. 257	scorbutic Potency, On the
		a
		q I. 54 Egberts, N. V. Douwe I, 117-1
439, 474-5; ill. 480; 481	Earle, Alice Morse	q I. 54 Egberts, N. V. DouweI. 117-1 Ehlers, Inc., Albert II. 27
439, 474-5; ill. 480; 481 ——"Venetian"I. 158, 399,	Earle, Alice MorseI. 50 Earliest credible mentionI. 3	q I. 54 Egberts, N. V. Douwe I. 1171 Ehlers, Inc., Albert II. 27 Eiffel Tower
439, 474-5; ill. 480; 481 — — "Venetian"I. 158, 399, 472; ill. 473, 480, 481 — — "Victoria"I. 158, 399;	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Effiel Tower ill. II. 33 Eliot R. Huvshe. I. 19
439, 474-5; ill. 480; 481 — "Venetian". I. 158, 399, 472; ill. 473, 480, 481 — "Victoria" I. 158, 399; ill. 474	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeil. 30 "Earth" tI. 260, 308	q
439, 474-5; ill. 480; 481 — "Venetian". I. 158, 399, 472; ill. 473, 480, 481 — "Victoria" I. 158, 399; ill. 474	Earle. Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeil. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea Co.,	q
439, 474-5; ill. 480; 481 — "Venetian" . I. 158, 399, 472; ill. 473, 480, 481 — "Victoria" . I. 158, 399; ill. 474 — Kinmond's . I. 473 — Krupp's . I. ill. 490 — Mackenzie's . I. 477	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeil. 30 "Earth" tI. 260, 308	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Eiffel Tower
439, 474-5; ill. 480; 481 — "Venetian" . I. 158, 399, 472; ill. 473, 480, 481 — "Victoria" . I. 158, 399; ill. 474 — Kinmond's . I. 473 — Krupp's . I. ill. 490 — Mackenzie's . I. 477	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea CoI. 203 East India CompaniesI. 205 East India CompaniesI. 68	q
439, 474.5; ill. 480; 481 — "Venetian" . I. 158, 399, 472; ill. 473, 480, 481 — "Victoria" . I. 158, 399; ill. 474 — Kinmond's . I. 473 — Krupp's . I ill. 490 — Mackenzie's . I. 477 — McMeekin's ill . I. 469 — Money's furnace . I. 469	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea Co. LtdI. 203 East India CompaniesI. 205 —AsiaticI. 68 —AustrianI. 67, 68	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Eiffel Tower
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399, 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies'	Earle. Alice Morse I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe	q
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399, 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies'	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating team in Europe ill. I. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co. I. 203 Ltd. I. 203 East India Companies I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78	q
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399, 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies'	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. 1 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 203 East India Companies I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Danish 67, 73, 109-10; II. 401	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Elife! Tower III. 33 Eliot, R. Huyshe. I. 19 Elizabeth of Russia, Empress. II. 9 Elizabeth, Dr. Christopher. II. 23 Elliott, Dr. Christopher. II. 20 Elliott, E. C. q. I. 425, 53 Elocodendron glaucum II. 17 Elphinstone, Sir Graeme H. D. II. 175; III. 30 Embassy of the Oriental Company of the United Provinces to the Emperor of
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399, 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies'	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. 1 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 203 East India Companies I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Danish 67, 73, 109-10; II. 401	q. I. 54 Egherts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Eiffel Tower ill. 11. 33 Eliot, R. Huyshe. I. 19 Elizabeth of Russia, Empress. II. 9 Ellerbrock, J. C. F II. 23 Elliott, Dr. Christopher I. 20 Elliott, E. C. q. I. 425, 53 Elocodendron glaucum I. 17 Elphinstone, Sir Graeme H. D. 1. 175; II. 30 Embassy of the United Provinces to the Emperor of China, q I. 3
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399, 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies'	Earle. Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co., Ltd. I. 205 —Asiatic I. 205 —Asiatic I. 68 —Bengal I. 68 —Continental I. 78 —Danish I. 67, 73, 109-10; II. 401 —Chartered I. 281 —Factory at Hirado. II. 211	q
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399, 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies'	Earle. Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 203 East India Companies I. 205 —Asiatic I. 67, 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Danish I. 67 —Dutch I. 67, 73, 109-10; II. 401 — Chartered I. 28 —Factory at Hirado. II. 211 — First tea transported II. 108 — Lords Seventeen III. 108	q
439, 474.5; ill. 480; 481 —"Venetian" I. 158, 399; 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies' ill. I. 479 —Robinson's I. 480 —Sharpe's I. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471, 479 —Up-draft, diagram of ill. I. 474 —Walker's I. 489	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. ill. I. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Dautch. I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Factory at Hirado. II. 211 —First tea transported II. 108 —Ships before Canton ill. 128	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Elife! Tower III. 33 Eliot, R. Huyshe. I. 19 Elizabeth of Russia, Empress. II. 9 Elizabeth of Russia, Empress. II. 9 Ellierbrock, J. C. F. II. 23 Elliott, Dr. Christopher. I. 20 Elliott, E. C. q. I. 425, 53 Elocodendron glaucum I. 17 Elphinstone, Sir Graeme H. D. I. 175; II. 30 Embassy of the Oriental Company of the United Provinces to the Emperor of China, q. I. 3 Emerson, Ralph Waldo q. II. 49 Emmericher Waren Expedition. Emmrich, K. D. II. 23 Emmrich, K. D. II. 23
439, 474.5; ill. 480; 481 —"Venetian" I. 158, 399; 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies' ill. I. 479 —Robinson's I. 480 —Sharpe's I. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471 —Up-draft, diagram of ill. I. 474 —Walker's I. 482 Drug stores II. 83	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. ill. I. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Dautch. I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Factory at Hirado. II. 211 —First tea transported II. 108 —Ships before Canton ill. 128	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Eiffel Tower ill. 11. 33 Eliot, R. Huyshe. I. 19 Elizabeth of Russia, Empress II. 9 Elliott, Dr. Christopher 12. 23 Elliott, E. C. q. I. 425, 53 Elocodendron glaucum I. 17 Elphinstone, Sir Graeme H. D. I. 175: III. 30 Embassy of the Oriental Company of the United Provinces to the Emperor of China, q 3 Emerson, Ralph Waldo q. II. 49 Emmericher Waren Expedition. Emmrich, K. D II. 28 Empire of the East I. 28 Empire of the East I. 28
439, 474-5; ill. 480; 481 —"Venetian" I. 158, 399; 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 479 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies' ill. I. 479 —Robinson's I. 480 —Sharpe's I. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471 —Up-draft, diagram of ill. I. 474 —Walker's I. 489 Drug stores II. 83 Drums q. II. 497 Drying	Earle. Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co., Ltd. I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Continental I. 78 —Dutch I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Fractory at Hirado. II. 211 —First tea transported II. 108 —Ships before Canton. III. 108 —Ships before Canton. III. 128 —Ships before Canton. III. 28 —English I. 29, 44, 52-4, 57, 66-85, 134-35, 144, 149	q. 1.54
439, 474-5; ill. 480; 481 —"Venetian" I. 158, 399; 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 479 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Money's furnace I. 469 —Ransomes, Sims and Jefferies' ill. I. 479 —Robinson's I. 480 —Sharpe's I. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471 —Up-draft, diagram of ill. I. 474 —Walker's I. 489 Drug stores II. 83 Drums q. II. 497 Drying	Earle. Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 203 East India Companies I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Danish I. 67 —Dutch I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Factory at Hirado. II. 211 —First tea transported II. 108 —Ships before Canton II. 18 —English I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, 129-30, 211	q. I. 54 Egberts, N. V. Douwe. I. 117-1 Ehlers, Inc., Albert. II. 27 Eiffel Tower ill. 11. 33 Eliot, R. Huyshe. I. 19 Elizabeth of Russia, Empress. II. 9 Ellerbrock, J. C. F II. 23 Elliott, Dr. Christopher 1. 20 Elliott, E. C. q. I. 425, 53 Elocodendron glaucum I. 17 Elphinstone, Sir Graeme H. D. 1. 175; II. 30 Embassy of the United Provinces to the Emperor of China, q 1. 3 Emerson, Ralph Waldo q. II. 49 Emmericher Waren Expedition. Emmrich, K. D II. 28 Empire of the East. I. 8 Empire State Bldg. ill. II. 336, 42 Empire Tea Growers. II. 313, 320, 33
439, 474-5; ill. 480; 481 —"Venetian" I. 158, 399, 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 473 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Ransomes, Sims and Jefferies' ill. 1, 479 —Robinson's II. 480 —Sharpe's II. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471, 479 —Up-draft, diagram of ill. I. 474 —Walker's I. 489 Drug stores II. 83 Drums q II. 497 Drying —Basket I. 293, 336 —Black tea	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea Co LtdI. 203 —AsiaticI. 205 —AsiaticI. 68 —AustrianI. 67, 68 —ContinentalI. 78 —DanishI. 67 —Dutch. I. 67, 73, 109-10; II. 401 —CharteredI. 211 —First tea transportedII. 108 —Lords SeventeenII. 108 —Ships before Canton.ill. I. 28 —English. I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, 129-30, 211 —ChartereI. 67, 68, 69	q. 1. 54
439, 474-5; ill. 480; 481 —"Venetian" I. 158, 399, 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 473 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Ransomes, Sims and Jefferies' ill. 1, 479 —Robinson's II. 480 —Sharpe's II. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471, 479 —Up-draft, diagram of ill. I. 474 —Walker's I. 489 Drug stores II. 83 Drums q II. 497 Drying —Basket I. 293, 336 —Black tea	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. ill. I. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co. Ltd. I. 203 East India Companies I. 205 —Asistic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Danish I. 67 —Dutch. I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Factory at Hirado. II. 21 —First tea transported II. 108 —Ships before Canton. ill. 28 —English. I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, 129-30, 211 —Charter. I. 67, 68, 69 —Charter. I. 67, 68, 69 —Charter. I. 67, 68, 69	q
439, 474-5; ill. 480; 481 —"Venetian" I. 158, 399, 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 473 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Ransomes, Sims and Jefferies' ill. 1, 479 —Robinson's II. 480 —Sharpe's II. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471, 479 —Up-draft, diagram of ill. I. 474 —Walker's I. 489 Drug stores II. 83 Drums q II. 497 Drying —Basket I. 293, 336 —Black tea	Earle, Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. ill. I. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 203 East India Companies I. 205 —Asiatic I. 68 —Austrian I. 667, 68 —Bengal I. 68 —Continental I. 78 —Danish I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Factory at Hirado. II. 211 —First tea transported II. 108 —Ships before Canton.ill. I. 28 —Ships before Conton.ill. I. 28 —English I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, 129-30, 211 —Charter. I. 67, 68, 69 —Coat-of-arms ill. I. 80 —Court of Directors I. 68,	q. 1.54
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399; 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I ill. 490 —Mackenzie's I 477 —McMeekin's ill. I. 469 —Money's furnace I 469 —Ransomes, Sims and Jefferies' ill. I 479 —Robinson's I 477 —Robinson's I 478 —Sharpe's I 478 —Stevenson's electric I 482 —Sutton Vacuum I 484 —Thompson's I 471, 479 —Up-draft, diagram of ill. I 474 —Walker's I 489 Drug stores I 497 Drying I 497 Drying I 293, 336 —Black tea I 288 —Ceylon I ill. 438, 439 —Charical I 469 —Chemical aspects I 290 —Chemical aspects I 290 —Chemical chappes during I 533	Earle. Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea Co LtdI. 203 —AsiaticI. 68 —AustrianI. 67, 68 —BengalI. 68 —ContinentalI. 78 —DanishI. 67 —Dutch. I. 67, 73, 109-10; II. 401 —CharteredI. 201 —Fractory at HiradoII. 211 —First tea transportedII. 108 —Ships before Canton.ill. I. 28 —English. I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, 129-30, 211 —CharterI. 67, 68, 69 —Coat-of-arms illI. 80 —Court of DirectorsI. 68, 69 —Court of DirectorsI. 68, 70, 72, 83 —Distinguished ServantsI. 85	q
439, 474.5; ill. 480; 481 —"Venetian". I. 158, 399; 472; ill. 473, 480, 481 —"Victoria". I. 158, 399; ill. 474 —Kinmond's I. 473 —Krupp's I ill. 490 —Mackenzie's I 477 —McMeekin's ill. I. 469 —Money's furnace I 469 —Ransomes, Sims and Jefferies' ill. I 479 —Robinson's I 477 —Robinson's I 478 —Sharpe's I 478 —Stevenson's electric I 482 —Sutton Vacuum I 484 —Thompson's I 471, 479 —Up-draft, diagram of ill. I 474 —Walker's I 489 Drug stores I 497 Drying I 497 Drying I 293, 336 —Black tea I 288 —Ceylon I ill. 438, 439 —Charical I 469 —Chemical aspects I 290 —Chemical aspects I 290 —Chemical chappes during I 533	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea Co LtdI. 203 —AsiaticI. 205 —AsiaticI. 68 —AustrianI. 67, 68 —ContinentalI. 78 —DanishI. 67 —Dutch. I. 67, 73, 109-10; II. 401 —CharteredI. 211 —Fractory at HiradoII. 211 —First tea transportedII. 108 —Lords SeventeenII. 108 —Ships before Canton.ill. 1. 28 —English. I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, —CharterI. 67, 68, 69 —Coat-of-arms illI. 80 —Court of Directors. I. 68 —Court of Directors. I. 68 —Court importationI. 29, 73	q
# 439, 474-5; ill. 480; 481 — "Venetian" I. 158, 399; # 472; ill. 473, 480, 481 — "Victoria" I. 158, 399; ill. 474 Kinmond's I. 473 Kinmond's I. 473 Krupp's I. ill. 490 — Mackenzie's I. 477 — McMeekin's ill. I. 469 — Money's furnace I. 469 — Ransomes, Sims and Jefferies' ill. I. 479 — Robinson's I. 480 — Sharpe's I. 475 — Stevenson's electric I. 482 — Sutton Vacuum I. 484 — Thompson's I. 471, 479 — Up-draft, diagram of ill. I. 474 — Walker's I. 489 Drums q II. 497 Drying — Basket I. 293 — Basket I. 293 — Black tea I. 288 — Ceylon I. ill. 438; 439 — Charcoal I. 489 — Chemical aspects I. 290 — Chemical aspects I. 290 — Chemical changes during I. 533 — China I. 302. 4; ill. 304, 466 — Crude oil I. 366; ill. 367	Earle. Alice Morse. I. 50 Earliest credible mention I. 3 Early engraving illustrating tea in Europe. II. I. 30 "Earth" t. I. 260, 308 East India and Ceylon Tea Co Ltd. I. 203 East India Companies I. 205 —Asiatic I. 68 —Austrian I. 67, 68 —Bengal I. 68 —Continental I. 78 —Danish I. 67 —Dutch I. 67, 73, 109-10; II. 401 —Chartered I. 28 —Factory at Hirado. II. 21 —First tea transported II. 108 —Ships before Canton. II. 128 —English. I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, 129-30, 211 —Charter I. 67, 68, 69 —Coat-of-arms III. I. 80 —Court of Directors I. 68 —Court of Directors I. 68 —Distinguished Servants I. 85 —First tea inportation I. 29, 73 —First tea from China II. 69	q I. 54 Egberts, N. V. Douwe I. 117-1 Ehlers, Inc., Albert II. 27 Eiffel Tower ill. II. 33 Eliot, R. Huyshe I. 19 Elizabeth of Russia, Empress. II. 9 Ellerbrock, J. C. F II. 23 Elliott, E. C. q I. 425, 53 Elloott, E. C. q I. 425, 53 Elocodendron glaucum I. 17 Elphinstone, Sir Graeme H. D. I. 175; II. 30 Embassy of the United Provinces to the Emperor of China, q I. 3 Emerson, Ralph Waldo q. II. 49 Emmericher Waren Expedition. Emmrich, K. D II. 28 Empire of the East I. 8 Empire of the East I. 8 Empire Tea Growers. II. 313, 320, 33 Encyclopedia Britannica q I. 25 Englebard, Sr. A II. 252, 25 Englehard & Sons Co., A II. 25 Englehard & Sons Co., A II. 25 Englesh & Scottish Joint Cooperative Wholesale Society, Ltd II. 85, 16 English breakfast t I. 25 Englesh breakfast t I. 25
439, 474-5; ill. 480; 481 —"Venetian" I. 158, 399, 472; ill. 473, 480, 481 —"Victoria" I. 158, 399; ill. 474 —Kinmond's I. 473 —Kinmond's I. 473 —Krupp's I. ill. 490 —Mackenzie's I. 477 —McMeekin's ill. I. 469 —Ransomes, Sims and Jefferies' ill. 1, 479 —Robinson's II. 480 —Sharpe's II. 475 —Stevenson's electric I. 482 —Sutton Vacuum I. 484 —Thompson's I. 471, 479 —Up-draft, diagram of ill. I. 474 —Walker's I. 489 Drug stores II. 83 Drums q II. 497 Drying —Basket I. 293, 336 —Black tea	Earle, Alice MorseI. 50 Earliest credible mentionI. 3 Early engraving illustrating tea in Europeill. I. 30 "Earth" tI. 260, 308 East India and Ceylon Tea Co LtdI. 203 —AsiaticI. 205 —AsiaticI. 68 —AustrianI. 67, 68 —ContinentalI. 78 —DanishI. 67 —Dutch. I. 67, 73, 109-10; II. 401 —CharteredI. 211 —Fractory at HiradoII. 211 —First tea transportedII. 108 —Lords SeventeenII. 108 —Ships before Canton.ill. 1. 28 —English. I. 29, 44, 52-4, 57, 66-85, 134-35, 147, 149-50; II. 99, 102, 121, —CharterI. 67, 68, 69 —Coat-of-arms illI. 80 —Court of Directors. I. 68 —Court of Directors. I. 68 —Court importationI. 29, 73	q



English Co-operative Wholesale	— — Madulkelle	——Sam Sing
SocietyII. 169	— — Mariawatte illI. 181, 197-98	——Singlo
English Food and Drug Act. II. 123	— — Matale I. 192	——Subong
Englishman, TheII. 879	MeddecombraI. 178	——SyleeI. 411 ——TalliarI. 191
Ennis, FrankII. 282 Ennis-Hanley-Blackburn Coffee	— — MonarakandeI. 186; ill. 420 — — MorayI. 189	— — Tingri
CoII. 282	Mount PleasantI. 193	——Tipling
Enshu t	— — Mousa Ella	——Tippuk
Ensor (artist)II. 465	— — Nartakande	Tippum
EnzymesI. 527-28, 536	— — Naseby	Tukvar
Eppens, Julius AII. 259	— — Norwood	Urranabund
Eppens, Smith CompanyII. 259	——Oodewelle	———Woodbine
Equipage, Oriental teaI. 17-	OononagallaI. 186	—Java
19; II. 358; W. 359, 369	——Park	——Number ofI. 126; II. 339, 340
Erh Ya qI. 3, 15, 20, 493-94 Erh Ya Chu qI. 21	——PedroI. 200 ——PelmadullaI. 200	
Erie CanalI. 87; II. 253	——Penrith	——————————————————————————————————————
Espenscheid, CharlesII. 269	——Penylan I. 178	Bagelen
EspositioneI. 23	——Pitakanda	——BagelenI. 118, 119 ——BedakahI. 118
Essay on Tea, An qI. 44; II. 494	——PoonagallaI. 193 ——PortswoodI. 200	— — Bengelen I. 129
Essay on Tea q	——PortswoodI. 200	——Bengelen
Essay upon the Nature and	PundaluoraI. 188	
Qualities of Tea qII. 493	RahatungodaI. 190	— — Djatinangor I. 118 — — Gamboeng I. 120, 121, 128 — — Gedeh
Essays of EliaI. 85 Essential oil of teaI. 158, 241,	— — Rockwood	Godob I 345
513, 523-24, 536	——St. Coombs	——GoalparaI. 125, 341, 345
Estate manager's bungalows, ill.	——St. John del Rey	——Heeleakah
I. 123; 441; ill. 445	——Scrubbs	Ledok Tea GardensI. 118
Estate Managers' Congress, Ban-	———Shakerley	Malabar I. 125, 128, 283,
doeng	— — Sheen I. 188	356, 358, 363, 366, 367
Estate rental rates, JavaI. 343	——Shrubs Hill	——MandalingI. 122
Estates	— — Sogamma	——MelattieI. 129
-Africa, East		— — MoendjoelI. 120, 122, 128 — — NeglaI. 128
——Bajo ill	— — Tamaravelly I. 203 — — Templestowe I. 189	Negia
- Kearsney ill	— ThotulagallaI. 178	PangerangoI. 129
——Kimugu #	— Tillicoultry I. 192	——PanoembangI. 121, 128
— — Kireta ill		
Lauderdale	— — Udahena	121, 122, 123, 128, 341
New Year's Gift	— WallahaI. 188, 190, 191	——Pasir TelegawarnaI. 122
—Asia		——Perbawati
——Thandaung, Burma illI. 452	— — Wangie Oya I. 199	——SinagarI. 118, 120, 121, 122, 128, 345 ——SindangsariI. 122, 128
-Azores 	— — Wevelkelle I. 203 — — Weyangawatte I. 198	Gindengessi I 122, 128
—Ceylon		——Sperata
——Number ofI. 419; II. 338	— - Woodstock	— Taloen I. 128, 360
Abbets/ord 1 200 203	——YoxfordI. 202	— — Taloen I. 128, 360 — — Tambi I. 118
1 calawatta I. 193	—Fiji Islands	— TanangtaloeI. 346 — TanangtaloengsariI. 118
	— - Vanua Levu	TandjoengsariI. 118
Avienwella	-Fr. Indo-China	- Tendjosjoe . I. 120, 122 - Tjarennang . I. 118 - Tjiasem . I. 130 - Tjiboengoer . I. 120, 122, 129
— Balmoral	———Arbre Broyé illI. 453, 454	Tjarennang
——BearwellI. 192, 196 ——Black ForestI. 178	Ban Methuot	Tiber T 120 122 129
- Blackwater	——————————————————————————————————————	— TjikadjangI. 118, ill.
——BlackwaterI. 191 ——Blair AthollI. 189	——Ia-Puch	119; 121, 122, 129
Bogahawatte ill	——Plei-KuI. 454	— Tiikembang 1. 118
———Carolina	—India	— TijoemboeleuitI. 118, 122
——Concordia I. 200	——Number ofI. 375; II. 338	——Tjirohani
——Condegalla I. 178	— — Adulpore 101	——TjisalakI. 122, 128, 477
——Craigie Lea illI. 423 ——DamansaraI. 188	——BadamtamI. 161	—TjisaroeniI. 129 —Tjisoeroepan ##I. 117
——DambatenneI. 186; ill. 431	——Barnesberg	— Waspada I. 121, 128, 129
— — Darrawella 194	——Badulipar	—Russia
— — Delta		Chokva I ill. 204: 206.
——Derryclare	— — Bordubi ill	239; ill. 448, 461, 462 —SumatraI. 342; ill. 345, 349
	Rurkhola	—Sumatra1. 342; tll. 345, 349
——DewalakandeI. 200 ——Dimbula illI. 175	——Burnie BraesI. 162	——Number of estates. I. 132; II. 339, 340
	— CherideoI. 150 — Chota TingriI. 144	Bah-Biroeng OeloeI. 131, 369
——Drayton	——Chota TingriI. 144 ——ChubwaI. 141, 143, 144	
——Dunedin	Dogniov 1. 144	——Bah Kisat
——Elbedde	— — Deopani	Delimbingen I 131 111.
Eplawatte	— — Doodputlee	
— Fruit Hill I. 189 — Galgoda	— Gabroo Purbuti. 150	——Kajoe Aro
0-15	— GelahatingI. 477	
Gallebodde	— — Golaghat I. 162 — — Hatheosh	Permanangan illI. 366
	— HeeleakahI. 157, 167	— Naga Hoeta I 131, 366 — Permanangan ill I 366 — Rimboen I 130
		— Si Marimboean I. 131 — Sidamanik
	— — Hoogrijan	Sidamanik
— Gonawatte I. 203 — Great Western I. 188	Hookham	Tandjong GoenoengI. 130
	— — Hukannukri 194	——Tebing TinggiI. 131
— Hangranoya	— — Jaipur I. 150, 151 — — Kachari PookriI. 151	— Tiga BlataI. 132 —United States
Hemingford I. 193	Kahung	— Mackey
— Henfold I. 189	— Kasauni	— — Middleton
- Henfold - Hindugalla . I. 179, 199, 203 - Hoolankande . I. 186 - Hope . I. 178 - Ingurugalla . I. 197	Khootoon Goorie 150	-Other Countries
——Hoolankande	Knoon don't	——Bigia, Brit. Malaya.I. 209, 454 ——Empreza Agricola do Lug-
	Lohargur	Empreza Agricola do Lug-
	Makaihari	ella, Port. E. AfricaI. 459 Estate management, D. E. II. 368
Keenakelle	Margherita ill	Etablissements Emile Dammann
— Keenakelle I. 178 — Kintyre I. 200	Moondakoiee	11. 240
Labookelle	— MuttuckI. 407 — NigritingI. 157, 161	Etiquette (see Manners and Customs)
——Lemastota	Panatola	Etiquette (see Manners and Customs) Etting, F. M
— LooleconderaI. ill. 178; 179, 184-85, 197, 199; ill. 446	Rokanhabbi	Etymology of Tea 492-495
TIA' TOZ.ON' TAI' TAA' MY ZEO		

European Ass'n in CeylonI. 202	-Ceylon I. 433; ill. 441 -China ill I. 302; II. 101 -Formosa I. 336, ill. 339	—Iran (Persia)II. 235
European tI. 504	—China ill	—JapanII. 223
Evans, A. J	Formosa	—Java
Evans, David G II. 252, 261	—India illI. 385, 386, 402 —JapanI. 309, 311, ill. 320	—RussiaII. 235 —SumatraII. 112
Evans, D. I. qI. 530, 532	—Japan	First
Evans, E. H	—Java ill	-Account in RussiaI. 25
Evans Coffee Co., David GII. 261	-Russian Transcaucasia	-Advertisements ill
EvaporationI. 282 Events of Eleven Years: 1863-	I. 207, ill. 448, 461	-Arrival in RussiaI. 29
1873I. 184	-SumatraI. 368; ill. 369	-Attempt to grow in U. S I. 115
Everest, A. E. q I. 514, 516	-World's largest ill	-Became article of exportII. 95
	Faggot tI. 228, 233, 258, 307	—Book of teaI. 4, 11; ill. 14 —BroadsideI. 39; II. ill. 294
Ewart, John	Faham	-BroadsideI. 39; II. ill. 294
Ewart, Maccaughey & Co., Ltd.	Fairlie. Alexander	-Cargo from Japan to U. S. I. 91
II. 162	Falconer, Dr. Hugh. I. 139, 141, 142	—Dealers I. 32
Examination (see Inspection)	Faneuil, Jr., Benjamin	-English coffee houseI. 41
Examiners (U. S. A.)II. 52	Fang Yen, q 1. 20	-Eulogy in English verse qI. 44
Excelsior Palace Hotel illII. 428	Fanning machines illI. 306	-Europeans to exportII. 98
Exhibitions	F. a. g. standard	-Free ship with free tea11. 104
—Batavia	Faraday, Michael	-Growing plants to reach Europe
-British Empire, Wembley	Farbridge, J. R 488	Europe
-British Empire, Wembley I. 193, 199; II. 320	Watigue hest for	—Japanese book on teaI. 8
-BrusselsI. 187; II. 304, 313	Feasy, F. H	-Java invoice reaches Mincing
-Chicago World's Fair. 11. 299,	Feel & Co 96	LaneI. 119
306, 315	Feltman, DrI. 32	———Amsterdam
-Colonial & IndianI. 187; II. 303	Female Spectator q	-Law against adulteration . II. 122
(2) o c c c c c c c c c c c c c c c c c c	Fenchurch St., London ill. I. 164	-London tea shopI. 46
-Grocers' and Allied Trades,	Ferguson, A. MI. 180, 200;	-Mention
London	II. 303	European literature I. 23;
I.ivernool	Ferguson, JamesII. 181	
-ParisI. 113, 187; 11. 305, 310	Ferguson, Sir JohnII. 179	
-Philadelphia Centennial11. 299	Ferguson, JohnI. 200	Newspaper advertisement II. 295; ill. 296
-Philadelphia Sesquicentennial	Ferguson, Inc., Stanley W II. 270, 289	
II. 301, 321		—Notice — — Dutch
-San Diego	Ferguson, Holness & Co., Ltd. II. 181	Italy
—St. Louis World's Fair II. 309, 321		——PortugueseI. 24
11. 509, 521 TI 330	Fergusson, Robert qII. 488 Ferment of Tea, The q	-Plantation in Ceylon illI. 176
—Toronto ill	Ferment of the Tea Leaf, The I. 528	-Printed reference in English
Exobasidium vexansI. 180	Fermentation of the Tea Leaf	illI. 26; 37
Exotic Botany	$q \dots I$. 528	-Public sale at Garway's I. 38
Experimental stations	Permentation of Tea	-Reference by an Englishman
—Banjoe-WangieI. 111 —BorbhettaI. 295, 410	Fermentation of TeaI. 529 "Fermentation" in tea manufac-	I, 37, 71; <i>ill.</i> 72
Puitonzong I 352 356 359.	tureI. 526-30	-Sale at Boston
—Buitenzorg I. 352, 356, 359, ill. 371, 372	Formented t (see Black t)	—Sale held at CalcuttaII. 131
Chakva I. 206, 207, 463	Wermenting	-Sale of Ceylon tea
—Devarshola, S. India. I. 171,	Black tea	-Sale of India tea in London
		I. 147; II. 130
-Heichin	Chemical aspects	-Sale of Kenya teasII. 134
		-Seeds received at Ceylon I. 177
Kempong Haroa W	Cold	-Shipment Assam tea to Cal-
		cuttaI. 147
		-Sumatra tea sent to London. I. 130
	—FormosaI. 335	TaxI. 4; II. 95 Tea business in LondonI. 38
Kyoto-fuI. 296, 326 MakinoharaI. 295, 313;	—India ill	—Tea Committee in IndiaI. 151
-MakinoharaI. 295, 313;	—Java and SumatraI. 364, 365	Tea examiner appointed, Eng-
	—Length of timeI. 287	landII. 123
MayaguezI. 216 Nara PrefectureI. 296, 326	-Rooms ill I. 286, 363, 364, 365	-Use as a social beverageI. 4
-Nara Prefecture 1 207 463	—Tables ill	First Letter Book of the East
	Warm I. 228 Fernald, Frank E. II. 225	India Company I. 72
—PeermadeI. 171, 172 —Phu Tho, TonkinI. 452	Ferris, Dr	First National Stores, Inc11. 288
	Fertilizers	Fischer, Anton OttoI. 92 Fischer, BenedictII. 252, 259
	—China	Fischer, Benedict II. 252, 259
	India	Fischer, EmilI. 514, 515;
	Java and Sumatra	q. 521, 524
—Sukhulii	Few Facts About Tea, A 11. 290	Fischer & Co., Inc., B II. 259
-Vancouver Island I. 213	Fidelity Warehouse Co	Fishback & CoII. 278
-Tocklai	Field, Cyrus	Fishbein, Morris qI. 558
	Fielding, Henry11. 390; q. 493	Fisher, WilliamII. 256, 278
	Figg, Clifford H. I. 202; 11, 148, 192	Fish-leaf (see Jannum) Fisscher
Export regulation (see Regulation)	Piece William Honry	Fitts, Friend PII. 266
Export weights, table of	Figgis, A. W	Fitzpatrick, Austin C II. 256, 257
Exporters (see Firms)	Figgis & Uo., A. W	Fitzpatrick, IrvingII. 257
Exports	Fiji Island t	Five o'clock tea ill II. 402, 425, 426
—Covlon	"Fine Tea Campaign"II. 327	Five-Year Plan, RussiaII. 345
—ChinaII. 335	Finlay, JamesII. 159 Finlay, KirkmanII. 159	Flapperitis exuberans
-Formosa	Finlay & Co., Ltd., James	Flacks and Flagons a
-French Indo-ChinaI. 453; II. 344	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Flavor
—IndiaII. 338	—GlasgowI. 212, 213; II. 159 —IndiaI. 163, 170; II. 140	Flavoring agents, early, . 11, 397, 400
Iran (Persia) II 346	-IndiaI. 163, 170; II. 140	Flavoring, powdered tea II. 458
—Iran (Persia)II. 346 —JapanII. 212, 221, 342	Winley Mille & Co I. 105, 100,	
Kenva (lolony	II. 149	Fleurs de Thé
Notherlands Indies11, 339-40	Firando (see Hirado)	Flora cochinchinennia, q
Nuccelend 458 11. 345	Firing (see Drving)	Flower blossoms in teaII. 430
— Uganda II. 345 — Union of S. Africa II. 344	Firman, W. G 1. 486	Flower bud of teaI. 499 Flower of tea illI. 496. 500
-Union of S. AfricaII. 344	Piume	
	—AmsterdamII. 115-120	
Frances Dairy Co., Ltd., 11, 1/2		Fluff I. 294
Extracte tos	Calcutta	Flush
Eyre, Joseph PII. 181		Caylon
	—China	—Formosa
"Faced" tea	Formore	—Formosa I. 334 —India
Factories, tea in		Tanan 1 310
Ve etemina	—France —GermanyII. 236-39	Java and SumatraI. 359
Brick teaII. 23; ill. 99	-Germany	



Folger, J. A	Fu-shima t	Gay, John qII. 488 Gebrou, KantibarI. 212
Foochow tI. 230, 232, 253, 257, 258	Gadd, C. HI. 195 Gallagher. BenII. 267	Gedenkboek der Nederlandsch Indische Theecultuur. I. 112 Geisha ill
257, 258 Foochow Capers tI. 232 Foochow Oolong tI. 232	Gallagher, Ben. II. 267 Gallagher, P. C. II. 267 Galle Face Hotel \$\vec{u}\$l. II. 153	Geisha dl
Foochow Orange Pekoe tI. 232 Foochow Scented Capers tI. 233 Foochow Scented Orange Pekoe	Gallic Acid I. 524 Gallwey, Captain I. 182 Galy-Carles, J. q I. 517	General Grocery Company, Inc. II. 288
tI. 233 Foochow Tea Merchants GuildII. 25	Gan Lu Legend	Genesis of tea in IndiaI. 134 Gentleman's MagazineI. 81
Food and Nutrition qI. 554 Food Distributors' AssnII. 289	Garden, GeorgeI. 212, 457 Garden marks	George III
Food Inspection and Analysis q. I. 506, 507 Food values of tea	—Ceylon I. 224 —Java I. 237; II. 16 Gardens (see also Estates)	Gerbstoffe, DieI. 515 German Research Institute for Food ChemistryI. 557
Forbes Alexander EII. 256, 258	—Botanical —BuitenzorgI. 110, 114, 116	German tea trade association.II. 73 GerminationI. 424
Forbes, A. M	——CalcuttaI. 135, 137, 139, 141, 143 ——DurbanI. 209	Geschiedenis van de gouverne- ments theecultuur op
Forbes, James HII. 252, 258 Forbes, Robert MII. 256, 258	— — Edinburgh RoyalI. 211 — — Entebbe, UgandaI. 212	Java q
Forbes Tea & Coffee Co., Jas. H. II. 258 Forbes & WalkerII. 9, 149	— — H. C. Botanic gardensI. 147 — — Jardin des PlantesI. 206 — — Royal Botanic Garden, Cal-	G10000 SIF W. D1. 185. 186:
Ford, E. M. q	cuttaI. 174, 177 — Royal Botanic Gardens, Kew	Gibbons, J. A. II. 145 Gibbs, Richard. I. 162 Gibbs, William Alfred. I. 164, 469
II. 285 Formosa	q. I. 498	Gifu t
Formosa blacksII. 62 Formosa Industrial CompanyI. 339 Formosa Mercantile Co., The	——SaharanpurI. 134, 137, 139 ——SibpurI. 134	Gill, WallaceII. 266 Gillanders, F. MI. 162;
II. 234, 285 Formosa Oolong tI. 208, 232, 235, ill. 236, 262	——State Botanical Gardens, JavaI. 122	II. 135, 165 Gillanders, Arbuthnot & Co
—Manufacture ofI. 328, 334 Formosa Tea Culture illI. 207	— — Sukhum	I. 162, 165; II. 135 Gillespie, S. WII. 252 Gillespie & Co., S. WII. 265
Formosa Tea Fleet, Daitotei al. II. 33	BhurtpurI. 142	Gillet, Louis AllstonII. 257 Gillet, Louis WarringtonII. 257
Formosa teasI. 235-36, 262-63; II. 455 Formosan Govt. Tea Inspection	I. 141, 143, 144 — — Garoet I. 114, 116 — — Garhwal I. 142, 154	Gillet, MartinII. 252, 253 Gillet, SullyII. 257 Gillet Co., Louis AII. 257
OfficesI. 220 Forsyth, Sir T. DouglasII. 198-99		Gillet & Co., MartinII. 253 Gillett, Elmslie MII. 254
Forsythe, WilliamI. 187, 190 Fortnum & Mason, Ltd. II. 158, 289 Fortune, RobertI. 7, 15, 115,	— — Kumaon I. 142 — — Lutchmesir I. 142 — — Sirmore I. 142	Gilman, George FII. 264 Gilson, E. HII. 106 Gingia Tea Co. Ltd
142, 213 Foster, Sir William q., I. 72	— Tjilankap	Gingia Tea Co., Ltd I. 161 Ginkaku-ji II. ill. 360; 365, 366 Ginn & Co., Ltd., G. A II. 245
82, 83, 85 Foster & Co	—Pleasure —London, earlyII. 389-96 ——Bagnigge Wells II. & 388: 396; & 405	Girard Stephen II. 249 250
from India	— — Belvidere GardensII. 396	Gissing, George qII. 496 Gladstone, Sir JohnI. 162 Gladstone, William EwartII. 500
Fowliang t	— — Bermondsey SpaII. 395 — — Canonbury HouseII. 396 — — Copenhagen HouseII. 396	GlassesII. 425, 427, 434 Glazing MachineI. 401, 402 Gleason, Harold Willard q.II. 492
Frankel, F. H. q		Glenie, Rev. James Moncriff SutherlandI. 178
Franklin, Alfred qI. 33; II. 495 Fraser, AlexanderI. 188	— — MaryleboneII. 393 — — RanelaghII. 390; ill. 392	Glenton, F. H
Fraser, J. S	u. 090, 391	Gluckstein, IsidoreII. 190 Gluckstein, MontagueII. 190 Gluckstein, Major MII. 190
Fraunces' Tavern & I. 62 Frazer, Gordon II. 150		Goalpara (see Estates—Java) Goddard, KI. 468
Frazer & Co., Ltd., Gordon I. 191, 202, 203; II. 150 Frazer, Farley & Vernum	— — Lesser resortsII. 396 — — N. Y., early — — Bowling Green I. 50	Godowns —Batavia ill
II. 219, 225 Free Tea LeagueII. 127		-Japan ill
Free tradeI. 78 Freeman, WI. 162 Freight rates	— — Niblo's #	Gold of Ophir, q. II. 103 Goldschmidt, J. E. II. 114, 118 Goldschmidt & Zonen, J. II. 118 Goliath's Fall. I. 79
—Ceylon II 12 —China II 20 —India II 6	——————————————————————————————————————	Good Health q
— Japan	Gardner, Hon. EdwardI. 135 Gardner, Williams & CoII. 242	Goodhue & CoI. 91 Goodman, ColemanII. 322 Goodricke, C. AII. 175
French t	Garhwal I. 154 Gari, broker's ill. II. 136 Garnett, Louise Ayers II. 469	Goodricke & Co., C. AII. 184 Goodwin, John HarryII. 188 Goolden, Commander Cyril.II. 150
Friend of IndiaI. 150, 151 Froelke, K. A. BII. 110 FruitI. ill. 496; 499; ill. 506	Garoet t	Goodden, Commander Cyril 150 Gordon, Alex. DI. 170; II. 139, 318
FruitI. ill. 496; 499; ill. 506 Fuji tI. 234, 261 Fuji CoII. 225	Garratt & Co., Ltd., Joseph. II. 170 Garrett, J. D II. 166 Garrick, H. D	Gordon, C. MI. 202 Gordon, George JamesI. 138,
Fujiyama	Gartmore Ceylon teaII. 129 Garway. ThomasI. 38. 39:	139, 140, 141, 145, 298 Gordon, RII. 151
Fullarton, William	II. 155, 493 Garway's broadsideI. 38, 39; II. ill. 294, 295	Gordon & Co., RII. 9, 151 Gottlieb, NII. 222, 226, 275, 302 Govern & Samke
218, 284, 301 Furuya & CoII. 284	Gavin, John	Gough & SemkeII. 51 Gourlay, F. E. BII. 311, 313 Govan, DrI. 134

Governmental Aid	Gre
Governmental Aid —China	Gre
-Formosa	Gre
Gowernmental Ald —China	Gre
Gow, William. I. 191, 481; II. 183	Gre
Gow, Wilson & Stanton	Gre Gre
Gowdell, A. H. RI. 162	u.o
Gowdell, A. H. R	Gre
Göz, Joseph FranzII. 463	Gre
Grace CollectionI. 80	Gre
Graded teaI. 260, 308	Gre
Grace Collection 80 Graded tea	Gre
illI, 367	Gri
Gradings	
—Cevlon I 220 224 225.	Gri
249, 439, 440 —ChinaI. 220, 230, 253, 258, 307 —Formosa OolongI. 220, 236,	Gri Gri
	Gri
263: II. 34	Gri
—Formosa Colong. 1. 220, 236, 263; II. 34 —India	Gri
——BlackI. 220, 227, 252	Gri
— GreenI. 228, 252, 402 — JapanI. 220, 235, 262	Gri Gri
-Japan	Gri
238, 266, 367	Gri
-Natal	Gri
—Nyasaland	Gri
Graham, C. EII. 244	Gri
263; II. 34 220 227, 252 252, 252, 402 252, 252, 402 254, 255, 402 254, 255, 262 254, 255, 262 254, 255, 265, 255, 265, 265, 265, 265, 265	Gri
Grand Canal, ChinaII. 19	Gri
Grand Hotel, Calcutta illII. 144	Gri:
Grand Hotel, Yokohama ul	Gro
II. 213, 214 Grand Hotel Villa D'Este, Lake	Gro
Grand Hotel Villa D'Este, Lake Como	— Ĕ
Grand Oriental Hotel, Colombo	Gro
ulII. 152	Gro
TheII. 270	Gro
Grant, J. W	Gui
Grav. Asa	Gui
Graving of tea	Gui
Great American Tea CoII. 263	Gui
Great Atlantic & Pacific Tea Co.	Gui
Court Dave of Call T 105 108	Gui
Great Bastern Hotel, Calcutta ill	Gui
ilII. 141, 142	Guj
Great Tea Race of 1866 I. 103	Gui
Great Valley EstateI. 224	Gut
Great Western Tea Co. 01 Cey- lon, Ltd I. 203 Greek tea I. 504 Green, George. I. 71 Green, Richard. I. 90 Green brick tea I. 233, 308 Green Dragon Tavern ill. I. 56 Green manuring I. 56	Gyo
Greek tea	Gyo
Green, GeorgeI. 71	
Green, RichardI. 90 Green brick teaI. 233, 308	—A
Green Dragon Tayern illI. 56	
Green manuring	Hag
Green manuring — Ceylon	Häl
—India	Hai
Java and Sumatra	Ha _l
Beating ill	Hal
-Constituents of I. 511, 513	Ha
-First to reach Europe	Hal
Machinery	Hal Hal
— Chemical changes I. 293, 537	Hal
-Picking	Hal
-Preparation of	Hal
	Hal
Tannin in	Hai
-UncoloredII. 216	Har
Azores	Hai
	Hai
—CeylonI. 200, 225, 440	Hat
-Burma	Ha
Formosa I. 208 French Indo-China I. 236 India I. 225, 401, 402	
—French Indo-China	Hai
—India	Hai
— Japan	Hai
Green Tea qI. 401	Han
Green tea district ill	Har
Green tip	Ha
Green tipI. 332 Greenbie, Sydney and Marjorie	Ha
a. 11. 102	
Greene, W. L	
Greene, W. L	Ha
Greenish, Henry U. q 1. 507	

