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Report on the Production of Tea in India in the Calendar Year 1913

PART I.—REPORT

The Nineteenth Report on the Production of Tea in India deals with the production in the calendar year 1913 and also as regards trade figures with the fiscal year 1913-14.

The export of the tea crop, it may be noted, of one year continues well into the next succeeding year. Considerable alterations have this year been made in the form of the annual report. Part I gives the main features of the year, and Part II includes the statistical tables. A new table has been included showing the wages of tea labourers in Assam, and an index has been appended to facilitate reference. A chart has also been added to illustrate the growth of the production and exports, and the variations in prices, of tea during the last ten years.

The statistics of area are given in table No. 1 in Part II (pages 10 and 11). The area under tea in 1913 was 609,700 acres, which is nearly 3 per cent greater than in the preceding year. The figures are for the most part those reported by planters. In the case of those plantations for which figures are not so reported estimates have been prepared by local officers. In the year under review such estimates have been made in respect of 8 gardens out of a total of 285 gardens in Bengal, in respect of 17 gardens out of a total of 752 gardens in Assam, and in respect of 44 gardens out of a total of 259 gardens in Southern India. Including the estimated area, the total area under tea in 1913 was

	Area acres.	Increase (+) or decrease (—) per cent.
Assam	367,500	+1.6
Bengal	156,000	+3.7
Southern India	63,700	+8.8
Northern India	17,300	+1.1
Bihar and Orissa	2,200	-5.3
Burma	3,000	+75.0

divided between the different provinces as shown in margin. The percentage increase or decrease as compared with the preceding year is also stated. The cultivation of tea in India has been mainly concentrated in tracts where a heavy rainfall and a humid and equable climate permit of repeated flushes and pluckings of the leaf. Over 85

per cent of the total area under tea in India lies in Assam (the valleys of the Brahmaputra and the Surma) and the two contiguous districts (Darjeeling and Jalpaiguri) of Northern Bengal. The elevated region over the Malabar Coast in Southern India (including the Native State of Travancore and the Madras districts of Malabar, Nilgiris, and Coimbatore) contains 10 per cent of the total.

Out of the total area of 609,700 acres, for which either returns or complete estimates have been received, 556,100 acres were reported to have been plucked during the year as against 544,800 acres in the preceding year. On the remaining 53,600 acres, the plants were either too young to be plucked or were not plucked for other reasons. Details for each district are given in table No. 2 in Part II.

The total number of plantations was 4,386 in 1913. In Burma, where tea plants are grown scattered in the jungle, each village tract containing tea plants has been taken to represent one plantation. The plantations vary greatly in size in the different provinces. In Assam 752 plantations are reported to have a total area of 367,549 acres under tea in 1913, that is, an average of 489 acres per plantation. In Bengal 547 acres is the average of 285 plantations, and in Travancore 390 acres of 96 plantations. In Madras, the United Provinces, and Bihar and Orissa the average is much smaller, being about 161 acres, 129 acres, and 98 acres, respectively. In the Punjab, where tea cultivation is conducted on a small scale, the average area is only 3 acres. These figures, which refer to the year 1913, relate only to tea bearing areas and do not include the area in

Number and size of
plantations.

the occupation of planters but not under tea cultivation. [For details for districts, see table No. 3 in Part II.]

Production of tea
(both black and
green).

The statistics of production are given in table No. 2 in Part II. The total production in 1913 is reported to have been 307,097,000 lbs, divided between the different parts of India as shown in the margin. The net increase over the preceding year amounts to over 9 million pounds or 3.1 per cent. It should, however, be borne in mind that these figures cannot be taken as entirely accurate, for, as already stated above under "Area" (page 1), estimates had to be made for as many as 69 gardens for which returns were not furnished by the planters.

	lbs
Assam	199,722,000
Bengal	80,109,000
Southern India	22,245,000
Northern India	4,709,000
Bihar and Orissa	312,000

The marginal table shows the variations in the area and production of tea in each of the last ten years, the average of the ten years 1901 to 1910 being taken as 100 in each case. It is noticeable that, while the area under cultivation has increased by 15 per cent in the decade, the increase in production has been one of 37 per cent.

	Variations in	
	Area	Production.
1904	98	97
1905	98	97
1906	99	105
1907	100	107
1908	102	108
1909	103	113
1910	105	115
1911	107	118
1912	110	130
1913	113	134

Burma is excluded from these calculations for the reason that the produce of the Burma tea gardens is almost wholly converted into *letpet* (wet pickled tea), which is eaten as a condiment. In 1913, 601,600 lbs of *letpet* were manufactured as against only 3,400 lbs of leaf tea (black). In tables Nos. 2 and 3 in Part II, however, the reported figures of *letpet* have been converted into black tea equivalents, four pounds of *letpet* being taken to represent a pound of black tea.

Production in
Burma.

The average production of tea per acre varies very greatly in the different districts. The marginal table shows the average production of manufactured tea (black and green) per acre plucked in each district in 1913. The highest production in the year was in Jalpaiguri (Bengal), namely, 691 lbs per acre, and the lowest in Hazaribagh (Bihar and Orissa), namely, 43 lbs. As a rule, the important tea-growing districts of Assam, Bengal, and Southern India show the highest production per acre. The average production in the whole of India (excluding Burma) was 554 lbs per acre in 1913 as compared with 548 lbs in 1912. Excessive rain and floods in Cachar and Lakhimpur and in parts of Sylhet in the early parts of the season caused considerable damage to the bushes and a consequent loss of outturn. The cold weather set in rather suddenly in all districts. Otherwise climatic conditions were fairly favourable in Assam and Bengal. In parts of Southern India the crop was affected by drought.

Average production
per acre.

	lbs per acre.
Jalpaiguri	691
Darrang	631
Lakhimpur	594
Sylhet	570
Nowgong	552
Sibsagar	564
Cachar	561
Travancore	514
Malabar	483
Dehra Dun	452
Coimbatore	452
Goalpara	402
Nilgiris	393
Chittagong	373
Kamrup	364
Darjeeling	344
Kangra	229
Chittagong Hill Tracts	215
Ranchi	154
Almora	123
Garhwal	59
Hazaribagh	43
Average	554

The figures of production given above include both black and green teas. The difference between the two kinds of tea arises from the different methods of preparation. Briefly the distinction is that the process of fermentation, which gives to black tea its colour, is avoided or arrested in the case of green tea. The total quantity of green tea reported to have been manufactured in the year under review is 3,272,000 lbs, as compared with 4,825,000 lbs in 1912 and 5,210,000 lbs in 1911. The quantity manufactured in each tract in the last two years is stated in the marginal table. Nearly two-thirds of the total quantity was manufactured in the Kangra Valley (Punjab) in the year under review.

Green tea.

The figures of production given above include both black and green teas. The difference between the two kinds of tea arises from the different methods of preparation. Briefly the distinction is that the process of fermentation, which gives to black tea its colour, is avoided or arrested in the case of green tea. The total quantity of green tea reported to have been manufactured in the year under review is 3,272,000 lbs, as compared with 4,825,000 lbs in 1912 and 5,210,000 lbs in 1911. The quantity manufactured in each tract in the last two years is stated in the marginal table. Nearly two-thirds of the total quantity was manufactured in the Kangra Valley (Punjab) in the year under review.

	1912 lbs	1913 lbs
Northern India	1,796,677	2,007,696
Southern India	1,822,743	521,399
Sirma Valley	977,528	468,858
Bengal and Bihar and Orissa	227,772	273,663

Bounties were paid on green tea from the Tea Cess Fund up to March 1909, but since that date no bounties have been paid; and with the present high prices for black tea the inducement to manufacture green tea appears to be getting weak.

Table No. 4 in Part II shows the quantity (in lbs) of Indian tea exported to each country during the last five years. The figures include the exports from the State of Travancore. The destinations given are the final destinations either declared on export, or, in the case of shipments under optional bills of lading, reported subsequently to the Custom houses. It has been found by experience that the declared destinations are not in all cases the final destinations; the result is that the figures of exports from India do not in every case agree with the figures of imports into various countries, *e.g.*, the United Kingdom. Even when the final destinations are given, the figures do not as a rule agree, owing partly to the quantity on board the ships in transit at the end of the year and partly to the different periods for actual shipments and their arrivals. But the discrepancies tend to balance one another in a series of years.

	Thousand pounds.		given in the margin in thousands of pounds. Detailed figures of export to each country are given in table No. 4 in Part II. The most striking features of the trade of 1913-14 are as follows. The total exports by sea improved by 11 million lbs or 4 per cent, as compared with 1912-13. Shipments to the United Kingdom, to which 72 per cent of the exports of Indian tea is directed, increased by 10,642,000 lbs or 5.4 per cent. Of the other countries in Europe, Russia took 272,000 lbs more than in 1912-13; and the exports to Germany, Austria-Hungary, Turkey (European), and Denmark showed an increase of 55,000 lbs, 34,000 lbs, 21,000 lbs, and 10,000 lbs, respectively. On the other hand, Holland and France showed a decrease of 61,000 lbs and 18,000 lbs, respectively. Exports to the remaining countries in Europe are not of any importance. Of the African countries, shipments to all, with the exception of East Africa, declined. Egypt, to which nearly two-thirds of the total exports of Indian tea to Africa is ordinarily directed, took some 50,000 lbs less than in 1912-13. The total exports to Africa showed a net decrease of 92,000 lbs or 3.6 per cent. In America the largest quantity of Indian tea goes to Canada. It took 117,000 lbs more than in 1912-13; but the United States, which is the second American customer of Indian tea, showed a decrease of 365,000 lbs. Chile took 25,000 lbs more than in 1912-13. The net decline in the shipments to America was thus about 221,000 lbs or 1.6 per cent. In Asia, China takes over half of the total exports of Indian tea to all the Asiatic countries (excluding India), and it increased its demand by 1,836,000 lbs; but Ceylon, which is the second Asiatic customer of Indian tea, took 315,000 lbs less, and Turkey, the third customer, 1,569,000 lbs less, than in 1912-13. Shipments to Aden, Persia, and the Straits Settlements also declined to a certain extent. The total exports to Asiatic countries were thus practically the same as in 1912-13, namely, 20 million lbs. Australia, New Zealand, and the Fiji Islands took between them some 308,000 lbs more than in 1912-13. Exports by land declined by 1,018,000 lbs or 32 per cent. The bulk of the exports by land goes to Afghanistan and other countries beyond the north-western frontier. It is stated in the Report on the External Land Trade of the Punjab for 1913-14 that efforts to develop the tea trade between Kangra and Tibet are reported so far to have failed, owing mainly to the tea being not prepared to suit the Tibetan taste, and that the preparation of suitable brick tea is still under investigation by the provincial agricultural chemist. Taking the exports both by sea and by land together, the net increase in 1913-14 was nearly 10 million lbs or 3.5 per cent.
	By sea.	By land.	
1909-10	249,413	1,108	
1910-11	254,392	2,046	
1911-12	260,862	2,653	
1912-13	278,601	3,214	
1913-14	289,519	2,196	

The total quantity of Indian tea imported into the United Kingdom is not consumed there. A considerable portion is re-exported from there to other foreign countries. The re-exports of Indian tea from the United Kingdom to each foreign country in each of the last five calendar years are given in table

No. 5 in Part II. The total figures for the five years are stated in the margin. The total re-exports in 1913 advanced by 2,461,000 lbs or 13 per cent, as compared with the preceding year. The largest quantity went, as usual, to Russia, namely, 6,980,000 lbs as against 5,332,000

lbs in 1912. Canada and the United States took 2,262,000 lbs and 2,176,000 lbs, respectively, through the United Kingdom, as against 2,129,000 lbs and 1,901,000 lbs, respectively, in the preceding year.