Greenville		
ureenville	7.7	400
Channen I	and II	185
Greenwich Te	a Party 1773 I	58
Greenwood L	ord II.	171
Greege H		153
Gregory, Sir	William Henry . II.	203
Greig. A	II. 180. 186-87.	. –
	191, 193,	197
Greig, A. F.	I .	484
Greig, J. N. I	F I.	484
Grelinger, L.	II.	. 118
Grelinger's In	n. & Export Mij.,	,
L	<u>. I <u>I</u>.</u>	118
Grenville, Geo	rge	. 51
Grieve, Norm	an William	000
CI 140-1- 3171	1. 198; 11	. 203 7 50
Grimn's What	1	1, 30
Grimtn, r. 11	m I vvi 1	40.42
Griffith, Willia	I.t.d. II	244
Griffiths John	M	244
Griffiths, John	Willis I.	87-8
Griggs, Col. C	. WII	274
Griggs, E. G.		274
Griggs, M. V	wII.	. 274
Griggs, Coope	r & CoI <u>I</u> .	. 274
Grigson, Edw	ard S	200
Grimshaw		545
Grindlay & C	o., Ltd	100
Grinlinton, S	IT John Joseph	206
Colonell Mine	11. 505	1 04
Crinnell, Milli	T. S. C. T.	00.02
Griswold, N.	w t II	268
Grocer and	Oil Trade Review	,
diocei will	II.	93
Grocers		. 82
-Begin to se	il teaI.	. 46
Groothoff, A.	I	. 127
Ground cover:	s	354
Grow, Fred A	II. <u>2</u> 20, 227	, 302
Guide to the .	Japanese Empire.1	. 338
Guignon, C.	A	294
Guilds	1. 296; 11. 2	1, 29
Guillaume, M		206
Guillemin, M	Alfrod of T	408
Gunderson, D	r. Anreu q	101
Gunn, Capt	r II. 114	120
Gunnowder t	I ill 230:	304
Gunta B C.		407
Gupta, D. C.	77	
Guri t I.	234. 261. 324: 11.	. 217
Guri tI. Gutzlaff. Rev.	234, 261, 324; 11. CharlesI.	. 217 . 138
Guri tI. Gutzlaff, Rev. Guv. Francis.	234, 261, 324; 11. CharlesI.	217 138 63
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki	234, 261, 324; 11. Charles I. 	217 138 63
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro tI.	234, 261, 324; 11 CharlesI. I. . 219, 234-35, 261,	217 138 63
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro tI.	234, 261, 324; 11. CharlesI. I. I. 	217 138 63 8
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro tI. —Analyses of	234, 261, 324; II. Charles II. II. 219, 234-35, 261, 309, 316-18,	217 138 63 8 324
Guri tI. Gutzlaff, Rev. Guy, Francis Gyoki Gyokuro t.I. —Analyses of —Manufactur	234, 261, 324; 11. Charles I	217 138 63 8 324 511 321
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro tI. —Analyses of —Manufactur	234, 261, 324; 11. Charles I	217 138 63 8 324 511 321
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro tI. —Analyses of —Manufactur Hachioji	234, 261, 324; 11. Charles	217 138 63 8 324 511 321
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & Ly	234, 261, 324; 11. Charles	217 138 63 8 324 511 321 311 237 237
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro t. I. —Analyses of —Manufactur Hachioji Hägisen & Ly Hagiang Cak	ord II. ord III. a Party, 1773 I. ord III. William Henry II. II. 180, 186.87, 191, 193, II. 180, 186.87, II. 180, 186.87, II. 190, II. on & Export Min. II. 198. II. rge II. an William II. an William II. II. 198. II. am I xvi, II. am I xvi, II. am II. xvi, II. am II. xvi, II. II. M. III. II. M. III. II. M. III. II. W. III. W. III. Oo. Itd. II. II. 305. II. 305. II. 305. II. 306. II. 200, V. I. II. II. II. II.	217 138 63 8 324 511 321 237 237 237
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyoki Gyokuro t.I. —Analyses of —Manufactur Hachioji Hälssen & Li Hagiang Cak Hagiwara, To	234, 261, 324; 11. Charles	217 138 63 8 324 511 321 237 237 237
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokur. Gyokuro tI. —Analyses of —Manufactur Hachioji Häglasen & Ly Hagiang Cak Hagiwara, To Hahn, F. C.	234, 261, 324; 11 Charles	217 138 63 8 324 511 321 237 237 237 203 124 267
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hägisen & L. Hagiang Cak Hagiwara, To Hahn, Henry. Hajji Mahomi	234, 261, 324, 11 Charles I.	217 138 63 8 324 511 321 237 237 237 267 3, 24
Guri tI. Gutzlaff. Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & L. Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajii Mahomi Haldane, R. C	234, 261, 324; 11 Charles	217 138 63 8 324 511 321 237 237 237 24 267 3, 24
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & L. Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahom Haldane, R. Hall, Eric	234, 261, 324; 11 Charles	217 138 63 8 324 511 321 237 237 237 237 24 267 3, 24 304
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro t. I. — Analyses of — Manufactur Hachioji Hälssen & L. Hagiang Cak. Hagiwara, To Hahn, F. C Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, George	234, 261, 324, 11 Charles I. I. 219, 234-35, 261, 309, 316-18, I. e of I. 320, I. 234, yon II. e t I. II. med I. 2; II. 186 II. 186 II. 186 II. 186 II. 186	217 138 63 8 324 511 321 237 237 237 237 24 267 3, 24 171 282
Guri tI. Gutzlaff. Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & L. Hagiang Cak Hagiwara, To Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, George Hall, William	234, 261, 324; 11 Charles I. I. I. 219, 234-35, 261, 309, 316-18, e of I. 320, I. 234, yon II. e t I. rao II II	217 138 63 8 324 511 321 237 237 203 24 267 3, 244 171 282 195
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Häglasen & Ly Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahom Haldane, R. C. Hall, George Hall, George Hall, Company	234, 261, 324, 11 Charles	217 138 63 8 324 511 321 237 237 237 303 124 267 3, 244 171 282 1253 267
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro t. I. — Analyses of — Manufactur Hachioji Hälssen & L. Hagiang Cak. Hagiwara, To Hahn, Henry Hahi, Mahom Haldane, R. Hall, George Hall, William. Hall Co., A	234, 261, 324; 11 Charles	217 138 63 8 324 511 321 237 237 267 3, 304 282 197 282 197 282 197 298 298 298 298 298 298 298 298 298 298
Guri tI. Gutzlaff. Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & Ly Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, Eric Hall, George Hall, William Hall Company Hall & Loud	234, 261, 324; 11 Charles I. I. I. 219, 234-35, 261, 309, 316-18, e of I. 320, I. 234, yon II. e t I. II. med II. E. II. E. II. E. II. II. II. II. II.	217 138 638 8 324 511 321 311 237 2237 303 244 267 27 27 282 282 282 282 282 282 282 282
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahom Haldane, R. Hall, William Hall Company Hall & Co., A Hall & Loud Hall Company Hall & Co.	234, 261, 324; 11 Charles	217 138 632 8 324 511 237 321 237 303 124 24 171 282 197 297 297 297 297 297 297 297 297 297 2
Guri tI. Gutzlaff. Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & L. Hagiang Cak Hagiwara, To Hahn, Henry Hajji Mahome Haldane, R. C. Hall, Eric Hall, George Hall, William Hall & Loud Hamaker, C.	234, 261, 324; 11. Charles	217 138 63 88 324 321 321 237 237 237 237 237 24 267 253 0, 262 282 282 282 282 253 511 253 253 253 253 253 253 253 253 253 253
Guri tI. Gutzlaff. Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & Ly Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, George Hall, William Hall Company Hall & Loud Hall & Loud Hall & Loud Hall & Co, A Hall & Loud Hall & Co, A Hall & Loud Hamaker, C. Hamaker, C.	234, 261, 324; 11 Charles I. I. 219, 234-35, 261, 309, 316-18, e of I. 320, I. 234, yon II. e t I. rao II. med I. II. med I. II. E II. 256, II. 186, II. 189, yon II. lexander I. 11, lexander I. 89, yon II. y, G. S. II. M. III.	217 138 632 511 321 311 321 312 237 237 237 237 247 253 0, 96 282 289 127 251 251 251 251 251 251 251 251 251 251
Guri tI. Gutzlaff, Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Häglasen & Ly Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahom Haldane, R. Hall, George Hall, George Hall, Eric Hall, Ecount Hall & Co., Hall & Loud Hall Company Hall & Loud	234, 261, 324; 11. Charles	217 138 638 8324 5111 321 311 237 2267 2267 2267 282 253 304 282 253 253 253 253 253 253 253 253 253 25
Guri tI. Gutzlaff. Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & L. Hagiang Cak Hagiwara, To Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, George Hall, William Hall & Loud Hamaker, C. Hamaker, E. Hamauratau t Hamauratau t	234, 261, 324; 11 Charles	217 138 68 324 5111 321 237 303 124 24 171 282 2197 2282 2197 2282 2289 125 261 261
Guri tI. Guziafi, Rev. Guy, Francis. Gyokuro tI. —Analyses of —Manufactur Hachioji Hälssen & Li Hagiang Cak Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, Eric Hall, George Hall, William Hall Company Hall & Loud Hamaker, C. Hamaker, J. Hamamatsu t Hamburg, por	234, 261, 324; 11 Charles I.	217 138 63 8 324 5111 321 321 237 237 237 247 267 237 267 27 27 27 27 27 27 27 27 27 27 27 27 27
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, Henry Hajji Mahomi Haidane, R. C Hall, George Hall, George Hall, George Hall & Co., Hall & Loud Hall & Loud Hall & Loud Hall & Compan Hamaker, E. Hamamaker, E. Hamamaker, E. Hamamaker, Lathammurg, por Hamilton, Lathammond, E	Tao	303 124 267 3, 24 171 282 197 253 0, 96 282 289 127 519 125 261 236
Hagiwara, To Hahn, F. C. Hahn, F. C. Hahn, Henry Hajji Mahomi Haldane, R. C. Hall, George Hall, William Hall & Company Hall & Co, A Hall & Loud Haly Company Hamaker, C. Hamaker, E. Hamaker, J. Hamamatau thambook, E. Hamood, E. Hamood, E. Hancock, Joh Hancock, Joh Hancock, Joh Hancock, Joh Hancock, Joh Hancock, Joh Handbook of drop to the dandbook of faradbook of	234, 261, 324, 11 Charles	303 1247 3, 244 3, 304 171 282 1253 0, 966 2889 127 519 519 392 193 173 173 173 173 173 174 148

Handbook of the Flora of Cey- lon, TrimenI. Handbook of Rupee Companies	174
Handbook of Rupee Companies	209
Handbook for the Cultivation	
(see Handboek voor de	
cultuur, etc.) Handelingen van het Eerste	
Ned. Ind. Natuurweten-	507
Handelingen van het Theecon-	201
Handelmaatschappy Transma-	350
rina, IncII. Handelsvennootschap voorheen	289
and Manufacture of Tea (see Handboek voor de cultuur, etc.) Handelingen van het Eerste Ned. Ind. Natuurweten- schappelijk Congress. I. q. Handelingen van het Theecon- gres	117
dam"I. 131, 368; II.	117
Handelsvereeniging	111
Handelsvereeniging te Medan. II.	17
Hand-rolled tea, cost of	323 252
Hangyang t	255
Hankow Tea Merchants Guild.	0.22
Hannay, A. B II.	25 318
Hanoi Cake t	237
Hanson, SamuelII.	159
Hanson & Son, SamuelII. Hanway, JonasI. 44, q. 48:	159
Haputale Planters' Assn I	494
Harasaki, GensakuI. 321,	005
Harbeck & CoI.	94
tiswoodI.	197
Harding, E. G	197
Harington, John E. Musgrave	0 10
Harler, C. RI. 168, 290;	0.19
501, 510, 517, 525, 534;	
11. 299, Harper (planter)I. 212,	449
Harpur, John II. 313, 320, Harrington, W. L	324
Harrington, W. LII.	222
Harrison, Charles II. 16	7-68
Harrison, C. J. I. 167, 510; q. Harrison, DanielII. 16	535 7-68
Harrison, G. D. BI. 178,	185
Harrison, SmithII. 16	7-68
—CalcuttaII.	143
—ColomboI. 11. —LondonI. 131; II. 167;	150
Woden I 269: II all	169
Harrisons, King & Irwin, Ltd.	112
II. 21, Harrod Henry Charles II	104
	170
Harrods, LtdII.	170 170
—Medan I. 368; III. 42. Harrisons, King & Irwin, Ltd.	100
Hartford Cooper H	264
Hartford Cooper H	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George H II. Hartford, George L III. Hartford, John A	264 264 264
Hartford, George HII. Hartford, George LII. Hartford, John AII. Hartford Products Corp. II.	264 264 264

Hazen, Edward JII. 288 Hazen, Powers & CoII. 288 Health, Strength, and Happi	Historical Record (Ch'a Ching) I. 20 History of the Great and Re- nowned Monarchy of	"Housing certificate" II. 47 Houssaye, J. G II. 298 Houtman, Cornelius 1. 28 Howden, J I. 486
ness q I. 555 Healthfulness of tea. I. 552-559 —Arguments against I. 538 —Opinions on. I. 552-559 Hearn, J. W. II. 281	China, The . I. 27; II. q. 398 History of South Carolina under the Royal Government,	Howland, George
Hearn, Laicadio qII. 495 Heath, A. HII. 144	The	Howlett, P. F II. 169, 207 Howorth, Wm I. 469, 471 Howqua II. 102, 103, 250 "Howqua mixture" I. 147
Heath, A. R. A II. 144, 151 Heath & Co., Ltd II. 111, 143, 151 Heatly & Gresham, Ltd I. 483 Heavy Pruning and Stem Dis-	Hlasiwetz	Hoyune t
Hecht, Robert LII. 260, 261, 273, 292, 327 Hedges (Java and Sumatra). I 354	Hodgdon, Daniel R. qI. 557 Hoedt, Dr. Ir. G. EI. 124 Hoeing	Huahsing t. I. 233 Hubbard, William. II. 258 Huc, Peré Evarist Régis q. II. 400 Huet, Pierre Daniel q. I. 35; II. 487, 493
Hedges, J. R. II. 146 Heekin, James II. 268, 276 Heekin, Robert E II. 268 Heekin Company, The II. 268	— India ill. I. 389 — Persia I. 459 Hoeth, A. W. Wichers II. 116 Hoffman, Francis II. 489	Hui Hos (see Hohows)
Heeleakah garden	Hoffman, Mark. II. 272 Hoffmann, F. q. I. 523 Hofong t. I. 255 Hogarth, William. II. 390, 462	Huiles essentielles, Les qI. 523 Hulett, Sir James Liege. I. 209, 211 Hulett & Sons, Ltd., J. L I. 209, 456; II. 243
Hellyer, Harold JII. 212, 224, 270 Hellyer, Harold JII. 224, 271	Hogg, Francis C	Hulett Estate, Natal & I. 456 Humidiflers & I. 285, 287, 365 Humidity I. 270, 287, 288 Humphreys, George II. 245
Hellyer, Thomas	Hok, Oeij TiauwI. 127 Holberg, Baron LudvigI. 35 Holborn, Robert MajorII. 161 Holborn & Sons, Ltd., R. M. II. 161	Hunasgeria Tea Čo., Ltd I. 203 Hundred-and-Seventy Chinese Poems q II. 484 Hung Ch'a I. 308
Hellyer & HuntII. 212, 224 Helopeltis (see Pests) Helopeltis for South India Planters, Observations onI. 412	Holden, Leonard M	Hunt, E. R. II. 212 Hunter, William C. q. II. 101, 104 Hurlbut, Gladys II. 498 Hussey, Frank J II. 286
Hemeleia vastatrix. I. 173, 179, 185 Hemmen, G. E	Holle, A. WI. 118, 121, 128 Holle, AlbertI. 118, 120, 122, 128, 476 Holle, Alexander AlbertI. 120, 128	Hutchinson (Governor of Mass.) I. 53, 57 Hutchinson, C. FII. 53, 280 Hutchinson, Claude Mackenzie
Henderson, G. R. B. III. 175 Henderson, J. A. II. 151, 193 Henderson & Co. III. 151 Henderson & Co., Ltd., George	Holle, Herman H I. 128 Holle, Karel Frederik I. 118, 121, 122, 128 Hollingworth, H. L. q I. 541-43	Hutchinson, Sir Jonathan q. I. 553 Hutchinson, Thomas and Elisha I. 57
Henderson & Co., J. AII. 193 Henderson & Sons, George.II. 170	Holme, Charles	Hutchinson, Woods q
Henry, Patrick. I. 78 Hensley, Charles J. II. 265 Heron, John II. 274 Hess, F. I. 131	Holness, Edwin II. 181 Holstein-Gottorp, Duke of .I. 30, 31 Holt, Alfred	Huxley, G
Hessian cloth I. 362, 363, 437 Hewett, Sir John Prescott II. 201 Hewlett, George II. 265, 280, 292 Hewlett, J. A	Home & Colonial Mail I. 537 Home & Colonial Stores, Ltd. II. 185 Home service merchants II. 89 Homma, Gisaburo II. 303	Hwie t
Hewlett, Samuel AugustusII. 265 Hewlett & Co	Hone, Nathaniel. II. 463 Honeysuckle Congou t. I. 230, 258 Hong merchants. I. 75; II. 100 Hongs. I. 101, 105; II. 18	Hynde and Stark I 212 Hyson t I 231, 232, 304 Hyson Skin t I 231 Hyson stove ill I 466
II. 118 Hicks, Mayor Whitehead	Hoochow t	I Ling T'u Ching qI. 21 Ibbetson, AlexanderII. 156, 207
Higham, Sir Charles11, 321, 322 Hiki-cha (powdered tea)I. 8, 234, 317, 321	Hoogly River ill. II. viii Hook, Theodore q. II. 498 Hooker, Sir Joseph Dalton q.I. 383 Hoole, John. I. 85; II. 494	Ichang t. I. 228, 254 Ikeda, Kenzo. II. 227, 286 Ilbery, Fearon & Co. II. 102 Ilax cassine. II. 503
Hill, John I 498 Hill Tippera I 385 Hill Tippera I 227 Hill Tippera II 142, 178 Hill Tippera II 142, 178	"Hop" tea II. 435 Hope, Edward I. 188 Hope, G. D. I. biog. 168; 344, 359, 393, 455; q 518	Hex paraguayensisI. 495, 502 Hlustrated London NewsI. 93 Imperial College of Agriculture, TokyoI. 511
Hilliers, Walter II. 164 Himalayan Journals q I. 383 Hindson & Co., W. R. I. 209, 456; II. 243	Hope & Son, Chas	Imperial Company of Trieste. I. 68 Imperial Edict
Hindugalla (see Estates—Ceylon) Hirado	Horniman, John	Imperial t
Hirschhorn, BenjaminII. 286 Hirschhorn, LouisII. 286 Historiae Naturalis et Medicae Indiae OrientalisI. 32	F. J II. 165 Horter, John II. 268 Hortus suburbanus Londonensis I. 497	
Historic Tea Party of Edenton, TheI. 65 Historica Indica qI. 25, 37	Hoseason, H. O I. 193, 200 Hoskins, A II. 186, 191, 193, 197 Hotek, tea in —France II. 426	Brazil II. 346 Canada II. 353 Ceylon II. 339 Chile II. 356
Historical and Chronological Deduction of the Origin of Commerce, q	—Germany illII. 425 —LondonII. 415 —U. SII. ill. 423; 424	—China II. 335 —Colombia II. 356 —Ozechoslovakia II. 355
Days of the Planting Industry in S. India q. I. 143	Hou Wei Lu	—Egypt II. 356 —Formosa II. 343

-French Indo-ChinaII. 344	Ingram, A. J I. 199, 200	Jamieson, G. D
GermanyII. 354	Inland Revenue LaboratoryI. 74	Jannum1. 333, 334, 394, 430
—GreeceII. 355 —IndiaII. 338	Inman, Thomas qI. 553 Innes, CaptainI. 101	Jansonius, RII. 114, 120
-Iran (Persia)II. 346. 355	Innes, Aaron	Janssen, D
—Iran (Persia)II. 346, 355 —Irish Free StateII. 350	Innes, AaronII. 253 Insch, JamesI. 170; II. 138	Japan: Its History, Art and
Japan	Inskipp, C. FII. 183	Literature a II 214
MauritiusII. 347	Inspection	Japan Central Tea Association I. 296, 319, 324-5; II. 28, 29, 32, 228, 299, 30
— Morocco	—AmsterdamII. 47	1. 296, 319, 324-5; 11.
—Netherlands II 355	—CalcuttaII. 3 —China illII. 18, 23, 25	-List of officersII. 229
-Netherlands IndiesII. 340	—FormosaI. 208, 340;	Japan Miscellanies
— Netherlands II. 355 — Netherlands Indies II. 340 — Newfoundland II. 354	ĬI. 34, 231	Japan Tea, Glorification of
New Zealand	—Japan	II. 361-378
—Peru II. 346 —Poland II. 354	—LondonII. ill. 40; 41-42	Japan Tea Buying Agency
	International Rules (Congress of	II. 227, 286
—Spain	Vienna) q	Japan Tea CompanyII. 21' Japan Tea Exporting CoII. 21
Tunia II 256	International Tea Committee	Japan tea plant ill
Turkey II 355	II. 329, 348	Japan Tea Promotion Committee
	International Tea Company's	II. 302
United States II. 51, 343, 351-54 - Venezuela II. 51, 343, 351-54 - World II. 356 - III. 256 - III. 256 - III. 256	Stores, LtdII. 181	Japan Tea Re-firing CoII. 218
-World II 337	Introduction into —America	Japan Tea Society
Improved Formosa OolongII. 231	—ChinaI. 4, 20	262; II. 455
inch, Johnist	—England	Japanese garden in America ill.
India ActsI. 70 India House, N. YI. 106	—Europe	II. 423
India House, N. Y	—GermanyI. 31	Japanese tea pioneers illII. 218
India teasI. 220, 221, 225,	—Japan I. 7, 8 —New England I. 49	Jardine, David
226, 227, 249-252; ill. 502; II. 454	—New York	Jardine, David
—Discovery of	—NyasalandI. 211	89, 90, 98, 105; II. 21,
India TeaI. 161 India Tea BureauII. 322, 323	—ParisI. 33	102, 104, 107, 223, 273
India Tea BureauII. 322, 323	-Philadelphia	102, 104, 107, 223, 273 Jardine, Matheson & Co., Ltd.
India tea, Far-flung kingdom of I. 133-172	—Scandinavian countriesI. 33 —Other countriesI. 29	FormosaII. 233 Jardine, Skinner & Co. I. 162,
India tea kiosk illII. 324	-Other countriesI. 29 Inverforth, LordII. 281	165 169 (1 135
India Tea TipeII. 323	Investor's India Year Book, The	Jars ill
India WharfI. 105	II. 209	Jasmine
Indiae Utriusque re Naturali et	Iran (Persia) t	JatsI. 133
Medicae, De qI. 32 Indian brick tea for TibetI. 402	Irano-Sinica qI. 494	Jaunet, MI. 216
Indian MuseumI. 167	Irvine & McEachern Pty. Ltd	Java and SumatraI. 341 Java and Sumatra teasI. 264-
Indian Planters Assn., Jal-	Irving, Miss MargaretII. 189	266; II. 455
paiguriI. 411	Irving, Minna qII. 491	Java and Sumatra, Tea's Con-
Indian Planters Association,	Irving, Washington $qII.$ 406	quest of
TravancoreI. 411 Indian Planting and Gardening	Irwin, A. P II. 53, 227, 260	Java CourantI. 113
q. I. 528	Irwin, Henry Raikes Alexander I. 161	Java Tea Congress and Fair (see Tea Congress)
Indian tea apparatus, Early	Irwin, P. CII. 260	Java Tea Pioneers illI. 120-
ill. I. 475	Irwin, RichardII. 196	23, 127-29
Indian Tea Association	Irwin, R. F	Jaun, office alII. 136
CalcuttaI. 164, 165, 166, 169, 171, 172, 296, 407,	Irwin, William P. M II. 277	Jebb, Thomas JamesI. 197
408; II. 315-17	Irwin, Harrisons & Crosfield, IncII. 227, 260	Jeffrey, A
Onertarly Innenal a I 200	Irwin-Harrisons-Whitney, Inc.	Jesuit tes
295, 314, 380, 387, 392, 409, 509, 510, 517, 518, 525, 530, 532, 534, 535	11, 227, 260	Jevne Co., HII. 278 Jewel Tea Co., IncII. 283, 284
409, 509, 510, 517, 518,	Irwin-Harrisons-Whitney, Inc.	Jewel Tea Co., Inc II. 283, 284
525, 530, 532, 534, 535	(Formosa)II. 234	Jewell-Thomas, RII. 153 Jewett, Milo PII. 267
——Scientific Department I. 167, 168, 408	Ishigai, SaijiroII. 218 Ishii, SeiichiII. 227, 228,	Jewett & Sherman CoII. 267
-LondonI. 160, 162, 296,	302-3: a. 492	Ji-An t
198-202	302-3; q. 492 Ito, Ichihei	Jobbers
— — Headquarters illII. 199 — — List of officersII. 200	Ito, Kozaemon	—JapanII. 27
——List of officers	Ito, Kumao	—United StatesII. 58 John IV
II. 137	Ito's Tea Firing Department,	John Company (see also Eng.
Indian Tea Cess Committee	LtdII. 226 Iwan t (see Kaporic)	Fast India Co.) I 67
I. 167, 171; II. 321		80-85; II. 129
Indian Tea CommissionI. 140-42	JaI. 495	80-85; II. 129 John Co. and the Clippers. II. 71, 89 Ichn E. II. 147
Indian Tea CommitteeI. 137-39 Indian Tea Committee's circular	Jaboka Tes Co	John, EII. 147 John, Reginald MarshallII. 147
I. 137-39	Jackson, RobertII. 156	John & Co., E I. 200; II. 9, 147
Indian Tea Districts Association	Jackson, William I. 157-8,	Johnson, H. Luckman I. 160
I. 164, 407; II. 199	213 , 214 , 47 1-2, 47 7-9,	Johnson, Dr. SamuelI. 44,
Indian Tea Industry: Its Rise,	481, 483, 485-6	48; II. 390; ill. 406; q. 488, 494, 498
Progress, etc. qI. 141, 155 Indian Tea: Its Culture and	Jackson & Co., Robert. II. 156 Jacobsen, Alfred W. II. 253 Jacobsen, Theodore. I. 81 Jacobson, Ed. I. 118 Jacobson, Ed. I. 111	Dr. Johnson's seat at the Chesh-
Manufacture a I. 388	Jacobsen, Alfred W	ire Cheese illII. 494
Manufacture, qI. 388 Indian Tea Planters' AssnI. 172 Indian Trade JournalII. 347	Jacobson, Ed	Joint Sales Tea Market . I. 208;
Indian Trade JournalII. 347	Jacobson, I. LI. 111; II. 117	11. 33
indians in tea (natives) 407	Jacobson, J. I. L. L	Joint Tea Association (Japan) II. 28, 29
Indische Mercuur qI. 529 Influence of Alcohol and Other	Jacobson, I. L I. 111; II. 117 Jacobson, J. I. L. I I. 111 118, 122, 357, 465, q. 466; II. 117 Jacobson & Zonen, Leonard. II. 117	Joint Tea Association of
Drugs on Fatigue, The	Jacobson & Zonen, Leonard. II. 117	Shizuoka Prefecture
q. I. 541	Jantesoetichte Fottschtwie Unem.	I. 324. 325
Influence of Caffeine on Mental	I. 509	Jolly, John KeithI. 180, 181, 182 Joly, Henry L. qII. 362
and Motor Efficiency, The	Jalpaiguri Planters' Association	Joly, Henry L. q
q. I 543	I. 172	Jones Dr
InfusionI. 19; II. 451 Inglis, CaptI. 101	James I I. 37	Jones, A. F II. 152
Inglis, CaptI. 162, 164,	James II	Jones, Capt. I. 101 Jones, Dr. I. 213 Jones, A. F. II. 152 Jones, Cyrus D. II. 270, 276
169; II. 137, 184	James, Abel	Jones, Frank S II. 270, 276
Inglis, C. DI. 170; II. 137	James & DrinkwaterI. 60, 61	Jones, Frank S. II. 270, 276 Jones, Harry L. III. 280 Jones, J. III. 31 Jones, M. P. II. 259
		women, w
Inglis, R	Jameson, WilliamI. 139	Jones. M. P

Jones, T. WII. 17, 111	Kedah Malay t	Kivomasa, Kato
Jones, WebsterII. 259	Keell, W. E	Kiyomasa, KatoII. 370 Klaproth, Julius Heinrich q.II. 230
Jones, W. T	Keell & WaldockII. 9, 151	Knapp's Tea-Water Pump ill I. 51
Jones, William Tetley II. 167, 275	KeelungII. 34	Knickerbocker Mills Company
Jones & Co., A. FII. 152	Keemun tI. ill. 228; 254	II. 257
Jones & Co., Ltd., RobertII. 244	Keiller, P. A. q	Knight Charles a I 83
Jones Brothers Tea Company	Keir, Simon	Knight, Charles q I. 83 Knight, H. M II. 206
II. 270	Keir, Dunder & Co. I 170	Knuckles Kalabakka and Dan
	Keir, Dundas & CoI. 179,	Knuckles, Kelebokka, and Pan- wila Planters' AssnI. 192
Jones-Thierbach Company, The	183, 185, 187	wila Planters' Assn1. 192
II. 259	Keith, Malcolm W II. 180, 193	Kobe teasII. 215
Jonquet, Dr. DenisI. 34	Kelani Valley Planters' Associa-	Kobo Daishi
Jonquet, Dr. DenisI. 34 Jorehaut Tea Company. I. 154, 160, 162; II. 208, 209	tionI. 198	Kobori-Enshiu-no-KamiII. 365, 369
160, 162; II. 208, 209	Kellner, O	Ko-cha (see Black Tea)
Journal Agricultural Chemistry	Kelly, L. H	Koehrman, J. W
Society q	Kelly, W. A	Koenigs-tea
Journal, American Chemical So-	Kemble, Mrs. Fanny qI. 95;	Koffie moe
ciety q	II. 405	Koi-cha
Journal American Medical Asso-	Kennard and WilliamsonI. 87	Koji Kongen 8
JULITURE A METICULE ALEUKUR ASSU-	Vannadu Ham C I 101	Kokan t
ciation q	Kennedy, Hew CI. 191	KOKAH I
Journal American Pharmacology	Kennedy, Lt. Col. W. Magill. I. 160 Kenny, C. D	Kokel, A
Assn I. 284; q. 531	Kenny, C. D	Kokew, or Kou Chao, tI. 255
Journal of the Asiatic Society. I. 2	Kenny & Co., C. D II. 269	Kokew Colong t
Journal Chemical Society I. 511	Kensington GardensII. ill.	Kolff, C. M. FII. 117
Journal of the China Branch of	410; 415	Kolff & Witkamp II. 117
the Royal Asiatic Society	Kenya t	Kolonial Memorieboek I. 31, 34
Journal of the China Branch of the Royal Asiatic Society I. 492	Kenya Tea CompanyII. 134	Komada, HikonojoII. 217,
Journal Home Economics qI. 547	Kenya Tea Growers AssnI. 213	218, 301
Journal, India Institute of Sci-	Kerbosch, M	Kong-I-TangII. 23
ence	Kerkhoven, Augustus Emilius. I. 128	Koning, Henry
Journal de Pharmacie et de	Kerkhoven, A. R. WI. 121-2,	Koninklyke Nederlandsche Stoom-
Chimie qI. 503	127-8, 350	koffiebranderij v/h H. E.
Journal Royal Horticultural So-	Kerkhoven, E. H I. 128	van Ysendyk, JrII. 119
ciety q	Kerkhoven, Edward Julius	Koolaw t
Towns Continued Arts Tondon	T 100 100 100	Kooznetzoff & CoII. 98
Journal Society of Arts London	I. 120, 122-3, 128	
gI. 75, 141, 155 Journal of an Eight Days' Jour-	Kerkhoven, JohannesI. 128 Kerkhoven, K. FI. 128	KoreujiII. 485
Journal of an Eight Days Jour-	Kerkhoven, K. F	Kosai, Y. q 511, 529
ney q 48	Kerkhoven, Rudolph Albert	Kossel, A. q
ney qI. 48 Journals of TravelsI. xvi, q. 140	I. 121, 128	Kousmichoff, Constantin11. 236
Jou Tzu Fang q	Kerkhoven, Rudolph Eduard	Kousmichoff, MichailII. 197, 236
Jou Tzu Fang q	I. 120, 122, 128, 477	Kosai, Y. q
Ceylon q	Keswick, J. JI. 169; II. 105	Kousmichoff, Viacheslav II. 197, 235
Judge, Charles G. L I. q. 401;	Keuchenius, A. A. M. N 1. 126, 352	II. 197, 235
483, 484	Keyzer, Jan JII. 120	Kousmichoff & Sons, P. M
Junks, Chinese	KiaI. 3, 15, 20, 492, 493	II. 197, 235
Junna, Prince qII. 485	Kianghan tI. 254	Kraay, G. M
Jupp, Richard I. 81, 82	Kiangnan t I. 255	Kwaenelin E a
•••	Kidderpore WarehouseII. 1, 3	12 mamor A W
Kabuse-cha (see Covered tea)	Kien Lung q II. 485	Kremer, T. H
I. 315	Ki-lam t	Kroger, B. H II. 274, 276
Kaempfer, Dr. EngelbertI. 495	Kilburn, E. DII. 135, 173	Kroger Grocery & Baking Co. II. 274
Kageyama, ShigekiII. 303	Kilburn & Co	Krohn, WernerII. 105 Krupp GrusonwerkI. 490
Kagoshima t	Kilburn, Brown & CoII. 173	Krupp Grusonwerk I. 490
Kahle, W. J II. 277	Kinds of Tea Grown in the	Kua lu
Kahrel, Adolf NicolaasII. 119	World (table) I. 246-267	Kuang YaI. 3; q. 20; II. 397
Kahrel, HermanII. 119	Kinds of tea used	Kublai Khan
Kahrel, R. JII. 114, 119	—AfricaII. 434	Kuen Fang Pu I. 4, 5
	—AsiaII. 432	Auen Fang Fu T 294
Kahrel's TheeII. 119		Kumaon
Kahwa (coffee)I. 30, 134	-AustraliaII. 419	Kumaon t
Kaihwa t I. 253	—CanadaII. 421	KumiaiI. 296, 339, 340;
Kaiser, Joseph	—China II. 430	II. 33, 35
Kaiser's Kaffeegeschäft G. m. b.	EnglandII. 409	Kunkel, CII. 222
HII. 238	—France II. 425	K'un Yuan Lu qI. 21
KakemonoII. 371	—GermanyII. 425	K'un Yuan Lu q
Kakuzo, Okakura qII. 362-3,	—JapanII. 431	Kuo P'oI. 3, 15, 20, 21; q.
368-9, 490	—Netherlands	493, 494; 11. 397
Kalshoven, I. G. EI. 127	-New Zealand	Kurseong & Darjeeling Tea Co.,
Kalutara Planters' Association. I. 193	—RussiaII. 426	Ltd
Kam	-United StatesII. 422	Kurunegala Planters' Association
Kama t I. 332, 333	King, C. B. R I. 195	I, 192
Kambayashi, K	King, Mrs. Elizabeth 05	
Kamibayashi, MiheiI. 465	King, Sir Henry Seymour II. 201	Kutoan t
Kampong t	King. W. S	K'u t'u
Kanan Devan Hills $t \dots I.$ 227	King, W. W	Ku Yuan Ch'ingI. 5; q. 493
Kanaya t	King Ch'a	KwaliesII. 466
Kanaya National Experimental	King Ch'a I. 308 "King of Coorg" I. 186 "King of Kandy" I. 185	Kwang Hsi's Dictionary q. I. 492
Station I. 295	"King of Kandy"I. 185	KwanyinII. 364
Kando, YesukeII. 216	Kingdom's IntelligencerII. 295	Kwanyin
Kangra	Kingsford, Arthur Charles	Kyd, Col. RobertI. 134
Kangra Valley t	I. 189, 190, 333, q. 358	
Kanis & GunninkII. 120	Kingsley, GeraldI. 164, 169,	Labaree, J. H
Kaporic t	170; II. 142, 184-5, 318, 321	Labaree & Co., J. HII. 271
Kardomah tea-rooms alII. 426	Kingsley, ThomasI. 162	Labeling machineryII. 72
Karker, M. H	Kinhwa t	Taban T non
Karker, M. H II. 283-4 Karsen, H. Th	Kining t	Labor
Kashef-es-Saltaneh, Prince	Kinkaku-ii 41	—CeylonI. 173, 196, 442
I. 209; II. 235	Kinkaku-ji illII. 360, 366 Kinmond, James CI. 157,	-Formosa
Katagiri-Iwami-no-KamiII. 366	159, 468, 471	-Fr. Indo-China
Kato, TII. 228	Kintuck t	—IndiaI. 149, 166, 404-6
Kayanaugh Patrick J II. 271	KiosksII. 432	—Iran (Persia)
Kowana t T 924 940	Kircherus Athanseine I 30 39	
Kawane tI. 234, 260 Kearley, Hudson EwbankeII. 182	Kircherus, AthanasiusI. 30, 32 Kirchner, Fischer & CoII. 237	—Java and SumatraI. 368, 369
Kondov & Tongo I.d II 100	Kirk, Alexander LouisI. 197	—NatalI. 456
Kearley & Tonge, LtdII. 182 Keast, GeorgeII. 244	Wiene Toe Co T 140	—Siam
Veste Tehn & TT 400	Kisna Tea CoI. 162 Kitcha YojokiI. 8, 9; II. 295, 484	-Uganda and KenyaI. 460
Reats, John q		
V 0 7-L 7 00 1010	Timbiam A T 000 000 000	Labrador / I 504
Keay, Captain JohnI. 97, 101.3	Kiukiang tl. 228, 230, 232,	Labrador tI. 504
Keats, John q	Kiukiang tI. 228, 230, 232, 253, 256	Labrador t