Table No. 6 in Part II shows the total of (a) Indian, and (b) Ceylon, tea exported direct by sea and re-exported from the United Kingdom to each principal foreign country in each of the last four calendar years. The figures

	THOUSAND POUNDS.	
	Indian tea.	Ceylon tea.
Russia	41,464	22,771
Other European Countries	6,075	5,810
United States	4,056	14,450
Canada	13,612	11,900
Australia	9,433	21,062
Other Countries	28,700	25,795

for 1913 are stated in the margin (in thousands of pounds). Russia seems to prefer Indian to Ceylon tea. In 1913 it increased its demands for both these kinds. The United States of America, however, seems to prefer Ceylon tea. In 1913 it took less of both kinds than in 1912. Canada, which usually takes Indian and Ceylon teas in about equal quantities, took

more of Indian tea and less of Ceylon tea than in 1912. Australia's demand appears to be for Ceylon tea, and it took, in preference to Indian tea, the Ceylon leaf in still larger quantities in 1913 than before.

The proportion per cent, to total exports from India by sea and by land, of exports consigned to the different parts of the world in the last two years is

	1912-13 per cent	1913-14 per cent
By Sea—		
To United Kingdom	70.4	71.7
„ rest of Europe	12.2	11.9
„ Asia	7.1	6.9
„ America	4.9	4.7
„ Australia	3.3	3.3
„ Africa	0.9	0.8
By land	1.2	0.7
	100	100

shown in the margin. The percentage of the Indian tea crop sent to the United Kingdom diminished steadily during the five years 1903-04 to 1907-08. The two succeeding years showed some improvement, but there was a marked decline in 1910-11, and although this was made good to a certain extent in 1911-12, the percentage fell still lower in 1912-13. A slight improvement, however, took place in 1913-14.

As regards exports to other countries in Europe the set-back experienced in 1911-12 was made good in 1912-13, but there was a slight decline in 1913-14. The shares of other continents remained practically the same as in the preceding year.

Table No. 7 in Part II shows the quantity of Indian tea shipped from Calcutta, Chittagong, Bombay and Karachi, South Indian ports, and Burma, in each of the last five years. The figures for 1913-14 are stated in the margin

	Thousand pounds.
From Calcutta	209,162
„ Chittagong	56,247
„ South Indian ports	21,474
„ Bombay and Karachi	2,625
„ Burma ports	9

Bombay and Karachi and South Indian ports continued to increase.

It is interesting to compare the exports of tea from India, Ceylon, and China, the three rival tea-supplying countries in the world's market. Table No. 8 in Part II shows the total reported exports by sea and land from each of these countries in each of the last eighteen years, with the ratio of increase or decrease in each year as compared with 1896-97, the figures for that year being

	Thousand pounds.	
	1912-13	1913-14
India	281,815	291,715
Ceylon	186,632	197,419
China—		
Black and green	127,827	1 03,058
Brick, tablet, and dust	69,733	70,062

taken as 100 in each case. The actual figures for the last two years are shown in the margin (in thousands of pounds). The exports from India and Ceylon have increased almost steadily in the eighteen years—those from India by 94 per cent and those from Ceylon by 79 per cent; but the exports from China have declined by 28 per cent.

Share of Indian ports in the tea trade.

Exports of tea from India, compared with those from Ceylon and China.

The total quantity of green tea exported to foreign countries, both by sea and by land, in 1913-14 amounted to 2,481,000 lbs, as compared with 4,607,000 lbs in 1912-13 and 4,579,000 lbs in 1911-12. Details for the last two years are given in the margin. The bulk of the exports was by land, and was directed to countries beyond the north-west frontier. The exports of green tea are declining as a result of restricted manufacture.

	1912-13	1913-14
	lbs	lbs
From Calcutta and Chittagong	725,275	35,899
„ South Indian ports	768,795	511,066
„ Burma	970	1,028
By land	3,112,144	1,932,560

	1911	1912	1913
Total quantity entered (thousand pounds)—			
Indian tea	168,745	165,298	172,844
Ceylon tea	89,120	93,529	91,518
China tea	14,495	10,576	9,683
Tea of other countries	21,143	26,006	31,646
TOTAL	293,503	295,409	305,691

	1911	1912	1913
Consumption per head (in pounds)—			
All tea	6.48	6.47	6.64
Indian tea	3.72	3.62	3.75

	1911	1912	1913
Quantity in bonded warehouses (thousand pounds)—			
Indian tea	87,090	93,648	101,410
Ceylon tea	19,388	17,476	15,011
China tea	16,752	17,529	13,510
Tea of other countries	4,999	9,839	8,477
TOTAL	128,229	138,492	138,408

warehoused in the United Kingdom on 31st December in each of the last three years, is also stated in the margin (in thousands of pounds).

The other tea supplying countries of any importance are Java, Japan, and Formosa. The official figures for the last three years of exports from these countries are stated (in thousands of pounds) in the marginal table.

	Thousand pounds.		
	1911-12	1912-13	1913-14
Java	55,499	63,834 (a)	61,939
Japan	42,919	39,548	33,925
Formosa(a)	26,572	24,153	23,931

Table No. 9 in Part II shows the imports into, and re-exports from, India of foreign tea by sea and land, and the balance left in the country for consumption, in the last five years. The figures for 1913-14 are stated in the margin (in thousands of pounds). The total imports in 1913-14 were 8,539,000 lbs, or 400,000 pounds less than in 1911-12. About a seventh of this quantity was re-exported as foreign tea, chiefly from Bombay to Persia, Turkey in Asia, Maskat, and the Bahrein Island by sea, and by land to Afghanistan, leaving some 7,262,000 lbs for consumption in India. Part of this remainder no doubt was used for blending with Indian teas, and the blend, when exported, would doubtless be treated as Indian produce in the customs declarations.

	Thousand pounds.
Imported from	
Ceylon	1,517
China	2,598
Elsewhere	4,424
Total	8,539
Re-exported	1,277
Balance left	7,262

As already explained, the reported figures of production are not accurate, and consequently any estimate of the consumption *per capita* in India as a whole is vitiated at the outset. In table No. 10 in Part II, however, is shown the balance of leaf tea, green and black, left in the country after deducting net exports (*i.e.*, exports *minus* imports) from production in each of the last five years. The figures for 1913-14 are stated in the margin (in thousands of pounds).

	Thousand pounds.
Production	307,250
Net exports	284,453
Balance	22,797

(a) For calendar year.

The balance left in 1913-14 amounted to about 27 million pounds as against 22 million pounds in 1912-13. The average for the last five years is 17 million pounds. In Burma, in addition to leaf tea, about 15 million lbs of pickled tea (*letpet*), mostly imported from the North Shan States, are consumed annually. The consumption of pickled tea in Burma is estimated to be about 1.4 lbs per head of population.

sales and prices.

	Number of chests sold.	
	1912-13	1913-14
Assam Valley	230,292	210,278
Cachar	151,060	133,697
Sylhet	122,966	115,157
Jalpaiguri	231,053	240,939
Darjeeling	116,614	124,728
Other places	12,247	25,378
Total	864,232	850,177

Table No. 11 in Part II shows the number of chests of tea of the different producing districts sold at the auction sales in Calcutta in each of the last ten years. The figures for the principal districts for the last two years are stated in the margin. The total number of chests sold in 1913-14 amounted to 850,000, as compared with 864,000 in 1912-13 and 772,000 in 1911-12.

Tables Nos. 12 and 13 show the number of chests of each grade of tea sold and the prices realised at the auction sales in Calcutta in 1912 and 1913; while

	1912		1913	
	Price	Index	Price	Index
	a. p.	number	a. p.	number
Broken Pekoe	7 5	112	8 1	122
Pekoe	6 11	117	7 5	126
Pekoe souchong	5 9	113	6 10	135
Declared value	7 8	110	8 4	118

table No. 14 illustrates the variations (expressed in index numbers) in the average prices of the three principal grades of tea, namely, Broken Pekoe, Pekoe, and Pekoe souchong, sold at the auction sales since 1888, the average of the ten years, 1901 to 1910, being taken as 100 in each case; the average declared values of exports of all descriptions of tea are also given with variations in index numbers. The figures for 1912 and 1913 are stated in the margin. The prices in 1913 show a general increase as against the preceding year.

Messrs. Gow, Wilson, and Stanton report that the sales of Indian tea in London on garden account from 1st July 1913 to 26th June 1914, amounted to 1,791,451 packages, as compared with 1,754,148 packages sold during the same period in the preceding year. The average price realised in 1913-14 was 9.25d. per lb as compared with 8.65d. per lb in 1912-13. Details for each district are given in table No. 15 in Part II.

rights.

Table No. 16 in Part II shows the course of freight charges on tea from Calcutta to London during the last twenty years. The rates are the minimum rates per ton (50 cub. ft.) that obtained in August, the month in which the largest quantity of tea is known to be ordinarily shipped. Up to 1907 the rates fluctuated considerably from year to year, the highest being £2 1s. 3d. in 1899 and the lowest £1 3s. 9d. in 1896. From 1908 to 1911 the rate remained stationary at £1 12s. 6d. In 1912 it rose to £1 15s. and remained unaltered in 1913.

bour.

The number of persons employed in the tea industry in each district in the year under review is given in table No. 3 in Part II. Total figures for the

	Permanent. Temporary.	
	Permanent.	Temporary.
Assam	413,897	43,130
Bengal	102,902	30,829
Bihar and Orissa	351	1,071
United Provinces	2,649	2,598
Punjab	4,614	6,472
Madras	15,995	3,988
Travancore	23,565	6,175
Burma	3,560	116
TOTAL	572,533	94,379

provinces for 1913 are stated in the margin. The total number of persons employed in the industry in 1913 is returned at 666,912, namely, 572,533 being permanently employed and 94,379 temporarily employed. Compared with the return of the previous year, there is an increase of 24,988 permanent employes and a decrease of 1,211 in the number of temporary hands. In Southern India, the work is sometimes done by contract, and in this case no record of the labour employed is available, and the figures are therefore not complete.

ages.