Ladies Home Journal q I. 549		
	Lemon tea	Loemadjang $t \dots I$. 265
Lageman, D	Lendner, A	Logan, Frank I. 107
Laing & Co I. 96	Lespinasse	Logan, G. K
Lakhimpur I. 380	Lester, Joseph II II. 289	Lohmann, C. E. J. I. 123, 124,
Lamb, CharlesI. 81, 85;	Lester Bros	511, 512; q. 521, 522
Damo, Charles 01, 00,	Latest I 124 992 927 984.	Tondon 311, 512, Q. 521, 522
II. q. 494	Letpet. I. 134, 223, 237, 264;	London
Lamb, J	II. 398	—DocksII. ill. 36; 38, 154
Lamb, General JohnI. 55	-Manufacture of	—Free port
Lambe, H I. 125; II. 111, 325	Letpet chauk	-Map of, in time of coffee
Lambe, Harold AII. 286	Letter to a Friend Concerning	houses
Lambe & Co., WalkerI. 125	Tea qI. 48; II. 494	Market
Lampard, C. A. (Arthur)	Lettsom, John Coakley I. 31;	-Trade, Members of illII. 194-5
I. 131; II. 150, 167	II. 494	Tandan a T 09
		Landan Commonaial Cala Bassas
Lampard, JacobII. 171	Levant Company (see East India	London Commercial Sale Rooms II. 43; ill. 44, 129
Lampard schemeII. 311	Co.—English)	11. 43; w. 44, 129
Lancaster, JamesI. 67, 68	Lewis, Charles	London Daily Mail q 1, 559
Lancet, The I. 509, 510, 523;	Lewis, CharlesII. 268 Lewis, FrederickI. 196; q. II. 387	London Daily Mail q I. 559 London GazetteI. 47; II. 296
q. 546, 552, 554	II. 387	London Genuine Tea Company
Landbouw Maatschappii Pange-	Lewis, Harry K II. 253 Lewis, Robert A II. 53, 267, 280 Li tea	ill
rangoII. 116	Lawis Robert A II 53 267 280	London in the Eighteenth Cen-
Landers, Frary & Clark. II. 441, 443	Li ten II 123	tury qII. 403
Tanders, Italy w Clark. II. 441, 440	Liberty tea	
Landmark, The q		London Magazine
Lane, F. G. A	Liberty TreeI. 56	London Observer qI. 173
Lane, George WII. 252, 266 Lane, Sir W. Arbuthnot qI. 559	Library of the Connecticut His-	London Pleasure Gardens of the
Lane, Sir W. Arbuthnot q 559	torical Society at Hart-	Eighteenth Century q. II. 389
Lane & Co., Geo. W	fordI. 54	London Tea CompanyII. 162
Lange, Friedr. WilhII. 107, 238	Licenses	London Times q 1. 553; II. 123
Languages (India)	-Coffee house, EnglandI. 42, 43	Longchin t
Lanka Plantations Co., LtdI. 203	—Import	Longdon Sir James I 107
Lantes II 264	-To sell tea in New England. I. 49	Longden, Sir JamesI. 187
Lao-tseII. 364		Longfellow, Henry W. q. I. 94;
Lapsang tI. 258	Liebreich q	II. 500
Lapsang Souchong tI. 229	Life and Adventuresq. 1. 173	Loolecondera (see Estates—Cey-
Larken, Edmund	Life of Anthony Woodq. I. 41	lon)
Larkin, Gerald RII. 282, 293	Life of Samuel Johnson, The.	Lorand, Arnold q
Larkin, Hon. Peter CI. 482;	q. I. 48	Lord Canning's RulesI. 154
II. 282, 293	Light of Asia qII. 495	Lords SeventeenI. 30, 109;
Lasiocalyx var	Lightering at Shimizu ill. II. 30	
Taston Col I 135	Lightening at Changhai ill II 99	II. 108
Latter, ColI. 135	Lightfoot, C. H	Lord Shelburne and the Ameri-
Laufer, Dr. Bernard q I. 494	Lightroot, C. H 11. 222	can Revolutionq. I. 79
Laughland, Mackay & Co., Ltd.	Likin	Lord & Co., RobertII. 242
II. 167	Liling t I. 255	Lott. Abramq. I. 54
La Vie Prive qII. 495	LindeI. 156	Lott, Abram
Law for the Regulating of the	Linde. John ElworthyII. 244	Loudon Winfield D II. 256, 282
m- Was Man in the	Lindsay, W. S	Loudon Shand I I I 187
Tea water Men II to City of New York. I. 51 Lawrence, C. Delaroy. II. 326 Lawrence, H. E	Lingtu t I. 256	Loudon-Shand, J. L I. 187, 188; II. 186, 303, 304
Tammana C Dolamov II 996	Link, Heinrich FrederickI. 497	100; 11, 100, 300, 304
Lawrence, U. Delardy II. 979	Time and Cont I got goe	Loudon-Shand, W. E II. 186
Lawrence, H. L	Linnaeus, Carl. 1. 205, 206,	Lough, ThomasII. 181
Lawrie, Alexander. 11. 139, 176, 198	495; q. 497, 498	Lough, William11. 181
Lawrie, A. C	Linschooten's Travels	Lough, W. H
	Linsing t	Low, Abdiel Abbot I. 90; II.
Lawrie & Co., AlexanderII. 176	L'Institute	252, 257
Lawrie & Co., GlasgowI. 96	Linton, Hercules	Low, Seth
Lawson, RII. 172	Lipton, Sir Thomas II. 179-80, 281	Low, William GilmanI. 90,
Dawson, 10		
I award Frank Hangy 101'	Linton Itd	
Layard, Frank Henry 1. 191;	Lipton, Ltd.	91, 104
Layard, Frank Henry 191; II. 150	—Calcutta II. 143	91, 104 Low & Brother, A. A I. 89,
Layard, Frank Henry 191; II. 150 Lavering	—Calcutta	91, 104 Low & Brother, A. A I. 89, 90-92, 95; II. 257
Layard, Frank Henry 191; II. 150 Layering —Formosa	—Calcutta	91, 104 Low & Brother, A. A I. 89, 90-92, 95; II. 257 Low & Brother's (A.A.) Fleet
Layering II. 150 Layering I. 332-33 — Japan I. 313. 314	—Calcutta II. 143 —Colombo I. 191; II. 150 —London II. 179 —Toronto II. 293	91, 104 Low & Brother, A. A I. 89, 90-92, 95; II. 257 Low & Brother's (A.A.) Fleet
Layard, Frank Henry	—Calcutta II. 143 —Colombo I. 191; II. 150 —London II. 179 —Toronto II. 293 —U. S. II. 281	Brother, A. A. I. 89, 90.92, 95; II. 257 Low & Brother's (A.A.) Fleet of Clipper Ships. q. I. 91
Layerd, Frank Henry	-Calcutta	Low & Brother, A. A I. 89, 90.92, 95; II. 257 Low & Brother's (A.A.) Fleet of Clipper Ships q. I. 91 Low Country Products Associa-
Layering II. 150 Layering I. 332-33 —Formosa I. 313, 314 Layton, John II. 187 Leach, Albert E. q. I. 505-7 Lead foil lining I. 292: II. 279	-Calcutta	91, 104 Low & Brother, A. A I. 89, 90.92, 95; II. 257 Low & Brother's (A.A.) Fleet of Clipper Ships q. I. 91 Low Country Products Association 1. 296, 444
Layering II. 150 Layering I. 332-33 —Formosa I. 313, 314 Layton, John II. 187 Leach, Albert E. q. I. 505-7 Lead foil lining I. 292: II. 279	— Calcutta II. 143 — Colombo I. 191; II. 150 — London II. 179 — Toronto II. 293 — U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500	Section
Layard, Frank Henry	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in. II. 482-500 -Chinese poetry II. 484	91, 104 Low & Brother, A. A I. 89, 90.92, 95; II. 257 Low & Brother's (A.A.) Fleet of Clipper Ships q. I. 91 Low Country Products Association . I. 296, 444 Löwe I. 515 Löwenthal I. 517
Layerd, Frank Henry. I. 191; Layering II. 150 Layering I. 332-33 —Formosa. I. 313, 314 Layton, John II. 187 Leach, Albert E. q. I. 505-7 Lead foil lining. I. 292; II. 279 Leaf of tea plant I. 17, 499; 41. 500 —Caffeine in I. 522	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482	Section 191 104
Layard, Frank Henry	-Calcutta	Section 191 104
Layering	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in. II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese prose, ancient II. 483	Section Sect
Layard, Frank Henry	-Calcutta	Section Sect
Layering II. 150 Formosa. I. 332-33 —Japan. I. 313, 314 Layton, John II. 187 Leach, Albert E. q. I. 505-7 Lead foil lining I. 292; II. 279 Leaf of tea plant I. 17, 499; 48. 500 —Caffeine in I. 522 —Constituents of I. 511-13, 524-26 —Effect of firing I. 533-4 Microscopical structure ill. I. 505-7 —Moisture content. I. 534-5	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese poetry II. 485 -Japanese poetry II. 483 -Modern poetry II. 493 -Modern prose II. 495	Section
Layard, Frank Henry	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese prose, ancient II. 483 -Modern poetry II. 483 -Modern poetry II. 490 -Modern poetry II. 486 -Western poetry early II. 486	104 105 107 108 108 109
Layard, Frank Henry	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese prose, ancient II. 483 -Modern poetry II. 483 -Modern poetry II. 490 -Modern poetry II. 486 -Western poetry early II. 486	1, 104
Layard, Frank Henry	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese prose, ancient II. 483 -Modern poetry II. 483 -Modern poetry II. 490 -Modern poetry II. 486 -Western poetry early II. 486	104 105 106 107 108 108 108 109
Layard, Frank Henry	-Calcutta	91, 104 Low & Brother, A. A. I. 89, 90.92, 95; II. 257 Low & Brother's (A.A.) Fleet of Clipper Ships. q. I. 91 Low Country Products Association I. 296, 444 Löwe I. 515 Löwenthal I. 517 Low Yong, or Liuyang, t. I. 255 Lubbock, Basil. I. 90, q. 97, 101-4 Lu Chat. I. 260, 308 Lumaye, Wm. J. II. 239 Lumqua, Dr. II. 338 Lumsden, Col. Dougald Mactavish II. 360 Lundgren, Douglas II. 240 Lundgren, Co. James II. 240
Layering II. 150 Formosa. I. 332-33 Japan. I. 313, 314 Layton, John II. 187 Leach, Albert E. q. II. 505-7 Lead foil lining. I. 292; II. 279 Leaf of tea plant I. 17, 499; ill. 500 —Caffeine in. I. 522 —Constituents of. I. 511-13, 524-26 —Effect of firing. I. 533-4 Microscopical structure ill. I. 505-7 —Moisture content. I. 534-5 Leaf tea I. 23 Leake, William Martin. I. 178, 179, 183-85; II. 203, 305 Lebong Tea Company, Ltd. I. 161 Leckie & Co., James B. JI. 172	-Calcutta	104 108 109
Layering II. 150 Formosa. I. 332-33 Japan. I. 313, 314 Layton, John II. 187 Leach, Albert E. q. II. 505-7 Lead foil lining. I. 292; II. 279 Leaf of tea plant I. 17, 499; ill. 500 —Caffeine in. I. 522 —Constituents of. I. 511-13, 524-26 —Effect of firing. I. 533-4 Microscopical structure ill. I. 505-7 —Moisture content. I. 534-5 Leaf tea I. 23 Leake, William Martin. I. 178, 179, 183-85; II. 203, 305 Lebong Tea Company, Ltd. I. 161 Leckie & Co., James B. JI. 172	-Calcutta	104 108 109
Layering II 150 Layering II 150 Formosa I 332-33 —Japan I 313, 314 Layton, John II 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 51-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I, 505-7 —Moisture content I 534-5 Leake, William Martin I 172, 123 Leake, William Martin I 172, 1623 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B II 172 Lecompte, Father Louis I 28	-Calcutta	1, 104
Layering II 150 Layering II 150 Formosa I 332-33 —Japan I 313, 314 Layton, John II 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 51-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I, 505-7 —Moisture content I 534-5 Leake, William Martin I 172, 23 Leake, William Martin I 172, 1623 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B II 172 Lecompte, Father Louis I 28	-Calcutta	1, 104
Layering II 150 Layering II 150 Formosa I 332-33 —Japan I 313, 314 Layton, John II 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 51-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I, 505-7 —Moisture content I 534-5 Leake, William Martin I 172, 23 Leake, William Martin I 172, 1623 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B II 172 Lecompte, Father Louis I 28	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 485 -Japanese poetry II. 485 -Japanese poetry II. 483 -Modern poetry II. 483 -Modern prose ancient II. 483 -Western poetry II. 490 -Western poetry early II. 486 -Western prose, ancient II. 495 -Western prose, II. 495 -Western prose, II. 496 Littinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liu Ch'a II. 308 Liu Kun I. 20, 21	104 108 108 109
Layering II 150 Layering II 150 Formosa I 332-33 —Japan I 313, 314 Layton, John II 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 51-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I, 505-7 —Moisture content I 534-5 Leake, William Martin I 172, 23 Leake, William Martin I 172, 1623 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B II 172 Lecompte, Father Louis I 28	-Calcutta	1, 104
Layering II 150 Layering II 150 Formosa I 332-33 —Japan I 313, 314 Layton, John II 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 51-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I, 505-7 —Moisture content I 534-5 Leake, William Martin I 172, 23 Leake, William Martin I 172, 1623 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B II 172 Lecompte, Father Louis I 28	-Calcutta	1, 104 108 109 1
Layering	-Calcutta	91, 104
Layering II 150 Layering I 332-33 —Formoss I 332-33 —Japan I 313, 314 Layton, John I 11 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 511-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I 505-7 —Moisture content I 534-5 Leake, William Martin I 178, 179 183-85; II 203, 305 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B. JI 172 Lecompte, Father Louis I 27 Ledger and Sword I 188, 213 Ledyard, John II 247 Lee, Nigel I I 192 Lee, Nigel I I 192 Lee, Samuel II 256, 265	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 191; III. 150 -London II. 193 -Toronto III. 293 -U. S. II. 281 Literary Magazine 9. II. 482 Literature, tea in III. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 484 -Chinese prose, ancient II. 483 -Japanese prose, ancient II. 483 -Japanese prose, ancient II. 483 -Modern poetry III. 490 -Modern prose II. 495 -Western prose, early III. 496 -Western prose, early III. 492 Little Tea Book, The, 9. III. 490, 495, 496 Litvinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liu Kun I. 20, 21 Liver, an aid to I. 552 Liverpool China & India Tea Co., Ltd. II. 239 Lives of the Queens of England	1, 104
Layering — II. 150 Layering — Formosa. I. 332-33 —Japan. I. 313, 314 Layton, John II. 187 Leach, Albert E. q I. 505-7 Lead foil lining I. 292; II. 279 Leaf of tea plant I. 17, 499; ill. 500 —Caffeine in I. 522 —Constituents of .I. 511-13, 524-26 —Effect of firing I. 533-4 Microscopical structure ill. I. 505-7 —Moisture content I. 534-5 Leaf tea I. 223 Leake, William Martin .I. 178, 179, 183-85; II. 203, 305 Lebong Tea Company, Ltd I. 161 Leckie & Co., James BII. 172 Ledger and Sword 185 Le Duc, Wm G. I. 158, 213 Ledyard, John II. 247 Lee, Baen E II. 482 Lee, Samuel II. 256, 265 Lee, Samuel II. 256, 265	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine. q. I. 48 Literature, tea in II. 482-500 -Chinese poetry. II. 484 -Chinese prose, early. II. 485 -Japanese poetry. II. 483 -Japanese poetry. II. 483 -Modern poetry. II. 483 -Modern poetry. II. 490 -Western prose, early. II. 495 -Western prose, early. II. 492 Little Fea Book, The, q. II. Livinoff & Co., Ltd., S. W. II. 98 Liuan t. I. 254 Liu Ch'a I. 308 Liu Kun I. 20, 21 Liver, an aid to. I. 552 Liverpool China & India Tea Co., Ltd. II. 239 Lives of the Queens of England Livinoff the Queens of England Livinoff the Queens of England	1, 104 108 109 1
Layering	-Calcutta	1, 104 108 109 1
Layering	-Calcutta	10
Layering — II. 150 Layering — II. 332-33 —Formosa	-Calcutta	10
Layering — II. 150 Layering — II. 332-33 —Formosa	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 191; III. 150 -London II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 484 -Chinese prose, early II. 485 -Japanese prose, ancient II. 483 -Japanese prose, ancient II. 483 -Modern poetry III. 490 -Modern poetry III. 495 -Western prose, early II. 495 -Western prose, early II. 495 Little Tea Book, The, q. III. 490, 495, 496 Litvinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liver, an aid to I. 252 Liverpool China & India Tea Co., Ltd. III. 239 Lives of the Queens of England -Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. II. 185 Lloyd, Sir John B. II. 185 Lloyd, Sir John B. III. 186 Lloyd, Sir John B. III. 186 Lloyd, Sir John B. III. 186	1, 104
Layering II 150 Layering I 332-33 —Formoss I 332-33 —Japan I 313, 314 Layton, John I 11 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 511-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I 505-7 —Moisture content I 534-5 Leake, William Martin I 178, 179 183-85; II 203, 305 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B. JI 172 Lecompte, Father Louis I 27 Ledger and Sword I 188, 213 Ledyard, John II 247 Lee, Nigel I I 192 Lee, Nigel I 1 192 Lee, W. D. II 146 Lee, Hedges & Co., Ltd. I 187, 193, 202; II 146 Leechman, C. A. II 147 Leechman, C. A. II 147 Leechman, George Barclay II 147	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 191; III. 150 -London II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 484 -Chinese prose, early II. 485 -Japanese prose, ancient II. 483 -Japanese prose, ancient II. 483 -Modern poetry III. 490 -Modern poetry III. 495 -Western prose, early II. 495 -Western prose, early II. 495 Little Tea Book, The, q. III. 490, 495, 496 Litvinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liver, an aid to I. 252 Liverpool China & India Tea Co., Ltd. III. 239 Lives of the Queens of England -Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. II. 185 Lloyd, Sir John B. II. 185 Lloyd, Sir John B. III. 186 Lloyd, Sir John B. III. 186 Lloyd, Sir John B. III. 186	1, 104 108 109 1
Layering	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 485 -Japanese poetry II. 485 -Japanese poetry II. 483 -Modern poetry II. 483 -Modern poetry II. 485 -Western poetry II. 485 -Western poetry II. 490 -Western prose, early II. 492 Little Fea Book, The, q. II. Livenoff & Co., Ltd., S. W. 11, 98 Liuan t I. 254 Liu Ch'a I. 308 Liu Kun I. 20, 21 Liver, an aid to I. 552 Liverpool China & India Tea -Co., Ltd. II. 239 Lives of the Queens of England Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. II. 185 Lloyd, W. J. II. 196 Lloyd, W. J. II. 196 Lloyd, Matheson & Carritt II. 167	1, 104 108 109 1
Layering — II. 150 Layering — I. 332-33 —Formosa	-Calcutta	10
Layering	-Calcutta	10
Layering	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 191; III. 150 -London II. 179 -Toronto III. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in III. 482-500 -Chinese poetry III. 484 -Chinese prose, early III. 484 -Chinese prose, early III. 485 -Japanese prose, ancient II. 483 -Modern prose III. 485 -Western poetry III. 495 -Western poetry, early III. 486 -Western prose, early III. 492 Little Tea Book, The, q. III. 490, 495, 496 Litvinoff & Co., Ltd., S. W. III. 98 Liuan t. I. 254 Liuan t. I. 20, 21 Liver, an aid to I. 20, 21 Liver, an aid to I. 20, 21 Liver, an aid to II. 239 Lives of the Queens of England Co., Ltd. III. 239 Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. II. 185 Lloyd, W. J. II. 196 Lloyd, Matheson & Carritt, II. 167 Lloyd, Pigott & Co., David, II. 168 Lloyd, Matheson & Carritt, II. 167 Lloyd, Pigott & Co., David, III. 178 'Iloaded' tea. I. 505	1, 104
Layering II 150 Layering I 332-33 —Formoss I 332-33 —Japan. I 313, 314 Layton, John II 187 Leach, Albert E q II 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 511-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill I 505-7 —Moisture content I 534-5 Leake, William Martin I 178, 179, 183-85; II 203, 305 Lebong Tea Company, Ltd. I 61 Leckie & Co., James B. JI 172 Lecompte, Father Louis I 27 Ledger and Sword I 158, 213 Ledyard, John II 247 Lee, Nigel I I 192 Lee, Nigel I I 192 Lee, Nigel I I 192 Lee, Hedges & Co., Ltd. I 187 Leechman, C. A. II 146 Leechman, George Barclay II 147 Leechman, C. I 197; II 146 Leefmans, S. I 276 Lees II 147 Leechman, C. I 197; II 146 Leefmans, S. I 276 Lees, Nassau I 156	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 191; III. 150 -London II. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese prose, ancient II. 483 -Japanese prose, ancient II. 483 -Japanese prose, ancient II. 483 -Modern poetry III. 490 -Modern prose arly III. 490 -Modern prose, early III. 495 -Western prose, early III. 495 -Western prose, early III. 492 Little Tea Book, The, q. III. 490, 495, 496 Litvinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liver, an aid to I. 252 Liverpool China & India Tea Co., Ltd. III. 239 Lives of the Queens of England - II. 239 Lives of the Queens of England - Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. III. 185 Lloyd, W. J. II. 186 Lloyd, Matheson & Carritt. II. 167 Lloyd, Sirother Co., David III. 160 Lloyd a new building itl. II. 178 'Loaded' tea. I. 505 Loading tea. I. 505	10
Layering	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 191; III. 150 -London II. 179 -Toronto III. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in III. 482-500 -Chinese poetry III. 484 -Chinese prose, early III. 484 -Chinese prose, early III. 485 -Japanese prose, ancient II. 483 -Modern prose III. 485 -Western poetry III. 490 -Modern prose, III. 490 -Modern prose, III. 492 -Western prose, early III. 486 -Western prose, early III. 492 -Little Tea Book, The, q. III490, 495, 496 -Litvinoff & Co., Ltd., S. W. II. 98 -Liuan t. I. 254 -Liu Ch'a II. 308 -Liuan t. I. 254 -Liu Ch'a II. 308 -Co., Ltd. III. 392 -Co., Ltd. III. 393 -Co., Ltd. III. 393 -Co., Ltd. III. 394 -Co., Ltd. III. 395 -Co., Ltd. III. 395 -Co., Ltd. III. 396 -Co., Ltd. III. 396 -Co., Ltd. III. 397 -Co., Ltd. III. 398 -Co., Ltd. III. 399 -Co., Ltd. III. 399 -Co., Ltd. III. 399 -Co., Ltd. III. 399 -Co., Ltd. III. 39	10
Layering II 150 Formoss I 332-33 —Japan I 313, 314 Layton, John I 313, 314 Layton, John I 11 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; 40. 500 —Caffeine in I 522 —Constituents of I 511-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill I 505-7 —Moisture content I 534-5 Leake, William Martin I 178, 179 183-85; II 203, 305 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B JI 172 Lecompte, Father Louis I 27 Ledger and Sword I 58, 213 Ledyard, John II 247 Lee, Nigel I I 192 Lee, Nigel I 1 192 Lee, Nigel I 1 192 Lee, W. D. 11 146 Lee, W. D. 11 146 Leechman, C. A. 11 147 Leechman, George Barclay II 147 Leechman & Co. I 197; II 146 Leefmans, S. I 276 Leefmans, P. II 156 Leefmans, P. II 156 Leefmans, P. II 156 Leefmans, S. II 276 Leegnd of Sleepy Hollow q. II 166 Legend of Sleepy Hollow q. II 166 Legend of Sleepy Hollow q. II 166 Legend of Japanese Art q. II 362	-Calcutta	Discrimination 10 10 10 10 10 10 10 1
Layering II 150 Layering I 332-33 —Formoss I 332-33 —Japan I 313, 314 Layton, John I 11 187 Leach, Albert E q I 505-7 Lead foil lining I 292; II 279 Leaf of tea plant I 17, 499; ill. 500 —Caffeine in I 522 —Constituents of I 511-13, 524-26 —Effect of firing I 533-4 Microscopical structure ill. I 505-7 —Moisture content I 534-5 Leake, William Martin I 178, 179 183-85; II 203, 305 Lebong Tea Company, Ltd. I 161 Leckie & Co., James B. JI 172 Lecompte, Father Louis I 27 Ledger and Sword I 188, 213 Ledyard, John II 247 Lee, Nigel I I 192 Lee, Nigel I 1 192 Lee, Nigel I 1 192 Lee, W. D. 11 146 Lee, W. D. 11 146 Leechman, C. A. 11 147 Leechman, George Barclay II 147 Leechman, C. I 156 Leefmans, S. I 276 Leefmans, S. I 276 Leefmans, S. I 276 Leefmans, P. II 156 Leefmans, P. II 156 Leefmans, S. II 276 Leegnd of Sleepy Hollow q. II 166 Legend of Sleepy Hollow q. II 466 Legend of Sleepy Hollow q. II 466 Legend of Japanese Art q. II 366	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto III. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese poetry II. 485 -Japanese poetry III. 483 -Modern poetry III. 483 -Modern poetry III. 485 -Western poetry III. 480 -Western poetry III. 480 -Western prose, early III. 490 Little Tea Book, The, q. III. Little Tea Book, The, q. III. Livinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liver, an aid to I. 250 Liver, an aid to I. 20, 21 Liver, an aid to I. 20, 21 Liver, an aid to II. 239 Lives of the Queens of England Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. III. 185 Lloyd, W. J. II. 196 Lloyd, Matheson & Carritt. II. 167 Lloyd, Pigott & Co., David. II. 167 Lloyd, Pigott & Co., David. II. 167 Lloyd, Snew building ill. II. 178 -Colombo. ill. II. 17 -Colombo. ill. II. 17	Section Sect
Layering	-Calcutta	10
Layering	-Calcutta	10
Layering	-Calcutta	10
Layering	-Calcutta II. 143 -Colombo I. 191; II. 150 -London II. 179 -Toronto III. 293 -U. S. II. 281 Literary Magazine q. I. 48 Literature, tea in II. 482-500 -Chinese poetry II. 484 -Chinese prose, early II. 482 -Japanese poetry II. 485 -Japanese poetry III. 483 -Modern poetry III. 483 -Modern poetry III. 485 -Western poetry III. 480 -Western poetry III. 480 -Western prose, early III. 490 Little Tea Book, The, q. III. Little Tea Book, The, q. III. Livinoff & Co., Ltd., S. W. II. 98 Liuan t I. 254 Liver, an aid to I. 250 Liver, an aid to I. 20, 21 Liver, an aid to I. 20, 21 Liver, an aid to II. 239 Lives of the Queens of England Livingston, Robert R. I. 55 Llewellyn I. 178 Lloyd, Sir John B. III. 185 Lloyd, W. J. II. 196 Lloyd, Matheson & Carritt. II. 167 Lloyd, Pigott & Co., David. II. 167 Lloyd, Pigott & Co., David. II. 167 Lloyd, Snew building ill. II. 178 -Colombo. ill. II. 17 -Colombo. ill. II. 17	10



$\begin{array}{cccccccccccccccccccccccccccccccccccc$	t_{022}	McWilliam, A. L. I. 488 Machin, Percy II. 159 Machinery, Evolution of I. 465-90 —Beating ill II. 475	——Burma II. 43 ——Canada II. 42 ——Cashmere II. 43 ——Central America II. 43
Macartney, Lord I Macaulay, Thomas B q. I	. 134	BlendingI. 480-81; 11. ill. 66, 72	— — Ceylon
MacBean, J. A I. 170; II Maccaughey, Hugh W II. 162	80-1 . 142	—Ceylon illI. 478 —Cutting illII. 65; 66 —Davidson'sI. ill. 481	— France II. 42 — Germany II. 42
Macdonald, Peter II Macdonald, R. G II MacDougall & Sons, Inc., Alice	177	-Drving (see Driers)	——India II. 43 ——Indo-China II. 43
MacDougall & Sons, Inc., Alice	. 100 e 285	—Fanning illI. 306 —Finishing and glazing.I. 401, 483-84	——Iran (Persia)II. 43 ——IrelandII. 41
FooteII MacDowall, Gen. HayI Macey, Captain ThomasI	. 174	—Grading	——JapanII. 43
Macfarlane, Sir DonaldII	. 184	—India	——Lebanon II. 43 ——Mexico II. 43
Mackenzie, D. F	. 164	—Kinmond's I. 468 —Labeling II. 72	— — Morocco
Mackenzie, Francis William. I	. 477 304	—Marshall's illI. 480 —McKercher's C. T. Cill. I. 487	——New ZealandII. 41 ——PalestineII. 43
Maccey, Captain Thomas	. 178	—McMeekin's I. 469 —Mixing ill II. 66	——RussiaII. 42
Mackenzie, WilliamI. 200 278; II. 308, 311	316	-Nailing	——————————————————————————————————————
Mackie, J. M	. 206	—Nelson's	- Straits Settlements11. 43
Mackie Dunn & CoII Mackinnon, JohnII. 137	. 242	——Horniman's illII. 133 —Pan-firingI. 319, 320, 484	— Tibet II. 43 — Tunisia II. 43
Mackintosh & CoI Mackwood, F. EI	. 138	-Rolling (see Rollers) -Sharpe's	— — Turkey II. 43 — — Turkistan II. 43
Mackwood & Co	. 196	—Sifting ill	— Union of South Africa. II. 43 — United KingdomII. 40
Macleay, SinclairII	. 177 185	## Sirocco" stove	— United States II. 42 — Other European countries
Macmillan, John II MacNair, J. F I. 169; II Macneill, Duncan . II. 137, 141	. 164	-Winnowing ill	Manning, Bowman & CoII.
Macneill, Duncan. II. 137, 141 Macneill & CoI. 163, 165	, 177	ing)	Manufacture of Tea in North-
170: II. ill. 139	: 141	Macy, Giver Carter. II. 261-62, 288 Macy Bros. & Gillet. II. 257, 289 Maddock, H. G	East India
Macneill & Co., DuncanII Macray, H. A. JII Macraphylla var I ill. 496	. 106 : 501	Maddock, H. G	—Ceylon I. 432-44 —Chemical changes during . I.
Macsween, C I	. 138 . 269		530, 53 —ChinaI. 302-307, 46
Macray, H. A. 1. 1. 496 Macrophylla var. 1. 40. 496 Macsween, C. 1. 1. 1. MacVeagh, Franklin 1. 1. MacVeagh & Co., Franklin 11. 1. McBride, James W. II. 259-60 266	. 269	Magniac, HollingworthII. 104 Magniac & CoII. 102, 104 Magor, R. BI. 164; II. 139,	-Formosa 1. 334-33
McCarthy, JustinII		Magor, R. KII. 139, 172	—IndiaI. ill. 395; 396-40 —JapanI. 317-32 —Java and SumatraI. 361-36
McCarthy, Thomas FII McCarthy, Thomas MII. 256	. 266	Magoria Joseph AmbroseI. 200	-Other CountriesI. 449-46
McClelland, JohnI. 1	, 200	Magruder, George Lloyd qI. 553 Maguire, F. G	—Process discovery II. 9 Manures (see Fertilizers)
McCord. W. HII	. 554	Mail-order houses1I. 88 Maintz' Productenhandel, N. V.	ManuringArtificial I 198-99, 42
McCord-Brady Co II McCormick, C. P II	. 267 . 277	Maitland, JohnII. 166	-Ceylon I. 42 -Green (see Green Manuring)
McCormick, Willoughby MII 256, 277	. 328	Maitland. Violet W	India
McCormick & Co Inc II	. 277	Majus, OscarI. 215 Makes (see Gradings) MakinoharaI. 295; ül. 313,	—Japan
M'Crady, Edward I McDonald, John I McDonald's Patent "Deflector" tea fanner I. ül. 484	485	Makong t	"Map of India" emblemII.
tea fannerI. ill. 484 McDowall R. J. S. gI	; 485 . 559	Malabar (see Estates—Java) Malang t	Maps — Africa I. 45
McDowall, R. J. S. qI McEwan, JohnII. 1 McFadden Coffee & Spice Co	77-78	Malayan t	—Ceylon I. 41 —China I. 29
II	. 278	Maling & Co. Ltd. II. 245	-FormosaI. 32
McIntosh, A. RII	. 147	Madoo mixture I 114	—India 1. 37 —Iran (Persia) 1. 45
McKay Donald I 87-8, 93-5	. 104	Mandarin Pekoe t I. 233 Mandimwe PropertyI. 458	Japan I. 31
McKay, J. F	8, 94	Mangles, R. D	—Java I. 34 —Mother Nature's Tea Garden I.
McKenzie, D. PII. 138 McKercher, Sir WilliamI. 4	, 100	Mann, H. H I. q. 138, 150-51; 156; biog. 167-68; q. 330,	—Russian TranscaucasiaI. 46 —Sumatra
McKim, IsaacI. 87; II McLaren, JamesII	. 255	379, 459-61, 463; 512, 528-29	-U. S. showing weighted aver-
McLaren & Sons, JamesII McLeish, JamesII	. 162	Mann, WilliamII. 256, 259, 285	lic water supplies I. 24 World I. 218, 268; II. 33 Marco Polo
McLeod, Sir Charles C I. 158 II. 143	;	—EarlyII. 397-407 ——America I. 49: II. 359, 406-7	Marco PoloI. 23, 2 Mariawatte (see Estates—Cey-
McLeod, M. CII. 143 McLeod, Major NormanII	, 192	——Burma	lon) Marihat Sumatra Plantagen
143, 193 McLeod & CoI. 164; II	, 322 . 142	— England II. 402 — Holland II. 359, 401 — Japan I. 27; II. 358, 399	G.m.b.H I. 13 Marinus, J. H I. 132; II. 11
McLeod, Russel & CoII McMeekin, ThomasI. 159	. 192 ,	— JapanI. 27; II. 358, 399 — ScotlandII. 403	Market namesI. 221, 246-26 Marketing in consuming coun-
469: II	. 177	——Siam	triesII. 37-5 —EnglandII. 3
McMeekin & CoII. 150 McMorran, TI. 169-70; II 138	. 201	-Present-dayII. 409-435	—Netherlands
McNamara, John JII. 280 McNaught, Major J. G. qI McNeal, Rev. George H. qI McPhun, R. BI	, 289 , 557	— — Algeria II. 434 — — Arabia II. 433	—Russia
McNeal, Rev. George H. qI	. 48 164	— — Australia	Markets —Amsterdam

—LondonII. 37, 38-46 —New YorkII. 37, 51	Metzger, R. TII. 265	Monopolies
—New YorkII. 37, 51	Mexican t	-Dutch East India CoI. 110
—Rotterdam II. 49 Marquart, Ferdinand	Meyer Bros. Coffee & Spice Co.	-English East India CoI. 66-85, 133, 13
Marquis	II. 261	-Hong merchants
Marshall E. J	MiangI. 134, 208, 223, 237,	—Hong merchantsI. 7: Monorail leaf trays illI. 36:
Marshall, Wm. B. qI. 553 Marshall Sons & Co., LtdI.	264, 449, 493; II. 346 Michaelson & Co., W. BII. 237	Monsoons
Marshall Sons & Co., Ltdl.	Michaelson & Co., W. BII. 237	—Ceylon I. 42: —China I. 29:
157-58, 399, 481, 485-89 Marten, Charles	Michaux, AndréI. 213 Microcosm of LondonI. 81	—India I. 37
Martin, Sir JamesII. 180,	Microscopical Examination of	—Japan I. 31
186-87, 197	Food and Drugs qI. 507	
Martin, James R I. 191	Middle Kingdom, The q II. 485	Java
Martindale, ThomasII. 256, 271 Martindale, Thomas CII. 271	Midzutany, TomotsuneII. 301	Montague, Charles q
Martindale & Co., ThomasII. 271	Mien-luang I. 454 Mieng-noi I. 454	274 98
Martineau, HarrietII. 500	Miers, Percy Penrose 199 Miles, W. H	Montgomery, Henry BII. 25
Martini, MartinoI. 33 Maruo, BunrokuII. 218, 225	Miles, W. HII. 323, 325	Montgomery, JamesII. 25
Maruo, Bunroku II. 218, 225	Miles, William HenryII. 188	Montgomery, James M II. 25
Maryland Historical SocietyI. 88	Miles & Co., Henry	Montgomery, John R11. 252, 25
Masakazu, Kobori II. 365 Masefield, G. H. I. 200 Masefield, John I. 108	Milk in teaI. 32, 35, 49, 544, 551; II. 397, 452	Montgomery, Lancelot TII. 17:
Masefield. John	-Effect on tannin	Montgomery & Co., James &
Maskeliya District	—First used	Montgomery & Co., James & John
Maskeliya Planters' AssnI. 191	Milk teaII. 457	Montuori, A. q
Mason, R. A	Mill, JamesI. 85; II. 494	Mooreroft, William qII. 400
Massachusetts Committee of	Mill, John StuartI. 85 Millar, JamesI. 212, 457	Moore, Arnold Spencer II. 188 Moore, Francis I. 106
Correspondence I. 54	Miller (artist)II. 465	Moore, G. E
Massachusetts Gazetteq. I. 58	Miller, H. EricII. 168-69	Moore, Sir John Voce II. 164, 174
Massmann, F. HII. 283, 289	Miller, K. BI. 165, 170; II.	Moore, Lt. Col. P. S II. 163
Masters, J I. 149, 150 Masters, J. A	139, 172	Moore Bros., LtdII. 164
Matara tea tree	Milligan, J. AII. 318, 330 Milliken, C. RII. 259	Moppett, H. J. qI. 435, 437;
Maté (see Yerba Maté)	Milliken, WII. 259	More About Tea Fermentation
Materia MedicaI. 494	Milliken, Tomlinson CoII. 259	
Matheson, Alexander II. 105	Milne & ChoyceII. 419	Moreland, Hayne & Co., Ltd
Matheson, Sir JamesII. 104	Milner, W. A. J	I. 479
Matheson & Co., LtdII. 105	Minchin, CaptainI. 101-3, 100	Morey, C. S
Matsucha t	Minsing I and I 100 101: II	Morey Mercantile Co II. 27
Matthews, George TII. 269, 276 Matthews & Co., G. TII. 269, 275	ill. 44, 126; 127-29	Morgan, J. S. H
Matthews & Co., G. TII. 269, 275	ill. 44, 126; 127-29 —Clipper ship days inI. 99-101 Mincing Lane Tea and Rubber	Morgan & Co., Ltd., Henry. al.
Mattill, H. A. q	Mincing Lane Tea and Rubber	II. 42
Planters' Assn I. 190	Share Brokers' Assn II. 208, 209	Mori t
Maurenbrecher, A. D. g., I. 520, 525	MingI. 2, 3, 15, 20, 21, 493	Morice ArthurI. 179. 18
Maurenbrecher, A. D. q I. 520, 525 Mauritius t I. 239, 267	Ming ts'ai	Morice, ArthurI. 179, 184 Morison, Prof. Samuel EI. 104
Maxwell, Messrs I. 212, 458 Maxwell House Products Co., Inc	Minto, Lord	Morisset
Maxwell House Products Co.,	Mitchell, George FI. 126,	Morland, GeorgeII. 463, 46 Mornay, StephenI. 15
May, Phil	214, 318, 485-86; q. 522, 526; II. 256, 279, biog.	Morning Chronicle & London
Maypole Dairy Co., LtdII.	282; 452	Advertiser
186; <i>ill.</i> 187	Mitchell, Helen S. q I. 548	Advertiser I. 6- Morrill, Albert H II. 27-
Mazarin, CardinalI. 33	Mitchell, R. P II. 244	Morris, Robert
Mazawattee Tea CoII. 129, 132, 173, 242	Mitchell, Sir William Wilson. II. 146	Morse, Hosea Ballou. I. 73; II. 10
Meadow Dairy Co., Ltd II, 193	Mitsuhashi, SII. 218, 228, 301. 303	Morse, William Horace.II. 223, 26 Mortimer, W. EII. 187, 19
"Meat tea"II. 405	Mitsui & Co., Ltd.	Morton, H
Meat with tea	—America	Morton, JamesII. 11:
MedanI. 342; II. 16	-Formosa.I. 208, 339; II. 231, 234	Morton, W. D
Medan Commercial AssnII. 17 Mededeeling's Lands Planten-	—Japan II. 226 Miura, Masataro q I. 547-49	Mosenthal & Co., AII. 24:
tuin	Mixing (see Blending)	Moss, W. H
Mededseling Proefstation v. Thes	Mixing machines illII. 66, 68	Gardenill. I.
I. q. 352, 357, 515, 519,	Bartlett	MotleyII. 50
520, 524; 528; q. 529, 530 Medicine, used asI. 208; II. 95	—BurnsI. 485; II. 69	Motman, vanI. 11: Motor cultivatorI. 389, 463, 48:
Meijboom, C	—Burns	Motteux Peter Antoine aII. 48
Meijboom, C	Mive f	Mountain tI. 50 Mourlon, RenéII. 24
Meister, Georg	M. J. B. Co	Mourlon, RenéII. 24
Mellis, A. R	Mlanje tea gardenill. I. 457-8	Moyes, R. M
Melrose, AndrewII. 163, 174	Moabund Tea Co	Movune Gunnowder t I 230
Melroses, LtdII. 163	Mogul Khan Altyn	Mozambique t. I. 239, 26 Muggeridge, J. T. II. 14 Muir, Sir A. Kay. II. 140, 16 Muir, James Finlay. II. 140, 15 Muir, John Buchanan. II. 140, 16
Mémoires relatifs à l'Asie q II. 230	Mogul Khan AltynI. 31 Mohr, AlbertII. 110	Muggeridge, J. TII. 149
Memoirs and Observations Made	Moir, John William 211-12	Muir, Sir A. Kay II. 140, 160
in a Late Journey through China q	Moisture Changes During the	Muir, James Finlay 140, 153
Mendel q	Manufacture of Black Tea I. 290	Muir Sir John II. 140, 159.
Mendelian tenets	Moisture content of a tea-shoot	Muir, Sir JohnII. 140, 159, 309, 310
Mennell, Edward NewmanII. 159	1. 512	Mulching
Mennell, R. O II. 159, 298	Molchanoff, Pechatnoff & Co.,	Mulder, P
Mennell & Co., R. OII. 158 Menzel, RI. 126, 355	Ltd	Muller, Abr 11. 11:
Merchandise Marks ActII. 134	Molyn, W. H II. 120	Müller, J. H I. 12'
Mercurius Politicus I. 41, 42;	Momikiri t	Multiple shopsII. 86; ill. 87; 13:
II. 295; <i>ill</i> . 296	Momikiri method of nand-	Mundakayam t I. 227, 25: Mundt, G. C. F. W. I. 120, 122, 12:
Mercurius Politicus Redivivus q.	rolling ill	Munro, D. G I. 171-72; q. 381-83
I. 41 Messmer method of brewing. II. 452	Monair, W. B	Munro, J. A. C I. 170; II. 140
Meteorological observations, Java	Money, Ldgar G	Munsell Dr. Hazel E. aI. 550
1. 122, 126	157, 384, 467, 469	Murdoch, Thomas II, 252, 25
Meteorological observations in	Moning t	Murlin, J. R. q
Assam	Monkeys gathering tea illI. 7	Murray, J. McCombie1. 197,
Metropolitan Museum of Art.	Monographia du thá II 298	281; II. 30



Murray, Thomas J. q. II. 490 Murray's Wharf. I. 62, 63 Muscular effort, best for. I. 556 Music, tea in. II. 420, 467 Musker, John. II. 185 Mussoorie il. I. 384 Myatt, William L. II. 275 Myddleton's tea stalk extractor I. il. 486; 487	Nichols, Beverly	Opium clippers I. 89 Opium trade I. 76, 80; II. 103 Opium War I. 80 Oppenheimer, Isaac q I. 554 Opposition (see Controversies) Orange, James I. 77 Orange Pekoe t — Ceylon ill I. 224-25 — China I. 259
Myers' Konversation Lexikon. I. 33 Myo-e, Saint	Nieyasu t I. 255 Nihon-Koki I. 8 Niles, George M. q I. 555 Nilgiri-Wynaad t I. 227	—Definition I. 225; II. 453 —Java ill I. 238 Orchardson, Sir William I. 212 Orchardson & Co., Ltd. II. 293
NagasakiI. 29; II. 211 Nagatani, Soichiro (see San-no-jo) Nakagawa, UichiII. 303 Nakajima, KanekichiII. 225, 303 Nakamura, YenichiroII. 227, 229, 302-3	Nilgiris t. 1. 227, 251 Nind & Co., Ltd., A. D II. 193 Ningchow t. 1. 228, 256 Ningsiang t. 1. 255 Ninsei II. 471	Oriental Repository II 83 Oriental Tea Company II 268 Origin Lucandary I 1
Nakvasin & Co., D. JİI. 98 Nanninga, A. WI. 123, 124, 511-12; q. 515, 524, 526; 528-29, 533	Nipkasee t. I. 256 "Nippy" II. 191; ill. 414 Nishi, Iwao II. 228, 301 Noakacharee Tea Co I. 199 Nobunga, Ota II. 365	—Of the plant. I. 5-6 —Of word "tea". I. 492 Ormiston, G. A. I. 169; II. 140 Orr, Robert Boyd. II. 233, 234 Orr, William Snell. II. 233
Nash, George II. 269 Nash & Hopkins II. 253 Nash-Smith Tea & Coffee Co. II. 269 Natal t I 238 266	Nobunaga, Ota II 365 Nockler, H. F. II 259 Norris, R. V. I 194 195 North, H. I 190 190 North, Lord I 52 194	Orr, Robert Boyd 11. 233, 234 Orr, William Snell I. 123 Ort, G. A I. 122 Osaki, Ihei II. 218, 225 Osaki, Motojiro II. 218, 225 Osbeck, Peter I. 205 Osborn, Edward M II. 252, 258 Osborn, Mrs. Elsie II. 258 Osborn Company, E. M II. 258 Ossorv. Earl of I. 44
Nathan, Ernest A	North China Congous al. I. 228, 308 North End Caucus	Osborn, Edward M
National Tea Symposium II. 328 National Urn Bag Co., Inc. II. 286 Natural History of Coffee, Thee, Chocolate, etc. q II. 398 Natural History of the Tea Tree	of Trade	Oswald, John C
Natural Leaf tI. 234, 324 Natural Organic Coloring Matters qI. 514	"Number One Under the Sky" I. 322 Nurseries	Otis, James. 1. 78 Ouchaine t. I. 231, 233 Ouhai t. I. 252 Oura, Madam Kay. II. 211
Naturalist in Western China, A I. 307 Navigation Act of 1651	— India I. 387, 388 — Java I. 352 — Sumatra ill I. 351 Nuwara Eliya I. 419; ill. 421 Nuwara Eliya Tea Estates Co.	Outline History of Japan q. II. 362 Out-of-door tea scenes (see Tea out-of-doors) Ovary ill I. 496 Overland leaf t II. 21
Nederlandsch Indisch Land Syn- dicaatI. 131-32, 369; II. 112 Nederlandsch Indisch Rubber en	Nyasaland tI. 210; 238, 266 Nye, Parkin & CoI. 90	Overland trade routesII. 25, 26 Overley, WilliamI. 81 OverproductionI. 172, 200; II. 134
Thee Tijdschrift, qI. 506 Nederlandsche Handel Maat- schappijII. 111, 116 Nederlandsche Indische Han- delsbankII. 116	O. B. Estates Co. I. 189 Oberholtzer, Ellis Paxson q. I. 51 Observationes Medicae q. I. 31, 32 O'Connor, J. M	Overseas Trading Corp., Ltd. II. 166 Ovington, John q 134; II. 493 Owen, Henry Bayford II. 188 Owen, Major Guy Butler II. 188 Owen, Sir Theodore Charles I. 198-9
Nederlandsche Thee Maatschappij	Oelschlager (see Olearius) Officer, John LiddellI. 211 Offices, tea in —England	OxidaseI. 529 Pacific Mail Line routeII. 255 Package teas (see also Packet-
Nelson, James. I. 159, 468, 470 Neng yam. I. 237, 451 Nerchinsk Treaty. I. 32; II. 96 Nerve nutrient. I. 553 Nervousness, not a cause of. I. 557	U. S	ing)II. 91 Packages, damaged—London.II. 40 Packet sizes —AustraliaII. 73 —ChileII. 77
Netherlands Indian Agricultural CorporationI. 130 Netherlands Trading Company I. 111, 114	Ogisho I. 8; II. 484 Oglevee, J. F II. 222, 227 Okabe I. 548 O'Keeffe, Arthur II. 288	England .II. 67 Germany .II. 425 Ireland .II. 418 Natal .II. 77
Netscher, H. J. ThI. 120, 128 Netsuke figures of Daruma ill. II. 363, 467 Neumann, Ferdinand N. II. 110, 177 Neumann, M II. 110	O'Keeffe, Gerald . II 288 Okushima, K. q I. 543 Old Age Deferred q I. 555 Old and New London q	—Now Zealand II 73 —Norway II 74 —Poland II 75 —Straits Settlements II 76 —Sweden II 74
Neumann, M. II. 110 Neuville, H. I. 513 New Jersey t. I. 495, 503 New Orleans Coffee Co. II. 281 New Year's Gift Estate (see Estate)	Oldfield, CI. 153 Oldfield, J. W. I. 192-93, 202; II. 146 Olearius, Adam. I. 31, 134, q. 494; II. 358	—U. S. A
tates—Africa) Newby, Harold WII. 319, 321, 323 Newson, A. B	Oleffe (artist)	—British ill
-Corporation of . I. 51 -Docks, 1828 il II. 246 -Handbill of 1774 ill. I. 62 -Historical Society . I. 63 -Hospital . I. 50	On the Causes of Greatness in Cities q	
—Tea district ill II. 290 —Tea Party I. 61-64 New York Evening Post qII. 297 New York Herald q I. 553-54	Jaipur	Beginning ofII. 132 Packeting machinery (see Machinery) Packing (in chests)
New York Medical Record q. I. 557 Ngo Fok Ro. I. 208 Ngoh, Kao q. II. 497 Niblo, William I. 50 Nibs. I. 235, 322	— Preparation of	-Ceylon. I. 440 -China II. 20Early ill. I. 478Formosa II. 35; ill. II. 232India. I. 400-401, 476, 478
Nicholl, W	Oopack tI. 229, 254, 308	—JapanI. 323; ill. II. 223