The average monthly wages of labourers (Act and Non-Act) employed in the tea gardens in Assam in the four years 1910-11 to 1913-14 are given in

table No. 17 in Part II. The figures for 1913-14 are stated in the margin.

Act labourers	{	Men	₹	a.	p.	The averages are calculated on the figures for September and March of monthly cash wages (including <i>ticca</i> , diet, rations, subsistence allowance, and bonus) per head of the total number on the books. It is stated in the Resolution of the local Administration on Immigrant Labour in Assam for 1912-13 that cash earnings are only one item in a labourer's well being,
		Women	5	11	5	
Non-Act. labourers	{	Men	5	5	9	and as leave is freely granted in most districts to labourers for cultivation on their own account, conclusions about the standard of comfort of the labour force cannot safely be drawn from the average rate of wages alone.
		Women	6	1	3	
		Children	4	11	5	
		Average	2	13	7	
			4	15	1	

In 1903 an Act, known as the Indian Tea Cess Act (IX of 1903), was passed at the request of the tea trade for promoting its sale and manufacture. Under this Act a duty of $\frac{1}{4}$ pie per lb is levied on all Indian tea exported. The whole of the amount collected is made over to a fund, known as the Tea Cess Fund, which is placed in the hands of a Committee appointed for the purpose, and Government merely acts as a revenue collecting agency. The total amount collected in 1913-14 was ₹3,79,000, which has been allotted to the United States (₹1,50,000), the United Kingdom (₹90,000), and the continent of Europe (₹1,12,500). No allotment has so far been made to the Indian market. Up to March 1909 a portion of the collection was paid to the planters in India as bounty on the manufacture of green tea, but, as already stated above, no such bounty has been paid since that date.

Table No. 18 in Part II shows the rates of customs duties levied on tea in the different countries of the world as they stood on the 1st April 1914. It will be seen that in Russia, which consumes the largest quantity of Indian tea next to the United Kingdom (*vide* tables Nos. 4 and 5 in Part II), the existing rates of duty are high as compared with those in other countries consuming Indian tea to any considerable extent. A reduction in the rates should be beneficial to the Indian tea industry. "Anglo-Russian" in the *Statist* of 7th March, 1914, wrote with reference to the Czar's Rescript concerning the liquor monopoly:—"It may be useful to bear in mind that next to *vodka*, the most popular beverage in Russia, is tea. If, therefore, it be the Russian Government's desire to restrict consumption of the former, its simplest plan would be to encourage that of the latter. In other words, it should reduce the heavy import duty on tea, and thereby increase consumption of that article to an extent such as would doubtless obviate any loss of revenue therefrom."

According to the returns of the Registrars of Indian Joint Stock Companies and the accounts of the companies registered in the United Kingdom as reported by the Indian Tea Association, the capital of Joint Stock Companies engaged in the production of tea during 1913 amounted to about ₹26·9 crores or over £17·9 millions, *viz.*:—

Companies registered in India	₹	4,07,73,708
„ „ „ the United Kingdom	£15,187,963 =	22,78,19,445
		<hr/>
		26,85,93,153

Particulars are available concerning the present position of 98 companies registered in India, which have an aggregate paid-up capital of ₹301 lakhs. Of these companies, 85 companies declared dividends for 1912, amounting to 14·7 per cent on the aggregate capital of ₹265 lakhs. 88 companies have up to now declared dividends for 1913, amounting to 17·4 per cent on their aggregate capital of ₹274 lakhs. The value per ₹100 of joint stock capital as calculated on the prices of the shares of 87 companies quoted in the Calcutta share market was ₹144 in March, 1913, and of 92 companies was ₹166 in March, 1914.

Similar details are available regarding 68 companies registered in the United Kingdom with sterling capital of £9·3 millions (₹1,394 lakhs). The total dividends declared in 1912 by 67 companies out of them with an aggregate capital of £9·2 millions (about ₹1,394 lakhs) amounted to 10·4 per cent. In 1913

the dividends so far declared by 58 companies come to 11·4 per cent on their aggregate capital of about £8·8 millions (₹1,323 lakhs).

In their tea market report for June 1914, Messrs J. B. Barry and Sons of London have given a resumé of the audited accounts for the past year of 101 joint stock tea companies incorporated in Calcutta, representing a total paid-up capital of ₹3,02,30,000. It shows a surplus on the year's working, exclusive of commission on profits and debenture interest, of ₹66,61,000, the average profit being 22 per cent on the capital involved. Out of the above sum dividends have been paid to the extent of ₹42,50,000, representing an average return to shareholders of 16·6 per cent. Classified according to districts, the results are shown below :—

DISTRICTS	Number of companies	Approximate area		Actual crops	Approximate yield per acre	Paid-up Capital	Realised gross average per lb	Cost per lb. including sale charges	Profits earned on capital			Dividends paid		
		Acres.	lbs.						lbs.	Rs.	As. P.	As. P.	%	%
Assam Valley . . .	25	22,543	10,992,239	488	82,17,210	8 2·83	6 1·45	17·68	14·24	15·73	13·38	9·40	9·20	
Cachar and Sylhet . . .	26	24,305	10,821,303	445	84,66,300	7 2·43	5 3·58	15·21	13·04	13·73	11·90	10·02	13·14	
Darjeeling	29	17,995	6,529,870	363	68,55,800	9 4·31	8 3·64	18·19	13·99	12·77	14·17	10·78	9·21	
Duars	21	25,069	15,409,397	614	66,90,800	7 8·91	4 11·61	39·95	30·49	29·40	29·58	26·21	20·97	
Total	101	89,912	43,752,809	487	3,02,30,110	7 11·69	5 6·46	22·03	17·39	18·97	16·83	13·17	12·97	

G. FINDLAY SHIRRAS,
Director of Statistics.

DEPARTMENT OF STATISTICS, INDIA,
CALCUTTA,
The 21st September, 1914.

PART II—TABLES.

No. 1—ABSTRACT STATEMENT OF AREA (IN ACRES) U

PROVINCES	Average 1885-1889	Average 1890-1894	Average 1895-1899	1899	1900	1901	1902	1903
Burma	76	720	1,233	1,340	1,479	1,502	1,521	1,520
Assam	115,890	141,458	177,880	197,815	204,985	205,352	207,358	204,702
{ Brahmaputra Valley								
{ Cachar and Sylhet	95,411	107,637	129,097	132,923	132,342	132,834	132,232	133,570
<i>Total Assam</i>	211,301	249,095	306,977	330,038	337,327	338,186	339,640	338,271
Bengal	73,169	95,625	118,452	132,923	134,572	135,129	135,158	135,950
Bihar and Orissa (a)	—	—	—	—	—	—	—	—
United Provinces	8,345	8,621	8,036	7,858	8,055	8,252	8,121	8,030
Punjab	8,794	9,068	9,895	10,170	9,745	10,235	9,324	9,39
Madras	5,558	5,385	7,016	10,164	6,107	6,184	6,013	6,54
Travancore and Cochin	3,352	7,186	15,682	23,115	25,202	25,279	24,880	24,58
TOTAL INDIA	310,895	375,700	467,291	515,658	522,467	524,767	525,257	520,61

No. 2—ABSTRACT STATEMENT OF THE PRODUCTION (IN POUNDS)

Burma	1,884	25,584	67,661	67,090	67,752	65,217	45,360	69,17
Assam	39,686,486	51,839,546	61,565,799	66,862,594	75,287,500	72,530,943	73,862,668	73,649,00
{ Brahmaputra Valley								
{ Cachar and Sylhet	26,990,887	37,318,196	49,287,320	61,509,263	65,831,144	62,365,374	58,254,610	66,550,00
<i>Total Assam</i>	66,677,373	89,157,742	110,853,119	128,371,857	141,118,644	134,896,317	132,117,278	145,199,00
Bengal	19,376,597	29,186,317	39,213,983	44,910,432	46,533,255	46,203,980	46,027,823	50,888,00
Bihar and Orissa (a)	—	—	—	—	—	—	—	—
United Provinces	1,634,190	1,894,513	2,040,658	2,196,512	2,297,429	2,420,337	2,139,305	2,007,2
Punjab	1,634,074	1,799,603	2,154,685	2,151,550	2,135,130	2,086,522	1,616,445	1,800,00
Madras	935,369	1,095,590	538,762	640,110	832,032	826,595	1,066,662	1,000,00
Travancore and Cochin	342,718	1,735,803	3,505,936	3,252,685	4,253,164	4,603,154	5,390,000	7,100,00
TOTAL INDIA	90,602,275	134,896,132	178,074,506	181,506,186	187,237,496	181,107,122	155,070,182	203,541,00

IN EACH PROVINCE IN INDIA FROM 1885 TO 1913.

1905	1906	1907	1908	1909	1910	1911	1912	1913	PROVINCES
1,502	1,498	1,669	1,724	1,693	1,695	1,700	1,715	3,000	Burma
207,276	206,698	208,575	210,704	212,457	214,543	218,178	222,428	225,877	Brahmaputra Valley
131,930	132,530	133,757	134,938	135,562	135,701	136,093	139,243	141,672	Cachar and Sylhet
339,206	339,228	342,332	345,642	348,019	350,244	354,276	361,671	367,549	Total Assam
136,153	136,484	139,516	141,553	143,254	145,868	146,756	150,497	156,002	Bengal
...	...	...	...	...	...	2,249	2,282	2,160	Bihar and Orissa (a)
7,934	7,949	7,961	8,066	8,066	7,864	7,612	7,797	7,978	United Provinces
9,412	9,425	9,411	9,393	9,376	9,397	9,381	9,315	9,322	Punjab
8,552	10,144	10,974	14,626	15,723	18,099	20,598	24,396	26,278	Madras
25,245	27,480	25,986	27,103	29,174	30,367	32,008	34,160	37,430	Travancore and Cochin
528,004	532,208	537,849	548,127	555,305	563,554	574,575	591,833	609,719	TOTAL INDIA

IN EACH PROVINCE IN INDIA FROM 1885 TO 1913.