ALL ABOUT TEA

—Java and SumatraI. 367, 478; II. 15	Peek, WilliamII. 163	Phillips, William
Packing machinery I ill 440 II 69	Peek, William	Phillips & CoII. 170 Phillips Engineering CoI. 486
—BritonI. 476; ill. 486; 487 —Davidson'sI. 159, 476; ill.	Peek Bros. & WinchI. 129-	Philosophical and Political His.
Davidson'sI. 159, 476; ill.	30; II. 162; <i>ill.</i> 163, 282	tory of the Settlement and Trade of the Euro- peans in the East and
481, 484, 490 —Davidson-Maguire I. 481-82	Peet John L. 120 II. 109	neans in the East and
—Davidson Maguire I. 481-82 —Jackson's I. 158, 476, 483	Peet, JohnI. 120; II. 109 Peet & Co., JohnI. 120, 128; II. 110, 177	West Indies q 44
Packing plant at Rotterdam ill.	II. 110, 177	Physiological Action of Tea as a
Padova & Co., GiulioII. 242	Pegg, Charles HII. 258, 266, 280, 288	Beverage q
Padrae t	Pehling t	Pickering, R. CII. 111
Pagoda anchorageI. 101, ill.	Pe-kaw-cheong	Pickford, Sir AlfredI. 169;
105; ill. II. 105 Pai Lian t	Pekoe	II. 137, 184
Pakhuismeesteren van de Thee	Pekoe Congou tI. 229, 257	Pickford, A. D
I. 31, 117; II. 46-8, 113	Pekoe Souchong Congou t	11. 137
Pakling t	1. 230, 258	Picking (see Plucking)
Paklum t	Peligot, EI. 509; q. 525, 546 Pen Ts'aoI. q. 1; 2, 3, 15,	Pickled t (see Letpet) Pickwick Papers qII. 494
Palmer, Samuel JamesII. 188	494; II. 495	PicturesII. 461-66
Palmer & Co., S. J II. 188	Pen Ts'ao Chu qI. 21	-Afternoon in OstendII. 465
Pan-fired tI. ill. 234; 322, 324; II. 214	Pendennis, q	-Burning of the "Peggy Stew- art" ill
Pan-firing	Penn. William	-Cafee und TheeII. 462; ill. 464
Formosa	Pennsylvania tI. 504 "Penny universities"I. 45	
—Japan illI. 318-20 —Pans illI. 304, 322	Pe-num-kaw t	-Cottage InteriorII. 464; ill. 465 -Chrysanthemums and Tea
—Siam	Pepion. JohnII. 257	II. 462; ill. 463
Pan-firing machinery (see Ma-	Pepion, John	—Cup of Tea ill
chinery)	45; II. 155, 493 Pepysian LibraryI. 40	-Daruma in Meditation ill. II. 462
Pangledjar factory ill	Percival, Capt. RobertI. 174	—Delights of the Tea Table II. 464; ill. 465
Panyong t	Dowlein A () a [514 516	-Figure and Tea ServiceII. 465
Pao Ling-hui q	Perkins, Thomas HII. 249, 250	-Lady Making TeaII. 463
Paraguay tI. 495; ill. 502 Parakan Salak (see Estates—Java)	Perman, W. F I. 485 Peroxidase I. 529, 530	—Le PhlegmatiqueII. 463; ill. 464 —Preparing Tea for His Maj-
Partitt, H. F	Perrottet, M	estv
Paris of the Far-Eastill. II. 24	Perry, HerbertII. 280	Processes of Tea Preparation
Parke, L. HII. 277 Parke Company, L. HII. 277	Perry, Commodore Matthew C. II. 211	—Serving Tea ill
Parker, C. L. CarsonI. 202	Persian t (see Iran t)	—Springtime
Parker, J. CarsonI. 194	Pe-shima t	—SpringtimeII. 465 —Tea a l'anglaiseII. ill. 460; 463
Parker Gallery	Pests —AdramaI. 357	—Tea at the Pantheon II. 464; ill. 465
Parsons, W	—CaterpillarsI. 391, 449	-Tea Drinker of 1771 illII. 463
Pasir Junghuhn factoryI. ill.	Crickets	-Tea Journey II. ill. 400; II. 461
Pasir Nangka factoryül. I. 363	—Green fly	—Tea LeavesII. 465 —Tea Party at Bagnigge Wells
Passara Planters' Assn	372, 390, 408, 428	II. 463; ill. 464 Teasing
PatanasI. 420	-Helopeltis sumatranaI. 357	—TeasingII. 465; ill. 466
Patents	Kalutara snail	Pigott Richard II 160 207
— — British I. 544 — — German I. 544	—Orange miteI. 356, 391 —PachypeltisI. 357	Pile & Co 1. 96
——GermanI. 544	Pachypeltis	Pilkington, L. G
—Machinery — Davidson'sI. 477	—Pink miteI. 391	Pim, Tobias II 107 Pinches, H. L. I 171 Pinckney, J. R. Hugh II 206 Pinehurst Tea Garden ill I. 214
— — Davidson's I. 477 — — First British I. 467 — — First U. S I. 468	—Purple mite	Pinckney, J. R. HughII. 206
— — First U. S	—Red spiderI. 357, 391, 428 —Scale insectsI. 391	Pinehurst Tea Garden illI. 214 Pineo, R. EI. 197; II. 281, 305
— — Jackson's I. 477.78 — — Twentieth century I. 484.90	—Scarlet miteI. 391, 428	Pingkiang, or Pingkong, $t cdots I$. 255
-Tannin-free tea	01 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
— —British	-Shot-hole borerI. 428	Pingsuey t
C I 546	—Tea aphis	Pink. A. L
— — German I. 546 — Teapots II. 439-43	—Tea aphisI. 391 —Tea mosquito (see Helopeltis)	Pink, A. LII. 232, 234 Pink, Ernest WilliamII. 170
——Iwentieth centuryI. 484-90 —Tannin-free tea ——BritishI. 545-46 ——GermanI. 546 —TeapotsII. 439-43 Patin, Dr. Gui qI. 33, 34; II. 493	—Tea aphis. I. 391 —Tea mosquito (see Helopeltis) —Tea-seed bug. I. 391 —Tea tortrix. I. 428	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R II. 170, 171
Patin, Dr. Gui q I. 33, 34; II. 493 Patterson, Charles R I. 95, 107	-Tea aphis I . 391 -Tea mosquito (see Helopeltis) -Tea-seed bug I . 391 -Tea tortrix . I . 428 -Termites . I . 391	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R. II. 170, 171 Pink Victor E. II. 170
Patin, Dr. Gui q I. 33, 34; II. 493	-Tea aphis. I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug. I. 391 -Tea tortrix I. 428 -Termites I. 391 -Thrips I. 391	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R. II. 170, 171 Pink Victor E. II. 170
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. I. 65 Pattle, James I. 138	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Ernest II. 170 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. I. 65 Pattle, James	-Tea aphis. I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug. I. 391 -Tea tortrix I. 428 -Termiters I. 391 -Thrips I. 391 -Tjang kriek I. 114 -White ants I. 391, 428 -Yellow mite I. 391, 428	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Ernest II. 170 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton il. I. 65 Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511	-Tea aphis. I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug. II. 391 -Tea tortrix II. 428 -Termites II. 391 -Thrips II. 391 -Tjang kriek II. 114 -White ants II. 391, 428 -Yellow mite II. 391, 428 -Yellow mite II. 391, 428 - Pests and Blights of the Tea - Plant The II. 168	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers I97, 198, 199 —India I 160, 161
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton il. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Paul B. d. II. 557	-Tea aphis. I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug. I. 391 -Tea tortrix I. 428 -Termites I. 391 -Thrips I. 391 -Tjang kriek I. 114 -White ants I. 391, 428 -Yellow mite I. 391, 428 -Yellow II. 168 -Yellow II. 195; q. 427,	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. 11. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. III. 170 Pioneers — Ceylon I. 177, 178, 180, — India I. 160, 161 — South I. 171, 172
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton il. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q 1. 557 Paulli, Dr. Simon q. I. 29, 30;	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers —Ceylon I. 177, 178, 180, 199 —India I. 160, 161 — South I. 171, 172 Java I. 120-23
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. I. 65 Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q I. 557 Paulli, Dr. Simon q. I. 29, 30; I. 208 A02	-Tea aphis. I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug. II. 391 -Tea tortrix. II. 428 -Termites II. 391 -Thrips II. 391 -Tjang kriek II. 114 -White ants II. 391, 428 -Yellow mite. II. 391, 428 -Yellow mite. II. 391, 428 -Yellow mite. II. 168 -Yellow Tea - Plant, The II. 195; q. 427, 428, 518 -Yetel, J. E. van Polanen. II. 123, 129	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Ernest II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers —Ceylon I. 177, 178, 180, 197, 198, 199 —India I. 160, 161 — South I. 171, 172 —Java I. 120-23 Piso, Gulielmus I. 32
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. I. 65 Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q I. 557 Paulli, Dr. Simon q. I. 29, 30; I. 208 A02	-Tea aphis I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug I. 391 -Tea tortrix . I. 428 -Termites . I. 391 -Thrips . I. 391 -Tjang kriek I. 114 -White ants . I. 391, 428 -Yellow mite . I. 391, 428 -Yellow mite . I. 168 -Pests and Blights of the Tea -Petch, T I. 195; q. 427, 427, 428 -Petel, J. E. van Polanen I. 123, 129 -Peterson, Antoinette Rotan q	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Ernest William II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers —Ceylon I. 177, 178, 180, 199 —India I. 160, 161 —South I. 171, 172 Java I. 120-23 Piso, Gulielmus I. 32 Pistuisse, J. Louis II. 469 Pitt, William I. 51
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. I. 65 Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q I. 557 Paulli, Dr. Simon q. I. 29, 30; I. 208 A02	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd. W. — Ceylon I. 177, 178, 180, — Ceylon I. 177, 178, 180, — India I. 160, 161 — South I. 171, 172 Java I. 171, 172 — Jiso, Gulielmus I. 22 Pisuisse, J. Louis II. 469 Pitt, William I. 51 Pitts, C. I. 182
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H I. 511 Paul, Frank II. 285 Paul, R. q I. 557 Paulli, Dr. Simon q. I. 29, 30; II. 398, 492 Pauw, A. A II. 113, 116 Pawinski, J. q I. 556 Paxton, William A II. 267 Paxton, William M II. 465 Paxton, Gallagher Co II. 267	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers — Ceylon I. 177, 178, 180, 199 — India I. 160, 161 — South I. 171, 172 Java I. 120-23 Piso, Gulielmus I. 32 Pisuisse, J. Louis II. 469 Pitt, William I. 51 Pitts, C. I. 182 Pitts & Gavin I. 182, 183
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H I. 511 Paul, Frank II. 285 Paul, R. q I. 557 Paulli, Dr. Simon q. I. 29, 30; II. 398, 492 Pauw, A. A II. 113, 116 Pawinski, J. q I. 556 Paxton, William A II. 267 Paxton, William M II. 465 Paxton, Gallagher Co II. 267	-Tea aphis	Pink, A. L. II. 232, 234, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170, 171 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers 197, 198, 199 — Ceylon I. 170, 178, 180, 197 — India I. 160, 161 — South I. 171, 172 Java I. 120-23 Piso, Gulielmus I. 32 Pisuisse, J. Louis II. 469 Pitts, William I. 51 Pitts, & Gavin I. 182, 183 Plant, characteristics I. 499 Plantations (see Estates)
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H I. 511 Paul, Frank II. 285 Paul, R. q I. 557 Paulli, Dr. Simon q. I. 29, 30; II. 398, 492 Pauw, A. A II. 113, 116 Pawinski, J. q I. 556 Paxton, William A II. 267 Paxton, William M II. 465 Paxton, Gallagher Co II. 267	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers — Ceylon I. 177, 178, 180, 199 — India I. 160, 161 — South I. 171, 172 Java I. 120, 23 Piso, Gulielmus I. 32 Piso, Gulielmus I. 32 Piso, Gulielmus I. 32 Pistits, C. I. 182, 183 Pitts, C. I. 182, 183 Platte & Gavin I. 182, 183 Plant, characteristics I. 499 Planters' Association of Ceylon
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Pattriotic Ladies of Edenton il. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q. I. 29, 30; Paulli, Pr. Simon q. I. 29, 30; Paulli, Dr. Simon q. II. 398, 492 Pauw, A. A. II. 113, 116 Pawinski, J. q. I. 556 Paxton, William A. II. 267 Paxton, William M. II. 465 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, George II. 191 Payne & Co. Ltd., George II. 191 Peacock, J. C. and B. L	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Victor E. II. 170 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Pioneers 197, 198, 199 — Ceylon I. 177, 178, 180, 199 — India I. 160, 161 — South I. 171, 172 Java I. 120-23 Piso, Gulielmus I. 32 Pisuisse, J. Louis II. 469 Pitt, William I. 51 Pitts, C. I. 182 Pitts, Gavin I. 182, 183 Plant, characteristics I. 499 Plantations (see Estates) Plantations (see Estates) Planters' Association of Ceylon I. 179-94, 196, 200, 201, 206, 444
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q. I. 557 Paulli, Dr. Simon q. I. 29, 30; Paulli, Dr. Simon q. II. 398, 492 Pauw, A. II. 113, 116 Pawinski, J. q. I. 556 Paxton, William A. II. 267 Paxton, William M. II. 465 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, George II. 191 Payne & Co. Ltd., George II. 191 Peacock, J. C. and B. L. I. 284; q. 531	-Tea aphis. I. 391 -Tea mosquito (see Helopeltis) -Tea-seed bug. I. 391 -Tea tortrix. I. 428 -Termites I. 391 -Thrips I. 391 -Thrips I. 391 -Thrips I. 391 -Thrips I. 391, 428 -Yellow mite. I. 168 -Yeth. I. 195; 427, 428, 518 -Yeth. I. 195; 427, 428, 518 -Yeth. I. 195; 427, 428, 518 -Yeth. I. 195; 11, 491 -Yeterson, Antoinette Rotan qYeterson, J. H. 11, 222 -Yetit, Pierre I. 35 -Yetroff, Ivan I. 25; II. 95 -Yetroff, Ivan II. 256, Ivan II. 256	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Plantia. I. 160 Int. Int. Plantations I. 182 Planters' bungalows I. il. I. il. Int. Planters' bungalows I. il.
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton il. Pattle, James I. 138 Pan Ling-hui I. 38 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, Frank II. 29, 30; Pauli, Dr. Simon q. I. 29, 30; Pauw, A. A. III. 113, 116 Pawinski, J. q. I. 1556 Paxton, William A. II. 267 Paxton, William M. II. 465 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, II. H. II. 191 Payne, G. Co. Ltd., George II. 191 Peacock, J. C. and B. L	-Tea aphis	Pink, A. I
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q. I. 557 Paulli, Dr. Simon q. I. 29, 30; Paulli, Dr. Simon q. II. 398, 492 Pauw, A. II. 113, 116 Pawinski, J. q. II. 1267 Paxton, William A. II. 267 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne & Co. Ltd., George II. 191 Peacock, J. C. and B. L Peacock, Thomas Love I. 85 Pearks Dairies, Ltd. II. 191 Pearks Dairies, Ltd. II. 191	-Tea aphis	Pink, A. L. II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170, 171 Pink, Sir Harold R. II. 170, 171 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W. II. 170 Plantia. I. 160 Int. Int. Plantations I. 182 Planters' bungalows I. il. I. il. Int. Planters' bungalows I. il.
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton il. Pattle, James I. 138 Pan Ling-hui I. 38 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, Frank II. 29, 30; Pauli, Dr. Simon q. I. 29, 30; Pauw, A. A. III. 113, 116 Pawinski, J. q. I. 1556 Paxton, William A. II. 267 Paxton, William M. II. 465 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, II. H. II. 191 Payne, G. Co. Ltd., George II. 191 Peacock, J. C. and B. L	-Tea aphis	Pink, A. L II. 232, 234 Pink, Ernest William II. 170 Pink, Frank II. 170 Pink, Sir Harold R II. 170, 171 Pink, Victor E II. 170, 171 Pink, Sir William II. 170, 171 Pink & Sons, Ltd., W II. 170 Pink & Sons, Ltd., W II. 180 Pintia I. 160, 161 Pitt, I. 171 Java I. 120-23 Pisuisse, J. Louis II. 182 Pisuisse, J. Louis II. 182 Pisuisse, J. Louis II. 182 Pistis & Gavin I. 182, 183 Plant, characteristics I. 499 Plantations (see Estates) Planters' Association of Ceylon I. 179-94, 196, 200, 201, 296, 444 Planters' bungalows I. ill. 155; 179, 412-14, 457; II. ill. 380 Planters' Chronicle, The. I. 171.
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Pattriotic Ladies of Edenton il. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q. I. 557 Paulli, Pr. Simon q. I. 29, 30; Paulli, Dr. Simon q. I. 29, 30; Paulli, J. G. II. 113, 116 Pawinski, J. q. II. 13, 166 Paxton, William A. II. 267 Paxton, William M. II. 465 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, George II. 191 Payne, J. C. and B. L. I. 1284; q. 531 Peacock, J. C. and B. L. I. 284; q. 531 Peacok, Thomas Love I. 85 Pearks Dairies, Ltd. II. 191 "Pearl Dew" I. 324 Pease, W. H. II. 202 Peeco I. I. 115	-Tea aphis	Pink, A. I
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Paulli, R. q. I. 557 Paulli, Dr. Simon q. I. 29, 30; II. 398, 492 Paulli, Dr. Simon q. I. 29, 30; Paww, A. A. II. 113, 116 Pawinski, J. q. I. 556 Paxton, William M. II. 267 Paxton, William M. II. 267 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, II. H. II. 191 Payne, II. H. II. 191 Payne, G. C. and B. L. II. 191 Peacock, J. C. and B. L. 184; q. 531 Pearks Dairies, Ltd. II. 191 "Pearl Dew" I. 324 Pease, W. H. II. 202 Pecco I. 115 Pecco I. 115 Pecchlin, Jan Niklass I. 32	-Tea aphis	Pink, A. L II. 232, 234, 234, 234, 234, 234, 234, 234,
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 65 Paul, B. H. I. 511 Paul, Frank II. 285 Pauli, R. q I. 557 Pauli, Dr. Simon q. I. 29, 30; II. 398, 492 Pauw, A. A. III. 113, 116 Pawinski, J. q I. 556 Paxton, William A. II. 267 Paxton, William M. II. 465 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, II. H	-Tea aphis	Pink, A. I
Patin, Dr. Gui q. I. 33, 34; II. 493 Patterson, Charles R I. 95, 107 Patriotic Ladies of Edenton ill. Pattle, James I. 138 Pan Ling-hui I. 3 Paul, B. H. I. 511 Paul, Frank II. 285 Paulli, R. q. I. 557 Paulli, Dr. Simon q. I. 29, 30; II. 398, 492 Paulli, Dr. Simon q. I. 29, 30; Paww, A. A. II. 113, 116 Pawinski, J. q. I. 556 Paxton, William M. II. 267 Paxton, William M. II. 267 Paxton & Gallagher Co. II. 267 Payne, George II. 191 Payne, II. H. II. 191 Payne, II. H. II. 191 Payne, G. C. and B. L. II. 191 Peacock, J. C. and B. L. 184; q. 531 Pearks Dairies, Ltd. II. 191 "Pearl Dew" I. 324 Pease, W. H. II. 202 Pecco I. 115 Pecco I. 115 Pecchlin, Jan Niklass I. 32	-Tea aphis	Pink, A. L II. 232, 234, 234, 234, 234, 234, 234, 234,

Planters' Stores & Agency Co., TheII. 142, 183	M - 4 - T - 1	UD
	—Tea after LunchII. 484	"Precious Thunder tea"II. 39
The	-Tea-Brewing	PremiumsII. 8
Planting	—Tea-DrinkingII. 484	Preparation of the beverage
China	—Tea Drinking; a Fragment q.	II. 449-4 5
—Ceylon	II. 488	(see also Brewing Methods)
—Formosa	—Tea Elegy qII. 487	Preparation of the landI. 27
—India I. 387	—Tea Idyl, A qII. 491	(see also Cultivation)
—Japan	—Tea OdeII. 485	Prescott, S. C. q
—Java	-Tea Ships, TheII. 490	Present-giving companiesII. 8
Distriction Constitution I 101	T T-1). The - 11 490	Decetes 1 12
Planting GazetteI. 191	-Tea Table, The qII. 486	Preston, A
Planting distances (see Spacing)	—Twadogs qII. 489	Preston, A. K
Platt, Charles B	-Young Gentleman in Love q.	"Pretty fingers" (see Momikiri t)
Platt & Son, W	II. 487	Prettyman, Thomas JII. 26
Playfair, Sir Patrick I. 164:	Posms, Masefield	Prices per pot or cup
II. 138, 141	Poets of John Company qI. 85	-Australia II. 42
Plays	Pokorny, W. AII. 234, 285-86	—AustraliaII. 42 —EnglandII. 411, 414-41
Deld Cimiles form to Wide A T A1	Delich too from II 920	Your Zooland II 41
-Bold Strike for a Wife, A. I. 41	Polish tea firmsII. 239	—New ZealandII. 41 —U. S
-By Your Leave	Polishing I. 323	_U. 8
-Double Dealer, The qII. 493	-India I. 402 "Polite Grocers of the Strand,	Prices per lb.
-Funeral, The q	"Polite Grocers of the Strand,	CalcuttaII.
—Funeral, The qII. 493 —Lady's Last Stake qII. 493	The" ill	ColomboII. 1
-Love in Seven Manques q II. 493	Political EconomyI. 85	-Dutch, earlyI. 118: II. 40
-Lying-in Woman, The 1. 35	Pollard, G. AII. 166	
-Maid's Last Prayer II. 486	Pollitzer, R. q I. 556	-London I 73 147: II 4
Manny Wadding Guest II 486	PometI. 35	Prideaux, A. A II. 147, 17
-Merry Wedding Guest II. 486	Dendel Cade lands T 116	Delegaler T D
—De Theezieke JuffersII. 401, 493 —Wives' Excuse	Pondok Gedeh landsI. 116	Priestly, J. B
-Wives' Excuse	Pondok Gedeh Cultuur CoI. 117	Prillwitz, P. M. H. H 1. 12
Pleasure Haunts of London Dur-	Pook, Samuel A	Principles of Leather Manufac-
ing Four Centuries q 11. 389	Pool of London ill	ture, The qI. 51
Pletzer. P. q	Pooley & Son. Ltd., HenryI. 477	Principles and Practical Consid-
Pluckers' songII. 467	Poole, Otis AII. 222, 226, 258	erations Involved in Tea
Plucking	Poole & Co., Otis AII. 226	ManuringI. 41
Paulanta I 430	Dools O M II 007	Dries Matthew a II 486 48
Baskets I. 430	Poole, O. M	Prior, Matthew qII. 486, 48
-Black tea	Pope, Alexander q. II. 403, 487, 493	"Priory" Tea and Coffee Co.,
-Burma	Popoff, C. S	LtdII. 18
Cevion	Popoff, C. S	Private Enterprise (India)
China	Popoff Frères, C. & SI. 206	I. 133, 14
-Close	Popoff Frères, C. & S I. 206 Popoff Bros., K. & S II. 98 Popularity of tea I. 538, 539	Private Papers of Henry Rye-
-Fine and coarse	Popularity of ten I 538 539	croft q
-FormosaI. 235, 236, 333, 334	Domestoin Anad 4 I 234 322	Prize Frequ on the Cultivation
Branch Indo Chine I 453 454	Porcelain-fired tI. 234, 322	Prize Essay on the Cultivation and Manufacture of Tea
-French Indo China I. 453, 454	Port of London illII. 38	T 42
—India	Port of London Authority11. 38	in IndiaI. 46
—Iran (Persia)I. 455 —JapanI. 234, 316-17	Port of London AuthorityII. 38 Portielje (artist)II. 465, 466	Proclamation for the Suppression of Coffee Houses q.I. 4
Japan	Ports	sion of Coffee Houses q.1. 4
Iove and Sumatra	-Africa	Proctor, H. R. q I. 51 Proctor's Modification of Lowen-
Long	—Canada	Proctor's Modification of Lowen-
Natal	—Ceylon	thai's Method a
—Nyasaland	Colombo II III 8: 0	Producing areasI. 26
Duration Transconcesie I 462	——ColomboII. ill. 8; 9 —ChinaI. 221, 252-260	ProductionII. 333-4
—Russian TranscaucasiaI. 462 —SiamI. 237, 449-50		Production
—Siam	-FormosaI. 221, 262-263	—AzoresII. 34
Plucking machine (Sadovsky)	-French Indo ChinaI. 263	—BrazilII. 34
<i>iii</i> 1. 4 00	—India	-British Malaya
Plucking scenes illII. 382	-JapanI. 221, 260-261; II. 31	—Ceylon
1 456.57		
Africa. E. 1/1	Inva	China
-Africa, E. ill	—Java	—ChinaII. 333, 33
	—Java	—ChinaII. 333, 33 —CostsI. 118, 15 —Fiji IslandsI. 216: II. 34
—Brazil ill	—Java	-ChinaII. 333, 33 -CostsI. 118, 15 -Fiji IslandsI. 216; II. 34
—Brazil illI. 416, 430, 431 —China illI. 300	— Malay States	— China
— Brazil ill	Java. 1. 221, 264-265 —Malay States. I. 263 —Nyasaland. I. 221, 266 —Sumatra. I. 221, 265-266 —Other countries. I. 267	
Brazil 4l	Java. 1. 221, 264-265 Malay States. I. 263 Nyasaland. I. 221, 266 Sumatra. I. 221, 265-266 Other countries. I. 267 Portuguese as Pioneers in Orien	—GuatemalaII. 35
	Java. 1. 221, 264-265 Malay States. I. 263 Nyasaland. I. 221, 266 Sumatra. I. 221, 265-266 Other countries. I. 267 Portuguese as Pioneers in Orien	—GuatemalaII. 35
	Java. 1. 221, 264-265 Malay States. I. 263 Nyasaland. I. 221, 266 Sumatra. I. 221, 265-266 Other countries. I. 267 Portuguese as Pioneers in Orien	—GuatemalaII. 35 —IndiaI. 133, 144, 375, 377, 380, 386; II 337-3
	Java	Guatemaia
	Java 1. 221, 264-265	—GuatemalaII. 35 —IndiaI. 133, 144, 375, 377, 380, 386; II 337-3 —Iran (Persia)I. 454; II. 34 —JapanI. 309, 311; II. 341-4
	Java 1. 221, 264-265	Guatemala
- Brazil ill	Java 1. 221, 264-265	Guatemala
- Brazil ill	Java 1. 221, 264-265	—Guatemala
-Brazil ill	Java 1 221, 264-265	—Guatemala
-Brazil ill	Java 1 221 204-265	—Guatemala
-Brazil ill	Java 121, 204-265	—Guatemala
-Brazil ill	Java 1 221, 264-265	—Guatemala
-Brazil ill	Java 1 221, 264-265 Malay States I 263 Nyasaland I 221, 266 Sumatra I 221, 265-266 Other countries I 221, 265-266 Portuguese as Pioneers in Oriental Trade I 24 Portuguese East Africa t I 239 Post-fermentation (see Mellowing) Postal, R. H II 240 Postum I 547 Potter, R. G II 277 Potter, R. G II 277 Pottery II 469 American II 477 Othinese II 469 English II 473 English II 473 Potental Pot	—Guatemala
-Brazil ill		—Guatemala
-Brazil ill	Java 121, 264-265 Malay States 1, 263 Nyasaland 1, 221, 265 Sumatra 1, 221, 265-266 Other countries 1, 267 Portuguese as Pioneers in Oriental Trade 1, 24 Post-termentation (see Mellowing) Postal, R. H 11, 240 Postum 15, 47 Potter, R. G 11, 277 Potter, Robert G 11, 258 Pottery 11, 469 American 11, 477 Chinese 11, 473 English 11, 473 Faience 11, 473 Hard 1, 473 Faience 11, 474	—Guatemala
-Brazil ill	Java 121, 204-265 Malay States I. 263 Nyasaland I. 221, 266 Sumatra I. 221, 265-266 Other countries I. 227 Portuguese as Pioneers in Oriental Trade I. 24 Portuguese East Africa t I. 239 Post-fermentation (see Mellowing) Postal, R. H II. 240 Postum I. 547 Potter, R. G II. 277 Potter, R. G II. 277 Potter, R. G II. 288 Pottery II. 469 American II. 479 Chinese II. 469 English II. 473 English II. 475 Faience II. 475 Porcelains II. 476 Porcelains II. 477 Porcelains II. 476 Porcelains II.	—Guatemala
-Brazil ill	Java 121, 204-265 Malay States I. 263 Nyasaland I. 221, 266 Sumatra I. 221, 265-266 Other countries I. 227 Portuguese as Pioneers in Oriental Trade I. 24 Portuguese East Africa t I. 239 Post-fermentation (see Mellowing) Postal, R. H II. 240 Postum I. 547 Potter, R. G II. 277 Potter, R. G II. 277 Potter, R. G II. 288 Pottery II. 469 American II. 479 Chinese II. 469 English II. 473 English II. 475 Faience II. 475 Porcelains II. 476 Porcelains II. 477 Porcelains II. 476 Porcelains II.	—Guatemala
-Brazil ill	Java. 1. 221, 264-265 —Malay States. I. 263 —Nyasaland. I. 221, 265-266 —Sumatra. I. 221, 265-266 —Other countries. I. 267 Portuguese as Pioneers in Oriental Trade. I. 24 Portuguese East Africa t. I. 239 Post-fermentation (see Mellowing) Postal, R. H. II. 240 Postum. I. 547 Potter, R. G. II. 277 Potter, R. G. II. 278 Pottery. II. 469 —American. II. 473 —Cream-colored ware. II. 473 —Praience. II. 473 —Porcelains. II. 475 —Salt-glaze and earthenware	—Guatemala
-Brazil ill	Java 121, 264-265	—Guatemala
-Brazil ill	Java 121, 264-265 Malay States I. 263 Nyasaland I. 221, 266 Sumatra I. 221, 265-266 Other countries I. 226 Portuguese as Pioneers in Oriental Trade I. 24 Portuguese East Africa t I. 239 Post-fermentation (see Mellowing) Postal, R. H II. 240 Postum I. 547 Potter, R. G II. 277 Potter, R. G II. 277 Pottery II. 469 American II. 477 Chinese II. 478 English II. 473 — Cream-colored ware II. 473 — Porcelains II. 475 — Salt-glaze and earthenware II. 475 — Stoneware II. 475 — II. 475 — Stoneware II. 473 — II. 475 — Stoneware II. 473 — II. 475 — III. 473 — III. 475 — III. 473 — III. 475 — III. 475 — III. 475 — III. 473 — III. 475 — III. 475 — III. 473 — III. 473 — III. 475 — III. 474 — III. 475 — III. 474 — III. 475 — III. 476 — III. 476 — III. 476 — III. 477 — III. 476 — III. 476 — III. 476 — III. 476 — III. 477 — III. 476 — III. 476 — III. 476 — III. 477 — III. 476 — III. 476 — III. 477 — III. 477 — III. 478 Guatemala	
-Brazil ill	Java 121, 264-265 Malay States 1, 263 Nyasaland 1, 221, 265 Sumatra 1, 221, 265-266 Other countries 1, 267 Portuguese as Pioneers in Oriental Trade 1, 24 Post-termentation (see Mellowing) Postal, R. H 11, 240 Postum 1, 547 Potter, R. G 11, 277 Potter, Robert G 11, 258 Pottery 11, 469 American 11, 477 Chinese 14, 473 Cream-colored ware 11, 473 Faience 11, 473 Salt-glaze and earthenware 11, 475 Stoneware 11, 475 Stoneware 11, 475 Transfer printing 11, 477 Transfer printing 11, 477 Transfer printing 11, 477 1, 267 Transfer printing 11, 477 Transfer printing 11, 477 1, 267 Transfer printing 11, 477 Transfer printing 11, 477 1, 221 Table 1, 221 Total 1, 222 Total 2, 222 Total	Guatemala
-Brazil ill	Java 121, 264-265 Malay States I. 263 Nyasaland I. 221, 266 Sumatra I. 221, 265-266 Other countries I. 227 Portuguese as Pioneers in Oriental Trade I. 24 Portuguese East Africa t I. 239 Post-fermentation (see Mellowing) Postal, R. H II. 240 Postum I. 547 Potter, R. G II. 277 Potter, R. G II. 277 Potter, R. G II. 277 Potter, R. G II. 469 American II. 477 Chinese II. 469 English II. 473 English II. 475 Stoneware II. 473 Stoneware II. 473 Transfer printing II. 473 Transfer printing II. 476 Willow pattern II. 476	Guatemala
-Brazil ill	Java. 1 221, 264-265 Malay States. I. 263 Nyasaland. I. 221, 266 Sumatra. I. 221, 265-266 Other countries. I. 267 Portuguese as Pioneers in Oriental Trade. I. 24 Portuguese East Africa t. I. 239 Post-fermentation (see Mellowing) Postal, R. H. II. 240 Postum. I. 547 Potter, R. G. II. 277 Potter, R. G. II. 278 Pottery. II. 469 —American. II. 477 —Chinese. II. 473 — Cream-colored ware. II. 473 — Porcelains. II. 475 — Salt-glaze and earthenware. II. 475 — Stoneware. II. 473 — Transfer printing. II. 473 — Transfer printing. II. 476 — European. II. 472 — European. II. 472	Guatemala
-Brazil ill 1, 416, 430, 431 -China ill 1, 300 -Formosa ill 1, 334 -India ill 1, 381, 385, 393-94 -Japan ill 1, 316-17, 11, 27 -Java and Sumatra ill 1, 359-61 -Russia ill 1, 462 -Plucking shears 1, 316 -Poems II, 490 -Ballad of the Boston Tea -Party, q II, 490 -Ballad of the Tea Pickers 11, 490 -Botton q II, 490 -Botton q II, 490 -Botton Garden q II, 490 -Botton Garden q II, 490 -City Mouse and the Country Mouse q II, 486 -Ctipper Ship, The 1, 106 -Ctipper Ship, The 1, 106 -Cup of Tea, A q II, 490 -Dish of Tea q II, 489 -Drop o' Tea, A q II, 488 -Love of Fame q II, 488 -Love of Fame q II, 488 -My Fragrant Cup of Tea, II, 481	Java 121, 264-265 Malay States I 263 Nyasaland I 221, 266 Sumatra I 221, 265-266 Sumatra I 221, 265-266 Other countries I 221, 265-266 Other countries I 221 Portuguese as Pioneers in Oriental I Trade I 24 Portuguese East Africa t I 239 Post-fermentation (see Mellowing) Postal, R. H II 240 Postum I 547 Potter, R. G II 277 Potter, R. G II 277 Potter, Robert G II 278 Pottery II 469 American II 477 Ohinese II 469 English II 473 Eraince II 475 Faience II 475 Stoneware II 475 Stoneware II 475 Stoneware II 475 Stoneware II 476 European II 476 European II 476 Faience II 476 Faience II 476 Faience II 472 Faience II 472 II 472 Faience II 472 II 472 Faience II 472	Guatemala
-Brazil ill		Guatemala
-Brazil ill	Java	Guatemala
-Brazil ill	Java	Guatemala
-Brazil ill		Guatemala
-Brazil ill	Java 121, 204-265	Guatemala
-Brazil ill	Java 121, 204-265	Guatemala
-Brazil ill		Guatemala
-Brazil ill	Java	Guatemala II. 35 —India I. 133, 144, 375. 377, 380, 386; II 337-3 —Iran (Persia) I. 454; II. 34 —Japan I. 309, 311; II. 341-4 —Java I. 119, 126, 34 —Kenya I. 119, 126, 34 —Mauritius I. 216, 239; II. 34 —Mauritius I. 216, 239; II. 34 —Mauritius I. 218, 239; II. 34 —Natal I. 211; II. 243, 34 —Nyasaland I. 211; II. 243, 34 —Nyasaland I. 211; II. 34 —Peru I. 215, 34 —Russia I. 462; II. 34 —Sumatra I. 126, 13 —Tanganyika II. 34 —Uganda II. 34 —World II. 333, 33 Proefstation voor Rubber I. 12 Proefstation Voor Thee (see —Proefstation West-Java) Proefstation West-Java I. 288, 295, 37 Prompt Day —Amsterdam II. 4 —London II. 40, 4 Propagands (see Advertising)
-Brazil ill	Java 121, 264-265	Guatemala
-Brazil ill	Java	Guatemala
-Brazil ill	Java 121, 264-265	Guatemala. II 35 -India I 133, 144, 375, 377, 380, 386; II 337-3 -Iran (Persia) I 454; II 34 -Japan I 309, 311; II 341-4 -Java I 119, 126, 34 -Kenya I 126, 239; II 34 -Mauritius I 216, 239; II 34 -Mauritius I 216, 239; II 34 -Mozambique I 459; II 34 -Natal I 121, 11 243, 34 -Netherlands Indies II 339-4 -Nyasaland I 212, 458; II 34 -Peru I 215, 34 -Russia I 462; II 34 -Siam I 466; II 34 -Siam I 126, 13 -Tanganyika II 34 -Uganda II 34 -Uganda II 34 -Uganda II 34 -Uganda II 34 -Vorid II 333, 33 -Proefstation voor Rubber I 12 -Proefstation Voor Rubber I 12 -Proefstation Voor Thee (see -Proefstation Voor Thee (see -Proefstation Voor II 333, 33 -Proefstation Voor II 333, 33 -Proefstation Voor II 333 -Proefstation Voor II 35 -Prompt Day -Amsterdam II 4 -London III 40, 4 -Propaganda (see Advertising) -Propagation I 204-21 -Abyssinia I 241
-Brazil ill	Java 121, 264-265 Malay States I 263 Nyasaland I 221, 265-266 Sumatra I 221, 265-266 Sumatra I 221, 265-266 Other countries I 221, 265-266 Other countries I 226 Portuguese as Pioneers in Oriental Trade I 24 Post-termentation (see Mellowing) Postal, R. H II 240 Postum I 547 Potter, R. G II 277 Potter, R. G II 277 Potter, R. G II 277 Potter, R. G II 477 Chinese II 469 American II 477 Chinese II 473 Cream-colored ware II 475 English II 475 Faience II 475 Stoneware II 475 Stoneware II 475 Stoneware II 476 European II 476 European II 477 Faience II 478 Porcelain II 470 Pottery of the Cha-no-yu, The Pottery of the Ch	Guatemala
-Brazil ill		Guatemala
-Brazil ill		Guatemala
-Brazil ill	Java 121, 264-265	Guatemala
-Brazil ill	Java 121, 264-265	Guatemala
-Brazil ill	Java 121, 264-265	Guatemala
-Brazil ill	Java 121, 264-265	Guatemala