107,308	112,589	129,642	118,438	64,741	67,576	76,495	83,287	153,797	Burma
86,622,872	95,864,861	91,448,438	96,569,046	104,605,258	105,043,093	106,397,298	122,293,047	124,824,497	Brahmaputra Valley
65,281,934	66,603,173	69,745,889	69,887,813	70,245,944	70,051,976	72,655,719	76,505,236	74,897,453	Cachar and Sylhet
5,90,806	162,468,034	164,194,327	166,456,859	174,851,202	175,095,069	179,053,017	198,798,253	199,721,950	Total Assam
53,570,740	60,688,193	60,216,558	59,971,647	60,920,725	64,674,243	64,653,923	70,524,169	80,108,705	Bengal
...	...	...	...	...	...	285,442	269,072	311,630	Bihar and Orissa (a)
2,174,713	2,290,169	2,294,594	2,009,856	2,206,630	2,045,275	2,534,708	2,656,805	2,579,072	United Provinces
1,432,308	1,237,694	1,237,545	1,437,509	1,413,701	1,418,854	1,489,169	1,930,985	2,129,835	Punjab
1,762,738	3,094,498	3,470,551	4,436,365	5,325,710	5,645,219	5,795,407	7,555,831	7,089,045	Madras
10,147,584	11,186,204	12,749,355	12,593,843	13,353,699	14,323,117	14,714,537	16,059,657	15,155,635	Travancore and Cochin
221,400,197	241,077,471	244,292,572	247,024,517	258,136,408	263,269,353	268,602,692	297,878,089	307,249,669	TOTAL INDIA

No. 3.—DETAILED STATEMENT OF AREA AND PRODUCTION OF TEA, NUMBER AND AREA

District	Number of plantations on the 31st December	Planted area as per previous year's statement	Area abandoned during the year	New extensions during the year (including re-planting in areas abandoned in previous years)	Total area under tea	Areas in the occupation of planters but not under tea cultivation	Total area of plantation
1	2	3	4	5	6	7	8
		Acres	Acres	Acres	Acres	Acres	Acres
JERMA—							
Katha	35	329	...	...	329	...	...
Upper Chindwin	18	1,373	...	1,284	2,657	...	2,657
Myitkyina	38	21	7	...	14	7	...
TOTAL	91	1,723	7	1,284	3,000	7	3,007
ASSAM—							
Cachar	159	60,118	972	981	60,127	216,446	276,573
Sylhet	128	79,142	248	2,651	81,545	180,771	262,316
Goalpara	4	707	...	...	707	470	1,177
Kamrup	21	3,335	459	25	2,901	16,847	19,748
Darrang	87	43,205	264	1,236	44,177	106,352	150,529
Nowgong	42	12,475	246	246	12,475	34,345	46,820
Sibsagar	162	85,939	587	2,440	87,792	181,920	269,712
Lakhimpur	149	76,082	427	2,170	77,825	158,186	236,011
TOTAL	752	361,003	3,203	9,749	367,549	895,337	1,262,886
BENGAL—							
Darjeeling	156	51,767	110	888	52,545	67,497	120,042
Jalpaiguri	104	94,168	612	5,285	98,841	157,243	256,084
Chittagong	24	4,485	46	94	4,533	15,936	20,469
" Hill Tracts	1	77	...	6	83	229	306
TOTAL	285	150,497	768	6,273	156,002	240,905	396,965
BIHAR AND ORISSA—							
Hazaribagh	1	90	...	...	90	1,950	2,040
Ranchi	21	2,191	122	1	2,070	3,448	5,511
TOTAL	22	2,281	122	1	2,160	5,398	7,551
UNITED PROVINCES—							
Almora	24	1,662	9	194	1,847	9,288	11,136
Garhwal	6	962	20	...	942	6,126	7,068
Dehra Dun	32	5,173	..	16	5,189	2,796	7,985
TOTAL	62	7,797	29	210	7,978	18,210	26,189
PUNJAB—							
Kangra	2,915	9,315	5	12	9,322	2,522	11,844
MADRAS—							
Nilgiris	117	12,883	92	1,080	13,871	23,126	37,000
Malabar	43	9,246	219	747	9,774	18,146	28,125
Coimbatore	3	2,375	...	258	2,633	1,500	4,133
TOTAL	163	24,504	311	2,085	26,278	42,772	69,077
Total British India	4,290	557,120	4,445	19,614	572,259	1,205,151	1,777,414
JOHIN (a)							
BAVAN CORE	96	34,160	322	3,592	37,430	86,597	124,349
TOTAL INDIA	4,386	591,280	4,767	23,206	609,719	1,241,748	1,901,763

PLANTATIONS, AND NUMBER OF PERSONS EMPLOYED IN EACH DISTRICT IN INDIA IN 1913.

PERSONS EMPLOYED (DAILY AVERAGE)		Area that has been plucked during the year	Area that has not been plucked during the year	Quantity (in lbs) of manufactured tea				District
Permanent	Temporary			1912		1913		
9	10	11	12	13				14
		Acres	Acres	Black	Green	Black	Green	
580 2,980 ...	3 112 1	329 1,375 14	... 1,282 ...	8,632 72,627 2,023	... ... ...	8,596 143,173 2,028	... ... ...	BURMA— Katha Upper Chindwin Myitkyina
3,560	116	1,718	1,282	(b) 83,287	...	(b) 153,797	...	TOTAL
54,374 73,642 261 2,049 51,717 11,745 109,569 105,540	5,374 6,381 133 1,290 4,088 2,572 10,030 13,262	56,182 76,117 687 2,570 41,807 11,897 83,013 73,827	3,945 5,428 20 331 2,370 578 4,779 3,998	31,651,605 43,876,103 280,540 966,701 26,287,920 6,577,621 44,308,293 43,871,972	213,025 764,503	31,046,513 43,382,082 276,290 935,053 26,373,922 6,564,397 46,787,131 43,887,704	468,525 333	ASSAM— Cachar Sylhet Goalpara Kamrup Darrang Nowgong Sibsagar Lakhimpur
413,897	43,130	346,100	21,449	197,820,755	977,528	199,253,092	468,858	TOTAL
30,465 68,786 3,589 62	11,977 18,342 506 4	50,564 88,417 4,207 81	1,981 10,424 326 2	16,209,029 52,874,560 1,426,319 13,550	... ... 261 450	17,401,964 61,120,139 1,569,182 15,676	... ... ... 1,744	BENGAL— Darjeeling Jalpaiguri Chittagong " Hill Tracts
102,902	30,829	143,269	12,733	70,523,458	711	80,106,961	1,744	TOTAL
11 340	4 1,067	45 2,013	45 57	2,092 39,919	... 227,061	1,925 37,786	... 271,919	BIHAR AND ORISSA— Hazariabagh Ranchi
351	1,071	2,058	102	42,011	227,061	39,711	271,919	TOTAL
991 256 1,402	477 81 2,040	1,817 792 5,111	30 150 78	188,076 38,982 2,388,521	35,905 5,021 400	179,822 42,881 2,309,408	43,109 3,852 ...	UNITED PROVINCES— Almora Garhwal Dehra Dun
2,649	2,598	7,720	258	2,615,479	41,326	2,532,111	46,961	TOTAL
4,614	6,472	9,310	12	175,634	1,755,351	169,100	1,960,735	PUNJAB— Kangra
6,899 6,470 2,626	1,770 1,703 515	9,204 5,907 1,362	4,667 3,867 1,271	3,582,611 2,055,987 551,510	746,353 619,370 ...	3,438,676 2,546,696 615,295	183,062 305,316 ...	MADRAS— Nilgiris Malabar Coimbatore
15,995	3,988	16,473	9,805	6,190,108	1,365,723	6,600,667	488,378	TOTAL
543,968	88,204	526,648	45,641	277,450,732	4,367,700	288,855,439	3,238,595	Total British India
28,565	6,175	29,485	7,945	15,602,637	457,020	15,122,614	33,021	COCHIN TRAVANCORE
572,533	94,379	556,133	53,586	293,053,369	4,824,720	303,978,053	3,271,616	TOTAL INDIA

No. 4.—STATEMENT SHOWING THE QUANTITY OF INDIAN TEA EXPORTED BY SEA*
(DISTINGUISHED ACCORDING TO COUNTRIES OF FINAL DESTINATION) AND
BY LAND, IN THE YEARS 1909-10 TO 1913-14

	1909-10	1910-11	1911-12	1912-13	1913-14
<i>By Sea—</i>	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	189,234,427	183,026,831	192,914,786	198,430,842	209,073,152
Austria-Hungary	23,184	43,277	82,725	124,516	158,734
Belgium	28,280	18,645	4,864	2,780	2,376
Denmark	1,955	13,884	10,680	3,281	13,330
France	78,951	64,370	73,925	51,563	33,945
Germany	698,747	368,851	628,838	645,746	701,140
Greece	146	200	10	...	260
Holland	14,885	38,759	153,557	91,185	30,080
Italy	2,507	1,652	1,278	2,084	1,395
Norway	7,900	6,870	11,064	5,140	4,275
Roumania	29,260	54	...	1,794	475
Russia	24,011,260	31,121,482	26,414,310	33,126,071	33,398,209
Sweden	3,430	4,114	4,131	3,831	2,928
Turkey, European	302,352	274,069	413,604	250,644	271,999
Other countries in Europe	2,880	3,425	1,830	6,518	22,861
EUROPE, EXCLUDING UNITED KINGDOM.	25,205,737	31,979,652	27,000,816	34,315,153	34,642,017
Egypt	633,843	860,823	1,311,130	1,643,585	1,593,680
East African Protectorate	106,424	139,873	166,079	267,907	280,900
Africa, East (Italian)	39,535	42,843	59,183	115,409	88,498
Africa, East (other ports)	38,979	74,735	95,796	134,095	163,405
Cape Colony	66,132	148,912	115,844	137,398	113,659
Madagascar	5,670	12,543	11,145	11,660	10,860
Mauritius	20,764	12,155	49,362	51,583	57,675
Natal	5,735	46,406	90,311	122,790	84,929
Zanzibar and Pemba	53,883	81,957	86,953	94,346	93,471
Other countries in Africa	1,744	...	222	112	115
AFRICA	972,709	1,420,247	1,983,025	2,578,886	2,487,192
Canada	8,945,883	8,444,730	10,571,880	11,447,520	11,564,565
United States	2,458,513	2,343,392	3,145,605	2,306,702	1,942,237
Argentine Republic	100	1,000	...	870	...
Chile	40,000	18,696	26,100	54,500	80,000
West Indies . . . . .	...	50	...	20	...
Other countries in America . . . . .	...	130	...	40	2,500
AMERICA	11,444,496	10,807,998	13,743,585	13,809,652	13,589,302

* Including shipments from the State of Travancore

NO. 4.—STATEMENT SHOWING THE QUANTITY OF INDIAN TEA EXPORTED BY SEA (DISTINGUISHED ACCORDING TO COUNTRIES OF FINAL DESTINATION) AND BY LAND IN THE YEARS 1909-10 TO 1913-14—*contd.*

	1909-10	1910-11	1911-12	1912-13	1913-14
<i>By Sea—contd.</i>	lbs.	lbs.	lbs.	lbs.	lbs.
Aden	176,364	141,801	220,083	251,857	178,543
Arabia	57,789	111,828	237,958	250,213	304,580
Bahrein Islands	346,020	269,586	337,357	516,970	550,530
Ceylon	3,809,106	4,570,029	4,315,479	4,214,551	3,899,677
China—Hongkong	385	47,412	73,252	59,689	56,418
China (exclusive of Hongkong and Macao)	6,207,582	8,216,823	5,007,671	9,111,217	10,950,205
Japan	432	102	754	16,510	1,466
Persia	387,308	312,614	416,443	372,628	246,205
Siam	2,863	5,232	8,856	8,178	10,565
Straits Settlements	340,717	462,108	593,642	667,257	663,824
Sumatra	1,000	28,362	37,190	50,462	23,331
Turkey, Asiatic	2,617,788	3,641,510	3,133,312	4,399,145	2,829,625
Turkistan (Russian) . . . . .	...	...	...	148,080	302,650
Other countries in Asia	1,375	3,161	12,441	3,344	4,764
ASIA	13,948,729	17,810,568	14,394,438	20,070,101	20,022,418
Australia, New Zealand and Fiji Islands	8,606,838	9,347,200	10,022,732	9,336,855	9,704,752
TOTAL BY SEA	249,412,936	254,392,486	260,862,382	278,601,489	289,518,833
<i>By Land—</i>					
Khelat	3,920	14,672	4,368	560	224
Persia	47,152	59,584	115,696	113,233	172,816
Afghanistan—					
Northern and Eastern	526,288	1,224,272	1,737,792	2,225,888	1,724,352
Southern and Western	228,816	265,328	239,904	201,040	300,944
Tirah	5,152	...	...	...	...
Dir, Swat, and Bajaur	153,440	312,256	361,984	316,736	339,136
Badakhshan . . . . .	...	...	...	...	1,792
Kashgarh Yarkhand . . . . .	...	...	...	...	560
Chinese Turkistan . . . . .	...	...	...	...	448
Waziristan	1,120	..	...	...	4,928
Kurram Valley	22,176	37,856	42,896	45,808	49,168
Central Asia	41,328	77,504	60,480	236,656	238,224
Tibet	17,808	15,680	21,168	14,448	10,528
Nepal . . . . .	...	5,600	784	1,008	784
Sikkim	46,256	29,008	59,808	48,832	34,043

No. 4.—STATEMENT SHOWING THE QUANTITY OF INDIAN TEA EXPORTED BY SEA (DISTINGUISHED ACCORDING TO COUNTRIES OF FINAL DESTINATION) AND BY LAND IN THE YEARS 1909-10 TO 1913-14—*concl'd.*

	1909-10	1910-11	1911-12	1912-13	1913-14
<i>By Land—cont'd.</i>	lbs.	lbs.	lbs.	lbs.	lbs.
Bhutan . . . . .	...	...	112	...	...
Nágá and Mishmi Hills . . . . .	...	...	...	448	1,456
North Siam	112	224	224	...	112
North Shan States	14,560	4,144	8,176	9,184	16,688
TOTAL BY LAND	1,108,128	2,046,128	2,653,392	3,213,840	2,196,208
TOTAL BY SEA	249,412,936	254,392,486	260,862,382	278,601,489	289,518,833
GRAND TOTAL	250,521,064	256,438,614	263,515,774	281,815,329	291,715,041

No. 5.—STATEMENT SHOWING THE QUANTITY OF INDIAN TEA RE-EXPORTED FROM THE UNITED KINGDOM TO PRINCIPAL FOREIGN COUNTRIES, IN THE YEARS 1909 TO 1913.

	1909	1910	1911	1912	1913
Re-exported to—	lbs.	lbs.	lbs.	lbs.	lbs.
Russia	6,496,576	5,429,103	4,081,917	5,332,395	6,979,883
Denmark	232,992	263,186	225,258	287,851	269,372
Germany	856,889	737,804	660,685	794,824	764,954
Holland	1,210,655	1,353,705	1,428,020	1,737,696	2,026,331
Belgium	69,591	83,468	94,950	98,356	115,575
France	76,039	77,440	89,766	92,297	124,649
Austria-Hungary	170,783	167,382	222,550	184,095	259,119
Turkey, European	85,547	96,546	73,646	59,724	81,954
" Asiatic	43,775	55,901	75,187	172,962	170,992
Portuguese East Africa	159,867	199,142	191,404	179,845	184,743
United States of America	2,775,884	1,641,003	2,099,763	1,901,292	2,175,972
Canada	2,208,839	2,148,879	2,679,991	2,128,809	2,262,313
Chile	1,117,046	1,257,695	1,221,533	1,408,709	1,393,651
Argentine Republic	763,941	962,875	1,141,157	818,842	955,949
Channel Islands	703,558	1,020,594	785,842	1,014,432	792,082
Union of South Africa	1,515,332	1,731,532	1,509,988	1,630,190	1,593,440
Newfoundland	59,933	55,255	52,856	63,718	71,330
Other countries	1,099,796	1,305,901	1,371,847	1,462,473	1,607,665
TOTAL RE-EXPORTED	19,647,043	18,587,411	17,997,360	19,368,510	21,829,974

No. 6.—STATEMENT SHOWING THE QUANTITY OF (a) INDIAN, AND (b) CEYLON, TEA EXPORTED DIRECT BY SEA AND RE-EXPORTED FROM THE UNITED KINGDOM TO EACH PRINCIPAL FOREIGN COUNTRY IN THE YEARS 1910 TO 1913.

	INDIAN				CEYLON			
	1910	1911	1912	1913	1910	1911	1912	1913
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
Russia	35,229,182	31,886,290	36,707,948	41,463,848	26,199,599	22,540,873	19,346,900	23,770,798
Other European countries	5,819,441	5,316,889	5,866,373	6,074,643	5,137,823	5,286,882	6,069,891	5,809,693
United States of America	3,891,587	5,132,360	4,567,022	4,055,825	12,162,242	14,763,181	15,421,510	14,449,912
Canada	11,271,404	13,249,465	13,329,341	13,612,034	10,067,096	11,327,490	12,929,449	11,900,279
Australia	10,345,896	7,990,074	10,038,546	9,432,961	18,730,386	17,385,223	19,179,372	21,061,629
New Zealand	514,346*	502,064*	412,885*	353,169*	4,522,594*	4,661,226*	5,046,598*	5,153,207*
Other Foreign countries	22,121,819	22,093,613	26,315,164	28,347,690	16,422,781	17,616,569	19,381,298	20,642,355
TOTAL	89,193,675	86,170,755	97,237,279	103,340,170	93,242,521	93,581,444	97,375,018	101,787,873

* Direct exports only

No. 7.—STATEMENT SHOWING THE QUANTITY (IN LBS) OF INDIAN TEA SHIPPED FROM DIFFERENT PORTS IN INDIA, IN THE YEARS 1909-10 TO 1913-14.

	From Calcutta	From Chittagong	From Bombay and Karachi	From South Indian ports including Travancore	From Burma Ports.
1909-10	179,077,332	51,849,143	1,384,534	17,094,518	7,409
1910-11	181,610,107	53,194,860	1,451,089	18,127,359	9,071
1911-12	185,420,275	55,555,705	1,498,660	18,372,052	15,690
1912-13	197,447,622	59,179,890	1,978,530	19,980,612	14,835
1913-14	209,163,850	56,246,642	2,625,195	21,474,288	8,858

No. 8.—STATEMENT SHOWING THE QUANTITY OF TEA EXPORTED BY SEA AND BY LAND TO FOREIGN COUNTRIES FROM INDIA, CEYLON, AND CHINA, IN THE YEARS 1896-97 TO 1913-14 WITH VARIATIONS IN INDEX NUMBERS, TAKING THE FIGURE OF 1896-97 AS 100.

	India		Ceylon*		CHINA †			
					Black and green		Brick, tablet & dust	
	lbs.	[]	lbs.	[]	lbs.	[]	lbs.	[]
1896-97	150,421,245	[100]	110,095,194	[100]	161,538,933	[100]	78,567,333	[100]
1897-98	152,344,905	[101]	114,460,318	[104]	137,097,600	[85]	75,781,867	[98]
1898-99	153,539,488	[105]	122,395,518	[111]	147,967,200	[92]	68,017,067	[87]
1899-1900	177,163,999	[118]	129,661,908	[118]	153,669,067	[95]	71,205,067	[91]
1900-01	192,300,658	[128]	149,264,603	[136]	144,270,933	[90]	52,190,667	[66]
1901-02	182,594,356	[121]	144,275,608	[131]	119,390,000	[74]	42,740,533	[54]
1902-03	183,710,931	[122]	150,829,707	[137]	123,226,933	[79]	78,513,400	[100]
1903-04	209,552,150	[139]	149,227,236	[135]	140,607,867	[88]	83,813,600	[107]
1904-05	214,300,325	[142]	157,929,333	[143]	132,366,933	[83]	61,493,733	[78]
1905-06	216,770,366	[144]	171,256,703	[156]	112,152,533	[69]	70,784,267	[91]
1906-07	236,090,328	[157]	171,558,110	[156]	108,864,534	[67]	79,506,133	[101]
1907-08	228,187,326	[151]	181,126,298	[164]	130,022,266	[80]	84,940,000	[108]
1908-09	235,089,126	[156]	181,436,718	[165]	129,265,733	[80]	80,885,733	[103]
1909-10	250,521,064	[167]	189,585,924	[172]	120,174,800	[74]	79,617,600	[101]
1910-11	256,438,614	[170]	186,925,117	[170]	123,947,734	[77]	84,158,943	[107]
1911-12	263,515,774	[175]	184,720,534	[168]	137,788,933	[85]	57,251,467	[73]
1912-13	281,815,329	[187]	186,632,380	[169]	127,826,800	[79]	69,733,200	[89]
1913-14	291,715,041	[194]	197,419,430	[179]	103,038,000	[64]	70,061,600	[89]

* The figures for years previous to 1905-06 relate to the calendar year as it has been found impossible to procure complete data for the official year
† For calendar year

No. 9.—STATEMENT SHOWING THE QUANTITY OF FOREIGN TEA IMPORTED INTO, AND RE-EXPORTED FROM, INDIA BY SEA AND BY LAND, IN THE YEARS 1909-10 TO 1913-14.

	IMPORTED FROM			Total imported	Total re-exported	Balance
	Ceylon	China *	Elsewhere †			
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1909-10	1,462,685	1,556,619	3,677,115	6,696,419	834,466	5,861,953
1910-11	1,250,743	2,537,548	4,448,140	8,236,431	842,362	7,394,069
1911-12	1,834,429	4,083,225	5,048,386	10,966,040	753,486	10,207,554
1912-13	1,897,439	1,813,865	5,177,334	8,888,638	3,221,332	5,667,306
1913-14	1,517,295	2,598,292	4,423,393	8,538,980	1,276,344	7,262,136

* Principally green tea

† Principally from Java, the Straits, and the North Shan States

No. 10.—STATEMENT SHOWING THE QUANTITY OF TEA, GREEN AND BLACK, AVAILABLE FOR CONSUMPTION IN INDIA, DURING THE YEARS 1909-10 TO 1913-14.