Ceylon	D	Cayenne			
Ceylon	D	Coylon	—Burma I. 208		Reid, CarlII. 168-69, 31
Colombia	Simon. 11. 25 Thomas . 11. 25 To Co. C. K	Colombia	—Cayenne	Manipur	Reid, Charles Ker
Colombia	Simon	Colombia	Ceylon 1. 424	-Naga Hills	Reid, D
France Indo China	William B. 11. 28: & Co. Wm. B. 11. 28: Charles. III. 26: cons led Kingdom. II. 36: led States. III. 52-5: sn of the Voyage of the Bishop of Beryte to Co- chinchina I. 2: ity III. 36: ks on the Tea Plant I ans- lated from Chinese Au- thors. q. I. 49: dot, Eusebius I. 5; q. 494; II. dot, Eusebius II. 5; q. 494; II. dot, Eusebius II. 5; q. in Major Leslie. II. 21: con a Mission to Szechuen II. on a Mission to Szechuen Tea Industry of Java and Sumatra. II. 344, 35: on the Cultivation of the Tanganyika Territory. Ion the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35: on the Indian Tea As- sonitation II. 36: son the Indian Tea As- sonitation II. 36: ches on the Manufacture of Various Kinds of Tea ches on the Manufacture of Various Kinds of Tea con I. 201; II. 23, 34 and Sumatra II. 27; III. 34: ches on the Manufacture of Various Kinds of Tea con II. 201; II. 12, 34 and Sumatra II. 127; III. 34:	Prench Indo-China 1. 208 C-bina 1. 417 Reity William & Co. 11. 208 C-bina 1. 198 C-bina 1. 198 C-bina 1. 198 C-bina 1. 209 C-bina 1. 198 C-bina 1. 209 C-bina 1. 201 C-bin	—Colombia I 215		Reid Simon II 25
France Indo China	William B. 11. 28: & Co. Wm. B. 11. 28: Charles. III. 26: cons led Kingdom. II. 36: led States. III. 52-5: sn of the Voyage of the Bishop of Beryte to Co- chinchina I. 2: ity III. 36: ks on the Tea Plant I ans- lated from Chinese Au- thors. q. I. 49: dot, Eusebius I. 5; q. 494; II. dot, Eusebius II. 5; q. 494; II. dot, Eusebius II. 5; q. in Major Leslie. II. 21: con a Mission to Szechuen II. on a Mission to Szechuen Tea Industry of Java and Sumatra. II. 344, 35: on the Cultivation of the Tanganyika Territory. Ion the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35: on the Indian Tea As- sonitation II. 36: son the Indian Tea As- sonitation II. 36: ches on the Manufacture of Various Kinds of Tea ches on the Manufacture of Various Kinds of Tea con I. 201; II. 23, 34 and Sumatra II. 27; III. 34: ches on the Manufacture of Various Kinds of Tea con II. 201; II. 12, 34 and Sumatra II. 127; III. 34:	Prench Indo-China 1. 208 C-bina 1. 417 Reity William & Co. 11. 208 C-bina 1. 198 C-bina 1. 198 C-bina 1. 198 C-bina 1. 209 C-bina 1. 198 C-bina 1. 209 C-bina 1. 201 C-bin	—England I 206		Reid Thomas II 25
France Indo China	William B. 11. 28: & Co. Wm. B. 11. 28: Charles. III. 26: cons led Kingdom. II. 36: led States. III. 52-5: sn of the Voyage of the Bishop of Beryte to Co- chinchina I. 2: ity III. 36: ks on the Tea Plant I ans- lated from Chinese Au- thors. q. I. 49: dot, Eusebius I. 5; q. 494; II. dot, Eusebius II. 5; q. 494; II. dot, Eusebius II. 5; q. in Major Leslie. II. 21: con a Mission to Szechuen II. on a Mission to Szechuen Tea Industry of Java and Sumatra. II. 344, 35: on the Cultivation of the Tanganyika Territory. Ion the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35: on the Indian Tea As- sonitation II. 36: son the Indian Tea As- sonitation II. 36: ches on the Manufacture of Various Kinds of Tea ches on the Manufacture of Various Kinds of Tea con I. 201; II. 23, 34 and Sumatra II. 27; III. 34: ches on the Manufacture of Various Kinds of Tea con II. 201; II. 12, 34 and Sumatra II. 127; III. 34:	Prench Indo-China 1. 208 C-bina 1. 417 Reity William & Co. 11. 208 C-bina 1. 198 C-bina 1. 198 C-bina 1. 198 C-bina 1. 209 C-bina 1. 198 C-bina 1. 209 C-bina 1. 201 C-bin	-Fiji Islands		Reid & Co., C. K
French Indo-Chinas 208, 209 Ceylon 1 198 Ceylon 1 198 Ceylon 1 199 Ceylon 1 199 Ceylon 1 199 Ceylon 1 191	William B II. 28: & Co., Wm. B II. 28: & Co., Wm. B II. 26: ons II. 26: Charles II. 26: Charles II. 26: Charles II. 26: Charles II. 26: II. 27: II. 36: II. 28: III. 36:	French Indo-China 208, 403 Ceylon 11 130 Relity, William B. 11 208 China 11 308 Relith, Charles 12 209 Lang (Persia) 1 209 1 209 Lang (Persia) 1 209 1 209 1 209 1 209 1 209 1 209 209 1 209	-FormosaI. 207-208, 332-333		Reid. Murdoca & Co
French Indo-China 208, 453 China II 198 Co. Went China II 420; 421 China II 430; 422 the Co. Wm. B	French Indo-China	France	Ceylon I. 417	Reily, William B	
Intaly	ons led Kingdom III 3 led States III 52-5 m of the Voyage of the Bishop of Beryte to Co- chinchina II 2 ity III 36 ks on the Tea Plant I ans- lated from Chinese Au- thors. Q I 49 dot, Eusebius II 5; q 404; III 49; Alfred Barton II 49; Alfred Barton II 49; J. H. III 31; Major Leslie II 21: on a Mission to Szechuen on Certain Aspects of the Tea Industry of Java and Sumatra. I 344, 35: on the Cultivation of Miang Q II 45: on tea Q II 7 on Tea Cultivation in the Tanganyika Territory. con the Tea Industries of Java, Formosa, and Japan II 194, 333; q 35: to the Indian Tea As- sociation II 34: so on the Old Records of the India Office II 38: con the Indian Tea sociation II 34: con Various Kinds of Tea et Agnes. III 49: ches on the Manufacture of Various Kinds of Tea tition of crops. II 23; and Sumatra II 27; III 34:	Tran (Persia)	French Indo-ChinaI. 208, 453	—ChinaII. 19	Reily & Co., Wm. B
United Kingdom Unit	ted Kingdom	Lialy	—Guatemala	—India ill	
Japan I. 313	ted States	Japan 1. 216	—Iran (Persia)	Railways, tea on	
Japan	m of the Voyage of the Bishop of Beryte to Cochinchina I 2 ity II 36 ks on the Tea Plant I anslated from Chinese Authors q. I 49 dot, Eusebius I, 5; q. 494; II 49 dot, Eusebius I, 21 on a Mission to Szechuen I. 40 and II 41 dot on Certain Aspects of the Tea Industry of Java and Sumatra I, 344, 35 on the Cultivation of Miang q I, 46 on tea q. I, 7 on Tea Cultivation in the Tanganyika Territory for the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35 on the Indian Tea Association I, 33 s on the Old Records of the India Office I, 6 er, Agnes II 49 ches on the Manufacture of Various Kinds of Tea to II 201; II 12, 34 and Sumatra I 17; II 34	Japan 1, 313 China II, 430; ill. 431 Relation of the Voyage of the Java and Sumatra 1, 351, 352 England II, 415; ill. 416, 417 Japan II, 431; ill. 432 China II, 431; ill. 432	—Italy	—Australia	-United Kingdom 3
- Kenya	Bishop of Beryte to Co- chinchina . I. 2 ity	Mauritius	—Jamaica		
- Kenya	chinchina I. 2 ity II. 3 ity II. 3 ks on the Tea Plant I anslated from Chinese Authors	Mauritius	Tave and Sumetre I 951 959		
- Mauritius 1. 216	ity II. 36 ks on the Tea Plant Translated from Chinese Authors	-Mauritius		-Ingland 11. 415, 12. 410, 417	chinching I 2
- Maxico	ks on the Tea Plant Tanslated from Chinese Authors	-Mexico I. 215	-Manritina I. 216		
Nysasland	lated from Chinese Authors	-Natal	Mexico I. 215		Remarks on the Tea Plant Trans-
- Peru	thors	-Peru	—Natal I. 209	—Ceylon	lated from Chinese Au-
- Peru	Alfred Barton I. 494, 11. 49, 4, J. H. II. 31, 4, Major Leslie I. 21; on a Mission to Szechuen on Certain Aspects of the Tea Industry of Java and Sumatra. I. 344, 35; on the Cultivation of Miang q. I. 46; on tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35; on tour in Assan for 1924-25 II. 38; to the Indian Tea Association I. 33; son the Old Records of the India Office I. 6er, Agnes. II. 49; ches on the Manufacture of Various Kinds of Tea of II. 201; II. 23, 44 and Sumatra II. 27; III. 34.	-Peru	NyasalandI. 211-212, 458	—China	thorsq. I. 49
- Feru 216	Alfred Barton I. 494, 11. 49, 4, J. H. II. 31, 4, Major Leslie I. 21; on a Mission to Szechuen on Certain Aspects of the Tea Industry of Java and Sumatra. I. 344, 35; on the Cultivation of Miang q. I. 46; on tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35; on tour in Assan for 1924-25 II. 38; to the Indian Tea Association I. 33; son the Old Records of the India Office I. 6er, Agnes. II. 49; ches on the Manufacture of Various Kinds of Tea of II. 201; II. 23, 44 and Sumatra II. 27; III. 34.	-Feru	Paraguay	FormosaI. 271, 330, 331	Renaudot, EusebiusI. 5; q.
-Puerto Rico	a. J. H	Puerto Rico		—India	494; 11, 49
-Russia . 1. ill. 204 206-207 -Siam . 1. 208 -Siam . 1. 209 -Siam	on a Mission to Szechuen I. 40: on Certain Aspects of the Tea Industry of Java and Sumatra	-Russia . 1. ill. 204; 206:207 -Siam . I 208 -Siam . I 208 -Sweden . I 205-206 -Raja Girischandra Roy . II 407 -Superior . I 205-206 -Rajawella Produce Co. Ltd. I. 203 -Lyanda . I 212 -Uganda . I 213-215 -West Indies . I 213-215 -West Indies . I 213-215 -Protein Bodies . I 525 -Proteins . I 536, 545, 546 -Pruning . Collar . I 393, 409, 429 -Collar . I 175, 428; ill. 429 -Collar . I 393, 409, 429 -China . I 301 -Formosa . I 301	Printippines	-Japan	Rendle, Alfred Barton1. 49
-Russia . 1. ill. 204 206-207 -Siam . 1. 208 -Siam . 1. 209 -Siam	on a Mission to Szechuen I. 40 on Certain Aspects of the Tea Industry of Java and Sumatra	-Russia . 1. ill. 204; 206:207 -Siam . I 208 -Siam . I 208 -Sweden . I 205-206 -Raja Girischandra Roy . II 407 -Superior . I 205-206 -Rajawella Produce Co. Ltd. I. 203 -Lyanda . I 212 -Uganda . I 213-215 -West Indies . I 213-215 -West Indies . I 213-215 -Protein Bodies . I 525 -Proteins . I 536, 545, 546 -Pruning . Collar . I 393, 409, 429 -Collar . I 175, 428; ill. 429 -Collar . I 393, 409, 429 -China . I 301 -Formosa . I 301	—Phodesia I 212	Wressland JumairaI. 271, 340	Renton, J. H
-Sweden	I. 40 The analysis of the state of the stat	-Sweden	-Russia I ill 204: 206:207	-Russia I. 462	Report on a Mission to Szechuen
-Sweden	on Certain Aspects of the Tea Industry of Java and Sumatra	-Sweden	Siam I. 208	Raja Girischandra RovI. 407	I. 40
Tanganyika	Tea Industry of Java and Sumatra	Tanganyika	Sweden	Rajawella Produce Co., LtdI. 203	
- United States . I . 213-215 - West Indies . I . 216 - Protein Bodies . I . 525 - Pruning	Sumatra 1. 344, 35: on the Cultivation of Miang q	-Uganda	—Tanganyika	Kamsay, Allan q	Tea Industry of Java and
—West Indies. 1. 216 Protein Bodies. 1. 525 Proteins. 1. 536, 545, 546 Proteins. 1. 526 Proteins. 1. 128 —Collar. 1. 333, 409, 429 — Heavy 1. 339 — Heavy 1. 392 — India. 1. 391, ill. 392, 409 — Japan . 1. 357 — Japan . 1. 357 — Nyasaland . 1. 458 — Nyasaland . 1. 458 — Psychological Institute of University of Munich . 1. 495 Psychological Institute of University of Munich . 1. 557 Psychological value of teta .	on the Cultivation of Ming q	—West Indies 1. 216 Manch t 1. 227 Mang q 1. 487 1. 528 Rand, B 1. 158 Report on tea 9. 1. 7 1. 75 Report on tea 9. 1. 7 Report on tea 9. 1. 7<	—Uganda I. 212	Ramusio, Giambatista1. 23,	SumatraI. 344, 35
—West Indies. 1. 216 Protein Bodies. 1. 525 Proteins. 1. 536, 545, 546 Proteins. 1. 526 Proteins. 1. 128 —Collar. 1. 333, 409, 429 — Heavy 1. 339 — Heavy 1. 392 — India. 1. 391, ill. 392, 409 — Japan . 1. 357 — Japan . 1. 357 — Nyasaland . 1. 458 — Nyasaland . 1. 458 — Psychological Institute of University of Munich . 1. 495 Psychological Institute of University of Munich . 1. 557 Psychological value of teta .	on tea	—West Indies 1. 216 Manch t 1. 227 Mang q 1. 487 1. 528 Rand, B 1. 158 Report on tea 9. 1. 7 1. 75 Report on tea 9. 1. 7 Report on tea 9. 1. 7<	-United States	24; II. 492	Report on the Cultivation of
Tanganyika Tan	on Tra Cultivation in the Tanganyika Territory q. I. 46 Java, Formosa, and Japan I. 194, 333; q. 35: to tour in Assam for 1924-25	Pruning		Ranchi t	Miang q
Tanganyika Tan	Tanganyika Territory q. I. 46 on the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35: on tour in Assam for 1924-25	Pruning	Protein Boules	Pandal Frank II 950	Report on teaq. 1. 7
-Ceylon. I 175, 428; ill. 429 -Collar. I 393, 409, 429 -China I 301 -Formosa I 333 -Formosa I 333 -Formosa I 391, ill. 392, 409 -Iran (Persia) I 1, 455 -Iran (Persia) I 1, 456 -Iran (Persia) I 1, 457 -Iran (Persia) I 1, 457 -Iran (Persia) I 1, 457 -Iran (I 1, 467 -Iran	on the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35 on tour in Assam for 1924-25 I. 38 to the Indian Tea Association II. 33 son the Old Records of the India Office II. 49 ches on the Manufacture of Various Kinds of Tea of Various Kinds of	-Ceylon. I. 175, 428; ill. 429 -Collar. I. 393, 409, 429 -China I. 393, 409, 429 -China I. 393, 409, 429 -China I. 391 -Formosa I. 333 -Formosa I. 333 -Heavy I. 392 -Iran (Persia) I. 455 -Japan I. 315 -Java and Sumatra I. 315 -Lung I. 429 -China I. 429 -China I. 357; -Lung I. 429 -China I. 358 359 -Lung I. 429 -China I. 358 359 -Lung I. 429 -China I. 358 359 -China I. 391 -François q. I. 44, 46; -China I. 391 -François q. I. 44, 46; -China I. 391 -François q. I. 44, 46; -China II. 357 -China II. 357 -China II. 358 359 -China II. 358 359 -China II. 356 -China II. 357 -China II. 358 -China II. 358 -China II. 357 -China II. 358 -China II. 357 -China II. 358 -China II. 358 -China II. 357 -China II. 357 -China II. 357 -China II. 358 -China II. 357 -China II. 358 -China II. 357 -China II. 358 -China II. 358 -China II. 357 -Ch	Prining	"Rennaware" I 174	Tangamike Territory
-China	on the Tea Industries of Java, Formosa, and Japan I. 194, 333; q. 35; on tour in Assam for 1924-25 I. 38; to the Indian Tea Association I. 33 s on the Old Records of the India Office I. 49; ches on the Manufacture of Various Kinds of Tea of Various Kinds of Tea of Various Kinds of I. 34; and Sumatra I. 127; II. 34	-China	-CevlonI. 175. 428: ill. 429	Ransomes. Sims and Jeffries.	a. T 46
-China	Java, Formosa, and Japan I. 194, 333; q. 35 on tour in Assam for 1924-25	-China	-Collar I. 393. 409. 429	Ltd	
-Formosa	I. 194, 333; q. 35 on tour in Assam for 1924-25	-Formosa	—China	Rasmussen, GeorgeII. 283	Java, Formosa, and Japan
	on tour in Assem for 1924-25		-Formosa	Rawlinson, Daniel	I. 194, 333; q. 35
-Iran (Persia) 435 -Japan 1. 315 -Java and Sumatra I. ill. 357: -Lung 1. 458 -Yayasaland 1. 457 -Yayasaland 1. 458 -Yayasaland 1. 457 -Yayasaland 1. 458 -Y	to the Indian Tea Association	Iran (Persia) 1 435Japan I 315Java and Sumatra I. ill. 357;Lung I 429Yapan I 506; II. 54Yapan I 506; II. 54Yapan I 429Yapan	—Heavy	Rawlinson, Sir Thomas 11. 158	Report on tour in Assam 107
-Japan	sociation I. 33: s on the Old Records of the India Office I. 6: er, Agnes II. 49: ches on the Manufacture of Various Kinds of Tea q. I. 51: ction of crops II. 34: on I. 201; II. 12, 34: a and Sumatra I. 127; II. 34:	-Japan	India1. 391, ill. 392, 409		1924-25
-Java and Sumatra 1. tll. 357; 358-359 -Lung 429 -Nyasaland 1. 425 -"Skiff" or "switching" 393 Pruning machine I. 11. 485; Psychological Institute of University of Munich 1. 557 Psychological Institute of University of Munich 1. 557 Psychological value of teta 552 Public Advertiser II. 485 Public Ledger q II. 297 Puerto Rico t 1. 267 Puch t 1. 254 Purch t 1. 254 Psychological value of teta 1. 455 Puerto Rico t 1. 257 Puerto Rico t 1. 254 Puerto Rico t 1. 254 Purch t 1. 284 Prunch t 1. 286 Prunch t 1. 506; II. 54 Read test 1. 506; II. 54 Reade, Arthur q 1. 553; II. 468 Recent Tea Developments in Georgia q. 1. 463 Prunch t 455 Prunch t 456 Prunch t	s on the Old Records of the India Office	-Java and Sumatra. iii. 357; 358-359 -Lung	Iran (Persia)	François ql. 44, 40;	Report to the Indian Tea As-
Seed test	the India OfficeI. 6: er, AgnesII. 49 erhas on the Manufacture of Various Kinds of Tea q. I. 51 etion of cropsII. 34 onI. 201; II. 12, 34 and SumatraI. 127; II. 34	Seed	Iava and Sumatra I ill 357		Bounds on the Old Percents of
Lung 1 429Nyasaland 1 458"Skiff" or "switching" I 393 Pruning machine I. ill. 485; 486 Pryce & Co., John 1 128 Poroulea Glandulosa 1 495 Psychological Institute of University of Munich I 557 Psychological value of tea I 557 Psychological value of tea I 557 Psychological value of tea I 1 456	er, Agnes. II. 49 ches on the Manufacture of Various Kinds of Tea q. I. 51 ction of crops. II. 34 on. I. 201; II. 23 a and Sumatra. I. 127; II. 34	-Lung I 429 -Nyasaland I 458 -"Skiff" or "switching" I 393 Pruning machine I, ill. 485, 486 Pryce & Co., John I 128 Psychological Institute of University of Munich I 557 Psychological value of tea I 552 Psychological value of tea I 552 Public Advertiser. II 485 Public Ledger q II 297 Puerto Rico t I 267 Puerto Rico t I 267 Puerto Rico t I 267 Puerto Rico t I 264 Psychological Institute of University of Munich I 557 -Chinese, early I 35 -Lemon tea II 456 -Lemon tea II 457 -Milk tea II 457 -Milk tea II 457 -Nyasaland I 21 -Nyasaland I 22 -Nyasaland I 21 -Nyasaland I 22 -Nyasaland I 21 -Nyasaland I 22	358-359	Read test	
	ches on the Manufacture of Various Kinds of Tea q. I. 51 stion of crops II. 34 on I. 201; II. 12, 34 a and Sumatra I. 127; II. 34		-Lung I. 429	Reade. Arthur aI. 553; II.	
Pryce & Co., John	of Various Kinds of Tea q. I. 51 ction of cropsII. 34 onI. 201; II. 12, 34 a and SumatraI. 127; II. 34	Pryce & Co., John	-Nyasaland	406, 408, 493	Researches on the Manufacture
Pryce & Co., John	q. 1. 51 etion of cropsII. 34 onI. 201; II. 12, 34 a and SumatraI. 127; II. 34	Pryce & Co., John	"Skiff" or "switching"I. 393	Reagan, John VII. 285	of Various Kinds of Tea
Versity of Munich	II. 34	Versity of Munich	Pruning machineI. ill., 485; 486	Recent Tea Developments in	a. 1. 51
Versity of Munich	II. 34	Versity of Munich	Pryce & Co., John	Georgiaq. 1, 403	Restriction of crops
Versity of Munich	II. 34	Versity of Munich	Pavahological Institute of Uni-	American iced too II 456	—Ceylon1. 201; 11. 12, 34
Psychological value of tea. I. 552 —Chinese, early I. 35 —India I. 35 Public Advertiser II. 485 —Lemon tea II. 457 —Kenya and Ugan Public Ledger q II. 297 —Milk tea II. 457 —Nyasaland Nyasaland Tanganyika	aI. 172; II. 134, 34 ya and UgandaI. 21	Psychological value of tea. I. 552 —Chinese, early I. 35 —India I. 172; II. 134, 34 Public Advertiser II. 485 —Lemon tea II. 457 —Kenya and Uganda I. 21 Public Leager q II. 297 —Milk tea II. 457 —Nyasaland I. 21 Puerto Rico t I. 267 —Russian tea II. 457 —Tanganyika I. 21 Puchi t I. 254 —Tea cocktails and high balls Retail tea merchandising II. 82-9 Physicological value of tea. II. 485 —Retail tea merchandising II. 82-9	versity of MunichI. 557	—Rritish iced tea	-Java and Sumatra 12.,
Public Ledger q. 11. 297 Milk tea 11. 457 —Nyasaland —Nyasaland —Nusbian tea 11. 457 —Tanganyika —Tanganyika —Tanganyika —Rusbian tea 11. 456 Retail tea Retail tea <td>ya and UgandaI. 21</td> <td>Public Leager q. 11. 297 —Milk tea 1. 457 —Nyasaland 1. 218 Puerto Rico t. I. 267 —Russian tea II. 457 —Tanganyika I. 21 Puchi t. I. 254 —Tea cocktails and high balls. Retail tea merchandising. II. 82-9 Puchi t. I. 294 307 II. 456 Retail tea merchandising. II. 82-9</td> <td>Psychological value of teaI. 552</td> <td>-Chinese early I. 35</td> <td>India I 172 II 134 34</td>	ya and UgandaI. 21	Public Leager q. 11. 297 —Milk tea 1. 457 —Nyasaland 1. 218 Puerto Rico t. I. 267 —Russian tea II. 457 —Tanganyika I. 21 Puchi t. I. 254 —Tea cocktails and high balls. Retail tea merchandising. II. 82-9 Puchi t. I. 294 307 II. 456 Retail tea merchandising. II. 82-9	Psychological value of teaI. 552	-Chinese early I. 35	India I 172 II 134 34
Public Ledger q. 11. 297 Milk tea 11. 457 —Nyasaland —Nyasaland —Nusbian tea 11. 457 —Tanganyika —Tanganyika —Tanganyika —Rusbian tea 11. 456 Retail tea Retail tea <td></td> <td>Public Leager q. 11. 297 —Milk tea 1. 457 —Nyasaland 1. 218 Puerto Rico t. I. 267 —Russian tea II. 457 —Tanganyika I. 21 Puchi t. I. 254 —Tea cocktails and high balls. Retail tea merchandising. II. 82-9 Puchi t. I. 294 307 II. 456 Retail tea merchandising. II. 82-9</td> <td>Public Advertiser II. 485</td> <td>-Lemon tea</td> <td>-Kenva and UgandaI. 21</td>		Public Leager q. 11. 297 —Milk tea 1. 457 —Nyasaland 1. 218 Puerto Rico t. I. 267 —Russian tea II. 457 —Tanganyika I. 21 Puchi t. I. 254 —Tea cocktails and high balls. Retail tea merchandising. II. 82-9 Puchi t. I. 294 307 II. 456 Retail tea merchandising. II. 82-9	Public Advertiser II. 485	-Lemon tea	-Kenva and UgandaI. 21
Puchi tI. 254 — Russian tea	saland	Puchi t	Public Ledger aII. 297	Milk tea	-Nyasaland
Pucchi t	renvike 21	Puchi t	Puerto Rico t	-Russian tea	Tanganvika 21
	tea merchandisingII. 82-9	Puern f	Puchi t	-Tea cocktails and high balls.	Retail tea merchandisingII. 82-9
Tuel Dail 11 160 m to an II 457 Rettle, A. T	A. T 196, 19		Puerh T		Rettie, A. T
	John 1, 189, 193, 19		Publ John II 281	Tes number II 456	Rettie, John
	Wilfred J		Pulbrook, Edward PII. 171	Record The Bangkok aI. 450	Rettie. Willred J
Pulbrook & Co II. 171 Recueil des Triveaux Chimiaues Revere, Paul. 1. 1. 2.	, rout, y. 50; 11. 418, 40; of Applied Rotans a T 51		Pulbrook & CoII. 171	Recueil des Triveaux Chimiaues	Review of Applied Rotanu a T 51
Pulham, James BrookI. 80 des Pays-Bas. q. I. 510, Reviséa aner di Fr		Pulbrook, Edward P II. 171 Record, The, Bangkok, q I. 450 Revere, Paul . I. q. 56; II. 479, 48 Pulbrook & Co	Pulham, James BrookI. 80	des Pays-Bas q. 1. 510,	The state of whiteon particulard. T. D.
Pullar, H. A II. 111 516, 524 Revolutionary War	a sper di Freniatria q1.54	Pulbrook, Edward P II. 171 Pulbrook & Co	Pullar, H. A		Revista sper di Freniatria a 54
Pumphrey, F II. 293 Rad brick tea I. 308 Raynolds Tames	n sper di Freniatria q1. 54 tionary WarI. 78-7	Pulbrook, Edward P. II. 171 Record, The, Bangkok, q. I. 450 Revere, Paul. I. q. 56; II. 479, 48 Pulbrook & Co. III. 171 Pulham, James Brook. I. 80 des Pays-Bas. q. I. 510, Pullar, H. A. II. 111 Record Triveaux Chimiques feeview of Applied Botany. q. I. 51 Revista sper di Freniatria q. I. 54 Revolutionary War. II. 78-7	Pumphrey, F 11. 293		Revolutionary War
Pumphrey, Josian 4// Red tea	sper di Freniatria q1. 54 tionary WarI. 78-7 de James II. 25:	Pulbrook & Co	Pumphrey, Josian 4//	Red brick tea I. 308	Revolutionary WarI. 78-7
	2 sper di Freniatria q1. 54 tonary WarI. 78-7 ds, JamesII. 25 ds & Co., Inc., Wm. T	Pulbrook & Co II. 171 Recueil des Triveaux Chimiques des Pays Bas. q. I. 510, 1510, 524 Revolutionary War. I. 78-7 Review of Applied Botany q. I. 54 Revolutionary War. I. 78-7 Revolutionary War. II. 25 Revolution	run on word tea	Red brick tea	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Purchas His Pilarimes a I 38 Posses Inc. Deniel II 280 Print A. E	1 sper di Freniatria q. 1. 54 tionary War 1. 78-79 ds, James	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl		Red brick tea	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Purifies the body 1. 557 Resports	1 sper di Freniatria q. 1. 54 tionary War 1. 78-79 ds, James	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl	Purchas, Samuel q	Red brick tea	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Purves, AII. 180, 186, 187, —AustraliaII. 353 Richardson John.	1 sper di Freniatria q1. 54 tionary WarI. 78-7 ds, JamesII. 25 ds & Co., Inc., Wm. T	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl	Purchas, Samuel q	Red brick tea. I. 308 Red tea. I. 308, 503 "Red tip". I. 332 Reed & Co., S. G. I. 94 Reeves Inc., Daniel II. 289	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
191, 193, 197 —CanadaII. 354 Richheimer, I. D	n sper di Freniatria q. 1. 54 tionary War I. 78-7 ds, James II. 25- ds & Co., Inc., Wm. T II. 25- t, A. E II. 51, 115, 32 Padre Matteo I. 2 ds D. T. II. 14	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports	Revolutionary War
Pussellaws Planters' Association China II 835 Tilling T.	n sper di Freniatria q. 1. 54 tionary War	Pulbrook, Edward P. II. 171 Pulbrook, Edward P. II. 171 Pulbrook & Co. III. 171 Record, The, Bangkok, q. II. 450 Review of Applied Botany, q. I. 51 Review of Applied Botany, p. I. 18 Review of Applied Botany, p. I. 18 Review of Applied Botany, p. I. 18 Review of Applied Botany, p. I. 51 Review of Ap	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports Australia II 353	Revolutionary War
Lussenawa Tiantera Association — Onina Kiddell. James	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds. James. II. 25 ds & Co., Inc., Wm. T II. 25 j. A. E II. 51, 115, 32 Padre Matteo. I. 2 ds. D. T II. 14 dson, John. I. 47 imer. I. D. II. 44	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports Australia II 353 — Canada II 354 — China II 335	Revolutionary War I. 78-7 Reynolds James II. 25 Reynolds Co., 1nc., Wm. T II. 25 Reynst A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards D. T. II. 14 Richardson John I. 47 Richheimer I. D. II. 44
I. 191 —IndiaII. 338 Ridenour-Baker Gr	1 sper di Freniatria q. 1. 54 tionary War 1. 78-7; ds. James 11. 25; ds. & Co., Inc., Wm. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —India II 338	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I. 191 —IndiaII. 338 Ridenour-Baker Gr	1 sper di Freniatria q. 1. 54 tionary War 1. 78-7; ds. James 11. 25; ds. & Co., Inc., Wm. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —India II 338 —Japan II 342	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I. 191 —IndiaII. 338 Ridenour-Baker Gr	1 sper di Freniatria q. 1. 54 tionary War 1. 78-7; ds. James 11. 25; ds. & Co., Inc., Wm. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports —Australia II 353 —Canada II 354 —China II 335 —India II 338 —Japan II 342 Netherlands II 355	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I	1 sper di Freniatria q. 1. 54 tionary War I. 78-7; ds, James II. 25; ds & Co., Inc., Wm. T II. 25; , A. E II. 51, 115, 32; Padre Matteo I. 2; ds, D. T II. 14 dson, John I. 47; imer. I. D II. 44; I. James	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 335 — Clnina II 338 —India II 338 — Japan II 342 —Netherlands II 350 — United Kingdom II 350	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T. II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 17
I. 191	1 sper di Freniatria q. 1. 54 tionary War I. 78-7; ds, James II. 25; ds & Co., Inc., Wm. T II. 25; , A. E II. 51, 115, 32; Padre Matteo I. 2; ds, D. T II. 14 dson, John I. 47; imer. I. D II. 44; I. James	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 27-29,	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T. II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 17
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds. James 11 . 25; ds. & Co., Inc., Wm. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo. I. 2 Richards, D. III. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgeway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Senno. II. 363; 7l. 365;
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds. James 11 . 25; ds. & Co., Inc., Wm. T Padre Matteo	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T Reynst, A. E. II. 51, 115, 32 Ricci, Padre Matteo I. 2 Ricchards, D. T. II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgway, Sir West II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Sen-no. II. 363; #l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds, James 11. 25; ds & Co., Inc., Wm. T j. A. E II. 51, 115, 32; Padre Matteo I. 12, 14; dson, John II. 14; dson, John I. 14; James I. 16; vay, Sir West I. 16; vay, Sir West I. 18; ay, Thomas II. 166, 17, ays, Ltd II. 166, 28; q. I. 540, 54; Sen-no.II. 363; 313, 365; from a Chota Sahib's Pipe II. 379, 49;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgeway, Sir West I. 166, 17 Ridgway, Thomas II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Sen-no.II. 363; ill. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds, James 11. 25; ds & Co., Inc., Wm. T II. 25; , A. E II. 51, 115, 32; Padre Matteo I. 2ds, D. T II. 14 dson, John I. 14; l, James I. 16; ur-Baker Grocery Co. II. 26; vay, Sir West I. 16; ay, Thomas II. 166, 28; ay, Ltd II. 166, 28; sy, Ltd II. 166, 28; from a Chota Sahib's Pipe II. 379, 49; & Co II. 23;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John. I. 47 Richheimer, I. D III. 44 Riddell, James. I. 16 Ridgeway, Sir West. I. 18 Ridgway, Sir West. II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. I. 160, 28 Rieger. I. 540, 54 Rikyu, Sen-no.II. 363; 71. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co. II. 379, 49 Riquet & Co. III. 379, 49
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War . 1, 78-7; ds. James . 11 25; ds & Co., Inc., Wm. T Yellow T. 11 15, 21; Padre Matteo . 1 2; ds. D. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo. I. 2 Richards, D. T III. 14 Richardson. John. I. 47 Richelmer, I. D III. 44 Riddell. James. I. 16 Ridgeway, Sir West I. 18 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 28 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; 4ll. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 23 Ris, Victor I. 131, 13 Ris, Victor I. 131, 13
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds, James II. 25; ds & Co., Inc., Wm. T II. 25; A. E II. 51, 115, 32; Padre Matteo I. 14 dson, John II. 14 dson, John II. 14 dson, John II. 14 usor.Baker Grocery Co. II. 26 tay, Sir West I. 16 tay, Sir West I. 18 ay, Thomas II. 166, 17 ays, Ltd II. 166, 28 ay, Ltd II. 166, 28 ay, Ltd II. 166, 38 from a Chota Sahib's Pipe II. 363; ill. 365; 366, 368, 37 from a Chota Sahib's Pipe & Co II. 379, 49 & Co II. 31, 13; ictor I. 31, 13; c. A. J II. 19	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed I 332 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —China II 338 —India II 338 —Japan II 342 —Netherlands II 350 —Re-firers, Japan II 27-29 Refiring I 293 —Formosa I 337 —Japan I 321 il 322 323 —Godown II 213 Re-firing I 293 —Formosa I 321 il 322 323 —Godown II 213 Re-firing I 465	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richelmer. I. D III. 44 Riddell, James I. 16 Ridgeonur-Baker Grocery Co. II. 26 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Ltd II. 166, 28 Ricyu, Sen-no. II. 363; vl. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 23 II. 27 Ris, Victor I. 131, 13 Ritchie, A. J. II. 19
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War . 1, 78-7; ds, James . 11 25; ds & Co., Inc., Wm. T Padre Matteo. I . 25; ds, D. T III. 14; dson, John I . 47; imer. I. D II. 44; I. James I. 16; vay, Sir West I. 18; ay, Thomas . II. 166, 28; Tays, Ltd II. 166, 28; from a Chota Sahib's Pipe & Co II. 23; fictor . I. 31, 13; Lictor . I. 31, 13; Lictor . I. 13, 13; Lictor . I. 15; len . II. 19; len . II. 15;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Red dea I 34 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —India II 335 —India II 342 —Netherlands II 350 —United Kingdom II 350 —Refirers, Japan II 27-29 Refiring I 293 —Formosa I 337 —Japan I 293 —Godown II 213 Refiring I 293 —Formosa I 37 —Japan I 293 —Godown II 213 Refiring I 293 —Refiring I 465 Refiring II <td>Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgway, Thomas II. 166, 28 Ridgway, Ltd II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no.II. 363; #l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co. II. 379, 49 Riquet & Co. II. 31, 13 Ritchie, A. J. II. 19 Ritcheden I. 15</td>	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgway, Thomas II. 166, 28 Ridgway, Ltd II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no.II. 363; #l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co. II. 379, 49 Riquet & Co. II. 31, 13 Ritchie, A. J. II. 19 Ritcheden I. 15
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War. I. 78-7; ds. James. II. 25; ds. & Co., Inc., Wm. T II. 25; A. E II. 51, 115, 32; Padre Matteo. I. 2; ds. D. T III. 14; dson, John. I. 47; imer. I. D II. 44; I. James. I. 16; vay. Sir West. I. 18; ay. Thomas. II. 166, 17, ays. Ltd. III. 166, 28; Sen-no.II. 363; 313. 365; from a Chota Sahib's Pipe & Co III. 379, 49;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 354 — China II 338 —Japan II 338 — India II 342 —Netherlands II 355 — United Kingdom II 27-29 22 Refiring I 293 — Formosa I 337 —Japan I 322 323 — Godown II 213 213 22 323 232 233 —Godown II 218 218 218 218 218 218 22 323 233 233 233 233 233 233 233 233 233 233 233 233 233 233 233	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 21ccci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John II. 47 Richardson, John II. 44 Riddell, James II. 44 Riddell, James II. 16 Ridgeway, Sir West II. 18 Ridgway, Sir West II. 166, 17 Ridgways, Ltd. III. 166, 17 Ridgways, Ltd. III. 166, 28 Rieger 43, 365 365, 368, 37 Rings from a Chota Sahib's Pips 11 13 79, 49 Riquet & Co. II. 23 Ris, Victor I. 131, 13 Ritchie, A. II. 19 Ritcherden 1. 15 Ritt Hotel 15
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War. I. 78-7; ds, James. II. 25; ds & Co., Inc., Wm. T II. 25; A. E. II. 51, 115, 32; Padre Matteo. I. 2; ds, D. T. II. 14 dson, John. I. 47; imer. I. D. II. 44; I. James. I. 166; say, Sir West. I. 18; ay, Thomas. II. 166, 28; ay, Sir West. I. 18; ay, Ltd. III. 166, 28; by, II. 363; ill. 365; 366, 368, 37; from a Chota Sahib's Pipe II. 379, 49; & Co. II. 23; ictor. I. 131, 13; ben. II. 131, 13; ben. II. 15; lotel York. III. 42;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II. 289 Reëxports II. 353 —Canada II. 355 —China II. 355 —China II. 335 —India II. 338 —Japan II. 342 —Netherlands II. 350 —Refirers, Japan II. 27.29 21 Refiring 1. 293 —Formosa I. 321 322 323 —Godown II. 213 —Godown II. 213 Refiring I. 465 Refiring pan iii. 11. 219 Regulation of exports. II. 134 348	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Thomas II. 166, 28 Rieger 9. I. 540, 54 Rikyu, Sen-no. II. 363; 7l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 23 Ritchie, A. J II. 19 Ritherden I. 15 Ritz Hotel New York 7l. 14 42
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War . I, 78-7 ds, James . II . 25 ds & Co., Inc., Wm. T Padre Matteo. I . 2 ds, D. T III . 14 dson, John I . 47 imer. I. D III . 44 I, James I . 6 vay, Sir West I . 18 ay, Thomas . II . 166, 28 Ay, Thomas . II . 166, 28 From a Chota Sahib's Pipe & Co II . 379, 49 & Co III . 379, 49 & Co III . 379, 49 & Co III . 31 jen . II . 19 len . I . 15 lotel York . Ul. II . 42 York . Ul. II . 42 Sen	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II. 289 Reëxports II. 353 — —Australia II. 354 — II. 354 — II. 355 — III. 355 — III. 355 — III. 350 — Refiren II. 350 — Refiring II. 350 — Refiring II. 372 221 Refiring II. 372 221 Refiring II. 337 — Japan II. 337 — Godown III. 213 II. 323 — 337 — Godown III. 213 Refiring machinery—"Hoiro" Hoiro Refiring pan iiI. 11 219 Regulation of exports. II. 134, 348 — Ceylon II. 201 III. 172	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; il. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 379, 49 Ris, Victor I. 131, 13 Ritche, A. J II. 19 Ritterden I. 15 New York ül. II. 42 —Paris ül. II. 42
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds. James. II. 25 ds. & Co., Inc., Wm. T J. 125 A. E II. 51, 115, 32 ds. D. T II. 14 dson, John. I. 47 imer. I. D II. 44 l, James. I. 16 vay. Sir West. I. 18 ay. Thomas. II. 166, 17 ays. Ltd. II. 166, 28 Sen-no.II. 363; 31. 365; from a Chota Sahib's Pipe & Co III. 37 & Co II. 37 den II. 19 den I. 15 lottel York. ül. II. 42 s ül. II. 42 s ül. II. 42 s ül. II. 42 s ül. II. 42	Pulbrook, Edward P. 11. 171 Pulbrook & Co. II. 171 Pulbrook & Co. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook . I. 80 Pullar, H. A. III. 111 Pumphrey, F. II. 293 Pumphrey, Josiah . I. 477 Pun on word "tea" . II. 499 Purchas, Samuel q . I. 38 Purchas Samuel q . I. 38 Purchas His Pilgrimes q . I. 38 Purrehas, A. II. 180, 186, 187 Purves, A. II. 180, 186, 187 Purses, A. II. 180, 186, 187 Pussellawa Planters' Association Pussellawa tea plantation ill. I. — Canada . II. 354 Pyper, Gordon . I. 194 Quaker Maid Co. II. 283 Queen Elizabeth . I. 29, 68, 69, 75 Quille, J II. 240 Quille, Fils, J II. 240 Quille, Fils, J II. 240 Quille & Fils, J II. 240 Quille & Fils, J II. 240 Quille & Fils, J II. 240 Quille, J II. 277 Quinby Company, W. S II. 277 Quinby Josiah . I. 58 Quinine	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 354 — China II 338 —Japan II 338 — India II 342 —Netherlands II 355 — United Kingdom II 350 —Refirers, Japan II 2729 — Refiring I 293 —Formosa I 337 —Japan I 31 31 32 323 —Godown II 213 Refiring machinery—"Hoiro" I 465 Refiring pan II 216 Refiring pan III 213 348 —Ceylon I 261 —India I 172 —India I 172 —Java and Sumatra I 127	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richardson, John I. 44 Riddell, James I. 16 Riddenour-Baker Grocery Co. II. 26 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger q. I. 540, 54 Stepse Rings from a Chota Sahib's Pips 366, 368, 37 Riquet & Co. II. 23 Ris, Victor I. 131, 13 Ritchie, A. J. II. 19 Ritherden 1. 15 Ritz Hotel New York ül. II. 42 Paris. Rivers ul. 11 42 Rivers ul. 15 Rivers ul. 11
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds, James. II. 25 ds & Co., Inc., Wm. T II. 25, A. E. II. 51, 115, 32 Padre Matteo. I. 2 ds, D. T. II. 14 dson, John. I. 47 imer. I. D. II. 44 I. James. I. 16 tay, Sir West. I. 18 ay, Thomas. II. 166, 17 ays, Ltd. III. 166, 17 ays, Ltd. III. 166, 37 ays, Ltd. III. 166, 38 from a Chota Sahib's Pipe II. 379, 49 & Co. II. 23 ictor. I. 31, 13 jen. I. 13, 13 jen. I. 154 jen. I. 154 lotel York. II. 14 se. II. 154 building	Pulbrook & Co. II. 171 Pulbrook & Co. II. 172 Pulbrook & Co. II. 175	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 354 —China II 338 —India II 338 —India II 342 —Netherlands II 355 — Whited Kingdom II 350 —Refirers, Japan II 27.29 219 221 Refiring I 230 —India I 350 —India I 350 —India I 219 221 Refiring I 219 221 Refiring I 231 232 323 —India I 213 232 323 232 232 232 323 232 323 323 337 337 337 337 337 337 33	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Ltd II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; 7l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 379, 49 Ritchie A. J. 11, 19 Ritchie A. J. 11, 19 Ritche A. J. 11, 19 Ritchee II. 379, 49 Riquet & Co II. 379, 49 Ritchie A. J. 11, 19 Ritche A. J. 11, 19 Ritche A. J. 11, 19 Ritche A. J. 11, 19 Ritz Hotel II. 13 New York Il. 14 Paris Il. 14
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War . 1, 78-7; ds, James . 11 25; ds & Co., Inc., Wm. T Padre Matteo. I . 2. ds, D. T III . 14 dson, John I . 47; imer. I. D III . 44; imer. I. D III . 44; imer. I. D II . 46; vay, Sir West . I. 16, 18, ay, Thomas . II . 166, 28; ay, Thomas . II . 166, 28; Thomas . II . 166, 28; from a Chota Sahib's Pipe & Co III . 379, 49; & Co III . 379, 49; co III . 379, 49; den . I. 15; len . III . 42; s	Pulbrook, Edward P. 111 171 Pulbrook & Co. 11 171 Pulham James Brook 1 80 Pullar, H. A. 111 111 Pumphrey, F. 111 293 Pumphrey, Josiah 1 477 Pun on word "tea" 11 499 Purchas, Samuel q 1 38 Purrchas, Samuel q 1 38 Purrchas His Pilgrimes q 1 38 Purchas Samuel q 1 38 Purchas His Pilgrimes q 1 38 Purchas Samuel q 1 38 Purchas His Pilgrimes q 1 38 Reed tea	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II. 289 Reëxports II. 353 — — Australia II. 354 — II. 354 — II. 355 — III. 355 — III. 355 — III. 350 — Refirend II. 350 — Refiring II. 27.29 221 Refiring II. 27.29 221 Refiring II. 232 323 — Formosa II. 337 — Japan II. 337 — Japan II. 321 Refiring machinery Hoiro" Hoiro" Refiring machinery Hoiro" Refiring machinery II. 121 Regulation of exports II. 134 348 — Ceylon II. 219 Regulation of exports II. 134 348 — II. 201 — III. 134 348 — III. 201 III. 201 III. 201 III. 201 III. 201 III. 201 <td< td=""><td>Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgeway, II. 166, 28 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no.II. 363; il. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 379, 49 Ritche, A. J II. 19 Ritterden I. 15 New York il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 Road building — Ceylon I. 42</td></td<>	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgeway, II. 166, 28 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no.II. 363; il. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 379, 49 Ritche, A. J II. 19 Ritterden I. 15 New York il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 Road building — Ceylon I. 42
Pulbrook, Edward P II. 171 Record, The, Bangkok, q I. 450 Revere. Paul. I. q.	. Paul. I. a. 56: II. 479, 48		Pulbrook, Edward PII. 171	Record, The, Bangkok, q I. 450	Revere. Paul. I. a. 56: II. 479, 48
Tulborous & Co	or Applied Rolany a. [51]		Pulham James Brook T 20	Recueu des Triveaux Unimiques	Review of Applied Bolany q. 1. 51
Pullar, H. A II. 111 516, 524 Revolutionary War	ner di Freniatria a. J. 54	Pulbrook, Edward P II. 171 Record, The, Bangkok, q I. 450 Revere, Paul . I. q. 56; II. 479, 48 Pulbrook & Co	Pullar, H. A		Revista sper di Freniatria a. 1. 54
Pumphrey, F 11, 293 Red brick tea 308 Revnolds James	n sper di Freniatria q1. 54 tionary WarI. 78-7	Pulbrook, Edward P. II. 171 Record, The, Bangkok, q. I. 450 Revere, Paul. I. q. 56; II. 479, 48 Pulbrook & Co. III. 171 Pulham, James Brook. I. 80 des Pays-Bas. q. I. 510, Pullar, H. A. II. 111 Record Triveaux Chimiques feeview of Applied Botany. q. I. 51 Revista sper di Freniatria q. I. 54 Revolutionary War. II. 78-7	Pumphrey, F		Revolutionary War
Pun on word "tea"	sper di Freniatria q1. 54 tionary WarI. 78-7 de James II. 25	Pulbrook & Co	Pun on word "tea" II 400	Red brick tea I. 308	Revolutionary WarI. 78-7
Purchas, Samuel q I. 38 Reed & Co. S. G I. 94 Revnet A F	1 sper di Freniatria q1. 54 tionary WarI. 78-7 ds, JamesII. 25 ds & Co., Inc., Wm. T	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl		Red brick tea	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Purchas His Pilgrimes q. 1. 38 Reeves Inc. Daniel 11. 289 Dicai Dade Mosto	1 sper di Freniatria q1. 54 tionary WarI. 78-7 ds, JamesII. 25 ds & Co., Inc., Wm. T	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl		Red brick tea	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Durifies the hody I 557 Desposes	1 sper di Freniatria q. 1. 54 tionary War 1. 78-79 ds, James	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl	Purchas, Samuel q	Red brick tea	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Purifies the body	1 sper di Freniatria q1. 54 tionary WarI. 78-7 ds, JamesII. 25 ds & Co., Inc., Wm. T	Pulbrook, Edward P. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook I. 80 Pullar, H. A. II. 111 Pumphrey, F. II. 293 Pumphrey, Josiah I. 477 Pun on word "tea" II. 499 "Red tea II. 308 Rettie, Wiffred II. 450 Revere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 51 Review of Applied Botany. q. I. 54 Review of Appl	Purchas, Samuel q	Red brick tea. I. 308 Red tea. I. 308, 503 "Red tip". I. 332 Reed & Co., S. G. I. 94 Reeves Inc., Daniel II. 289	Revolutionary WarI. 78-7 Reynolds, JamesII. 25 Reynolds & Co., Inc., Wm. T
Purves, A, II, 180, 186, 187. —Australia II, 353 Dishardson The	n sper di Freniatria q. 1. 54 tionary War I. 78-7 ds, James II. 25- ds & Co., Inc., Wm. T II. 25- t, A. E II. 51, 115, 32 Padre Matteo I. 2 ds D. T. II. 14	Pulbrook & Co	Purchas, Samuel q	Red brick tea. I. 308 Red tea. I. 308, 503 "Red tip". I. 332 Reed & Co., S. G. I. 94 Reeves Inc., Daniel II. 289	Revolutionary War
rurves, AII. 180, 180, 187, —Australia	n sper di Freniatria q. 1. 54 tionary War	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports	Revolutionary War
191. 193 197 —Canada II 354 Print Land	n sper di Freniatria q. 1. 54 tionary War I. 78-7 ds, James II. 25- ds & Co., Inc., Wm. T II. 25- t, A. E II. 51, 115, 32 Padre Matteo I. 2 ds D. T. II. 14	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports	Revolutionary War
Duscellers District Association — Canada	n sper di Freniatria q. 1. 54 tionary War	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports Australia II 353	Revolutionary War
Prince United Association China II 835 True II 835	a sper di Freniatria q. 1. 54 tionary War. I, 78-7 ds. James. II. 25 ds & Co., Inc., Wm. T II. 25 j. A. E II. 51, 115, 32 Padre Matteo. I. 2 ds. D. T II. 14 dson, John. I. 47 imer. I. D. II. 44	Pulbrook, Edward P. II. 171 Pulbrook, Edward P. II. 171 Pulbrook & Co. III. 171 Pumphrey, III. 190 Pulbrook & Co. III. 171 Pumphrey, III. 191 Pumphrey, III. 193 Pumphrey, Josiah I. 477 Pun on word "tea" III. 499 Purchas, Samuel q. I. 38 Reed & Co., S. G. I. 94 Purchas, His Pilgrimes q. I. 38 Purchas His Pilgrimes q. I. 38 Reewsere, Paul. I. q. 56; II. 479, 48 Review of Applied Botany, q. I. 51 Review of	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354	Revolutionary War I. 78-7 Reynolds James II. 25 Reynolds Co., 1nc., Wm. T II. 25 Reynst A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards D. T. II. 14 Richardson John I. 47 Richheimer I. D. II. 44
Lussenawa I lanters Association — Ollina Kindell. James	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds. James. II. 25 ds & Co., Inc., Wm. T II. 25 j. A. E II. 51, 115, 32 Padre Matteo. I. 2 ds. D. T II. 14 dson, John. I. 47 imer. I. D. II. 44	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports Australia II 353 — Canada II 354 — China II 335	Revolutionary War I. 78-7 Reynolds James II. 25 Reynolds Co., 1nc., Wm. T II. 25 Reynst A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards D. T. II. 14 Richardson John I. 47 Richheimer I. D. II. 44
I. 191 —IndiaII. 338 Ridenour-Baker Gr	1 sper di Freniatria q. 1. 54 tionary War 1. 78-7; ds. James 11. 25; ds. & Co., Inc., Wm. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —India II 338	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I. 191 —IndiaII. 338 Ridenour-Baker Gr	1 sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —India II 338	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I. 191 —IndiaII. 338 Ridenour-Baker Gr	1 sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports —Australia II 353 —Canada II 354 —China II 335 —India II 338 —Japan II 342 Netherlands II 355	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I. 191	1 sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 335 — Clnina II 338 —India II 338 — Japan II 342 —Netherlands II 350 — United Kingdom II 350	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Ridenour-Baker Grocery Co., II. 26 Ridenour-Baker Grocery Co., II. 26
I	1 sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James 11. 25 ds & Co., Inc., Wm. T II. 25, A. E II. 51, 115, 32 Padre Matteo I. 44 dson, John 14. 7 imer. I. D II. 44 l, James I. 16 var. Baker Grocery Co. II. 26 cay, Sir West 18 ay, Thomas II. 166, 17 ays, Ltd III. 166, 28	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 27-29,	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T. II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 17
I. 191	a sper di Freniatria q. 1. 54 tionary War . I, 78-7 ds, James . II . 25 ds & Co., Inc., Wm. T II . 25 . A. E II. 51, 115, 32 ds, D. T II. 14 dson, John . I . 47 imer. I. D II. 44 . James . I. 16 vay, Sir West . I. 18 ay, Thomas . II. 166, 17 ays, Ltd . II. 166, 28	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports Australia II 353 — Canada II 354 G. G. II 354 — China II 338 Japan II 338 — India II 342 G. G. II 350 — Netherlands II 350 G. G. II 350 G. G. II 350 G. G. II 350 G.	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo. I. 2 Richards, D. III. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgeway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Senno. II. 363; 7l. 365;
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James 11. 25 ds & Co., Inc., Wm. T II. 25, , A. E II. 51, 115, 32 Padre Matteo I. 2 ds, D. T II. 14 dson, John I. 14 l, James I. 6 ur-Baker Grocery Co. II. 26 vay, Sir West I. 18 ay, Thomas II. 166, 17 ays, Ltd II. 166, 27 ays, Ltd II. 166, 28 Sen-no. II. 363; 31. 365; 366, 368, 37	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John. I. 47 Richheimer, I. D II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Thomas II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Sen-no.II. 363; 71. 365; 366, 368, 37
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James 11. 25 ds & Co., Inc., Wm. T II. 25, , A. E II. 51, 115, 32 Padre Matteo I. 2 ds, D. T II. 14 dson, John I. 14 l, James I. 6 ur-Baker Grocery Co. II. 26 vay, Sir West I. 18 ay, Thomas II. 166, 17 ays, Ltd II. 166, 27 ays, Ltd II. 166, 28 Sen-no. II. 363; 31. 365; 366, 368, 37	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D. T II. 14 Richardson, John. I. 47 Richheimer, I. D II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Thomas II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Sen-no.II. 363; 71. 365; 366, 368, 37
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War . I, 78-7 ds, James . II . 25 ds & Co., Inc., Wm. T Padre Matteo . I . 2 ds, D. T . III . 44 dson, John . I . 47 imer. I. D . III . 44 James . I . 16 vay, Sir West . I . 18 ay, Thomas . II . 166 ay, Tionas . II . 166 ay, Ltd . II . 166 Sen-no.II . 363; vll . 365; Sen-no.II . 363; vll . 365; from a Chota Sahib's Pipe 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T Reynst, A. E. II. 51, 115, 32 Ricci, Padre Matteo I. 2 Ricchards, D. T. II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgway, Sir West II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Sen-no. II. 363; #l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7 ds, James II. 25 ds & Co., Inc., Wm. T II. 25, A. E II. 51, 115, 32 ds, D. T II. 14 dson, John 1, 7 imer. I. D II. 44 l, James I. 66 vay, Sir West I. 18 ay, Thomas II. 166, 17 ays, Ltd II. 166, 28 q. I. 540, 54 Sen-no.II. 363; 31. 365; from a Chota Sahib's Pipe II. 379, 49	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo. I. 2 Richards, D II. 14 Richardson, John. I. 47 Richheimer, I. D. II. 44 Riddell, James. I. 16 Ridgeway, Sir West I. 18 Ridgeway, Sir West I. 166, 17 Ridgway, Thomas II. 166, 28 Rieger. q. I. 540, 54 Rikyu, Sen-no.II. 363; ill. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49
Pussellawa tea plantation . ill . I . I . I . I . I . I . I . I . I .	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds, James 11. 25; ds & Co., Inc., Wm. T II. 25; , A. E II. 51, 115, 32; Padre Matteo I. 2ds, D. T II. 14 dson, John I. 14; l, James I. 16; ur-Baker Grocery Co. II. 26; vay, Sir West I. 16; ay, Thomas II. 166, 28; ay, Ltd II. 166, 28; sy, Ltd II. 166, 28; from a Chota Sahib's Pipe II. 379, 49; & Co II. 23;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John. I. 47 Richheimer, I. D III. 44 Riddell, James. I. 16 Ridgeway, Sir West. I. 18 Ridgway, Sir West. II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. I. 160, 28 Rieger. I. 540, 54 Rikyu, Sen-no.II. 363; 71. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co. II. 379, 49 Riquet & Co. III. 379, 49
I	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds, James 11. 25; ds & Co., Inc., Wm. T II. 25; , A. E II. 51, 115, 32; Padre Matteo I. 2ds, D. T II. 14 dson, John I. 14; l, James I. 16; ur-Baker Grocery Co. II. 26; vay, Sir West I. 16; ay, Thomas II. 166, 28; ay, Ltd II. 166, 28; sy, Ltd II. 166, 28; from a Chota Sahib's Pipe II. 379, 49; & Co II. 23;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John. I. 47 Richheimer, I. D III. 44 Riddell, James. I. 16 Ridgeway, Sir West. I. 18 Ridgway, Sir West. II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger. I. 160, 28 Rieger. I. 540, 54 Rikyu, Sen-no.II. 363; 71. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co. II. 379, 49 Riquet & Co. III. 379, 49
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War . 1, 78-7; ds. James . 11 25; ds & Co., Inc., Wm. T Yellow T. 11 15, 21; Padre Matteo . 1 2; ds. D. T	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308, 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 — China II 335 — India II 335 — Japan II 342 — Netherlands II 355 — United Kingdom II 350 — Re-firers, Japan II 2729 Poficing 219, 223	Revolutionary War. I. 78-7 Reynolds, James. II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo. I. 2 Richards, D. T III. 14 Richardson. John. I. 47 Richelmer, I. D III. 44 Riddell. James. I. 16 Ridgeway, Sir West I. 18 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 28 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; 4ll. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 23 Ris, Victor I. 131, 13 Ris, Victor I. 131, 13
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War 1, 78-7; ds, James II. 25; ds & Co., Inc., Wm. T II. 25; A. E II. 51, 115, 32; Padre Matteo I. 14 dson, John II. 14 dson, John II. 14 dson, John II. 14 usor.Baker Grocery Co. II. 26 tay, Sir West I. 16 tay, Sir West I. 18 ay, Thomas II. 166, 17 ays, Ltd II. 166, 28 ay, Ltd II. 166, 28 ay, Ltd II. 166, 38 from a Chota Sahib's Pipe II. 363; ill. 365; 366, 368, 37 from a Chota Sahib's Pipe & Co II. 379, 49 & Co II. 31, 13; ictor I. 31, 13; c. A. J II. 19	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed I 332 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —China II 338 —India II 338 —Japan II 342 —Netherlands II 350 —Re-firers, Japan II 27-29 Refiring I 293 —Formosa I 337 —Japan I 321 il 322 323 —Godown II 213 Re-firing I 293 —Formosa I 321 il 322 323 —Godown II 213 Re-firing I 465	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richelmer. I. D III. 44 Riddell, James I. 16 Ridgeonur-Baker Grocery Co. II. 26 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Ltd II. 166, 28 Ricyu, Sen-no. II. 363; vl. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 23 II. 27 Ris, Victor I. 131, 13 Ritchie, A. J. II. 19
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War. I. 78-7; ds. James. II. 25; ds. & Co., Inc., Wm. T II. 25; ds. & Co., Inc., Wm. T II. 25; ds. A. E II. 51, 115, 32; Padre Matteo. I. 2; ds. D. T III. 14; dson, John. I. 47; imer. I. D II. 44; I. James. I. 16; vay. Sir West. I. 18; ay. Thomas. II. 166, 17; ays. Ltd. III. 166, 28; Sen-no.II. 363; 313. 365; from a Chota Sahib's Pipe & Co III. 379, 49; & Co	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Red dea I 34 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 335 —India II 335 —India II 342 —Netherlands II 350 —United Kingdom II 350 —Refirers, Japan II 27-29 Refiring I 293 —Formosa I 337 —Japan I 293 —Godown II 213 Refiring I 293 —Formosa I 37 —Japan I 293 —Godown II 213 Refiring I 293 —Refiring I 465 Refiring II <td>Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 21ccci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John II. 47 Richardson, John II. 44 Riddell, James II. 44 Riddell, James II. 16 Ridgeway, Sir West II. 18 Ridgway, Sir West II. 166, 17 Ridgways, Ltd. III. 166, 17 Ridgways, Ltd. III. 166, 28 Rieger 43, 365 365, 368, 37 Rings from a Chota Sahib's Pips 11 13 79, 49 Riquet & Co. II. 23 Ris, Victor I. 131, 13 Ritchie, A. II. 19 Ritcherden 1. 15 Ritt Hotel 15</td>	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 21ccci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John II. 47 Richardson, John II. 44 Riddell, James II. 44 Riddell, James II. 16 Ridgeway, Sir West II. 18 Ridgway, Sir West II. 166, 17 Ridgways, Ltd. III. 166, 17 Ridgways, Ltd. III. 166, 28 Rieger 43, 365 365, 368, 37 Rings from a Chota Sahib's Pips 11 13 79, 49 Riquet & Co. II. 23 Ris, Victor I. 131, 13 Ritchie, A. II. 19 Ritcherden 1. 15 Ritt Hotel 15
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War. I. 78-7; ds. James. II. 25; ds. & Co., Inc., Wm. T II. 25; ds. & Co., Inc., Wm. T II. 25; ds. A. E II. 51, 115, 32; Padre Matteo. I. 2; ds. D. T III. 14; dson, John. I. 47; imer. I. D II. 44; I. James. I. 16; vay. Sir West. I. 18; ay. Thomas. II. 166, 17; ays. Ltd. III. 166, 28; Sen-no.II. 363; 313. 365; from a Chota Sahib's Pipe & Co III. 379, 49; & Co	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 354 — China II 338 —Japan II 338 — India II 342 —Netherlands II 355 — United Kingdom II 27-29 22 Refiring I 293 — Formosa I 337 —Japan I 322 323 — Godown II 213 213 22 323 232 233 —Godown II 218 218 218 218 218 218 22 323 233 233 233 233 233 233 233 233 233 233 233 233 233 233 233	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 21ccci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John II. 47 Richardson, John II. 44 Riddell, James II. 44 Riddell, James II. 16 Ridgeway, Sir West II. 18 Ridgway, Sir West II. 166, 17 Ridgways, Ltd. III. 166, 17 Ridgways, Ltd. III. 166, 28 Rieger 43, 365 365, 368, 37 Rings from a Chota Sahib's Pips 11 13 79, 49 Riquet & Co. II. 23 Ris, Victor I. 131, 13 Ritchie, A. II. 19 Ritcherden 1. 15 Ritt Hotel 15
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War. I. 78-7; ds, James. II. 25; ds & Co., Inc., Wm. T II. 25; A. E. II. 51, 115, 32; Padre Matteo. I. 2; ds, D. T. II. 14 dson, John. I. 47; imer. I. D. II. 44; I. James. I. 166; say, Sir West. I. 18; ay, Thomas. II. 166, 28; ay, Sir West. I. 18; ay, Ltd. III. 166, 28; by, II. 363; ill. 365; 366, 368, 37; from a Chota Sahib's Pipe II. 379, 49; & Co. II. 23; ictor. I. 131, 13; ben. II. 131, 13; ben. II. 15; lotel York. III. 42;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II. 289 Reëxports II. 353 —Canada II. 355 —China II. 355 —China II. 335 —India II. 338 —Japan II. 342 —Netherlands II. 350 —Refirers, Japan II. 27.29 21 Refiring 1. 293 —Formosa I. 321 322 323 —Godown II. 213 —Godown II. 213 Refiring I. 465 Refiring pan iii. 11. 219 Regulation of exports. II. 134 348	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci, Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Thomas II. 166, 28 Rieger 9. I. 540, 54 Rikyu, Sen-no. II. 363; 7l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 23 Ritchie, A. J II. 19 Ritherden I. 15 Ritz Hotel New York 7l. 14 42
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War . 1, 78-7; ds, James . 11 25; ds & Co., Inc., Wm. T Padre Matteo. I . 2; ds, D. T III . 14; dson, John I. 47; imer. I. D III. 44; I, James I. 16; vay, Sir West I. 18; ay, Thomas . II. 166, 28; Tays, Ltd II. 166, 28; Sen-no.II. 363; vll. 365; from a Chota Sahib's Pipe & Co II. 23; jetor . I. 31, 13; den . I. 15; len . I. 15; lotel York . vll. II. 42; s vll. II. 42;	Pulbrook & Co	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II. 289 Reëxports II. 353 — —Australia II. 354 — II. 354 — II. 355 — III. 355 — III. 355 — III. 350 — Refiren II. 350 — Refiring II. 350 — Refiring II. 372 221 Refiring II. 372 221 Refiring II. 337 — Japan II. 337 — Godown III. 213 II. 323 — 337 — Godown III. 213 Refiring machinery—"Hoiro" Hoiro Refiring pan iiI. 11 219 Regulation of exports. II. 134, 348 — Ceylon II. 201 III. 172	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; il. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 379, 49 Ris, Victor I. 131, 13 Ritche, A. J II. 19 Ritterden I. 15 New York ül. II. 42 —Paris ül. II. 42
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds. James. II. 25 ds. & Co., Inc., Wm. T J. 125 A. E II. 51, 115, 32 ds. D. T II. 14 dson, John. I. 47 imer. I. D II. 44 l, James. I. 16 vay. Sir West. I. 18 ay. Thomas. II. 166, 17 ays. Ltd. II. 166, 28 Sen-no.II. 363; 31. 365; from a Chota Sahib's Pipe & Co III. 37 & Co II. 37 den II. 19 den I. 15 lottel York. ül. II. 42 s ül. II. 42 s ül. II. 42 s ül. II. 42 s ül. II. 42	Pulbrook, Edward P. 11. 171 Pulbrook & Co. II. 171 Pulbrook & Co. II. 171 Pulbrook & Co. II. 171 Pulham, James Brook . I. 80 Pullar, H. A. III. 111 Pumphrey, F. II. 293 Pumphrey, Josiah . I. 477 Pun on word "tea" . II. 499 Purchas, Samuel q . I. 38 Purchas Samuel q . I. 38 Purchas His Pilgrimes q . I. 38 Purrehas, A. II. 180, 186, 187 Purves, A. II. 180, 186, 187 Purses, A. II. 180, 186, 187 Pussellawa Planters' Association Pussellawa tea plantation ill. I. — Canada . II. 354 Pyper, Gordon . I. 194 Quaker Maid Co. II. 283 Queen Elizabeth . I. 29, 68, 69, 75 Quille, J II. 240 Quille, Fils, J II. 240 Quille, Fils, J II. 240 Quille & Fils, J II. 240 Quille & Fils, J II. 240 Quille & Fils, J II. 240 Quille, J II. 277 Quinby Company, W. S II. 277 Quinby Josiah . I. 58 Quinine	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 354 — China II 338 —Japan II 338 — India II 342 —Netherlands II 355 — United Kingdom II 350 —Refirers, Japan II 2729 — Refiring I 293 —Formosa I 337 —Japan I 31 31 32 323 —Godown II 213 Refiring machinery—"Hoiro" I 465 Refiring pan II 216 Refiring pan III 213 348 —Ceylon I 261 —India I 172 —India I 172 —Java and Sumatra I 127	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richardson, John I. 44 Riddell, James I. 16 Riddenour-Baker Grocery Co. II. 26 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgways, Ltd. II. 166, 28 Rieger q. I. 540, 54 Stepse Rings from a Chota Sahib's Pips 366, 368, 37 Riquet & Co. II. 23 Ris, Victor I. 131, 13 Ritchie, A. J. II. 19 Ritherden 1. 15 Ritz Hotel New York ül. II. 42 Paris. Rivers ul. 11 42 Rivers ul. 15 Rivers ul. 11
Pussellawa tea plantation II 191	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds, James. II. 25 ds & Co., Inc., Wm. T II. 25, A. E. II. 51, 115, 32 Padre Matteo. I. 2 ds, D. T. II. 14 dson, John. I. 47 imer. I. D. II. 44 I. James. I. 16 say, Sir West. I. 18 ay, Thomas. II. 166, 18 ay, Thomas. II. 166, 28 ays, Ltd. III. 166, 28 ays, Ltd. III. 166, 28 from a Chota Sahib's Pipe II. 379, 49 & Co. II. 23 ictor. I. 31, 13 jen. I. 13, 13 jen. I. 154 lotel York. II. 14 se. II. 154 building	Pulbrook & Co. II. 171 Pulbrook & Co. II. 172 Pulbrook & Co. II. 175	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 —Canada II 354 —China II 354 —China II 338 —India II 338 —India II 342 —Netherlands II 355 — Whited Kingdom II 350 —Refirers, Japan II 27.29 219 221 Refiring I 230 —India I 350 —India I 350 —India I 219 221 Refiring I 219 221 Refiring I 231 232 323 —India I 213 232 323 232 232 232 323 232 323 323 337 337 337 337 337 337 33	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Ltd II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; 7l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 379, 49 Ritchie A. J. 11, 19 Ritchie A. J. 11, 19 Ritche A. J. 11, 19 Ritchee II. 379, 49 Riquet & Co II. 379, 49 Ritchie A. J. 11, 19 Ritche A. J. 11, 19 Ritche A. J. 11, 19 Ritche A. J. 11, 19 Ritz Hotel II. 13 New York Il. 14 Paris Il. 14
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War I, 78-7 ds, James II, 25 ds & Co., Inc., Wm. T James II. 51, 115, 32 Padre Matteo I. 2 ds, D. T. III. 14 dson, John II. 47 imer I. D. III. 44 I, James II. 68 tay, Sir West I. 18 ay, Thomas II. 166, 28 ay, Thomas III. 166, 28 Sen-no.II. 363; 37 from a Chota Sahib's Pipe & Co. III. 379, 49 & Co. III. 379, 49 & Co. III. 379, 49 fictor I. 311, 13 c. A. J. III. 19 len I. 15 lotel York III. 42 s. III. 42 s. III. 42 s. III. 42 building	Pulbrook, Edward P. 111 171 Pulbrook & Co. 11 171 Pulham James Brook 1 80 Pullar, H. A. 111 111 Pumphrey, F. 111 293 Pumphrey, Josiah 1 477 Pun on word "tea" 11 499 Purchas, Samuel q 1 38 Purrchas, Samuel q 1 38 Purrchas His Pilgrimes q 1 38 Purchas Samuel q 1 38 Purchas His Pilgrimes q 1 38 Purchas Samuel q 1 38 Purchas His Pilgrimes q 1 38 Reed tea	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II. 289 Reëxports II. 353 — — Australia II. 354 — II. 354 — II. 355 — III. 355 — III. 355 — III. 350 — Refirend II. 350 — Refiring II. 27.29 221 Refiring II. 27.29 221 Refiring II. 232 323 — Formosa II. 337 — Japan II. 337 — Japan II. 321 Refiring machinery Hoiro" Hoiro" Refiring machinery Hoiro" Refiring machinery II. 121 Regulation of exports II. 134 348 — Ceylon II. 219 Regulation of exports II. 134 348 — II. 201 — III. 134 348 — III. 201 III. 201 III. 201 III. 201 III. 201 III. 201 <td< td=""><td>Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgeway, II. 166, 28 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no.II. 363; il. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 379, 49 Ritche, A. J II. 19 Ritterden I. 15 New York il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 Road building — Ceylon I. 42</td></td<>	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 16 Ridgeway, II. 166, 28 Ridgway, Thomas II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no.II. 363; il. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe Riquet & Co II. 379, 49 Riquet & Co II. 379, 49 Ritche, A. J II. 19 Ritterden I. 15 New York il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 — Paris. il. II. 42 Road building — Ceylon I. 42
Pussellawa tea plantation II I I I I I I I I	a sper di Freniatria q. 1. 54 tionary War. I. 78-7 ds. James. II. 25 ds. & Co., Inc., Wm. T J. 25 A. E II. 51, 115, 32 ds, D. T II. 14 dson, John. I. 47 imer. I. D II. 44 l, James. I. 16 vay, Sir West. I. 18 ay, Thomas. II. 166, 17 ays, Ltd. II. 166, 28 Sen-no. II. 363; 311. 365; from a Chota Sahib's Pipe The Co II. 37 & Co II. 37 & Co II. 37 e. A. J. II. 19 den I. 15 totel York ül. II. 42 s il. 14 building on I. 42 building on I. 42 c I. 34	Pulbrook	Purchas, Samuel q	Red brick tea I 308 Red tea I 308 503 "Red tip" I 332 Reed & Co., S. G. I 94 Reeves Inc., Daniel II 289 Reëxports II 353 — Canada II 354 —China II 354 — China II 355 —India II 338 — India II 355 —India II 355 — United Kingdom II 350 —Refirers, Japan II 27.29 221 Refiring I 293 —Formosa I 337 —Japan I 322 323 —Godown II 218 222 323 —Godown II 218 223 323 —Godown II 218 221 323 —Godown II 218 221 323 —Godown II 218 222 323 —Godown II 218 221 323	Revolutionary War I. 78-7 Reynolds, James II. 25 Reynolds & Co., Inc., Wm. T II. 25 Reynst, A. E II. 51, 115, 32 Ricci. Padre Matteo I. 2 Richards, D. T II. 14 Richardson, John I. 47 Richheimer, I. D II. 44 Riddell, James I. 16 Ridgeway, Sir West I. 18 Ridgway, Thomas II. 166, 17 Ridgway, Ltd II. 166, 28 Rieger q. I. 540, 54 Rikyu, Sen-no. II. 363; 7l. 365; 366, 368, 37 Rings from a Chota Sahib's Pipe II. 379, 49 Riquet & Co II. 379, 49 Ritchie A. J. 11, 19 Ritchie A. J. 11, 19 Ritche A. J. 11, 19 Ritche A. J. 11, 19 Ritterden I. 15 Ritz Hotel New York 3l. II. 42 — Paris 3l. II. 42 Road building 4