	Production	Net exports to foreign countries	Balance
	lbs.	lbs.	lbs.
1909-10	258,136,408	244,659,111	13,477,297
1910-11	263,269,353	249,044,545	14,224,808
1911-12	268,602,692	253,308,220	15,294,472
1912-13	297,878,089	276,148,023	21,730,066
1913-14	307,249,669	284,452,905	22,796,764

No. 11.—STATEMENT SHOWING THE NUMBER OF CHESTS OF TEA SOLD IN AUCTION TEA SALES IN CALCUTTA, IN THE YEARS 1904-05 TO 1913-14.

Principal districts	Number of chests sold in									
	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Assam	153,512	152,406	154,265	179,956	184,645	176,529	186,228	191,217	230,292	210,278
Cachar	150,775	135,841	144,063	147,199	141,371	158,736	143,977	147,370	151,060	133,697
Sylhet	91,666	87,481	101,737	117,377	112,845	111,234	102,308	117,301	122,966	115,157
Jalpaiguri	150,311	153,422	182,813	177,484	186,190	188,912	198,870	201,562	231,053	240,939
Darjeeling	85,693	85,839	88,132	79,383	90,292	81,933	92,818	99,055	116,614	124,728
Chittagong	8,681	8,553	12,562	8,752	7,750	7,750	8,613	8,304	8,321	9,643
Kangra Valley } Kumaon }	2,238	...	...	2,046	900	1,066	2,549	2,025	1,203	2,326
Nepal	524	423	486	539	1,052	386	876	2,516	643	1,099
Chota Nagpur	419	290	1,516	1,254	461	323	325	189	759	1,206
Dehra Dun . . . . .	...	503	113	204	20	367	...	363	...	8,877
Nilgiris	55	...	...	10	...	...	...	...	...	...
Other places . . . . .	...	...	...	...	...	...	...	...	104	1,205
	643,874	626,090	686,206	716,296	727,324	729,569	738,306	771,713	864,232	850,177

No. 12.—STATEMENT SHOWING THE NUMBER OF CHESTS* OF EACH GRADE OF TEA SOLD
AT AUCTION SALES IN CALCUTTA IN 1912 AND 1913.

		Flowery Pekoe, Broken Flowery Pekoe, Orange Pekoe, Broken Orange Pekoe	Broken Pekoe	Pekoe	Pekoe Souchoong, Pekoe Fannings	Souchoong, Fannings, Broken Souchoong, Broken Pekoe Sou- chongs, mixed, etc.	Dust	Total
Assam (Brahmaputra Valley)	1913	47,725	30,024	51,282	45,230	28,695	7,322	210,278
	1912	44,957	31,681	58,901	55,225	31,940	7,588	230,292
Cachar	1913	17,519	18,656	33,375	38,712	20,246	5,189	133,697
	1912	22,675	19,367	37,427	43,630	21,743	6,218	151,060
Sylhet	1913	19,157	16,513	34,981	25,861	11,629	7,016	115,157
	1912	19,816	17,836	38,731	27,418	12,481	6,684	122,966
Jalpaiguri, Western Duars	1913	58,564	28,137	60,189	63,544	18,798	11,707	240,939
	1912	52,823	28,777	58,592	64,070	16,643	10,143	231,053
Darjeeling	1913	44,603	12,148	32,278	26,764	4,722	4,213	124,728
	1912	41,380	10,932	32,463	24,964	3,374	3,501	116,614
Chittagong	1913	993	663	3,268	2,762	1,460	497	9,643
	1912	679	652	2,682	2,447	1,426	435	8,321
Kangra Valley	1913	375	210	507½	599½	572½	61½	2,328
	1912	181	110	237	522	77	76	1,208
Kumaon	1913	92	56	305	357	212	...	1,022
	1912	105	80	421	590	21	...	1,217
Nepal	1913	562	...	127	260	95	55	1,099
	1912	274	65	135	106	48	15	643
Chota Nagpur	1913	247	223	337	196	179	19	1,206
	1912	158	118	232	102	127	20	759
Dehra Dun	1913	3,433	129	1,996	2,116	704	499	8,877
	1912	...	...	...	...	...	...	...
Other places	1913	168	467	225	168	140	37	1,205
	1912	3	67	16	16	...	...	104

* Includes packages withdrawn from sale

No. 13.—STATEMENT SHOWING THE PRICES PER POUND REALISED AT AUCTION SALES
IN CALCUTTA IN 1912 AND 1913.

		As. p.	As. p.	As. p.	As. p.	As. p.	As. p.	As. p.
Assam (Brahmaputra Valley)	1913	10 1	8 6	7 7	7 3	7 1	6 7	8 2
	1912	9 10	7 9	7 4	6 6	6 7	5 10	7 6
Cachar	1913	7 10	7 4	6 11	6 7	6 5	6 5	6 11
	1912	7 4	6 6	6 7	5 5	5 2	5 3	6 1
Sylhet	1913	8 1	7 1	6 11	6 5	6 3	6 3	6 11
	1912	7 7	6 2	6 7	5 5	5 3	5 2	6 3
Jalpaiguri, Western Duars	1913	8 5	7 11	7 4	7 2	7 1	6 9	7 7
	1912	7 11	7 5	6 10	6 2	6 0	5 10	6 10
Darjeeling	1913	10 11	9 7	9 4	7 7	7 10	7 0	9 4
	1912	10 3	9 5	8 2	6 5	7 3	6 2	8 7
Chittagong	1913	8 0	7 8	7 1	6 5	6 3	6 7	6 11
	1912	8 0	7 3	6 7	5 4	4 11	5 4	6 0
Kangra Valley	1913	7 10	7 2	7 0	7 1	7 1	6 6	7 2
	1912	7 2	6 4	6 6	5 4	4 11	5 0	5 11
Kumaon	1913	8 1	7 0	7 1	6 4	5 6	...	6 7
	1912	7 9	6 4	7 1	6 0	4 4	...	6 6
Nepal	1913	6 9	...	6 7	5 10	4 2	5 6	6 3
	1912	7 0	7 0	6 1	4 4	4 4	5 1	6 1
Chota Nagpur	1913	8 6	8 9	6 7	5 10	5 8	4 4	7 1
	1912	6 7	7 7	5 6	4 5	5 2	4 1	5 10
Dehra Dun	1913	7 3	6 9	6 8	6 5	6 4	6 0	6 9
	1912	...	...	...	...	...	...	...
Other places	1913	7 11	7 3	6 11	6 8	6 6	6 9	7 1
	1912	7 0	6 9	8 0	2 7	...	...	6 4

No. 14.—STATEMENT SHOWING THE AVERAGE PRICES OF PRINCIPAL GRADES OF TEA SOLD AT AUCTION SALES IN CALCUTTA, AND AVERAGE DECLARED VALUES OF EXPORTS FROM 1888 TO 1913, WITH VARIATIONS EXPRESSED IN INDEX NUMBERS, AVERAGE OF 1901 TO 1910 BEING TAKEN AS 100 IN EACH CASE.

	<i>Broken Pekoe</i>		<i>Pekoe</i>		<i>Pekoe Souchong</i>		Average declared value for all descriptions	
	Price per lb.	Variation	Price per lb.	Variation	Price per lb.	Variation	Value per lb.	Variation
	<i>As. p.</i>		<i>As. p.</i>		<i>As. p.</i>		<i>As. p.</i>	
1888	10 3	155	8 1	137	6 3	123	8 8	124
1889	9 9	148	7 5	126	5 7	110	8 2	117
1890	8 10	134	7 2	122	5 8	112	7 10	112
1891	8 8	131	7 1	120	5 3	104	7 11	113
1892	11 3	171	8 9	149	6 5	127	8 9	125
1893	9 3	140	7 3	123	5 5	106	8 4	119
1894	11 8	177	9 5	160	7 3	142	9 4	133
1895	9 0	136	7 4	124	5 11	116	8 11	127
1896	8 8	131	6 10	116	5 5	107	8 9	125
1897	7 6	113	6 1	103	4 11	96	8 6	121
1898	7 0	106	5 8	96	4 7	90	8 2	117
1899	6 10	103	5 9	97	5 1	100	8 4	119
1900	6 0	91	5 0	85	4 2	81	8 0	114
1901	6 1	92	5 2	88	4 5	88	7 3	104
1902	6 1	92	5 2	88	4 3	84	6 6	93
1903	6 6	99	5 10	99	5 2	102	6 7	94
1904	5 10	88	5 4	90	4 6	89	6 5	92
1905	6 3	95	5 2	88	4 2	82	6 7	94
1906	6 8	101	5 7	95	4 7	90	6 9	96
1907	7 2	109	6 10	116	6 2	121	7 3	104
1908	6 6	98	6 0	102	5 2	102	7 1	101
1909	7 8	116	6 9	115	6 0	118	7 5	106
1910	7 3	110	7 0	119	6 4	125	7 10	112
1911	7 9	117	7 7	129	6 9	133	7 11	113
1912	7 5	112	6 11	117	5 9	113	7 8	110
1913	8 1	122	7 5	126	6 10	135	8 3	118

No. 15.—STATEMENT SHOWING THE NUMBER OF PACKAGES AND AVERAGE PRICE PER POUND OF INDIAN TEA SOLD IN LONDON IN 1912-13 AND 1913-14, AS REPORTED BY MESSRS. GOW, WILSON, AND STANTON.

Producing District	1912-13		1913-14	
	Number of Packages	Average price per lb.	Number of Packages	Average price per lb.
Assam (Brahmaputra Valley)	935,193	<i>d.</i> 9·23	933,416	<i>d.</i> 9·74
Cachar and Sylhet (Surma Valley)	300,365	7·37	296,100	8·33
Chittagong	5,243	7·44	5,131	8·34
Darjeeling	77,640	11·22	80,525	11·62
Duars	245,257	8·25	280,548	8·80
Terai	17,841	7·77	15,414	8·72
Nilgiris and Wynaad	49,983	7·84	54,960	8·54
Travancore	122,626	7·79	125,357	8·52
TOTAL	1,754,148	8·65	1,791,451	9·25

No. 16.—STATEMENT SHOWING THE RATES OF FREIGHT CHARGED ON TEA FROM CALCUTTA TO LONDON, IN THE YEARS 1894 TO 1913.

Year	Rate			Year	Rate		
	£	s.	d.		£	s.	d.
1894 . . .	1	17	6	1904	1	15	0
1895 . . .	1	15	0	1905	1	11	3
1896 . . .	1	3	9	1906	1	11	3
1897 . . .	1	7	6	1907	1	16	3
1898 . . .	1	18	9	1908	1	12	6
1899 . . .	2	1	3	1909	1	12	6
1900 . . .	1	15	0	1910	1	12	6
1901 . . .	1	8	9	1911	1	12	6
1902 . . .	1	11	3	1912	1	15	0
1903 . . .	1	13	9	1913	1	15	0

Note.—The rates are the minimum rates per ton (50 cub. ft.) obtaining in August in each year

No. 17.—STATEMENT SHOWING THE AVERAGE MONTHLY WAGES OF LABOURERS EMPLOYED IN TEA GARDENS IN ASSAM, DURING 1910-11 TO 1912-13.