Roberts F A. I 160 II 125 184	Early method	Saicho I. 8
Roberts, F. A. I. 160; II. 125, 184 Roberts, F. W. S	— — Hand ül	Saigo, ShozoII. 228, 303
Roberts, William I. 151, 160	—Formosa ill	Sail q
Robertson, Charles Murray11, 188	-Fr. Indo-Chinaill. I. 453	Sainsbury, AlfredII. 173
Robertson, J. M II. 145	Indiaill. I. 396-97, 467, 470-72	Sainsbury, J. BII. 173 Sainsbury, John JamesII. 173
Robertson & Co., J. MI. 186, 189, 202; II. 145	—Japan. I. 319-20 ——Hand	Sainsbury, LtdII. 173
Robertson, Bois & CoII. 188	——MachineI. ill. 321; 324	St. Coombs tea estate (see
Robertson, Cullen & CoII. 102	-Java and SumatraI. 363-64	Estates. Cevlon)
Robeson Rochester Corporation.	-Nyasaland I. 459	Salada Tea Company, Inc II. 282
II. 441	Russia	Salada Tea Company of Canada,
Robinson, CaptainI. 96, 101, 102	—SiamI. 450	Ltd I. 482; II. 293
Robinson, Benjamin L 498	Rolling table (II	Salant q
Robinson, EdwardI. 480-81; II. 196	Rolling table (II) I. 471 Rollo, Keith I. 197, 198 Romance of Tea II. 299	Salaries (planters)
Robinson, E. F	Romanoff Czer Michael 31	—Ceylon I. 446 —India I. 413, 414
Robinson, G. Wilse	Ronnefeldt, Th	—Java and SumatraI. 372, 373
Robinson, Sir Hercules I. 179	Roome, Col. Wm. P11, 271, 276	Salatiga t
Robinson, John JI. 197	Roome & Co., Wm. P	Sale days, London
Robinson, Josiah SII. 269	Roosevelt, Theodore qII. 500 Roosevelt & JoyceI. 91	—China t
Robinson, SamuelII. 287 Robinson & Woodworth, Inc. II. 269	Root rot, Suggested treatment of	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Robinson Bros. & Masters, Ltd.	I. 412	Java and Sumatra tII. 44
II. 196	Roneways (see Wire-shoots)	Saleeby, C. W. q I. 554-55
Robison, C. K	Rose, William II. 172	Sales (see also Auctions)
Rochleder I. 509	Rosling, Sir Edward1, 186,	-Volume of, CalcuttaII. 6
Rochleder I. 509 Roe, F. F I. 202, 203	189, 190, 194	-Volume of, CeylonII. 13
Roelofs. Otto	Ross, Sir Edward DenisonI. 13 Ross, Frank PII. 283	Volume of, JavaII. 16 Salmon, AlfredII. 190
Roelofs & Zonen, OttoII. 118 Roettier John	Ross John	Salmon, HarryII. 166. 190
Roettier, John I. 43 Rogers, E. R. II. 280 Rogers, J. A. I. 195	Ross, Sir Ronaldq. I. 559 Ross, Walter SutherlandI. 200	Salmon, Harry
Rogers, J. A	Ross, Walter Sutherland I. 200	Salmon, J II. 190
Rogers Samuel a	Rossiter, D. L	Salmon Manrice
Rogivue, MauriceII. 305, 308 Roles, F. CrosbieII. 311	Rostq. I. 543 Rotch, CaptainI. 57	Saltus, Francis Saltus qII. 490 SamovarII. 427, 434, 446
Rolfe & Co., LtdII. 244	Rothschild, Baron deI. 178	Sampling
Roll breakers . I. 285: ill. 434. 436	Pothschild coffee estate	—AmsterdamII. 47
Roll breakersI. 285; ill. 434, 436 —Colombo Commercial CoI.	Roundy, J. A	-London II. 40; ill. 41; 42
489; W. 490	Roundy Peckham & Dexter Co.	—Amsterdam II. 47 —London II. 40; ill. 41; 42 —New York II. ill. 50; 52
-Davidson's "Sirocco".I. 159;	II. 270	Sampling break1. 291; 11. 3
######################################	Routledge, VincentII. 192 Rowe, John	San no-joI. 9 Sanborn, James SII. 267
RollersI. 285, ill. 365, 434; 468	Rowe, White & CoI. 199; II. 188	Sandeman, A. PI. 164; II. 141
-Brown's triple action. I. 436;	Rowley Davies & Co., LtdII.	Sanderson, John CorneliusII.
ill. 478	111, 164	174, 188
-Colombo Commercial CoI.	Roxburgh	Sanderson & CoII. 188
436, 488; ill. 490	Roy, Tarini ProsadI. 172	SanetomoI. 9
—Davidson I. 159 ——"Sirocco" O. C. B. I. ill.	Royal Arsenal Co-operative Society, Ltd., TheII. 172	Sangster, Margaret EI. 106 SanyoII. 486
489: 490	Royal Colonial Institute, Lon-	Sargent, Charles SpragueI. 498
"Sirocco" Rotary ül. I. 484	don	Saris. Captain John
—Empire <i>ill</i>	Royal Company of Agriculture	Saryune t
-Harasaki I. 320; ill. II. 219	and Herbiage at Ghent. I. 110	Sasano, TokujiroII. 218
—Holle	Royal ExchangeI. 73, al. 165	Satyr Against Tea, AII. 493
— HoworthI. 471 — JacksonI. ill. 285, 477	Royal garden party ill II 408	"Saucering"II. 401, 403 Saunder, Forbes GriffithI. 199
——24" and 36" Circular RapidI. 435; #1. 480 ——Cross ActionI. 158, 470-71	Royle, J. ForbesI. 137, 139, 141 Rubber Growers' AssociationI. 188	
Rapid I. 435; 41. 480	Rubber Growers' AssociationI. 188	Saunders, Hon. Frederick. I. 185 Saunders, H. S. I. 185, 186, 197 Saunders, M. P. II. 148 Saunders, T. H. II. 189 Saunders, W. II. 186, 193, 207
——Cross ActionI. 158, 470-71	Rubber Plantations Investment	Saunders, H. SI. 185, 186, 197
36" Double Action Metallic I. 435	Trust LimitedI. 131	Saunders, M. P
	Ruishu KokushiI. 8; II. 484 Rules for brewingII. 452	Saunders W H. 186, 193, 207
I. 436	Rumpelmayer's, Parisill. I. 426	Savage, Alfred. I. 468 Savage, Edward I. 468
— Evolution of ill 471	Ruo Estates, LtdI. 212, 457	Savage, Edward I. 468
——Evolution of illI. 471 ——ExcelsiorI. 158, 471	Rush into coffee (Ceylon)I. 175	Savage & Co
——FirstI. 157; al. 471 ——Hand PowerI. 158	Rush into tea (Ceylon)I. 179	Sax
— — Hand Power	Rush into tea (Java)I. 126 Ruskin, JohnII. 500	Sayama (Hachioji) t 254, 261, 311
——Rajah	Russell, Frank CII. 271	Sayville, Henryq. I. 47
— — Rapid	Russell, PatrickII. 192	Scaevola
Single Action Metallic I.	Russell, Robert S	Scandrett, C. J
435, 486 ——32" Square Rapid. I. 435,	Russell & Co. —ChinaI. 90, 92; II. 103	Scarron, Paul. I. 35 Scarth, Edward. I. 161
479; ill. 480, 486		Scented Caper tI. 233, 259
-Kerkhoven	America	Scented teasI. 228, 232, 259, 305
-Kinmond I 157	Russian brick teaI. 305, ill. 306	Scenting teaI. 114
—Krupp ill	Russian caravan tradeII. 95, 235	Scheibler, RobertII. 238
—Kurita 1. 320 —Lanka I. 488	Russian teaII. 457 Russian Tea Cultivation under	Scheibler & Co., J. FrII. 238 Schilling, AugustII. 272-73
—Lyle bag	the Czars illI. 204	Schilling & CoII. 238
-McMeekin I. 469	ine Czars w	C 1 111 C A C A TT 050
Marshal Sons & Co.	Rutgers, A. A. L	Schilling & Co., AII. 272
Double Action "Rapid"	Rutgers, A. A. L	Schilte, P. D
	Rutgers, A. A. L	Schilte, P. D
	Rutgers, A. A. LI. 126 Rutherford, H. KerrI. 181, 188, 196, 197-98; q. 428; II 202 203 304	Schilte, P. D
——Open topI. 487 ——Brine cooledI. ill. 487: 489	Rutgers, A. A. LI. 126 Rutherford, H. KerrI. 181, 188, 196, 197-98; q. 428; II 202 203 304	Schilte, P. D
——Open top I. 485 ——Brine cooled I. #l. 487; 489 —Mochizuki	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108	Schilte, P. D
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt II. 101, 107, 108 Sabaragamuwa Planters' As-	Schilte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto II. 298 Schmidt, Ernest II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283
— Open top. I. 487 — Brine cooled. I. ill. 487; 489 — Mochizuki I. 320 — Primitive, India ill. I. 470 — Takabayashi I. 320	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt II. 101, 107, 108 Sabaragamuwa Planters' As-	Schilte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schieinkofer, Otto. II. 298 Schmidt, Frnest. II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II.
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108 Sabaragamuwa Planters' Association I. 193 Sabonadiere, F. R I. 178	Schilte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto II. 298 Schmidt, Ernest II. 284 Schoene, C. E. II. 135 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II. 283 254 283
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108 Sabaragamuwa Planters' Association I. 193 Sabonadiere, F. R 178 Sabonadiere, William I. 178 Sabonadiere & Co I. 178 Sabonadiere & Co	Schitte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto. II. 298 Schmidt, Frnest. II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II. 254, 283 Schouten, F. H. II. 111 Schover, E. A. II. 271, 276, 298
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108 Sabaragamuwa Planters' Association I. 193 Sabonadiere, F. R I. 178 Sabonadiere, William I. 178 Sabonadiere & Co I. 178 Sackville, A. W. S I. 188, 189	Schitte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto. II. 298 Schmidt, Frnest. II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II. 254, 283 Schouten, F. H. II. 111 Schover, E. A. II. 271, 276, 298
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108 Sabaragamuwa Planters' Association I. 193 Sabonadiere, F. R I. 178 Sabonadiere, William I. 178 Sabonadiere & Co I. 178 Sackville, A. W. S I. 188, 189	Schilte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto. II. 298 Schmidt, Frnest. II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II. Schouten, F. H. II. 118 Schoyer, E. A. II. 271 276 298 Schoyer & Co., E. A. II. 271 Schutter, Carl H. II. 259
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108 Sabaragamuwa Sociation I. 193 Sabonadiere, F. R I. 178 Sabonadiere, William I. 178 Sabonadiere, William I. 178 Sabonadiere & Co I. 178 Sackville, A. W. S I. 188, 189 Sadovsky's Tea Plucking Machine Ul. I. 463; 489	Schilte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto. II. 298 Schmidt, Frnest. II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II. Schouten, F. H. II. 118 Schoyer, E. A. II. 271 276 298 Schoyer & Co., E. A. II. 271 Schutter, Carl H. II. 259
	Rutgers, A. A. L I. 126 Rutherford, H. Kerr I. 181, 188, 196, 197-98; q. 428; II. 202, 203, 304 Ryan, C. G I. 194 Ryrie, Capt I. 101, 107, 108 Sabaragamuwa Planters' Association I. 193 Sabonadiere, F. R I. 178 Sabonadiere, William I. 178 Sabonadiere & Co I. 178 Sackville, A. W. S I. 188, 189	Schitte, P. D. II. 119 Schimmel's Berichte q. I. 523 Schleinkofer, Otto. II. 298 Schmidt, Frnest. II. 284 Schmidt, Heinrich W. II. 238 Schoene, C. E. II. 135 Schonbrunn, S. A. II. 283 Schonbrunn & Co., S. A. II. 254, 283 Schouten, F. H. II. 111 Schover, E. A. II. 271, 276, 298

ALL ABOUT TEA

Scott	Shaw, G I. 153	Shui Chih t
Scott, Alex. M	Shaw, George Bernard II. 498	Shuko
Scott, Captain David I. 135, 139	Shaw, J. N	—Code
Scott, William Morris	Shaw, R	Siahaj, E. L
Scott & Co	Shaw, R	Siam t 1. 237, 264 Siangkiang t 1. 256
Scottish Assam Tea Company	Shaw, W. S I, 171, 172	Siangkiang tI. 256
l. 157, 477	Shaw & Co., R. G	Siangvin t
Scottish Central African Syndi-	Shaw, Finlayson & Co I. 165	Sias. Charles D
cate Ltd The I 211 212	Shaw, Finlayson & Co I. 165 Shaw, Maxton & Co I. 95	Siangkiang 1. 256 Siangyin 1. 255 Sias, Charles D
cate, Ltd., TheI. 211, 212 Scottish Ceylon Tea Co., Ltd.	Shaw, Wallace & CoI. 164,	Sidewick C T II 196
I. 203	169, 170; II. 142	Singfried John II 222 226 284
	Che Venn 4 I 059	Singleight John C II 999 995
Scottish Cooperative Wholesale	Sha Yang tI. 258 SheI. 15, 20, 493	Dieginieu, John C 222, 223,
Society	She	220, 213, 210, 204
Scottish Tea and Lands Co. of	Sheldon, Daniel q. I. 40	Siegiried, Walter HII. 222,
Ceylon, Ltd I. 203	Sheldon, GilbertI. 40	226, 284, 302-3
Screven, Mrs. R. J 213	Shelley, Percy Bysshe qII. 489	Siegfried & CoII. 226, 284
Scull, Joab	Shen NungI. 1, 2, 3, 15, 20;	Siemens-Schuchert
Scull, Wm. C	q. 493, 494; 11, 495	Siemssen, G. TII. 105
Scull. Wm. S	Shepard I. 547 Shepard, Charles UI. 214,	Siemssen & Krohn. II. 21, 104, 105
Scull Co., Wm. S	Shepard, Charles UI. 214,	Sienning t
Sculpture, tea in	484, 485	SiftersI. 286, ill. 291; 468
Sealing machinery ill II. 70	Shepard, John	-Baillie & ThompsonI. 476
Seasonal teas	Shepard & CoII. 173	—Brougham
Seed, tea	Shepherd, T. H	-"Chalmers" I 488: ill 489
—Ceylon I. 424	Shepherd, W. W	-Jackson's Rotary illI. 480
—IndiaI. 387, 388	Sherman, Lewis	—Magic I. 476
——Selection of	Sherman, S. S	-Marshall's Four-tray Balanced
	Sherman, WilliamII. 267	
—Iran (Persia) I. 455	Observation of and and	I. ill. 487
"Seed-at-Stake"ill. I. 144	She-tay t	—Moore 1. 476
Seed podI. ill. 496, 500	Sheth, K. M	—Pumphrey I. 477 —Walker's "Pentagonal". I. 489 Sifting I. 291
Seeman, Carl	Shewan, Captain Andrew. I. 96,	-Walker's "Pentagonal"1. 489
Seeman, Joseph	97, 98, 105, q. 106-8	Sifting
Seeman, Carl II. 275 Seeman, Joseph II. 275 Seeman, Sigel W II. 275 11. 275 II. 275	Shi Shuo q	—CeylonI. ill. 438; 439
Seeman Brotners, Inc	Shibata, K	—ChinaI. 304, ill. 305 —IndiaI. ill. 398, 399;
Seeyok Tea CoI. 161	Shiga t	—IndiaI. ill. 398, 399;
Seifert, O	Shih Ching, ConfuciusI. 2, 20, 21	400, 470, 475, 476
Seiju, Hos-shi 8	Shih Ching, Shen Nungq. I. 20	—Japan ill
Seisser	Shihmen t	400, 470, 475, 476 —Japan ill
Selling forward	Shimbi Shoin, Ltd	Siftings I. 322, 323
—ColomboII. 9, 10, 11	Shimizu illII. 210	SiftingsI. 322, 323 Sigmond, Dr. qII. 495
—London II 46	Shin Shang Company II. 98	Silvery ()olong t I 232 259
—London	Ship of China and Java with	Silvery Oolong t I. 232, 259 Simmons, Harriman NII. 282
Semedo, Father Alvaro I. 27;	Mat Sails ill	Simpson George I 216
q. II. 398	Shipping	Simpson, George I. 216 Simpson, Montagu II. 243
Semi-fermented teas (see	—Ceylon	Simpson & Co., TII. 243
Oolong t)	—New York, early illII. 251	Sims, J
Con Dom Comul I 198	Shipping centers	Sinclair, D. Erroll. I. 196; II.
Sen, Ram ComulI. 138		188, 203
Sencha t. I. 234, 261, 316-18, 321, 322, 324; II. 217	Ships, sailing —American, earlyII. 247-8	Sinclair, JamesI. 192, 196,
Amalusia of I 511	—"Ascension" I 68 —"Benver" I 57 —"Bedford" I 57	197; II. 202
—Analysis of	— 'Beaver''	
Senko-Šoshi (see Yeisai)	"Dedford" T 57	Sinclair, J. GraemeI. 191,
Sequier, ChancellorI. 34 Servants, Ceylonill. II. 386	"Deitonale Delli" I 60	192, 196
Servants, Ceylon	— "Britannia Ball" I. 60 — "City of Corinth" II. 132	Sinclair, May qII. 496
Service	"City of Corinta	Sinclair, WilliamI. 191
-American, earlyill. II. 407,	"City of Paris"	Sinclair, W. HII. 253
478, 479	—"Collegian"	Singchuen t
—Cup platesII. 448; ill. 477	— Dartmouth 57	SingkehsI. 116
—DelftII. 473		Singleton, EstherI. 49
-ElectroplateII. 479	— "Glenogie" 1. 99	Singlo t
-Matched tea sets appearII. 438	— "Greynound" 1. 59	Singlo Tea Co., LtdI. 160, 162
-MiscellanyII. 445	—"Hector" 1. 68	SinhaleseI. 295
-Netherlands ill II. 422	—"London"	Sin-Shan
—PewterII. 479	- "Loyal Blisse"	Sin-Shan II. 21 Sirdar I. 166, 404, 406 "Sirocco" automatic feeder and
—Samovar II. 427 —Sèvres ül	—"Macclesfield" 1. 74	"Sirocco" automatic feeder and
—Sevres ill	"Mare Scourge" 1. 68	spreader
-Sheffield PlateII. 479	—"Nancy"	"Sirocco" centrifugal and pro-
—SilverII. 478; ill. 480; 481	—Packet 1. 87	peller fan
— — Modern ill	"Peggy Stewart"	Sirocco Engineering Works
Seton, GeorgeII. 175		I. 159, 160
Sewall, Chief JusticeI. 49	—"Princess" 73	Siushui t
Shading	"Princess" . I. 73 "Red Dragon" . I. 68	Siva's Tank at Sibsagarill. I. 136
—Ceylon I. 426		Sixty-four Years in CeylonI.
—IndiaI. ill. 378; 387, 389	- "Susan" I. 68	196; II. 387
—Japan	—"Theeboom"ill. II. 108	Skiff, Frank VII. 283
—Java and SumatraI. 351,	— "Theeboom"	Skinner, Charles BinneyII. 135
353, 354	Ships' husbands	Skinner, WilliamII. 202
Shai	Ships of the Dutch East India	Skrine, Duncan W. HI. 197;
Shakspeare, WII. 146, 147, 178	Co. before Cantonill. I. 28	II. 147
Shalders, Ernest AII. 286	Shipton, J I. 187, 188	Skrine & Co
Shan var	Shirozaemon, Kato	Slade, Sidney EII. 170
Shan Use of Tea as FoodII. 398	Shin Lunq. 1 3	Slater, G. CI. 202, 203; II. 150
Shand, P. R	Shiuchang t	Slaughter, Sir William Capel
Shand, Haldane & CoII. 186	ShizuokaII. 29	II. 185
ShanghaiII. 24	Shizuoka Club House ill II. 220	Slendang
Shanghai Bureau of Inspection	Shizuoka-Ken Tea Association	Slenderness, promotesI. 559
II. 23	ill. II, 31	Slenderness, promotesI. 559 Sloan, Alfred PII. 279
Shanghai-Packed tI. 231, 308	Shizuoka-Ken Tea Expert Train-	Sloane HerbariumI. 134
Shanghai tea export season. II. 24	ing Cohool T 005	Slotemaker, A. C
Shanghai Tea Gulld I 308 II 25	Shizuoka-Ken Tea Refirers' Guild, The	Slotemaker, A. C I. 127 Slotemaker, C. G I. 131, 132
Shannon, W. W	Guild, The II. 32	Smith, Balfour
Shantam, or Hsiangtang. t I.	Shizuoka Tea Guild I. 324, 326	Smith, Balfour
228. 255	Short. Thomas. I. 29 37 47:	Smith, Cicely Fox qI. 104,
Shares, teaI. 154, 155; II 208	II. 494	106 107
Shares, teaI. 154, 155; II. 208 Sharpe, C. JI. 164; II. 138, 162	Short Leaf Canton Scented	Smith, D. H II 275, 283 287
Sharpe, L. H	Orange Pekoe tI. 233	Smith, D. HII. 275, 283, 287 Smith, Elliott RII. 223, 261
Shaw A A I 153	Obanim 4 I OFO	Smith, Elliott TII. 261
Shaw, C. F. S I 212	Shouwu t	
Shaw, A. A	Shrady, George Fq. I. 553	Smith, G. WaldoII. 279

Smith, HII. 114 Smith, Stoomkoffiebranderij &	Sorting and Packing Tea (see Sorteeren en Afpakken,	Steele, Sir Richard qII. 493 Steele, Samuel BII. 266
Theehandel HII. 119	etc.)	Steele & Co., RobertI. 95, 96, 97
Smith, Julius	Southon t I. 115 Southong t I. 229, 257, 307	Steele-Wedeles CompanyII. 265 Stehr, GeorgeII. 172
Smith, LockhartI. 169; II. 139, 318	South China CongousI. 228	Stelling, DenninghoffI. 128
Smith, "Mattakelle"I. 192 Smith, Michael EII. 269	South Indian Association in	StemsI. 322, 323
Smith, Michael E	London.I. 171, 200; II. 206 —List of officers	Stenning, J. C
Smith, Richard BII. 223, 261 Smith, Seymour SII. 273, 276	Membership	Stenning, Inskipp & CoII. 183 Stephen, AlexanderI. 96 Stephen, C. CII. 147, 178
Smith, Rev. Sydneyq. 1. 48;	South Indian teas	Stephen, C. C II. 147, 178
II. 495, 499 Smith Thomas I 196	South Sea tea	Stephens, L. G
Smith, Thomas I. 196 Smith, Traver II. 267	South Travancore t	Stephenson, F. D II. 267 Steuart, Capt. James II. 145
Smith, Vivian H	Southall & Co., WII. 242	Steuart & Co., Geo 1. 190, 200,
Smith, W. Harding qII. 371 Smith, Wm. BowdenI. 185, 186	SoutherneII. 405, 486 Southey, qII. 404	202; II. 145 Stevens, F. AII. 270
Smith & Co., Thomas IIII. 251	Souvenirs d'un Voyage dans la	Stevenson
Smith & Son. W. H	Tartarie, etc. q II. 400	Stevenson, J. S
Smith Company, E. TII. 261 Smith, Baker & CoII. 220,	Soviet Russia's Tea Development in Transcaucasia ill.	Stewart, Anthony
223, 233, 261	I. 448	Stewart. DonaldI. 186
Smith & DimonI. 88	Spacing I. 272	Stewart, D. M
Smithett, William II. 172, 174 "Smouch"	—China I. 301 —Ceylon I. 426	203; II. 149, 313
Smuggling tea1. 52, 68, 69,	Formosa	Stewart, William A
70, 78; II. 124	—India I. 387	Stewart, W. E
Smythe, Sir ThomasI. 80 Snelling, H. AII. 171, 180	—Japan I. 314 —Java I. 353	Stewart & Co., D. MII. 192 Stewart & Ashby Coffee CoII. 287
Snelling, Absoloms & Lampard,	Spar-tea	Stewart, Holl & Co., Ltd II. 183
LtdII. 171, 193, 197, 288	Sparnaay, D. C I. 127	"Stewing" the leafI. 289, 291
Snelling, Lampard & Campbell, LtdII. 171	Sparrow's of the MinoriesII. 162 Species Plantarumq I. 497, 498	Still, E. A
Société des Produits Maxime. II. 240	Speer, C. J. II. 147 Speex, James II. 211	193; II. 205
Société des Thés de l'Indo-Chine I. 454	Specx, James	Stillman, F. D II. 280, 287
Société des Thés de l'Elephant,	Spencer ArthurII. 282	Stillman, F. E
II. 239	Spencer, Arthur	Stimson, RowlandII. 186
Société Indo-Chinoise de Cul-	Sperata plucking knifeI. 359, ill. 360; 487	Stimson & Co., RowlandII. 186 StimulantI. 540, 553, 554, 556
tures Tropicales I. 454 Society of Arts, London . I. 74,	Spice IslandsI. 29	Stinling William a I 554
135, 145, 187	"Spider-leg" teaI. 322; II.	Stix, Sylvan L
Soekaboemi t I. 264 Soekaboemi t I. 238, 265	Spilhaus & Co., Ltd., Wm II. 242	Stock Exchanges
Soekaboemi Agricultural Associa-	Spitzka, Edward Anthony. q. I. 553	—AmsterdamII. 208 —LondonI. 178; II. 208
tion	Spode. JosiahII. 475	Stocks-United KingdomII. 350
Soekaboemi and Rubber Planters' AssociationI. 370	SpoutsII. ill. 444; 445 Sprague, A. AII. 265	Stokes, FrancisII. 161 Stokes, RobertII. 161
Soekaboemi Planters' Associa-	Sprague, Warner & CoII. 265	Stoken, Robert
		Storage (see Charges)
tion 1. 125	Spraying	Storage (see Charges) Story of the Tea LeafII. 498
tion	Spraying —Cevlon I. 428	Story of the Tea LeafII. 498
tion 1. 125	Spraying —Ceylon I. 428 —Java I. 356	Story of the Tea Leaf
tion	Spraying	Story of the Tea LeafII. 498 Story of the Willow Pattern Plate, TheII. 477 StrainersII. 438, 445 Stream of Nine Windings, ill. I. 7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Spraying	Story of the Tea Leaf.
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils —Best I 15, 270 —Burma I 451 —Ceylon I 420 —China I 297, 298	Spraying	Story of the Tea Leaf.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Spraying	Story of the Tea Leaf.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Spraying	Story of the Willow Pattern Story of the Willow Pattern II. 477 Strainers. II. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 484 Strickland, Agnes q. I. 43 Stricta var. I. 500 "String" teas. I. 232, 259 Stuart A. II. 139, 176,77, 185
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 Fr. Indo-China I 454 Japan I 312 Jaya and Sumatra I 343, 344	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern Plate, The II. 477 Strainers III. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G I. 484 Strickland, Agnes q I. 438 Strickland, Agnes q I. 500 "String" teas I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh I. 200 Stuart, J. N. I. 169; II. 139, 176 Stuart, J. N. I. 169; II. 139, 176
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 For Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459	Spraying	Story of the Willow Pattern Story of the Willow Pattern II. 477 Strainers. II. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 484 Strickland, Agnes q. I. 43 Stricka var. I. 500 "String" teas. I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh. I. 200 Stuart, J. N. I. 169; II. 139, 176 Stuart Limited, Donald. II. 245
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Fr. Indo-China I 454 Japan I 312 Java and Sumat: a 1 343, 344 Uganda and Kenya I 458 Soil covers I 426	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern 11. 477 Strainers. II. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 438 Stricta var. I. 50 "Stricta var. I. 232 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh. I. 200 Stuart, J. N. I. 169; II. 139, 176 Stuart, Limited, Donald II. 245 Stuchell, J. W. II. 289
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils —Best I 15, 270 —Burma I 451 —Ceylon I 420 —China I 297, 298 —Formosa I 329 —Fr. Indo-China I 454 —Japan I 312 —Java and Sumatra I 343, 344 —Uganda and Kenya I 459 Soil covers I 426 Solovtzoff, A 1 206 Solovtzoff, A 518, 550, 551	Spraying	Story of the Tea Leaf II. 498
tion 1 125 Soemedang t 1 265 Soeyoan t 1 231, 252 Soils Best 1 15, 270 Burma 1 451 Ceylon 1 420 China 1 297, 298 Formora 1 329 Fr. Indo-China 1 454 Japan 1 312 Java and Sumatra 1 343, 344 Uganda and Kenya 1 459 Soil covers 1 426 Solovtzoff, 1 206 Solublie extract. I 512, 518, 550, 551 Solublity of tea leaf, 1 512	Spraying 1 428 —Ceylon 1 356 Spring Valley (see Estates—Ceylon) 1 356 Spring Valley Ceylon Estates—Ltd. 1 197, 203 Spurling, J. 1 86, 94, 96-9 98 Squeeze" 11 20 Stables, W. Gordon q. 1 552; Stadium, N. Y 1 50 Stailes, James 11 162 Stalk t 1 233 Stamp Act of 1765 1 51 78 Standard Brands, Inc. II. 258, 266 Standards, tea 1 325	Story of the Tea Leaf II. 498 Story of the Willow Pattern Plate, The II. 477 Strainers III. 438, 445 Stream of Nine Windings, ill. 1. 7 Streeting, G I. 484 Strickland, Agnes q I. 436 Strickland, Agnes q I. 500 "String" teas I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh I. 202 Stuart, I. 109 II. 139, 176 Stuart Limited, Donald II. 245 Stuchell, J. W II. 289 Styles (see Gradings) Subject in Brief xiii.xiv Substitutes I. 502-505
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils —Best I 15, 270 —Burma I 451 —Ceylon I 420 —China I 297, 298 —Formora I 329 —For Indo-China I 454 —Japan I 312 —Java and Sumatra I 343, 344 —Uganda and Kenya I 459 Soil covers I 426 Soluble extract. I 512, 518, 550, 551 Solubility of tea leaf I 512 Soluble extract. I 512, 518, 550, 551 Solubility of tea leaf I 512 Soluble tea I 223	Spraying	Story of the Tea Leaf II. 498
tion 1 125 Soemedang t. I 265 Soeyoan t. I 231, 252 Soils Best. I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Fr. Indo-China I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff, A I 206 Soluble extract I. 512, 518, 550, 551 Solubility of tea leaf. I 512 Soluble tea I 223 Some Aspects of Modern Tea	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern Strainers II. 477 Strainers II. 438, 445 Streeting, G II. 484 Strickland, Agnes q I. 484 Strickland, Agnes q I. 500 "String" teas I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, II. II. II. II. II. II. II. II. II. II
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils —Best I 15, 270 —Burma I 451 —Ceylon I 420 —China I 297, 298 —For Indo-China I 329 —For Indo-China I 343, 344 —Japan I 312 —Java and Sumatra I 343, 344 —Uganda and Kenya I 459 Soil covers I 426 Soluble extract I 512, 518, 550, 551 Solublity of tea leaf I 512 Some Aspects of Modern Tea Pruning I 393 Some Famous Sailing Ships and	Spraying	Story of the Tea Leaf II. 498
tion	Spraying	Story of the Tea Leaf II. 498
tion 1 125 Soemedang t. 1 265 Soeyoan t. 1 231, 252 Soils Best. I 231, 252 Boils Best. I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff, A I 206 Solubility of tea leaf I 512 Some Aspects of Modern Tea Fruning Q I 393 Some Famous Sailing Ships and Their Builder, Donald	Spraying	Story of the Willow Pattern 11. 498 Story of the Willow Pattern 11. 477 Strainers. 11. 438. 445 Stream of Nine Windings, ill. 1. 7 7 Streeting, G. 1. 48 Strickland, Agnes q. 1. 43 Strictla var. 1. 500 "String" teas. 1. 212, 250 Stuart, A. N. II. 139, 176-77, 183 183 Stuart, J. N. I. 169; II. 139, 176 17 Stuart Limited, Donald 11. 245 Styles (see Gradings) 11. 289 Subject in Brief xiiixiv Subdorough 1. 502-505 Sudorough 1. 502-505 Suez Canal 1. 93, 99 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke 11. 484
tion 1 125 Soemedang t 1 265 Soeyoan t 1 231, 252 Soils Best I 231, 252 Boils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formora I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff A 1 206 Soluble extract I 512, 518, 550, 551 Solubility of tea leaf I 512 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and McKay I 88 Some Secrets of Tea 11, 298	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern Strainers II. 477 Strainers II. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G I. 438 Stricta var I. 500 Stricta var I. 500 Stricta var I. 500 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh I. 200 Stuart, J. N. I. 169; II. 139, 176 Total tart, J. N. I. 169; II. 139, 176 Stuart Limited, Donald II. 245 Styles (see Gradings) Subject in Brief xiii-xiv Substitutes I. 502-505 Sudborough I. 33, 99, I. 83; II. 132, 255 Sugar in tea I. 49, 525, 551; II. 452 Sugawara, Kiyosuke II. 484
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils —Best I 15, 270 —Burma I 451 —Ceylon I 420 —China I 297, 298 —Formora I 329 —For Indo-China I 454 —Japan I 312 —Java and Sumatra I 343, 344 —Uganda and Kenya I 458 Soilovtzoff, A I 206 Soluble extract I 512, 518, 550, 551 Solubility of tea leaf. I 512 Some Aspects of Modern Tea Pruning I 393 Some Famous Sailing Ships and Their Builder, Donald McKay I 88 Some Secrets of Tea II 298 Somerville, William II 148 Somerville & Co. II 9	Spraying	Story of the Tea Leaf II. 498
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Bost I I 31, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 For Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff A I 206 Soluble extract I 512, 518, 550, 551 Solubility of tea leaf I 223 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald Their Builder, Donald Some Secrets of Tea II 298 Some Secrets of Tea II 298 Some Secrets of Tea II 298 Some Soerets of Tea II 298 Someryille & Co. II 9, 148 Someryille & Co. II 9, 148 Somes, Joseph I 76 Songs III II 468, 469	Spraying	Story of the Tea Leaf II. 498
tion 1 125 Soemedang t. 1 265 Soeyoan t. 1 231, 252 Soils Best. 1 15, 270 Burma 1 451 Ceylon 1 420 China 1 297, 298 Fr. Indo-China 1 329 Fr. Indo-China 1 454 Japan 1 312 Java and Sumatra 1 343, 344 Uganda and Kenya 1 459 Soil covers 1 426 Solovtzoff, A 1 206 Solubility of tea leaf 1 512 Solubility of tea leaf 1 512 Some Apects of Modern Tea Pruning q 1 393 Some Famous Sailing Ships and Their Builder, Donald McKay 1 88 Some Secrets of Tea 1 1298 Some Secrets of Tea 1 1298 Some Secrets of Tea 1 1298 Somerville, William 11 148 Somes, Joseph 1 71 Songs ill 11 468, 469 Sons of Liberty 1 15-36, 62-3	Spraying	Story of the Tea Leaf II. 498
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 1 5, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formora I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff A I 206 Solubble extract I 512, 518, 550, 551 Solubility of tea leaf I 512 Soluble tea I 223 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald McKay I 88 Somerville, William II 148 Somerville & Co. II 9, 148 Somerville & Co. II 9, 148 Somes, Joseph I 71 Songs ill II 468, 469 Sons of Liberty I 53-6, 62-3 Sonstatt I 545	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 231, 252 Boils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formora I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Solovtzoff, I 206 Solovtzoff, I 206 Soloble extract I 512, 518, 550, 551 Solubility of tea leaf I 512 Soluble tea I 223 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald McKay I 88 Somerville, William II 148 Somerville & Co. II 9, 148 Somerville & Co. II 9, 148 Somes, Joseph I 71 Songs ill II 468, 469 Sons of Liberty I 53-6, 62-3 Sonstadt I 545 Soomoo t 1 229, 257 Sorteren en Afpakken van de	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern Plate, The II. 477 Strainers II. 438, 445 Stream of Nine Windings, ill. 1. 7 Streeting, G I. 484 Strickland, Agnes q I. 438 Strickland, Agnes q I. 500 String' teas I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh I. 200 Stuart, J. N. I. 169; II. 139, 176 Stuart Limited, Donald II. 245 Stuart Limited, Donald II. 245 Styles (see Gradings) Subject in Brief xiii-xiv Substitutes I. 502-505 Sudborough I. 502-505 Sudborough I. 522 Suez Canal I. 93, 99, 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke II. 484 Sugawara, Kiyosuke II. 484 Sugawara, Michzane II. 484 Sugawara, Michzane II. 484 Sukanobu, Nishikawa II. 484 Sukanobu, Nishikawa II. 484 Sumatra teas enter the market II. 130-132
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 1 5, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soilotzoff A I 206 Solotzoff A I 206 Soluble extract I 512, 518, 550, 551 Solubility of tea leaf I 223 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald Their Builder, Donald Some Secrets of Tea II 298 Some Secrets of Tea II 298 Somerville, William II 148 Somes, Joseph I 71 Songs ill II 468, 469 Sons of Liberty I 53-6, 62-3 Sonstadt I 545 Soomoo t 1 229, 257 Sorteren en Afpakken van de Thee, Over het I 155	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern II. 477 Strainers. II. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 484 Strickland, Agnes q. I. 48 Strickland, Agnes q. I. 232, 259 Stricka var. I. 500 "String" teas. I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh. I. 200 Stuart, J. N. I. 169; II. 139, 176-17, 183 Stuart, J. N. I. 169; II. 139, 176 Stuart Limited, Donald. II. 245 Styles (see Gradings) Subject in Brief. xili-xiv Substitutes. I. 502-505 Sudborough. I. 502-505 Suder Canal. I. 93, 99. 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyocuke. II. 484 Sumatra tea pioneers. I. 131, 132 Sumatra tea pioneers. I. 130, 131 Sumatra teas enter the market I. 130, 131 Sumatra teas enter the market I. 130, 131 Summer Storm q
tion 1 125 Soemedang t I 265 Soeyoan t I 231, 252 Soils Best I 231, 252 Boils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formora I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Solovtzoff, I 206 Solovtzoff, I 206 Soloble extract I 512, 518, 550, 551 Solubility of tea leaf I 512 Soluble tea I 223 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald McKay I 88 Somerville, William II 148 Somerville & Co. II 9, 148 Somerville & Co. II 9, 148 Somes, Joseph I 71 Songs ill II 468, 469 Sons of Liberty I 53-6, 62-3 Sonstadt I 545 Soomoo t 1 229, 257 Sorteren en Afpakken van de	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern Plate, The II. 477 Strainers III. 438, 445 Stream of Nine Windings, ill. 1. 7 Streeting, G I. 484 Strickland, Agnes q I. 438 Strickland, Agnes q I. 500 String' teas I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh I. 202, 259 Stuart, J. N. I. 169; III. 139, 176 Stuart Limited, Donald II. 245 Stuchell, J. W II. 289 Styles (see Gradings) Subject in Brief xiii-xiv Substitutes I. 502-505 Sudborough I. 502-505 Sudborough I. 39, 99, 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; II. 452 Sugawara, Kiyosuke II. 484 Sugawara, Michzane II. 484 Sugawara, Michzane II. 484 Sugawara, Tea's Conquest of I. 130, 132 Sumatra teas enter the market II. 130, 131 Summer Storm q II. 497 Summer Storm q II. 497 Summer Storm q II. 193
tion 1 125 Soemedang t. I 265 Soeyoan t. I 231, 252 Soils Best. I 231, 252 Boils Best. I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff, I 206 Solublity of tea leaf I 512 Solublity of tea leaf I 512 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald McKay I 88 Some Secrets of Tea II 298 Some Secrets of Tea II 298 Some Secrets of Tea II 298 Some Sil U 1 488 Somerville, William II 148 Somerville & Co. II 9, 148 Somes Joseph I 71 Songs ill II 468, 469 Sons of Liberty I 53-6, 62-3 Sonstadt I 545 Soomoo t. I 229, 257 Sorteeren en Afpakken van de Thee, Over het I 155 Sorteers Davidson's "Sirocco" I 155	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern Plate. II. 477 Strainers. II. 438. 445 438. 445 Stream of Nine Windings, ill 7 Streeting, G. 1. 48 445 Strickland, Agnes q. 1. 43 8trickland, Agnes q. 1. 43 Stricta var. I. 500 "String" teas. I. 212, 250 Stuart, A. N. II. 139, 176-77, 183 Stuart, I. 129, 176-77, 183 Stuart, I. 139, 176-77, 183 Stuart, J. N. I. 169; II. 139, 176 Stuart, 124 125 Stuart Limited, Donald. 11, 245 Styles (see Gradings) Subject in Brief. xiii-xiv Subject in Brief. xiii-xiv Subdorough. 1. 502-505 Sudey Kut t. I. 229, 232, 257, 258 Suez Canal. 1. 93, 99 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke. 11, 484 Sugawara, Michzane. 11, 484 Sugawara, Michzane. 11, 484 Sumatra tea pioneers. I. 130, 132 Sumatra teas enter the market I. 130, 132
tion 1 125 Soemedang t. I 265 Soeyoan t. I 231, 252 Soils Best. I 231, 252 Boils Best. I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formosa I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff, I 206 Solublity of tea leaf I 512 Solublity of tea leaf I 512 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and Their Builder, Donald McKay I 88 Some Secrets of Tea II 298 Some Secrets of Tea II 298 Some Secrets of Tea II 298 Some Sil U 1 488 Somerville, William II 148 Somerville & Co. II 9, 148 Somes Joseph I 71 Songs ill II 468, 469 Sons of Liberty I 53-6, 62-3 Sonstadt I 545 Soomoo t. I 229, 257 Sorteeren en Afpakken van de Thee, Over het I 155 Sorteers Davidson's "Sirocco" I 155	Spraying	Story of the Tea Leaf II. 498 Story of the Willow Pattern Yelate, The II. 477 Strainers II. 438, 445 Stream of Nine Windings, ill. 1. 7 Streeting, G I. 484 Strickland, Agnes q I. 438 Strickland, Agnes q I. 500 String' teas I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh I. 200 Stuart, J. N. I. 169; II. 139, 176 Stuart Limited, Donald II. 245 Stuart Limited, Donald II. 245 Styles (see Gradings) Subject in Brief xiii-xiv Substitutes I. 502-505 Sudborough I. 502-505 Sudborough I. 522 Suez Canal I. 93, 99, 183; II. 132, 255 Sugar in tea I. 49, 525, 551; Sugawara, Kiyosuke II. 484 Sugawara, Kiyosuke II. 484 Sugawara, Michzane II. 484 Sugawara, Michzane II. 484 Sugawara teas enter the market II. 253 Sumatra teas enter the market II. 130, 131 Summer Storm q II. 497 Summer Storm q II. 193 Sumner Storm q III. 193
tion 1 125 Soemedang t. 1 265 Soeyoan t. 1 231, 252 Soils Best. I. 231, 252 Boils Best. I. 15, 270 Burma I. 451 Ceylon I. 420 China I. 297, 298 Formosa I. 329 Fr. Indo-China I. 454 Japan I. 312 Java and Sumatra I. 343, 344 Uganda and Kenya I. 459 Soil covers I. 426 Solovtzoff, A. I. 206 Solublie extract. I. 512, 518, 550, 551 Solubility of tea leaf I. 512 Some Aspects of Modern Tea Pruning q. I. 393 Some Famous Sailing Ships and McKay I. 393 Some Famous Sailing Ships and McKay I. 88 Some Secrets of Tea II. 298 Some Secrets of Tea II. 298 Some Secrets of Tea II. 298 Some Some Ville William II. 148 Somerville & Co. II. 9, 148 Somes Solosph I. 71 Songs ill II. 468, 469 Sons of Liberty I. 53-6, 62-3 Sonstadt I. 545 Soomoo t. 129, 257 Sorteeren en Afpakken van de Thec, Over het I. 155 Sorteers Davidson's "Sirocco" I. 159; ill. 481, 489 —"Eureka" II. 5479, 480 —"Eureka" II. 5479, 480 —"Eureka" II. 5479, 480 —Kutcha I. 397	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern Plate. II. 477 Strainers. II. 438. 445 Stream of Nine Windings, ill. I. 78 Strecting, G. I. 484 Strickland, Agnes q. I. 43 Stricta var. I. 500 "String" teas. I. 212 259 Stuart, A. N. II. 139, 176-77. 183 Stuart, J. N. I. 169 II. 148 Stuart, J. N. I. 169 II. 149 176 Stuart Limited, Donald, II. 245 Stuchell, J. W. III. 248 Stuchenoll, Studenoll, II. 249 250 505 Sudborough. I. 252 Sugar in tea. I. 232 255 Sugar in tea. I. </td
tion 1 125 Soemedang t 1 265 Soeyoan t 1 231, 252 Soils Best I 231, 252 Boils Best I 15, 270 Burma I 451 Ceylon I 420 China I 297, 298 Formora I 329 Fr. Indo-China I 454 Japan I 312 Java and Sumatra I 343, 344 Uganda and Kenya I 459 Soil covers I 426 Solovtzoff A I 206 Soluble extract I 512, 518, 550, 551 Solubility of tea leaf I 512 Soluble tea I 223 Some Aspects of Modern Tea Pruning q I 393 Some Famous Sailing Ships and McKay I 88 Somerville & Co II 9, 148 Somerville & Co II 9, 148 Somerville & Co II 9, 148 Somes, Joseph I 71 Songs tll I 468, 469 Sonstadt I 545 Soomoo t I 229, 257 Sorteeren en Afpakken van de Thee, Over het I 155 Sorters Davidson's "Sirocco" I 159; "Eureka" 11, 479 Jackson's I 158, ill 479 Jackson's I 158, ill 479 Jackson's I 158, ill 479 Jackson's Continuous automatic	Spraying	Story of the Willow Pattern Story of the Willow Pattern Strainers II. 438, 445 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 484 Strickland, Agnes q. I. 43 Strickland, Agnes q. I. 43 Strickland, Agnes q. I. 43 Strickland, Agnes q. I. 500 "String" teas. I. 232, 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, Hugh. I. 200 Stuart, J. N. I. 169; II. 139, 176 Stuart, Limited, Donald. II. 245 Styles (see Gradings) Subject in Brief. Xili-xiv Substitutes. I. 502-505 Sudborough. I. 522 Suez Canal. I. 93, 99 Suez Canal. I. 93, 99 Sugawara, Kiyosuke. II. 452 Sugawara, Kiyosuke. II. 484 Suian t. I. 49, 525, 551; Sukenobu, Nishikawa. II. 462 Sumatra tea pioneers. I. 131, 132 Sumatra teas enter the market I. 130, 131 Summer, J.R. Hugh. II. 193 Sumner, J.R. Hugh. II. 193 Sumner's "Ty. Phoo" Tea, Ltd. Sumner's "Ty. Phoo" Tea, Ltd. Surma Valley. I. 380
tion	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern II. 477 Strainers. II. 438, 445 Stream of Nine Windings, ill. I. 7 7 Streeting, G. I. 484 Strickland, Agnes q. I. 484 Strickland, Agnes q. I. 500 "String" teas. I. 232, 259 Stuart A. N. II. 139, 176-77, 183 Stuart, Hugh. I. 200 Stuart, Hugh. I. 169; II. 139, 176 Stuart, II. 245 Sturchell, J. W. II. 245 Styles (see Gradings) Subject in Brief. xiii-xiv Subdorough. I. 502-505 Sudorough. I. 502-505 Suez Canal. I. 93, 99 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke. II. 452 Sukanobu, Nishikawa. II. 484 Suian t. I. 253 Sukenobu, Nishikawa. II. 484 Sumatra teas enter the market II. 130, 131 Summer, J. R. Hugh. II. 193 Sumner, J. R. Hugh. III. 193 Sumn
tion	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern Plate. II. 477 Strainers. II. 438. 445 45 Stream of Nine Windings, ill 7 Streeting, G. 1. 48 445 Strickland, Agnes q. 1. 43 8trickland, Agnes q. 1. 43 Stricta var. I. 500 "String" teas. I. 212, 250 Stuart, A. N. II. 139, 176-77, 183 Stuart, I. 129, 176-77, 183 Stuart, I. 139, 176-77, 183 Stuart, J. N. I. 169; II. 139, 176 Stuart, I. 139, 176 17 Stuart, J. N. I. 169; II. 139, 176 Stuchell, J. W. II. 245 Styles (see Gradings) Subject in Brief. xiii-xiv Subject in Brief. xiii-xiv Substyles (see Gradings) Subject in Brief. xiii-xiv Substyles (see Gradings) 1. 502-505 Suder Canal. I. 93, 99 1. 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke. II. 452 Sugawara, Kiyosuke. II. 484 Sugawara, Michzane. II. 484 Sugawara, Michzane. II. 4
tion	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern Plate. II. 477 Strainers. II. 438, 445 148 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 484 Strickland, Agnes q. I. 438 Strickland, Agnes q. I. 202 Strickland, Agnes q. I. 232 Stuart L. I. 232 259 Stuart, A. N. II. 139, 176-77, 183 Stuart, I. 129, 176 11. 245 Stuart, J. N. I. 169; II. 139, 176 Stuart Limited, Donald. II. 245 Stuchell, J. W. II. 289 11. 289 Styles (see Gradings) Subject in Brief. xiii-xiv Substitutes. I. 502-505 Sudborough. I. 502-505 Sudborough. I. 522 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke. II. 484 Sugawara, Kiyosuke. II. 484 Sugawara, Michzane. II. 484 Sumatra tea pioneers. I. 313, 132 Sumatra, Tea's Conquest of. I. 130, 131 Sumatra teas enter the market <t< td=""></t<>
tion	Spraying	Story of the Tea Leaf. II. 498 Story of the Willow Pattern Plate. II. 477 Strainers. II. 438, 445 148 Stream of Nine Windings, ill. I. 7 Streeting, G. I. 484 Strickland, Agnes q. I. 438 Strickland, Agnes q. I. 202 Strickland, Agnes q. I. 232 Stuart Limited, I. 139, 176-77, 183 Stuart, Hugh. I. 200 Stuart, J. N. I. 169; II. 139, 176-77, 183 Stuart, II. 245 Stuchell, J. W. II. 245 Styles (see Gradings) Subject in Brief. xiii-xiv Substitutes. I. 502-505 Sudborough. I. 502-505 Sudborough. I. 522 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyocuke. II. 452 Sugawara, Kiyocuke. II. 484 Sugawara, Michzane. II. 484 Sugawara, Michzane. II. 484 Sumatra tea enter the market II. 130, 132 Sumatra teas enter the market II. 130, 131 Sumatra teas enter the market II. 130, 131 Sumn
tion	Spraying	Story of the Willow Pattern II. 498 Story of the Willow Pattern II. 438, 445 Stream of Nine Windings, ill. I. 7 Treeting. G. I. 484 Streeting. G. I. 484 Strickland, Agnes q. I. 43 Strickland, Agnes q. I. 43 I. 500 "String" teas. I. 232, 259 I. 202 Stuart, A. N. II. 139, 176-77, 183 Stuart, I. 169; II. 139, 176 Stuart, J. N. I. 169; II. 139, 176 Stuart, II. 245 Sturchell, J. W. II. 289 II. 289 Styles (see Gradings) Subject in Brief. xili-xiv Subscitutes. I. 502-505 I. 502-505 Sudorough. I. 522 I. 522 Suez Canal. I. 93, 99. 183; II. 132, 255 Sugar in tea. I. 49, 525, 551; Sugawara, Kiyosuke. II. 452 Sugawara, Kiyosuke. II. 484 II. 482 Sukenobu, Nishikawa. II. 462 II. 484 Sumatra tea pioneers. I. 131, 132 Sumatra teas enter the market I. 130, 131 Summer Storm q. II. 193 II. 193 Sumner, Sir John. II. 193 Sumner's "Ty. Phoo" Tea, Ltd. Surma Valley. I. 236; II. 216 Surmorgates. I. 236; II. 216 Surnorgates. I. 236; II. 2

Swallow Tail Line. I. Sweepings. I. Sweet, Robert. I. Sweetland. I. Sweet tea. I. Swenarton, J. H II. 53, 274. Swenarton, J. H II. 53, 274.	95 323 497 9 504
Swe'pe	292 451 493 230 497 135 22 201 250 32 239 556
Szekacs, Bela q I. T. bohea I. T. viridis I. Ta I. Tables, tea II. Tablet tea I. 223, 228, 233, 260, 294, 305, 307; II. 97 Tabloid tea I. 294 : II.	498 498 495 406
11. 97	458 458 22 34 231 255
Tait & CoII. 230, Taiwan (see Formosa) Taiwan Cha Kyodo Hambaisho II.	232
Taiwan Tea Joint Sales Market I. 340; II Takabayashi, Kenzo. I. 479; II. Takakuwa, Gensaku	33 219 303 212 146
Tales from the Tea Gardens	. 20
Tales from the Tea Gardens —Inquisitive Elephant, TheII. —Python and the LogII. —Tiger Sam, Christening of.II. Talgaswela Tea Company of Ceylon, LtdI. TamilsI. 295; ill. 416, 430-31; Tamo (see Daruma) Tampirs (see Withering)	386 379 379
TamsuiII. Tanabé, II. Tandjong PriokII. 15; ill.	34 127 112
	540 520 545 514 514 516 452 517 545 449 515 551
	533 545 519 9-20 520
Withering, effect fromI. Tannin "browns"I. 288, Tannin-free teasI. 545,	535 551 519 516 7-20 284 293 551 412 293 288 364 255 150
—Amsterdam II. —London II. —New York II.	48 40 51 258

Tarve	r, H			ii	I	. 484 . 59
—Ru	rs les .	· · · · ·			<u>i</u>	. 245
—Tei —Wo	rms . men.			ii	. i72	. 241 , 189
Tasti:	ng leutta	ill			4 7	, 143
—Çh	ina		ii.	18; i	น. 23	, 107
— Col	om bo rmosa	u.		\dots II.	231	, 13 , 233
—Ha —Jai	mbur oan il	gill. I	• • • • •	i	II I. 2 9	. 237 . 212
—Lo	ndon .		.I. ill	II. 18; i II. il II. II. II.	240	60-1
—Mil	k			041	I	. 245
— Ne — Ne	w Yo w Zea	rk aland	ili	241;	II	. 245
—"0 —Sc	n the	nose	"		II	. 43 . 67
—Šta	ndar	ds			11	. 43
_w	iter	State	I	239	244	245
Tasti: —An	ng Eo ierica	quipm n	ent i	l. 24	!! 3; ill	. 244
—En	glish Nah	ill			.I. 2	42-43 487
Tatle	r					. 296
Taxa	ck, K tion (. R. (866 B	ilso D	uties)		. 51.
—Ап —Сh	ieric a in a		 	· · · · ·	I. 51 II. 1	9, 214
—En	gland	Tay	I.	42, 6	8; II	. 124 . 4
For	rmosa				II	231
Taylo	r, H.	w		<u></u> .	II	. 318
Taylo	r, Ja	mes.	1	$\frac{178}{184}$. 179 I. 197	, 199
Taylo	r, Ja	mes	Banks	3 orf	I	. 90 197
Taylo	r &	Potter			į	. 90
Tcha. T'e				.i. 38	, 492	495
Tea :	a la '	Russe f 177	3 ill.	 	11 . I. 5	. 427 2, 53
Tea:	An	Histo	rical	Sketch	iII	. 298
Tew 8	ina A					
	(Se	o als	ca o In	roduc	tion	• •
Tea ((Se inte and (e also Am	ca o Int erica) Prod	roduc	tion Com	
Tea ((Se inte and (pan	o also Am Coffee vies	o Interication	roduc	tion Com	209
Tea e	(Se inte and (pan ind ()	o also Am Coffee ties Coffee I.	o Inserication Production Trade	troduc	Com	209 54-59
Tea d	(Se into and (pan ind ()	o also Am Coffee lies Coffee I.	o Interiors Prod Trade 71, Il	lroduc lucing Jour 89, 5-	ComII mal q 48, 5 , 413	. 209 54-59 , 452
Tea o Tea o Tea o Tea o Tea o	(Seinte and () pan and ()	o also Am Coffee Lien Coffee I. Tea B Tea D he Te	erica) Prod Trade 71, Il Blending a Pla	lucing Jour 89, 5- 328	ComII mal q 48, 5 , 413II	. 209 . 54-59 . 452 . 298 . 502
Tea d Tea d Tea d Tea d Tea d Tea d	(Se into and () pan and () and	e also Am Coffee vien loffee I. Tea B Tea D the Te	Trade Trade 71, Illending a Pla inking	troducting Jour 89, 5. 328. 7 I	ComII mal q 48, 5 , 413II245I553	. 209 54-59 , 452 , 298 , 298 , 502
Tea of Te	(Se into and (pan of the cond	o also Am Coffee ica Coffee I. Cea B Cea D he Te ca-Dr	or Intercept of the control of the c	troducting lucing 89, 5- 328 19. I	ComII.	209 54-59 452 298 502 495
Tea of Te	(Se into and () pand () and () as ()	Tea Breader Confession I.	o Interior I	232 222 241; 42 241; 239 239 21 1. 24 24; 24 2. 6 24 24; 25 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25	ComIIal q 48, 5II245I553IIIIIIIIIIII	. 209 54-59 452 298 , 298 , 502 , 405
Tea of Te	(Se into and () pan and () as a Not Assn.	Tea Bread Diese Sour te of 1	ca o Interica) erica) Prod Trade 71, II tlendir ealing a Pla inkin II rance ce of q View	troducting Jour 89, 5- 328 Jour 9, 5- 406, Vita: ounty York	ComII. mal q 48, 5 , 413II245II553 468II min-CII	209 54-59 452 298 502 405 405 324
Tea of Te	(Se into and C pand T and T and T and t as a Not Assn.	of also Am Coffee Lief I. Cea B Lea D Lea	Trade Prod Trade 71, Illending a Pla inking II rance cce of q View Shizuol	troduce lucing 8 Jour 8 9, 5 328 9, I nt q 406,	ComIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	209 54-59 452 298 298 502 495 405 324 289 324
Tea . Tea . Tea .	Not Assn. Assn. Assn. Assoc	of F of S of S istion	q uji C New Y hizuol of th	ounty. York. a City to U.	I II yI S. A	. 548 . 324 . 289 . 324
Tea . Tea . Tea .	Not Assn. Assn. Assn. Assoc	of F of S of S istion	q uji C New Y hizuol of th	ounty. York. a City to U.	I II yI S. A	. 548 . 324 . 289 . 324
Tea . Tea . Tea .	Not Assn. Assn. Assn. Assoc	of F of S of S istion	q uji C New Y hizuol of th	ounty. York. a City to U.	I II yI S. A	. 548 . 324 . 289 . 324
Tea Tea Tea —Off Tea-b	Not Assn. Assn. Associcers. ags	of F of S of S iation	q uji C New M hizuol of th	ounty fork. a Cit; ne U. II. 2	I II yI S. A 89-92 . 291 , 421 423 II	. 548 . 324 . 289 . 324 . 327 . 292 . 443 . 423 9. 80
Tea Tea Tea Dea Dea Tea Dea Dea Dea Dea Dea Dea Dea Dea Dea D	Not Assn. Assn. Assn. Associoers. ags uze chine	of F of S of S iation	q uji C New J hizuol of th	ounty. York ta Cit; ne U. II. 2II. ; 418	I II yI S. A 89-92 . 291 , 421 423 II	. 548 . 324 . 289 . 327 . 292 . 443 . 423 9, 80
Tea Tea Tea Dea Dea Tea Dea Dea Dea Dea Dea Dea Dea Dea Dea D	Not Assn. Assn. Assn. Associoers. ags uze chine	of F of S of S iation	q uji C New J hizuol of th	ounty. York ta Cit; ne U. II. 2II. ; 418	I II yI S. A 89-92 . 291 , 421 423 II	. 548 . 324 . 289 . 327 . 292 . 443 . 423 9, 80
Tea Tea De Tea D	Not Assn. Assn. Assn. Associags uze chine oalls basket becom Blendi	of F of S of S iation II. ry ill (see ' serv es ar ing, I ing as	q uji C. New J. hizuol. of th ill. 81 Iea E. ice ticle of	ounty. York. ta Cit. ta Cit. ta Cit. ta Lit. ti. ti. ti. ti. ti. ti. ti. ti. ti.	IIIII S. A 89-92 . 291 , 423II II. 7	. 548 . 324 . 324 . 327 . 292 . 443 . 423 9, 80
Tea Tea De Tea D	Not Assn. Assn. Assn. Associags uze chine oalls basket becom Blendi	of F of S of S iation II. ry ill (see ' serv es ar ing, I ing as	q uji C. New J. hizuol. of th ill. 81 Iea E. ice ticle of	ounty. York. ta Cit. ta Cit. ta Cit. ta Lit. ti. ti. ti. ti. ti. ti. ti. ti. ti.	IIIII S. A 89-92 . 291 , 423II II. 7	. 548 . 324 . 324 . 327 . 292 . 443 . 423 9, 80
Tea Tea De Tea D	Not Assn. Assn. Assn. Associags uze chine oalls basket becom Blendi	of F of S of S iation II. ry ill (see ' serv es ar ing, I ing as	q uji C. New J. hizuol. of th ill. 81 Iea E. ice ticle of	ounty. York. ta Cit. ta Cit. ta Cit. ta Lit. ti. ti. ti. ti. ti. ti. ti. ti. ti.	IIIII S. A 89-92 . 291 , 423II II. 7	. 548 . 324 . 324 . 327 . 292 . 443 . 423 9, 80
Tea Tea De Tea D	Not Assn. Assn. Assn. Associags uze chine oalls basket becom Blendi	of F of S of S iation II. ry ill (see ' serv es ar ing, I ing as	q uji C. New J. hizuol. of th ill. 81 Iea E. ice ticle of	ounty. York. ta Cit. ta Cit. ta Cit. ta Lit. ti. ti. ti. ti. ti. ti. ti. ti. ti.	IIIII S. A 89-92 . 291 , 423II II. 7	. 548 . 324 . 324 . 327 . 292 . 443 . 423 9, 80
Tea Tea Tea Tea Tra I Tr	Note Assn. A	of F of S of S iation II. II. III. III	q uji C New J hizuoli of tl ill. 81 ill. 81 crea E ice iticle of he A ssoc Assoc of The	gg) II. 418 gg) II. 418 created art of tradition, ation,	III S. A 89-92 291 423II II. 7 16; ill c. II Lon II.	. 548 . 324 . 282 . 327 . 423 9, 80 . 417 [. 298 . 298 . 3, 6
Tea Tea Tea Tea Tra I Tr	Note Assn. A	of F of S of S iation II. II. III. III	q uji C New J hizuoli of tl ill. 81 ill. 81 crea E ice iticle of he A ssoc Assoc of The	gg) II. 418 gg) II. 418 created art of tradition, ation,	III S. A 89-92 291 423II II. 7 16; ill c. II Lon II.	. 548 . 324 . 282 . 327 . 423 9, 80 . 417 [. 298 . 298 . 3, 6
Tea Tea Off Tea-b Ga Mal Trea I Tea	Not Assn Assn Assn Assn Assn Assn Chine ass uze chine balls backom Blendi Brok Cut Brok don Bur Cot Buye	te on roof S of	q uji C New Ji hizuol of the ill. 81 Fea E ice ticle of The A ssoci Associ of The dents. okers'	ounty York. ta Cit; te U. II. 2 II. 418 gg) II. 416 f trad frt of, ne Ar iation, Cumb Lond I Assn.	II. II. III. III. III. III. III. III.	. 548. . 324. . 327. . 327. . 443. . 423. . 443. . 443.
Tea Tea Off Tea-b Ga Mal Trea I Tea	Not Assn Assn Assn Assn Assn Assn Chine ass uze chine balls backom Blendi Brok Cut Brok don Bur Cot Buye	te on roof S of	q uji C New Ji hizuol of the ill. 81 Fea E ice ticle of The A ssoci Associ of The dents. okers'	ounty York. ta Cit; te U. II. 2 II. 418 gg) II. 416 f trad frt of, ne Ar iation, Cumb Lond I Assn.	I I I I I I I I I I I I I I I I I I I	. 548 . 324 . 289 . 327 . 292 . 443 . 423 . 423 . 423 . 298 . 298 . 3, 6 . 58 . 207 . 207
Tea de la constant de	Note Asset	te on of F of S iation of S iation Si iation S iation III. III. (see ' s serv ing, I ing at ers ' ta	q q live y initial sill. 81 live y initial sill. 81 live ini	ounty York. a City II. 2 II. 2 II. 418 II. 418 Cumb. Lond I Assn. 1, 447,	I I I I I I I I I I I I I I I I I I I	548. 324. 289. 324. 423. 423. 423. 423. 298. 298. 3, 6. 298. 5, 207. 207. 207. 480. 480. 480. 480. 480. 480. 480. 480
Tea	A Not. B	te on of F of S istion of S istic S is S	q q live y in the line of the line o	ounty. ou		. 546 . 324 . 289 . 327 . 292 . 423 . 423 . 423 . 423 . 298 . 298 . 298
Tea	A Not. B	te on of F of S istion of S istic S is S	q q live y in the line of the line o	ounty York. a City II. 2 II. 2 II. 418 II. 418 Cumb. Lond I Assn. 1, 447,		. 546 . 324 . 289 . 327 . 292 . 423 . 423 . 423 . 423 . 298 . 298 . 298

Tea Classic I. 4, 12, 14, Tea Clearing House, London II. 45. Tea clippers II. 46. Tea Club, U. S II. 3 Tea cocktails and high-balls II. 13. Tea Congress at Bandoeng 1924 I. 122, 126; al. 1 II. 133. Tea Corporation (1921) Ltd I. 12 Tea cottages ill. 409, 411, 414. 414.	22
II. 45- Tea clippers I 86-1	46
Tea Club, U. SII. 3	28
Tea cocktails and high-ballsII. 4 Tea Congress at Bandoeng 1924	56
I. 122, 126; <i>il.</i> 1	27
Tea ControlII, 133- Tea Corporation (1921) Ltd. I 2	34 03
Tea cottages ill409, 411, 414,	
Tea Corporation (1921) Ltd. 1. 2 Tea cottages ill. 409, 411, 414, 415, 4 Tea Cultivation, Cotton and Other Agricultural Ex- periments in India 1. 1 Tea Cultivation and its Develop- ments in Nyasaland 1. 4 Tea Cultivation in Kumaon and	18
Other Agricultural Ex-	- 0
Tea Cultivation and its Develop-	56
ments in NyasalandI. 4 Tsa Cultivation in Kumaon and	59
Gurhwal qI. 1	39
China, Earlyill. I.	10
ments in NyasalandI. 4 Tea Cultivation in Kumaon and Gurhwal qI. Tea culture and manufacture in China, Early	10
Tea cupp gilt	37
Teacup and saucer, evolution of	47
Tea Cyclopaedia q I. 509, 5	28
-Japanese illII. 425, 4	68
Tea Districts Labour Association	07
Tea Districts Labor Supply As-	
"Tea Drama." game of II. 4	66
Tea Cyclopaedia q	
Tea Duty Repeal Association (New York)II. 219, 2 Tea eggII. 425, 4 Tea Experimental Station, Bui-	9
(New York)II. 219, 2	79 45
Tea Experimental Station, Bui-	
tenzorg (see Proefstation) Tea Expert, The	
—QualificationsII. Tea Expert BureauI. 114,	59
Tea Export CorporationI. 1	25
Tea Facts and Figures II. 2	09
Tea for the aged	55
124-25, 296, 372; 11. 16, 17, 18. 17, 18. 17, 18. 17, 18. 17, 18. 18. 18. 18. 18. 18. 18. 18. 18. 18.	08
Tea from China	97
II. 1	56
Tea Georgia, Ltd	63
Tea Growers' Association of Netherlands IndiaI. 5 Tea Hints for RetailersII. 288, 2	15
Netherlands IndiaI. 5	50
Tea Hints for Retailers 11. 288, 2 Tea hours	98
-AustraliaII. 4	19
—Canada	11
—France II. 4	26
—IrelandII. 4	18
—NetherlandsII. 4 —New ZealandII. 4	21 18
Tea hours -Australia	23
—ChinaII. 397; ill. 429, 4	30
—JapanII. ill. 220; 4	31 57
Tea in Assam	45
Tea in Ceylon q	21 10
Tea ice creams	1-9
Regarding the qI. 1 Tea Industry of Java and Su-	54
Tea Industry of Java and Su- matra	68
Tea Industry in Northeast India,	
Early History of I. 138, 1 Tea: Its Cultivation and Manu-	56
facture qI. 1	41
Tea: Its History and Mystery. II. 2	98
Tea: Its Mystery and History.	
	98
Tea: Its Origin, Cultivation,	98
Manufacture, and Use	98