	ACT LABOURERS.		NON-ACT LABOURERS.		
	Men	Women	Men	Women	Children
	R a. p.	R a. p.	R a. p.	R a. p.	R a. p.
1910-11 . . .	5 11 0	5 1 6	5 11 6	4 6 7	2 11 11
1911-12 . . .	5 8 4	4 15 11	5 15 11	4 7 9	2 11 0
1912-13 . . .	5 11 2	5 1 6	5 15 0	4 9 5	2 13 1
1913-14 . . .	5 11 5	5 5 9	6 1 3	4 11 5	2 13 7

Note.—These averages are not the means of the district averages, but are calculated independently by dividing the total earnings of two typical months by the total number of coolies on the books.

NO. 18.—STATEMENT SHOWING THE RATES OF CUSTOMS DUTIES LEVIED ON TEA IN PRINCIPAL COUNTRIES OF THE WORLD AS THEY STOOD ON 1ST APRIL 1914.

	Per lb.		Per lb.
	Rs. A. P.		Rs. A. P.
Russia—		British Colonies and territories in South Africa—	
(1) Imported by the European Frontiers:—		Tea, the produce of South Africa or tea grown within the South African Colonies Union	Free
<i>Brick tea, black or green</i>	0 8 0	Other tea	0 4 0
<i>All other kinds</i>	1 6 3		
(2) Imported by the European Frontier or the Black Sea:—		Canada—	
<i>Tea of Ceylon or Indian origin</i>	1 6 3	Tea imported direct from the country of growth and production, also tea purchased in bond in the United Kingdom	Free
(3) Imported across the frontier of the Semiryehensk Province of the Steppes, Irkutsk or the Amur:—		All other tea <i>ad valorem</i> 10 per cent.	
<i>Black bohea, flower green and yellow</i>	1 2 0		
(4) Imported into the Amur and the Trans-Baikal region of Irkutsk:—		Australia—	
<i>Brick-tea</i>	Free	In packets not exceeding 20 lbs in weight	0 1 0
<i>All other tea</i>	1 2 0	All other tea	Free
(5) Imported through the Customs House of Irkutsk or westward across the Frontier of Siberia or of the Steppes or the Semiryehensk:—		New Zealand—	
<i>Tea in bricks</i>	0 2 7	Tea in packages of 5 lbs or over (net weight of tea):	
<i>Tea in tablets of the Russian manufacture</i>	0 10 7	If the produce of some part of the British dominions	Free
		Otherwise	0 2 0
Germany—		Tea in packages of less than 5 lbs.:	
For consumption as tea	0 5 4	If the produce of some part of the British dominions	0 2 0
For the manufacture of theine	Free	Otherwise	0 2 5
France—		Tea being the produce of and being imported from the Colony of the Cape of Good Hope, the Colony of Natal, the Orange River Colony, the Transvaal, and Southern Rhodesia	0 1 0
Imported directly from a country out of Europe	0 9 1	United Kingdom	0 5 0
Imported from European entrepôts	0 11 8	Sweden	0 3 0
Spain—		Norway	0 6 0
Tea, and imitations thereof, and "yerba maté" (Paraguay tea)	0 7 0	Denmark	0 4 3
Tea transhipped in a European port	0 7 5	Holland	0 2 3
		Belgium	Free
Austria-Hungary—		Portugal	1 8 6
Imported by sea	0 9 9	Italy	0 10 11
Imported by land	0 11 0	Greece	0 1 9
Japan—		Turkey <i>ad valorem</i> 11 per cent.	
Black tea	0 4 2	Egypt <i>ad valorem</i> 8 per cent.	
Black tea dust	0 1 3	British East Africa <i>ad valorem</i> 10 per cent.	
Other tea	0 1 1	United States	Free
Persia—		Argentine Republic	0 4 7
White tea	0 7 0	Chile	0 8 2
All other tea	0 4 6	Ceylon	0 4 0
		China <i>ad valorem</i> 5 per cent.	
		Straits Settlements	Free

APPENDIX.

THE TEA TRADE.*

English people have been drinking tea for more than two and a half centuries. The beverage became known to Europe through the medium of the Dutch East India Company, and was introduced into England from Holland by Lord Arlington and others in the first half of the 17th century. By 1660 the custom of drinking tea was sufficiently general to cause tea to be taxed in company with coffee and chocolate. Tea was to be procured at the chief coffee-houses of the day, but at a price ranging from £5 to £10 a pound it must still have been a luxury. It was considered worthy of record that the English East India Company made a present of some tea to King Charles II in 1664, but a decade later the company was obtaining a regular supply. In 1703 the imports of tea amounted to 100,000lb.; they reached a million pounds annually by 1721, and before the end of that century had reached 37,000,000lb. In 1913, 366,000,000lb. of tea were imported into the United Kingdom, of which 305,500,000lb. were for home consumption or 6.61lb. per head of the population. The Customs duty at 5*d.* per lb. amounted in this same year to £6,368,611. A flourishing industry.

Although Europe had to wait until the 17th century for the pleasure of drinking tea, the beverage was known to China more than a thousand years previously. The tea plant is mentioned in the ancient Chinese Dictionary, the *Rh-ya*, but we do not hear of tea-drinking until the fourth century A.D. Even then the taste would seem to have been an acquired one, as the decoction was pronounced to be too bitter for the ordinary palate. Originally the plant appears to have been used for medical purposes, and then as a relish or vegetable. The "Tea Classic" is attributed to the eighth century, and by that date the use of tea was sufficiently established to call for an Imperial duty upon it. A long controversy has raged round the tea plant, its species and its varieties. As the result of an exhaustive analysis of this question in "The Commercial Products of India," Sir George Watt decides in favour of one species, *Camellia Thea*, with three chief varieties, *Viridis*, *Bohea*, and *Stricta*. To the first-named variety belong the plant indigenous to Assam, the wild tea of Manipur, and the pick of the China teas. *Thea Bohea* is the hybrid tea of Indian tea-planters, and the chief plant in the Fukien province of China. It is regarded as a cross between *Viridis* and the third variety. *Thea Stricta* is the Chinese tea known to Indian tea planters, but seems to be better known in India than in China. The tea plant is usually propagated from seed. For scientific culture we have to turn to India, as in China tea-planting is in the hands of individual peasants, and for reasons to be stated later is not the life-vocation that it is in India. Plants for seed production are not checked in their growth by pruning, and sometimes reach a height from 30ft. to 40ft. The "China" plant, as it is termed in India, is smaller, from 10ft. to 12ft. in height; but plants of 20ft. to 30ft. are known in China. The seeds are sown in nurseries in November and December, and planted out at the end of six or 12 months, usually at the rate of 2,000 to the acre, in triangular formation, the plants being 5ft. apart. Pruning takes place every year. A very small leaf crop will be obtained the second year after the first pruning; in the third year the yield should be at the rate of 150lb. per acre and in six years from 400lb. per acre upwards. An average yield in India is a little under 500lb. History.

The difference between black and green teas arises from the different methods of preparation, and has nothing to do with differences in the plants. Sir George Watt points out that as early as 1631 Bontius, a Dutch physician living in Batavia, called attention to this fact, but it was lost sight of by Europe for two centuries. Briefly, the distinction between the two kinds of tea is that the process of fermentation which gives to black teas their colour has been avoided or arrested in the case of green teas. Black and green tea

Hand labour, which in China is employed almost exclusively in the preparation of teas, has in India made room for machinery, which was first introduced in 1860, and became general after 1870. In the scientific method of preparing tea for the market the first process after the plucking of the leaf is to spread it out to wither, until it is flaccid, an operation that takes about 20 hours at a temperature of 80deg. F. The leaf is then rolled by machinery for from a quarter of an hour to one hour, and it is at this stage that the fermentation, or, more correctly speaking, oxidation, begins, the edges of the leaves and the ends of the stalks losing their greenness and becoming brown. The leaves are spread out in a cool darkened room in layers from two to six inches thick for from two to six hours. They have then to be dried or fired as quickly as possible. Originally this was done over clear charcoal fires, but machinery is now employed in India, the leaves being treated with a current of hot air of about 220 deg. F., reduced towards the end of the process to 180 deg. F. The tea is then graded according to the various marks (or "chops," in China, which supplies nearly the whole of the phraseology of the tea market) and packed. Before packing, each grade is refired at a temperature of 180 deg.-200 deg. F., and is packed while still just warm.

In the case of green teas, with a view to avoiding fermentation, the leaves immediately they are received from the pluckers are treated by a process known as panning. They are thrown, without being withered, straight on to a heated cast-iron basin, sloped from the back; here they are tossed about by hand until soft enough, when they are slightly rolled. Alternate panning and rolling are continued until the edges of the leaves are slightly crisp.

* Extract from an article on Tea and Maté in the "Times" of June 8, 1914—Food Supplement.

They are then dried off as quickly as possible as in the case of black teas. The next process is to steam the leaves under pressure in a rotating cylinder—a treatment that lasts from 1½ to 2 minutes under a steam pressure of 20lb. to the square inch. After being steamed, the leaves are placed in a centrifugal machine to get rid of the excess of water; they are then rolled slightly and immediately dried off.

In regard to the plucking of the leaves, India and China again part company, the rough and ready methods of the latter being superseded by the scientific plucking of the Indian plantations. Only the topmost leaves on each shoot are used for the best tea, and the object of the cultivation is to secure the maximum supply of young shoots throughout the season. Thus while in China only three pluckings take place in April, May, and August, in India bushes will be plucked from 20 to 30 times during the year at intervals of from seven to nine days. Tradition connects the grading of teas with the position of the leaves on the shoot; the bud and the first opened leaf are supposed to give "Orange (or flowery) Pekoe," the next leaf "Pekoe," with "Souchong" and "Congou" lower down in the scale. But according to Sir George Watt, "the grades are now merely commercial terms which have little relationship to any particular leaves."