TeakettlesII. 436, 445	Tea ReunionII. 365	Textor & Co
-American, early	Tea-rooms	Tey
—ChineseII. 445	—Algiers ill	Thackeray, William Makepeace
-European, early illII. 446	Arabia	qII. 495
—JapaneseII. 446	—AustraliaII. 420	Thay
—WhistlingI. 243; II. 50	—Canada	ThéI. 495
Tea King of JavaI. 125	—England	The, Le I. 294
Tealate	Germany	Thé de caravaneI. 505
Tea LeavesI. 49, 54, II. 495	—JapanII. ill. 360, 366; 367	TheaI. 44, 72, 73, 495,
Tea making appliances, evolution	-London	497, 498
ofII. 436-448	—Mexico ill	Thea assamica
Tea-making spoonsII. 445	-NetherlandsII. 421	Thea boheaI. 114
Tea Mania and Panic I. 154, 155	-New Zealand	Theaceae
Tea Manners and Customs in	-Paris II. 426: ill. 427	Thea chinensis, var. B. Bohea
England II 419	-Russia	tea-tree Sims q I. 499
Tea Manufacture: Its Theory and Practice, q I. 435 Tes Manufacturers' Guild II. 32	—U. S	Thea, elegia
and Practice, q I. 435	Tea room estheticsII. 366	Thea japonicaI. 498
Tea Manufacturers' Guild II. 32	Tea salads of the Burmese (see	Thea L I. 498
168 marters stories of 11 369	Letpet)	Thea sasanquaI. 114
"Tea meetings"II. 405	Tea saturnaliaI. 155	Thea Sinensis I. 497, 498, 499
тей <i>тетон</i>	Tea Scripture	Thea sinensis LinnI. 498 Thea sinensis (L) Sims. I. 222, 493, 495; ill. 496; 499
Tea Memoir (Ch'a Ching)I. 12	Tea-seed oil	Thea sinemus (L) Sims. 1. 222,
Tea money ill	Tea share handbooksII. 209	Thea Sinensis, PetitI. 35
Tea NotesI. 154	Tea Shares and Tea Share TradingII. 208	Theatres and cinemas. II. 415;
Tea Nurseries	Tea Shop illII. 86, 87	ill, 416
Tea oddities in the newsII. 435 Tea out-of-doors \$\mathcal{U}_1II. 410	—First I. 46	
411, 412, 413, 415, 418,	First Lyons ill	Theatri BotaniciI. 28 Thee
420, 422, 427, 428, 429	—Paris ül	Thee en Koffiehandel v/h Wijs
Tea parties	Vienna ill	& ZonenII. 119
—Dutch	Tea Street, Shizuoka ill11. 28	Thee-cultuur op Java, Het begin
—English	TeaspoonsII. 448, 480; ill. 481	der q
Tea patriarchs, a family of	Tea's Triumph in Ceylon I. 173-204	Theezan teaI. 504
I. 127-129	Tea StudiesII. 298	TheineI. 520
Tea Planters' . Benevolent Insti-	Tea tackle, 1710 illII. 403	TheobrominI. 521
Tea Planters' Benevolent Insti- tution, India I. 158	Tea TalksII. 298	Theodor, F. EII. 177, 326
Tea Planting in Ceylon, Elliott	Tea: The Drink of Pleasure and	Theodor & Rawlins. II. 21, 106, 177
& Whitehead qI. 425, 534	Health, qI. 553; II. 495 "Tea, the Tie That Binds" ill. II. 492	Theol
Tea Planting in Ceylon, Owen. I. 199	"Tea-Time"	Thirty Committee. I. 189, 191;
Tea Planting Prospects in the	Tea Trading CoII. 98	II. 307
Southwestern Highlands of TanganyikaI, 460	"Tea waggons"I. 87	Thomas, Frank SII. 289
Teapots (see also Brewing Devices)	"Tea waggons"I. 87 Tea waterI. 51; 11. 406	Thomas M H I 185
-American ill	Tea-water numbsI. 50, 51	Thomas, Oliffe W. II. 256, 275 Thomas, Robert. II. 137, 138 Thomas, W. L. II. 164; III. 137, 138 Thomas & Co., J. II. 3; ill. 136, 137
—AluminumwareII. 439	Teaism	Thomas, RobertII. 137
—Ancient and modern illII. 447	Teamster's teaI. 504	Thomas, W. L1. 164; 11. 137, 138
-BritanniawareII. 439	Technologie du ThéI. 513	Thomas & Co., J. 11. 3; ut. 136, 137
—Cadogan coverless illII. 447	Tee	Thomas, Cumberlege & Moss. II. 191
"Ceylon"II. 441	Tes, Der	Thompson, ArthurII. 160 Thompson, HenryI. 479
-Chinese BoccarroII. 436;	Teelwaree Tea CoI. 162	Thompson, R. ScottI. 163
-Chinese pewter $ul.$ II. 398	Teetgen, AugustusII. 166	Thompson, WilliamI. 183
—ColonialII. 438; ill. 439	Teetgen & Co., LtdII. 166	Thompson, W. J
Conner II 430	Teh	Thompson & CoII. 251
—"Cosv" ill II 444 450	Teisseire, G. E	Thompson, W. J. & HI. 100,
-Early English II. 403; ill.	Teja 495	147, 169, 199; II. 160
474, 475, 476	Temperatures	Thomson, AlexanderII. 148,
-18th century European ill. II. 438	—Ceylon I. 422	192, 267
-ElectricII. 443	—China I. 299	Thomson, Alexander M. II. 252, 267 Thomson, Henry P II. 286, 292
-EnamelwareII. 439	—FormosaI. 330, 331 —JapanI. 311, 312	Thomson, R. T. q
-EnglishII. 409; ill. 442, 450	Java and SumatraI. 346-47	Thomson, Alston CoII. 192
——First II. 437 —European ill II. 450	-Russian TranscaucasiaI. 462	Thomson & Taylor Co
First in Furance II 427	Ten Brink C. H. J. II. 119	Thornton-Smith, WII. 158
-First in EuropeII. 437	Ten Brink, C. H. J II. 119 Ten Brink, S. F III. 119	Thuere, P. EII. 120
—GlassII. 439; ill. 444 —IhingII. 436; ill. 470	Ton Brink's Thechandel II 119	
	Ten Dillik a Theenander	Thuere's Theehandel, P. E II. 119
—Indian ill	Ten Rhyne, William	Thuere's Theehandel, P. EII. 119 Thwaites. George Henry Ken-
—Indian illII. 477 —Inset infusersII. 439; ill.	Ten Rhyne, WilliamI. 31 Tencha, or Hikicha, tI. 234,	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick
—Indian illII. 477 —Inset infusersII. 439; ill. 440, 450	Ten Rhyne, WilliamI. 31 Tencha, or Hikicha, tI. 234, 235, 261, 317, 318, 321, 324	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick
—Indian ill	Ten Rhyne, William	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick
- Indian ill	Ten Brink's Theehandel. II. 119 Ten Rhyne, William I. 31 Tencha, or Hikicha, t. I. 234. 235, 261, 317, 318, 321, 324 Tengbergen & Co., W II. 117 Tengelmann, Emil II. 238	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick
- Indian ill	Tenkalchi	Thuere's Theehandel, P. E II. 119
- Indian ill	Tennent, Sir James Emerson q.	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick. I. 177, 180 Tibetan brick tea. I. 177, 180 Tibetan tea service utensils II. Tiedeman, P II. 110 Tiedeman & van Kerchem
- Indian ill	Tennent, Sir James Emerson q. I. 173, 174	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick. I. 177, 180 Tibetan brick tea. I. 177, 180 Tibetan tea service utensils II. Tiedeman, P II. 110 Tiedeman & van Kerchem
- Indian ill	Tennent, Sir James Emerson q. I. 173, 174 Tennyson, Lord Alfred qII. 490 Tenyang t	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick. I. 177, 180 Tibetan brick tea. I. 177, 180 Tibetan tea service utensils II. Tiedeman, P II. 110 Tiedeman & van Kerchem
- Indian ill	Tennent, Sir James Emerson q. I. 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t. I. 258 Teo-a (Esperanto) I. 495	Thuere's Theehandel, P. E II. 119 Thwaites. George Henry Kendrick I. 177, 180 Tibetan brick tea I. 306 Tibetan tea service utensils ill. Tiedeman, P II. 110 Tiedeman & van Kerchem
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 439 - II. 439 - II. 441, 450 - Saltglaze earthenware. II. 439 - 'S. Y. P.'' II. ill. 310; 441, 450 - Tea ball ill. II. 441, 450 - Teaket ill. III. 400; ill. 437 - Tibet. II. 400; ill. 439 - Tibet. II. 400; ill. 439	Tennent, Sir James Emerson q. 1.173, 174	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick
Indian ill	Tennent, Sir James Emerson q. I. 173, 174	Thuere's Theehandel, P. E II. 119 Thwaites. George Henry Kendrick 177, 180 Tibetan brick tea
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 438 - London tea bob. II. 441, 450 - Saltglaze earthenware. II. 439 - "S. Y. P." II. ill. 310; 441, 450 - Tea ball ill. II. 441, 450 - Teaket ill. II. 400; ill. 437 - Tin. II. 439 - Wedgwood ill. II. 439 - Whistling. II. 442	Tennent, Sir James Emerson q. I. 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t I. 258 Teo a (Esperanto) I. 495 Tephrosia candida ill I. 354 Terai I. 383 Terai t. I. 226	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick 1. 177, 180 Tibetan brick tea 1. 306 Tibetan tea service utensils ill. Tiedeman, P
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 439; ill. 439 - London tea bob. II. 441, 450 - Saltglaze earthenware. II. 439 - S. Y. P.'' II. ill. 310; 441, 450 - Tea ball ill. II. 441, 450 - Teaket ill. III. 444, 450 - Tibet. III. 400; ill. 437 - Tin. III. 439 - Wedgwood ill. II. 450 - Whistling. III. 442 - Willow-pattern ill. II. 450	Tennent, Sir James Emerson q. 1.173, 174	Thuere's Theehandel, P. E 11 119 Thwaites, George Henry Kendrick
Indian ill	Tennent, Sir James Emerson q.	Thuere's Theehandel, P. E II. 119 Thwaites, George Henry Kendrick. I 177, 180 Tibetan brick tea. I 17, 180 Tibetan tea service utensils III. Tiedeman, P II. 110 Tiedeman & van Kerchem. I 128: II. 110, 117 Tienkai t I. 230, 231, 253 Tienkai Gunpowder. I. 230 Tiga Blata factory III. 1 365, 366 Tillage Formosa. I 333 — Japan I 315 — Java. I 349 Tillmanns, Carl Heinz. I 359, 487
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 438 - II. 438, 441, 450 - Saltglaze earthenware. II. 439 - "S. Y. P." II. ill. 310; 441, 450 - Tea ball ill. II. 441, 450 - Teaket ill. III. 400; ill. 437 - Tin. II. 439 - Wedgwood ill. II. 450 - Whistling. II. 450 - Whistling. II. 450 - Whistling. II. 450 - Tea. Producing Companies. II. 209 Tea. punches. II. 207 Tea. punches. II. 250	Tennent, Sir James Emerson q. 1.173, 174	Thuere's Theehandel, P. E 11 119
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 438 - II. 438, 441, 450 - Saltglaze earthenware. II. 439 - "S. Y. P." II. ill. 310; 441, 450 - Tea ball ill. II. 441, 450 - Teaket ill. III. 400; ill. 437 - Tin. II. 439 - Wedgwood ill. II. 450 - Whistling. II. 450 - Whistling. II. 450 - Whistling. II. 450 - Tea. Producing Companies. II. 209 Tea. punches. II. 207 Tea. punches. II. 250	Tennent, Sir James Emerson q. I. 173, 174	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick. I 177, 180 Tibetan brick tea. I 306 Tibetan tea service utensils II. 476 Tiedeman, P. II. 110 Tiedeman & van Kerchem. I 128; II. 110, 117 Tienkai t. I. 230, 231, 253 Tienkai Gunpowder. I 230 Tiga Blata factory III. I 365, 366 Tillage I 333 — Japan I 335 — Java. I 349 Tillmanns, Carl Heinz. I 359, 487 Times of Crylon, The. I 200 Tins (race in Siam). I 450
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 438 - London tea bob. II. 441, 450 - Saltglaze earthenware. II. 439 - "S. Y. P." II. ill. 310; 441, 450 - Tea ball ill. III. 441, 450 - Teaket ill. III. 444, 450 - Tibet. III. 400; ill. 437 - Tin. II. 439 - Whistling. II. 450 - Whistling. II. 450 - Whistling. II. 450 - Tea Purchaser's Guids q. II. 296 - Tea Purchaser's Guids q. II. 296 - Tea Quarterly, Colombo. I. 445;	Tennent, Sir James Emerson q. I. 173, 174	Thuere's Theehandel, P. E 11. 119
- Indian ill. 477 - Inset infusers. II. 439; ill. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 438 - I. 440, 450 - Japanese. II. 436; ill. 437, 471 - Porcelain. II. 441, 450 - Saltglaze earthenware. II. 439 - "S. Y. P." II. ill. 310; 441, 450 - Tea ball ill. II. 441, 450 - Tea ball ill. II. 441, 450 - Tibet. II. 400; ill. 437 - Tin. II. 439 - Wedgwood ill. II. 450 - Whistling. III. 450 - Whistling. III. 450 - Whistling. III. 450 - Whistling. III. 450 - Tea-Producing Companies. II. 209 - Tea punches. II. 209 - Tea Quarterly, Colombo. II. 445; - Tea Quarterly, Colombo. II. 455	Tennach 1 173 174	Thuere's Theehandel, P. E. II. 119 Thwaites, George Henry Kendrick
- Indian ill	Tennent, Sir James Emerson q. I. 173, 174	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick 1. 177, 180 Tibetan brick tea 1. 306 Tibetan tea service utensils ill. Tiedeman, P
- Indian ill	Tennent, Sir James Emerson q.	Thuere's Theehandel, P. E. II. 119 Thwaites. George Henry Kendrick. I. 177, 180 Tibetan brick tea. I. 306 Tibetan tea service utensils ill. Tiedeman, P. II. 110 Tiedeman & van Kerchem. II. 110 Tiedeman & van Kerchem. II. 230, 231, 253 Tienkai t. I. 28: II. 110, 117 Tienkai t. I. 230, 231, 253 Tienkai Gunpowder. I. 230 Tiga Blata factory ill. I. 365, 366 Tillage —Formosa. I. 333 —Japan I. 315 Java. I. 349 Tilmans, Carl Heinz. I. 359, 487 Times (London) q. I. 85, 93 Times of Ceylon, The. I. 200 Tins (race in Siam) I. 450 Tipping & Morris II. 159 Tito, Max. II. 285 Tito, Max. II. 285 Tijandericer t. I. 265
- Indian ill	Tennent, Sir James Emerson q. I 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t. I. 258 Teo-a (Esperanto) I. 495 Tephrosia candida ill. I. 354 Terai I. I. 283 Terai t. I. 226 —China I. 301 —Formosa ill. I. 348, 351 Terry, T. Philip. I. 338 Terwee's Theehandel. II. 119 Testing (see also Tasting) —Batavia ill. I. 17, 109	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick 1. 177, 180 Tibetan brick tea 1. 306 Tibetan brick tea
- Indian ill	Tennent, Sir James Emerson q. I. 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick 1. 177, 180 Tibetan brick tea 1. 306 Tibetan brick tea
- Indian ill	Tennent, Sir James Emerson q. I 173, 174 Tennyson, Lord Alfred q II. 490 Tenyang t. I. 258 Teo-a (Esperanto) I. 495 Tephrosia candida ill. I. 354 Terai I. I. 283 Terai t. I. 283 Terracing I. 271 — Ceylon I. 425 — China I. 301 — Formosa ill. I. 329 — Java I. 348, 351 Terry, T. Philip I. 338 Terwee's Theehandel II. 119 Testing (see also Tasting) — Batavia ill. II. 17, 109 — China I. 23 — Japan II. 28; ill. 29 — Japan II. 28; ill. 29 — Tetley, Joseph. II. 167, 174	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick 1. 177, 180 Tibetan brick tea 1. 306 Tibetan brick tea
- Indian ill	Tennent, Sir James Emerson q. I 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t. I. 258 Teo-a (Esperanto) I. 495 Tephrosia candida ill. I. 354 Terai I. 256 Terracing I. 271 — Ceylon I. 425 — China I. 329 — Java I. 348, 351 Terry, T. Philip I. 338 Terwee's Theehandel II. 119 Testing (see also Tasting) — Batavia ill. II. 17, 109 — China I. 23 — Japan II. 28; ill. 29 Tetley, Joseph III. 167, 174 Tetley & Company, Inc. Joseph	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick. I 177, 180 Tibetan brick tea. I 177, 180 Tibetan brick tea. I 177, 180 Tibetan tea service utensils III. Tiedeman, P. III. 110 Tiedeman & van Kerchem. II. 110 Tienkai t. I. 230, 231, 253 Tienkai Gunpowder. I. 230 Tiga Blata factory III. 1365, 366 Tillage I 365, 366 Tillage I 345 — Formosa. I 349 — Formosa. I 349 — Tillmanns, Carl Heinz. I. 359, 487 Times (London) q. I. 85, 93 Times (London) q. I. 85, 93 Times of Ceylon, The I. 200 Tins (race in Siam) I. 450 Tipping I 429 Tipping Morris II. 159 Tito, Max. II. 282 Tjiandericer t. I. 265 To Think of Tea. II. 498 Tockai Experimental Station I. 288, 295, 391, III.
- Indian ill	Tennent, Sir James Emerson q. I. 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t. I. 258 Teo-a (Esperanto) I. 495 Tephrosia candida ill. I. 354 Terai I. 236 Terai t. I. 226 Terracing I. 271 — Cevlon I. 425 — China I. 301 — Formosa ill. 301 — Formosa ill. 329 — Java. I. 348, 351 Terry, T. Philip. I. 338 Terwec's Thechandel. II. 119 Testing (see also Tasting) — Batavia ill. II. 17, 109 — China I. 23 — Japan II. 28; ill. 29 Tetley, Joseph II. 166, 275	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick. I 177, 180 Tibetan brick tea. I 177, 180 Tibetan brick tea. I 177, 180 Tibetan tea service utensils III. Tiedeman, P. III. 110 Tiedeman & van Kerchem. II. 110 Tienkai t. I. 230, 231, 253 Tienkai Gunpowder. I. 230 Tiga Blata factory III. 1365, 366 Tillage I 365, 366 Tillage I 345 — Formosa. I 349 — Formosa. I 349 — Tillmanns, Carl Heinz. I. 359, 487 Times (London) q. I. 85, 93 Times (London) q. I. 85, 93 Times of Ceylon, The I. 200 Tins (race in Siam) I. 450 Tipping I 429 Tipping Morris II. 159 Tito, Max. II. 282 Tjiandericer t. I. 265 To Think of Tea. II. 498 Tockai Experimental Station I. 288, 295, 391, III.
- Indian ill	Tennent, Sir James Emerson q. I 173, 174 Tennyson, Lord Alfred q. II. 490 Tenyang t. I. 258 Teo-a (Esperanto) I. 495 Tephrosia candida ill. I. 354 Terai I. 256 Terracing I. 271 — Ceylon I. 425 — China I. 329 — Java I. 348, 351 Terry, T. Philip I. 338 Terwee's Theehandel II. 119 Testing (see also Tasting) — Batavia ill. II. 17, 109 — China I. 23 — Japan II. 28; ill. 29 Tetley, Joseph III. 167, 174 Tetley & Company, Inc. Joseph	Thuere's Theehandel, P. E. 11. 119 Thwaites, George Henry Kendrick 1. 177, 180 Tibetan brick tea 1. 306 Tibetan brick tea

TokonomaII. 365, 368	Traitez Nouveaux et du curieux	Twankey t
Tokonoma II. 365, 368 Tollens, B. q I. 525 Tomlin, C. P II. 180	du Café, du Thé et du ChocolateI. ill. 34; II. 296	Twining, DanielII. 15
Tomlin, C. P	Chocolate I. ill. 34; 11. 296	Twining, George II. 15
Tomlinson, Capt	Tranquilizer, tea as aI. 553, 558	Twining, John
Tong, Awei	Transactions and Proceedings of	Twining. Mary
Tong, James YI. 106, 107	the Japan Society of Lon-	Twining, Richard I. 79; q. II.
Tong, SufkanI. 106, 107	don qII. 472	121, 15
Tongshan tI. 254	Transcaucasian teaI. 239	Twining, Samuel HarveyII. 15
Tonkin Black t	Transplanting L 425	Twining, ThomasI. 46;
Tonkin Cake t I. 237, 263	—Ceylon	II. 121, 156, 15
Tonkin Green t	India ill	Twining & Co., RI. 147; II. 156; ill. 157; 49
ToosheI. 153	—Elliott's transplanterI. 388 —Jeben's transplanterI. 388	11. 150; W. 157; 49
Top DressingI. 390	Transportation	Twining, Crosfield & Co., Ltd
Topography (Japan)I. 314 Topping	-Earliest Record of	Twitchell Chemplin Co. II. 196
—China	—CeylonI. ill. 442, 443; II. 11	Twitchell-Champlin CoII. 263
Torii, KII. 228	—China ill. I. 307; II. 19, 22,	Tycon tI. 232, 250 Tye, ErnestII. 199, 200
Toshiro (Shirozaemon)I. 9;	26, 96	Tyler, August C
II. 470, 471	-Field	Typhoid garm destroys the I 55'
Tottering Lilies of Daitotei, The	——CeylonI. 431, ill. 432	Typhoid germ, destroys theI. 55' Tytler, Dr. JohnI. 13'
I, 338	——India ill	Tytler, Robert BoydI. 181,
Tower Tea Co., LtdII. 181	- Java and SumatraI. 360	182, 180
Toxicity of Caffeine, The qI. 540	—Formosa illII. 33, 35, 232	100, 100
Toychong t	—India illI. 402, 403, 404,	Udapussellawa districtI. 419
Tractat van het Excellente Cruyt	407; II. 7	Veber die Beeinfluszung ein-
Thee	—Japan ill	facher psychischer Vor-
Trade (History)	—London ill	gänge durch einige Ar-
-Algeria	-Time to principal markets	zeneimittel a I. 54
—AlgeriaII. 241 —AmericaII. 247-293	II. 37, 38	zeneimittel qI. 54 Uganda tI. 239, 260
China clippersII. 255	Travancore t	Uitgaend Brievenboek of the
	Travancore tI. 227, 251 Travancore Combined Planters'	Oostindische Vereenigde
-Early voyagesII. 247	Association	Maatschappij
First tea ship	Travancore tea garden illI. 385	Uji t
	Travels into the East Indies q.	Ukers, William HII. 310
— — "Prime ministers"II. 253	I. 30, 134	Ukuwela Estates Co., LtdI. 193
— Furs and tea II. 248 — "Prime ministers" II. 253 — Public auctions II. 257	Travels in the Himalayan Prov-	Ultra violet rays on t I. 537
— Australia II. 243 — British Indies II. 135-153	inces of Hindostan, etc.	Unfermented t (see Green t)
-British IndiesII, 135-153	qII. 400	Union Pacific Tea CoII. 271
	Travels of the Ambassadors q. I. 31	Unit of saleII.
	Travers, Archibald	Unit of weight (Japan)II. 28
ChinaII. 95-107	Travers, BenjaminII. 155	United Company of Merchants
-British trade inI. 75-77	Travers, FrankII. 156	United Company of Merchants of England Trading to the East Indies
— Tea displaces silk	Travers, James LindsayII. 155	the East IndiesI. 74, 80
—EgyptII. 241	Travers, JohnII. 155	United Kingdom Tea Co., Ltd.
Formosa	Travers, John IngramII. 155	TT 185
—FranceII. 239	Travers, JosephII. 155	United Planters' Association of Southern India. I. 167, 170, 295, 411
-Germany	Travers, RoderickII. 155	Southern IndiaI. 167,
-Great Britain I. 121-134	Travers, Samuel SmithII. 155	170, 295, 411
—Germany II. 236-239 —Great Britain I. 121-134 — —Indias and Ceylons enter	Travers, Walter FrancisII. 156 Travers & Sons, Ltd., Joseph I. 147; II. 130, 155; ill. 156	-Scienting Department, . 1, 1/1/2
market	Travers & Sons, Ltd., Joseph	——BulletinI. 382 ——Exp. StationI. 412
Mineing Lane II 127	I. 147; II. 130, 155; W. 156	
— Private enterpriseII. 121	Treatise on Tea	United Planters' Co. of Ceylon,
	Treatise on Warm Beer I. 37	United Planters' Co. of Ceylon, Ltd
—Iran (Persia)II. 235 —JapanII. 211-229	Treaty of MunsterI. 68	United States Board of Tea Ap-
Japan11. 211.229	Treaty of NankingII. 100, 103	pealsII. 52, 53, 54
— KobeII. 214 — YokohamaII. 211-214	Tregilgas, Fred JII. 189 Treub, Melchior M. I. 122, 123, 124	United States Daily qI. 550
— Yokohama11. 211-214	Treub, Meichior M I. 122, 123, 124	United States Department of
Morocco	Trevelyan, Sir Chas. E I. 138	AgricultureI. 214, q.
—Natal	Trial of Sarah, The qI. 495 Trigault, Nicolas qI. 25; II. 398	225; 526, 540; q. 549
-Netherlands11. 108-120	Trigauit, Nicolas q 25, 11. 556	U. S. Geological Survey of water
-New ZealandII. 245	Trimble, Major Roswell D I. 214, 554	supplyI. 245
—PersiaII. 235	Trimen, Dr. HenryI. 174	United States Pharmacopoeia
—PolandII. 239	Triple Knife Nail Passing Gear	q. I. 539, 545
—RussiaII. 235	I, 480	University of MichiganI. 79
—Scandinavia	Tropical Agriculture qI. 533	University of RochesterI. 548
Thunia II 241	Tropical AgriculturistI. 179, 200	Unloading tea —Hankow ill
Union of S. AfricaII. 242	Trueman, T. LII. 140, 176	—London II
Other countriesII. 240	Tsa I. 495	-London u
Trade and Administration of	Tsia I. 30	Unno, KanetaroII. 228
China qII. 101	Tsiology: a discourse on teaII. 298	Uric acid I 521
Trade and Revenue ActI. 51, 78	Tsujimura, Michiyo $q,\ldots,1,547$	Uric acidI. 521 Urns and boilers
Trade values (see Complete Ref-	Tsungvang t	446.479
erence Table)	Tsungyang t	Urauhart H W I 202: II 148
Tradesmen's cards illII. 122,	21, 492, 493	Urquhart, H. WI. 202; II. 148 Usage du Café, du Thé, et du Chocolat, de l'II. 296
130, 162	Tubbs F. R	Chacalat de l'II. 296
	Tu Ch'a	Usu-cha II. 378
Early II. 129-130	Tuck, M. A	Usu-cha
-In producing countries II. 1.35	Tutans I. 380	
— — Ceylon II. 7:14	Tuke, MaryII. 158 Tuke, WilliamII. 158, 159	al. I. 16-18
	Tuke, William II. 158, 159	UvaI. 420
— Formosa	Tukvar Co., LtdI. 161 Tung Chun Lu qI. 21	Uwa-bayashi Sei-senII. 461
——IndiaII. 1.7	Tung Chun Lu q	
	Tung Ten t	Vacuum packed tea
— — Japan	Tung Ten tI. 258 Tunstall, A. CI. 167, 392; q. 530	Valentijn, FrancisI. 28, 109
— — Japan		van Amstel, E. PloosII. 110
— — Japan II. 26-32 — — Java II. 14-16 — — Sumatra II. 16-18	Tupnoime, Deeston	
— — Japan	Turnbull, George. I. 202, 203;	van Buren, S. J. W I. 128
Trading	Turnbull, George. I. 202, 203; II. 149	van Buren, S. J. W I. 128
— Japan	Turnbull, George. I. 202, 203; II. 149 Turner, A. W. L I. 193	van Buren, S. J. WI. 128 van de Bergh, De Erve JII. 120 van den Berg N. PI. 118. 128
II. 495	Turnor, Edgar 1. 189, 190, 202	van Buren, S. J. WI. 128 van de Bergh, De Erve JII. 120 van den Berg N. PI. 118. 128
Traill, George WilliamI. 139, 142	Turnbull, George. I. 202, 203; II. 149 Turner, A. W. L I. 193 Turner, Edgar I. 189, 190, 202 Turner, Frank II. 186	van Buren, S. J. W I. 128 van de Bergh, De Erve J II. 128 van den Berg, N. P I. 118, 128 van den Bergh, J. H I. 124
II. 495 Traill, George WilliamI. 139, 142 Traill, Gilbert FI. 197;	Turnonme, Beeston	van Buren, S. J. W I. 124 van de Bergh, De Erve J II. 126 van den Berg, N. P I. 118, 128 van den Bergh, J. H I. 124 Van den Bosch, Gen. J. Graaf
Traill, George William I. 139, 142 Traill, Gilbert F I. 197; II. 147, 188	Turnonme, Beeston	van Buren, S. J. W
Traill, George William I. 139, 142 Traill, Gilbert F I. 197; II. 147, 188 Traill, Thomas II. 138, 141	Turnoull, George. I. 202, 203; Turner, A. W. L. I. 193 Turner, Edgar I. 189, 190, 202 Turner, Frank II. 186 Turner, H. J. C. I. 164 Turner, Henry III. 298 Turner, & Co. I. 96, 105	van Buren, S. J. W
Traill, George William I. 139, 142 Traill, Gilbert F I. 197; II. 147, 188	Turnonme, Beeston	van Buren, S. J. W

van der Sluijs, D	Vitamins in tea	Warren, Dr. Joseph
van der ValkII. 118	—Vitamin-B	Warrington, WI. 170; II.
Van Dillen, L. R	—Vitamin-C	140, 318
van Dusseldorp & Co., J. M. W.	—Vitamin-E	Wash in Tea GardensI. 350
II. 117	Vogan & CoII. 98	Water boilersII. 445
Van Duverden	Vogan Tea Co. of Ceylon, Ltd.	Water and teaII. 451
Van Dyk Co., JamesII. 273	I. 203	Water Supply Paper 658 I. 245
van Eik, Josua	Volkmann, George FII. 272	Water vesselsII. 375; ill. 376
van Guelpen, AlexII. 238	Vollema, S. J	Waterman "Rully" I 92
van Heeckeren tot Walien, L. A.	Voluntary Foreign Market Fund	Watkins, Thomas
F. H. Baron. I. 120, 121, 128	II, 315	Watson, A. GI. 169; II. 139
van Heekeren, F. L. S. II. 114, 116	von GuerardI. 132	Watson, B. H 1. 482
van Heekeren, J. J II. 114, 116	von Lagerstrom, MagnusI. 205	Watson, C. II
van Heekeren & CoII. 116	von Liebig, Baron Justus q I. 552	Watson, E. A
van Helmont, Johannes Bap-	von Linne, Carl (see Linnaeus)	Watson, H. E
tiete I 32	von Mandelslo, Johann Albrecht	Watson, J. A
van Heurn, F. C	I. 30, 134	Watson, J. F. W
van Heusden, W. C	von Siebold, Philipp Franz	Watson, Sir Malcolmq. 1. 559 Watson, P. O
van Hooff, H. W. SI. 127, 129	I. 110, 113	Watson, P. O II. 186-7
van 't Hoogerhuys, W. H II. 119	Voute, Robert	Watson, Sir William George. II. 186-7
van Kerchem, C. F. W. Wiggers	Voute & Zonen, Jan Jacob. II. 117	Watt, Sir George. I. 147, 156,
II. 110	"Voyage" tea	168, 379, 498; q. 500-02 Waygood-Tupholme Grocers' Ma-
van Koetsveld, G. JI. 124 van Leeuwen, F. H. de Kock.	Voyage to Suratt	Waygood-Tupholme Grocers Ma-
Van Leeuwen, F. A. de Nock.	Voyages and Travels (see Navi- gatione et Viaggi)	Chinery Co
Van Leeuwen, F. W. A. de Kock	Voyages et Missions Apostoliques	Waygood-Tupholme Grocers Ma- chinery Co
II. 51, 113, 117	q. 1. 27, 33	Webb Man Many D II 981
van Lennep, J. H. Roeters. II. 118	q. 1. 21, 55	Webb Thomas I II 281
van Linschooten, Jan Hugo. I.	Waddington H I 143	Wabb William H I 90
27. 28	Waddington, II I. 143 Wade, Thomas K II. 286	Webb, William H
	Wadhams, William	Webber
van Loon, Hendrik qII. 497 van Maarseveen, P. FII. 118	Wadhams, WilliamII. 267 Wadhams & Co., IncII. 267	Weber, Dr 1. 32
van MotmanI. 118	Wages (coolies)	
van Musschenbroek, S. C., II, 116	—Ceylon I. 443	Webster, R. ValentineII. 152
van Musschenbroek, G. F. W. A.	—India I. 405	Webster Automatic Packeting
K	-Java and Sumatra. I. 360, 368-9	Factory, LtdII. 152
van Nelle, Erven de Wed. J	Wahgel, H. q	Weddle, Harold
II. 118	Waite, W. W	Weddle Tea Company11. 275
van Rees, Burksen & Bosman's	Waitrose, LtdII. 193	Wedeles, Isaac
Handelmaatschappij 11. 118	Wakefield, J. BII. 187	Wedemeyer q. 1. 541
van Rees, JanII. 114	Waldock, Frederick William. 11. 151	Wedgwood, Josiah l. 48; 11. 475
van Romburgh, PI. 123,	Waldock, H. MII. 151	Weed, J. SpencerII. 270
124, 511, 512; q. 521-23	Waldron, John qII. 493	Weeding, selective
van Slingelandt, J. BaronII. 110	Waldschmidt, Professor1. 32	Wehry, Albert
van Son, HI. 125, 129 van Son, J. CI. 129	Waley, Arthur q II. 484 Walford, Edward q I. 46	Weeding, selective
van Vloten, OI. 124, 125,	Walker I. 137	Wehry & Co., GeoI. 125; II.
130; 11, 110	Walker, G. Chapman II. 149	Woldoman J C II 252, 265
van Vollenhoven, Jacs II. 114, 118	Walker, Gerald T I. 486	Weideman Company, The11. 265
van Vollenhoven & Poortman	Walker, Gerald T	Weighing
II. 118	II. 145	-Amsterdam
van Warmelo, HI. 127 van Ysendyk, H. EII. 114, 119	Walker, H. C	—Japan ill
van Ysendyk, H. EII. 114, 119	Walker, H. C. I. 482 Walker, W. I. 164 Walker & Son, London I. 96	—LondonII. 39; ill. 40 —New YorkII. 51
Varieties I. 500 Vaughn, V. C. q. I. 556 Vaux, J. W. II. 53, 277, 280	Walker Sone & Co. Colombo I 479	New York
Vauy J W II 53 277 280	Walker Sons & Co., Colombo. I. 478 Wall, George. I. 180, 182, 185, 188	Weighing machinery.II. ill. 67, 69, 70; 71, ill. 72
Vegetable relish, tea used as.I. 208	Wall, James John II. 147	Weights, average
Vegetative Propagation of Tea	Wallace, C. W	-Calcutta
q. I. 352	Wallace, F	—LondonII. 40
Verband des Deutschen Tee-	Wallace, Frederick WmII. 497	Weinholt Bros I. 184
handels	Wallace, J. S. B	Weir & Co., Ross WII. 272
Vereeniging Thee Expert Bureau	Wallace-RossI. 212, 458	Wellensiek, S. J 124
I. 125	Waller, Edmundq. I. 44; II. 486	Wellington, Duke of 11. ul.
Vereeniging van Thee Importeurs	Waller, P. A	406; 500
II. 47, 48, 49, 113	Wallich, Dr. Nathaniel. I. 135,	Wells, Emma
Vereeniging voor de Thee Cul-	138-142, 145, 147, 177;	Welter, H. LI. 512, 528; q.
tuur.I. 122, 370; II. 51, 113, 326	Walliage A C	529, 530
Verner, W. HI. 160, 161	Walliser, A. CII. 222 Walpole, Sir Robert. I. 77; II. 124	Wenchow $tI.$ 230, 231, 252, 257 Wesley, Johnq. I. 47; II.
Vernon, DanielI. 49	Walsh, Joseph MII. 298	405, 494
Verslag 's Lands Plantentuin	Waltzing Matilda II. 420	Wesley's Tea potill. I. 48
q. I. 521, 522	Wanajasa (see Gardens, Exp.)	West Indian Produce Associa-
Vertue, George	Wang Piu q	tion, LtdII. 157
Vey, S. HamiltonII. 239	Wang Su	West Indian tea
Viceroy of Canton	Wapping Old Stairs, London	Western Wholesale Grocer Mills
Victoria and Albert Museum.	Wan of American Indianal III. 182	II. 283
I. 83; II. 437, 464 Victoria Commemoration Bldgs.	War of American Independence	Westervelt, Jacob A
il I 190	War of 1812 I. 78, 79	Westphal Sonn & Co., G. W. A. II. 237
Vie Prinée d'Autrefoie La a	War of 18121. 79, 87 Ward, Charles TII. 269	
Vie Privée d'Autrefois, La q. II. 495	Wardel q I. 543	Weymouth, BernardI. 98 Whampoa AnchorageI. 75, ill.
View of the Agricultural, Com-	Wardrop, Alexander. I. 180, 189, 191	76; II. 23, ill. 100
mercial, and Financial	Wardrop, J. G	Wharton
Interests of CeylonI. 174	Warehouses	Wheeler, H
Vigilance CommitteeI. 62, 63	—Amsterdam illII. 47	Whieldon, Thomas II. 475 Whipped Tea II. 397
Village teaI. 369	—Bremen ülII. 238	Whipped TeaII. 397
Villiers, E. C., I. 192, 193; II. 313	—Calcutta	White, Col I. 148 White, A. Melville I. 188, 189 White, Bertram Francis II. 188
Villiers, Sir Thomas LI. 202; II. 145	—LondonII. 38; ill. 39, 45 —New York	wnite, A. Melville 188, 189
Vinit, PierreII. 239	Warehousing, LondonII. 39, 40	
Viridis var	Warfield, Dr. CharlesI. 64	White, GeorgeII. 178
Visit to the Tea Districts of	Warfield, John DII. 267	White, Henry I. 62
China and IndiaI, 15	Waring, F. E	White, J. Berry. q. I. 141, 155,
Vitomin C in Green Tea qI. 548	Warm fermented t	161; II. 201
Vitamin Content of Green Tea	Warner, E. J	White & Co., GeorgeII. 178
	warrants" (Amsterdam)II. 47	"White" tea
Negligible q	Warren, James. I. 144; II. 142, 183	white wines of teas

Whitehead, F. Jq. 1. 425,	Windbreaks	Wright, J. GrahamII. 275, 277
433, 534 Whiteman & Co	—Ceylon I. 426 —India I. 389	Wright, T. Y
Whiting, Algernon OII. 203	—Java and SumatraI. 353, 354	104 - 11 146
Whiting, Algernon O	Wind Clock #1	Wright, Wm. J
Whitmarsh, Theodore WII. 269	Windjammers Give Way to	Wroth, Warwick q
Whitmee Engineering Co., Ltd.	Steamers	Wuchang t
1. 481	Wine jugsII. 436 Winkler Prins' Geillustreerde	Wuhus I. 231 Wu-I t I. 253, 257
Whitney, Joel C	Winkler Prins' Gedlustreerde	Wu-1 t 1. 253, 257
Whitney & Co., J. C., Japan II. 227, 260	Encyclopaedie qI. 111 WinnowingI. 400	Wu-Li-chien (see Gan Lu)
Whitney Co., J. C., Formosa. II. 234	-Machineill. I. 475	Wu Ti
Whittall, JamesII. 148, 203, 305	Winsland, F. E I. 485	Wutu
Whittall & CoI. 202, 484;	Winslow, Joshua	Wuyuan t
II. 148	Winstanley, HII. 106	Wychgel, D. RII. 114, 120
Whittingham & Co., W. B II. 298	Winterberry teaI. 504	Wychgel, G. U. U
Wholesale Tea Merchandising	Winton, A. L	Wychgel's Thechandel
11. 57-81	Wire-shoots	Wyld, Lt. Col. C. E II. 158
Wholesaler, theII. 57-58	—Ceylon I. 432	Wyman, Charles E II. 274, 280
Wholesalers, LtdII. 244 Wholesaling	—Java I. 360 Wirtz, John CII. 223, 256, 261	Wynaad t
-Great BritainII. 58	Wisner & CoII. 21, 106	Xanthin
—Great Britain II. 58 —United States II. 58 —Other countries II. 72	Wissotsky & CoII. 235	ZEMUNIA
-Other countriesII. 72	Withering	Yalysheff, BoornashI. 25; II. 95
Wickham, R	—Ceylon I. 432	Yamaguchi, TetsunosukeII.
Wickham letterI. 71, 72	—Chemical aspects ofI. 284	219 201
Widles Food Products Co 11 258	-Chemical changes duringI. 531	Yamashira Tea CoII. 217
Wiemann, George F	—ChungsI. 120; ill. 395	Yamashira Tea Co. II. 217 Yamashiro t. II. 234, 261, 311 Yang Ch'a. I. 260, 308 Yang Hsiung. I. 15, 20 Yang Kow t. I. 257 Yang Yamashira Yamashi
Wiemann Co., Geo. FII. 285	—Controlled I. 282	Yang Ch'a
Wight, WI. 167	—FormosaI. 334-5	Vang Vow 4 I 257
Wigner Honey Loftus I 71	—Ideal conditionsI. 284 —IndiaI. 395-7, 467, 476 —Java and SumatraI. 121, 361-3	
Wigner Money 1 71	-Java and Sumatra I. 121. 361-3	Yanglowtung f
Wild tea I. ill. xvi; 6, 138	-LoftsI. 282-3, 361; ill.	Yangtze-kiangII. 19, 20
Wiley, Dr. Harvey HII. 271	—LoftsI. 282-3, 361; ill. 396, 432	Yeasts
Wild teaI. ill. xvi; 6, 138 Wiley, Dr. Harvey HII. 271 Wilkie, Sir DanielII. 464, 465	—Nyasaland	reichu
Wilkins, William	-Soluble extractI. 284	Yeisai, Abbot I. 8, 9; II. 362,
Wilkinson, Robert I. 138	-TatsI. 282, 283; ill. 321,	363, 466, 484
Wilkinson's Tea and Coffee	396, 433, 434 T 282	Yeisai and the Kitcha Yojoki
Share ManualII. 209 Willard & Co., Edward AII. 265	Temperature I. 282 Withering machines. I. 283, 47.	Yellow teaI. 308
Willcox, S. TII. 207	306, 337, 363, 476	Yen Shih Kuq. I. 493
William Jackson TrustI. 158	-Blackman	Yan Tau Ch'un Ch'iu I. 2: a. 20
Williams C	—Blackman I. 397 —Bosscha I. 126, 283, 284	Yen Ying
Williams, Roy	—Jacobson	Yen Ying
Williams, S. Wells qII. 485	-Keith open-type wheel I. 397	502; 503
Williams & Son, JI. 94	—MarshallI. 476, ill. 477; 487	—PreparationII. 435
Williams & Co., R. C I 200	—Robinson I. 480 —Sirocco Cased I. 397	Yield (see Production) Yih, Le q
Williams & Co., R. C	-Sirocco wall	Yih, Z. L
11, 136, 172, 136	-Tampirs	Ying, Chiu
Williamson, G. C. qI. 43 Williamson, J. HI. 162; II.	Witkamp, James T II. 117	Yingchow t
Williamson, J. HI. 162; 11.	Witt, Geo. N	Yokohama teasII. 215
138, 172	Woburn Experimental Station.I. 168 Wolf, Johann ChristianI. 173	Yokoyama, MagoichiroII. 303 York, Duchess ofI. 46; II. 403
138, 172 Williamson, RobertII. 159 Williamson, R. LyellI. 169,	Wollenhaupt, GebrüderII. 237	Yoshikai, MasaoII. 303
170; II. 139	Wangenho t	Voshikawa Kakujiro II 218
Williamson, ThomasII. 167	Wonosobo t I. 264 Wood q. I. 540, 541	Yoshikawa, KakujiroII. 218 Yoshimasa, ex-ShogunII. 358, 365 Young, AndrewII. 147, 179
Williamson & Co., George I.	Wood Anthony a. I. 41	Young, AndrewII. 147, 179
151; II. 172	Wood, H. C	Young, Arthurq. 1. 47
Williamson, Cloudsley & Co.,	Wood, Worden 59	Young. Dr. Edward q
Ltd	Woodbury, W. HII. 259	403, 488
Williamson, Magor & Co1.	Woodworth, Alfred S II. 269	Young, Edward J I. 188, 200
151, 162, 165, 169, 170; II. 138	Woodworth, Herbert GII. 269, 280	Young Hyson $tI.$ 230, 232, 304, 307
Willis, Captain JohnI. 98, 108	"Woolen" teaI. 260, 304, 308	Young, James I. 164
Willow pattern, Story of the II. 476	Woolson, A. M II. 274, 276	Young, ThomasI. 58
—Tea house	Woolson Spice CompanyII. 274	Young, Mahood & CoII. 278 Ysendyk, H. E. vanII. 114, 119
Willson, Becklesq. I. 73, 85	Worke, Leslie I. 164; II. 141	Ysendyk, H. E. vanII. 114, 119
Wilmehneet Q A II 150	Working capacity, increases. I. 556-7	Yuanshan t
Wilshire, Jos. II. 267 Wilson, A. I. 164, 169 Wilson, A. R. II. 186, 193	World War effects	Yuchang t
Wilson, A I. 164, 169	—America	Yuille, Herbert BuchananII.
Wilson, A. R	—Ceylon II. 132	Valo Andrew II 120
Wilson, AlfredII. 172, 174	England	Vule Sir David II 139 173
Wilson, C. C	—JapanII. 220·1	Yule, Andrew II. 139 Yule, Sir David II. 139, 173 Yule, George II. 174
Wilson, CalebII. 161	—Russia	Yule & Co., Andrew II. 139 Yule, Catto & Co., Ltd II. 173 Yunshih t I. 255
Wilson, HenryI. 307	World's Teacup and World's	Yule, Catto & Co., LtdII. 173
Wilson, J. G. P	Largest Shipül. II. 341	Yunshih t
Wilson, W. K	Worms, BenedictI. 178	
Wilson, William Trafford II. 183	Worms, GabrielI. 177, 178	Zechnowitz, SamuelII. 281
Wilson & Bros., Ltd., Joshua	Worms, Maurice BI. 177, 178	Zedler's Lexicon q
II. 161	Worms, SolomonI. 178	Zeit. Pflanzenzucht qI. 519 ZenismII. 364
Wilson & Co., Ltd., RII. 245	Worry, the Disease of the Age	Zeper P
Wilson & Son, R II. 242	q. I. 555	Zeper, P
Wilson, Smithett & Co II. 172	Wrapping machine al. II. 71	110, 115
Wimmer I. 543	Wright, C. W. Ross	Zoological Gardens, LondonII.
Winch, W. R	Wright, George CII. 257	ill. 410; 415

338.14 434 t V.2 C.2