India went to China for its tea-plant, but is inclined now to regret the step, as the indigenous plant has proved the better grower. Between 1821 and 1826 the tea-plant was discovered in Assam and Manipur. In spite of the fact that in 1788 the Governor-General had pointed out the desirability of cultivating tea in India in order that England should not be dependent for her supply on China, no practical notice seems to have been taken of the discovery and little was done until 1834, when a committee was formed to report on situations for experimental cultivation and a delegate sent to China to obtain seed and information. The tea-plant was rediscovered in Assam, but expert opinion was against the native variety, and the Indian tea industry was started under Government auspices with China plants. In 1838 the first sample of Indian grown tea was sent to England; two years later the Government had withdrawn from tea planting in favour of private enterprise, and in 1841 the first public sales of Indian tea took place in Calcutta, when 4,613lb. were sold. The early years of the industry were not marked with conspicuous success, and it was not until 1855 that any great impetus was given to the trade. From that year tea cultivation spread rapidly, and bringing in its train the usual gambling transactions, was the victim of a disastrous crisis in 1866. The episode "steadied" the industry, which since then has never gone back. In 1912 the number of acres devoted to tea cultivation was 591,833, compared with 525,257 acres in 1902 and 374,869 acres in 1892. Production has risen from 121,994,000lb. in 1892 to 188,589,000lb. in 1902 and 296,302,258lb. in 1912. The joint stock capital engaged in the industry amounted in 1912 to £17,649,781, in addition to which there is the large but unknown quantity of private capital invested. The labour employed was returned at a total of 643,135 hands. Exports have risen from 488lb. in 1838 to 278,518,411lb. in 1912, valued at £8,862,651.

Of the 305,530,044lb. of tea retained for home consumption in 1913 in the United Kingdom the Customs returns give 172,761,180lb., or 56·5 per cent., from India; 91,467,097lb., or 30 per cent., from Ceylon; 9,669,815lb., or 3·1 per cent., from China; and 31,631,952lb., or 10·3 per cent., from other countries. Imports from Java for 1913 were according to the Tea Brokers' Association, 21,769,884lb., but this figure includes the amount re-exported, and the corresponding figure for the China imports would be 16,163,637lb., instead of under 10 million lb.

The respective merits of Indian and China teas must be decided by personal predilection. Imports into the United Kingdom indicate the direction in which the popular taste has inclined. Tea analyses, it is generally admitted, are not yet satisfactory, and where they set out to emphasize or minimize differences between India and China teas, there is no guarantee that the samples can be regarded as equally representative. The tannin bogey in Indian tea has been conjured away in the interests of the market, leaving China tea with a deficiency of caffeine. But the vast majority of consumers are probably not over-anxious on the subject. Indian teas deserve their success, for they are well grown, well marketed, well advertised. Tea auctions deal with Indian, Ceylon, Java, and any other kinds of tea except China tea, which has to rely upon private sales. Scientific culture has prevailed over unscientific methods with the result that the world has a larger and much cheaper supply of tea than if it had to rely upon China teas alone. The present position of the India tea industry has been reached by the continual adoption of improvements in methods of pruning, of plucking, of cultivation, and of manufacture. In Assam, it is pointed out, the average crop in 1873 was from 250lb. to 280lb. per acre; in 1904 it was from 450lb. to 500lb. But the great hold that India has on the world's tea market is given it by the cheapness of its products.

Tea-growing in China is a peasant industry. The plant is cultivated mainly on the slopes or at the foot of hills generally in small patches round the homesteads. The family picks the leaves and gives them their preliminary drying in the sun. They are then bought up by the middleman, who takes them with his other purchases to the firing-house for assortment and treatment. The first picking is in April, the second, lasting 10 to 12 days, is in May, while a third crop is harvested in August.

In contrast with the mechanical appliances of the Indian plantations, the preparation of tea in China is done exclusively by hand—or by foot. The leaves when picked are thrown into large flat basket trays, and exposed to the sun. As they begin to darken and curl up

they are gathered up and made into balls, this process being done by the feet when a large quantity of leaf has to be twisted. As soon as the leaves have been given sufficient twist, the ball is broken up, the leaves are placed in cotton bags, and taken to the nearest marts for sale.

The treatment of green teas approximates more closely to the Indian method; but the roasting pan and movement by hand take the place of the steaming of the leaves under pressure. As for the artificial colouring of green teas, the practice is understood to have been imposed upon the Chinese tea merchant, in the first instance, by a demand for an article of which he was unable to obtain an adequate natural supply. The first teas exported from China were black, but the appearance in some consignments of the delicate Hyson teas brought these into special favour. Difficulty was experienced in securing a uniform tint, while preparing the leaf in such a way as to enable it to stand the long voyage. Hence the resort to "facing" which is treatment of the leaf with a mixture of three parts of Prussian blue with four parts of gypsum in the form of a powder. One pound of the mixture is sufficient to treat 200lb. of tea.

A third feature of the China tea trade is brick tea, which finds its way to Central Asia, Siberia, and Russia. For this purpose the leaves when plucked are panned, as in the case of green teas, and rolled lightly. Fermentation takes place and the leaves are spread out in heaps three to four inches deep for three or four days. They are then dried in the sun, and after being steamed over a boiler are pressed into bricks, 10½ in. long by 4 in. deep. If stalks are present in the leaves the whole is treated with a glutinous rice solution to give the necessary adhesiveness.

The United Kingdom derives its tea supply from India, Ceylon, Java, and China, and in smaller quantities from Japan and Formosa. Natal has occasionally sent consignments, and now Nyassaland and Jamaica have entered the ranks of the contributing countries. In 1888 the commercial tea crop (*i.e.*, the total exports of the seven producing countries) amounted to 472,000,000lb., of which 113,000,000lb. were produced in the British Empire, 289,000,000lb. in China, and the remainder, 70,000,000lb., in Japan, Formosa, and Java. In 1908 the commercial tea crops had risen to 711,000,000lb., of which 408,000,000lb. were produced in the British Empire and 210,000,000lb. in China. In 1912, the last year for which figures are available, the tea crop was only a little under 800,000,000lb. with 480,000,000lb. raised in the British Empire. In justice to China it must be pointed out that while the consumption of tea in India amounts to some 20,000,000lb. only over and above the quantity exported, the consumption in China may reach 50 times that total. Estimates of the *per capita* consumption in China are in the nature of guesswork. Tea imports.

The 6·61lb. of tea consumed in the United Kingdom per head of the population is exceeded in Australia and New Zealand, which in 1909 consumed 6·83lb. and 7·45lb. respectively compared with 6·24lb. for that year in the United Kingdom. Canada comes next on the list with 4·4lb. Russia, the next largest importer of tea, drinks but little over 1lb. per head of her population. The Netherlands, thanks no doubt to the rapidly growing industry of Java, now drinks 2lb. per head.

Tea was first taxed in 1689, when a duty of 5s. per lb. was levied. Between 1722 and 1740 a 4s. excise duty and customs duty at the rate of 14 per cent of the average price was imposed. The duty was gradually lowered until between 1784 and 1795, when it amounted to 12½ per cent, *ad valorem*. After the latter year it was raised until it amounted to 100 per cent. When the East India Company's monopoly was abolished the duty was again lowered until it ranged between 1s. 6d. and 3s. per lb. according to quality. In 1856 it was fixed at 1s. per lb., in 1867 at 6d., and in 1906 at 5d., the figure at which it now stands. In other countries the duty on tea ranges from 5½d. in Germany to 2s. 0½d. in Portugal. Russia, which is the only other country that raises a large revenue from tea, levies a duty varying from 2¾d. to 1s. 10½d. per lb., according to the kind of tea and the division of the frontier over which it is imported.

MATÉ.

On each side of the giant river Paraná, in its course from the Brazilian State of Goyaz to where it joins the Paraguay, the verdure of the forests is stained here and there with patches of a darker, more vivid green, the foliage of a fine bushy tree of about the height of an orange tree, and as a rule rather more than a handbreadth in diameter. From its large, glossy leaves, tongue-shaped, serrate and moderately thick, is made what may be called the national beverage of Paraguay, Southern Brazil, Argentina, Chile, and Uruguay. The tree is the yerba maté (*Ilex Paraguayensis*), the tea plant of South America. Tea Plant of South America.

The use of maté dates from shortly before the arrival of the *conquistadores* in the Paraná region. There was a legend among the Guarani natives to the effect that one of their medicinemen was directed by the Evil One to prepare and drink an infusion of the leaves whenever he desired to hold converse with the powers of darkness. Another story gives the credit of the discovery of the excellences of maté to San Bartolomé the Apostle, who employed it with success in the treatment of some epidemic malady. Whatever its origin, saintly or satanic, the Indians drank it hugely and with blind faith in its manifold virtues.

But before long the yerba maté proved as bitter a curse to the indigenes of the Paraná basin as the rubber tree has been to the Amazon tribes; the Spaniards, becoming addicted to the use of the leaf and interested in its commercial possibilities, pressed the Indians into their service for its exploitation, and with characteristic inhumanity worked thousands of them to death.

Method of preparation.

The method of collecting and preparing the leaf was in those days essentially what it is now. Harvesting began in April and ended in July or August. The leaves and the very small twigs were slashed off with knives and heaped upon hurdles which were set up at lepôts established in various parts of the forest. A slow fire under the hurdles cured the maté, which was then thrown into pits lined with hides and there pounded with pestles. Now-a-days it is usually dried in stoves and crushed in mills, but whereas in Argentina and Uruguay this *maté fino* is preferred, in Brazil and Chile the product is considered to possess superior qualities when merely pounded to coarse fragments in a box.

The generic name of the tree is derived from the Guarani word for the gourd in which the dried leaf was infused, but there are several others. In Paraguay the better sort of leaf comes from the *caamini*, and an inferior variety from the *yerba de palos*; on the Brazilian side of the Paraná, where the plant is often a shrub, it is known as *congoha* as well as *heroa-maté*. In neither country is it very widely cultivated, for though it grows wild in superabundance it is a delicate plant to rear, and there is the further consideration that three years must elapse before the stripped tree puts forth all its new foliage. The Jesuits grew it, mainly by transplanting, in their Missions, and they alone were supposed to possess the secret of raising it from the seeds, which, it was commonly believed, had first to undergo some mysterious preparation in the crops of the birds which fed upon them. The maté industry is now carried on by proprietary companies, by lessees of State lands, or by the head *yerballeros*—the chiefs of the expeditions which, sometimes after a search lasting several weeks, discover a patch of trees and start work immediately, obtaining later on the necessary authority from the Government. In the latter case the harvest is bagged in the forest and sold to the companies or to travelling agents.

The Plant in Europe.

Attempts have been made to introduce the maté habit into England, but have failed. It is a beverage eminently suited to a hot, debilitating climate, stimulating muscular contraction, decreasing fatigue, and rousing the brain to activity. The gaucho of the pampas will work when necessary for 24 hours with no other sustenance than a handful of maté. He drinks the infusion plain and boiling hot, sucking it from the gourd through a silver tube with a strainer at its lower end. Others add sugar or lemon-juice, or both. The taste is not as a rule immediately attractive, suggesting as it does acrid China tea, but it soon grows upon one, and maté drinking frequently becomes a harmless sort of vice, cheaper than the tea habit, for the cost is far less, and the same leaves can be used three and even four times. Though known in England as "Paraguay tea," it mostly comes from Brazil, and particularly from the State of Paraná. Paraguay exports only some 9,000 tons a year, whereas Brazil ships a matter of 70,000 tons, worth over £2,000,000, of which Argentina takes about 50,000 tons.

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