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# Indian Finance Year-Book, 1932

P. R. SRINIVAS, M.A., *Editor.*  
C. S. RANGASWAMI, *Managing Editor.*

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## MESSAGE

FROM

HON'BLE SIR GEORGE SCHUSTER,

*Finance Member of the Government of India.*

I am glad to send a message of encouragement to *Indian Finance* on the occasion of their first publication of an *Indian Finance Year-Book*. Such a publication carefully compiled and annually kept up to date ought to be of the greatest possible value. Information of this kind for the instruction of the public is especially needed in these days. For we are living in what was rightly described in the recent report of the MacMillan Committee in England as a "crowded and increasingly competitive world."

So far as international trade is concerned, India is still finding a fair market for her main commodities, though prices are very low. But it is necessary to watch how she is keeping her place in these days of fierce competition and of increasing barriers to trade which each nation is erecting against the other. In this connection there are many questions which need consideration. If complete international co-operation cannot be achieved, can groups of nations be formed working together? Can India profitably work in such a group of nations? Are Indian commerce and industry doing all that is possible to develop the vast markets which exist in their own country? How is a protective policy affecting India? Are those industries which have now received a substantial measure of protection making the best use of that protection, or failing to do so to the detriment of the public? Are Indian products, which even in these days the world still wants, being marketed in such a way as to maintain India's place among her competitors and to bring to the producers the fullest value which they could receive?

These are questions which all who are interested in India's welfare should be asking themselves.

If the *Indian Finance Year-Book* helps them to follow the trend of events and in some way to answer these questions, so as to form an intelligent public opinion on issues so vital to India's welfare, it will be doing service of great value.

# IN GRATITUDE ; AND IN EXTENUATION

The Indian Finance Year-Book sees the light of day five weeks later than the original time-table.

For which delay, we crave pardon.

In extenuation, may we urge that in a maiden effort of this kind, our first estimate of work to be accomplished has proved incorrect.

The plan of work, we venture to submit, is stupendous. We have had to analyse and tabulate the ten-year budget figures of the Central Government and the Provincial Governments; we set to prepare elaborate and laborious statements for the Money and Currency section; our trade statistics cover a period of ten years; three-year accounts of banks and Insurance Companies have been scrutinised and careful calculations made; Railways and Light Railways have meant a detailed study; over ten industries have been dealt with concisely and comprehensively; and, for the first time, agricultural statistics have been set forth in a complete and proper setting.

Our original estimate was that the Year-Book will be of 220 pages. In its final form, it is 276 pages. The statistical tables number no less than 200. We believe that, so far, there has not been published, by a private agency, any book so replete with statistical information on so great a variety of subjects.

For explanation of, and justification for, the tardy performance of our promise, we would refer our readers to the very performance itself.

An occasion for excuse is, we realise, an accusation; we may, therefore, quit this topic and dilate on a more pleasant one.

In the fulfilment of our task, we have received the friendliest co-operation, aptest assistance and every manner of encouragement from Sir George Schuster, the Finance Member; Sir Osborne A. Smith, the Managing Governor of the Imperial Bank of India; Sir T. Vijayaraghavachariar, the Vice-President of the Imperial Council of Agricultural Research; Mr. P. R. Rau, the Financial Commissioner of Railways; and Mr. J. B. Taylor, the Controller of the Currency (now acting Financial Secretary). We tender them our sincerest thanks.

From the All-Mighty to the less mighty. Mr. N. Sundaresan of the Controller of the Currency's office and Mr. M. Vaidyanathan of the Imperial Council of Agricultural Research have, by the way they took on themselves the responsibility for some portions of our work, laid us under a debt of gratitude too deep for words. Mr. N. Mukherjee of the Art Press has been more than our printer—he has been a partner in the heavy load of responsibility.

In the end, we will, in all humility, say only this: Whether or not this compilation will educate our readers, it has been a course of compulsory but pleasant education to us, the compilers.

P. R. SRINIVAS,

*Editor.*

July 12, 1932.

C. S. RANGASWAMI,

*Managing Editor.*

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# INDIA—THE FACT AND THE DREAM.

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To those who endeavour to study the problems of Indian economy with care and judgment, to interpret the present without bias and to visualise the future with fervour and imagination, there can be no greater tragedy than the dull insipidity of the fact and the thrill and romance of the dream. Our routine task compels the closest attention to the facts; but we have, ever, conceived our mission to lie in a constant and correct visualising of the dream and in the communication to our readers of the faith that, given co-ordinated, enlightened, well-informed and well-directed national effort—effort in which the State and the people should work in harmony,—that dream may well be a fact. Of what was past, we have tried to be faithful chroniclers and just annotators. In regard to what is now and here, our attitude is not that of puerile cavilling or futile apportioning of blame; humbly and earnestly do we seek to make the present the enduring foundation for the glory-filled edifice of the morrow. Of what might succeed, we have, we are proud to confess, the fullest confidence and the most fervent hope; so complete is our confidence and so sincere is our hope that we feel and believe that, in time, we would persuade one and all to share with us our hope and work with us in the confidence that a nation-wide plan of Economic Regeneration would make India great and glorious alike for her own good and for the good of the world.

This brings us to our second article of faith. India's economy is a vital factor in world economy. Our political travails and ordeals, our economic deterioration, the contraction of our consuming power—these are amongst the prime causes of the present world-wide depression in trade. International monetary conferences, disarmament conundrums, debts and reparations, tariffs and what not—these engage serious attention at the present moment; frantic efforts to arrive at a common understanding are being made; and extravagant hopes are held that once these knotty problems are solved, world prosperity will be restored. Relief in regard to one or all of these matters has significance only in the sense that the good old slate is being cleaned of some of its smutty and filthy writing. Let us even grant that America and Europe can start with a clean slate. Is it not as important that what is to be written on the slate hereafter is of good report? To ensure that the new writing is what it should be, world trade should be assured of development in fruitful directions. From this point of view, India's place in world trade becomes all-important. The consuming power of European countries or of America has but little scope for expansion, as they have, already, a high standard of living. Raising the standard of living in those climes is a doubtful blessing, and requires a Herculean effort.

In India, on the other hand, the standard of living is so low that much has to be done, and a great deal can be done quite easily. The margin for rise in the scale of the living of the masses is ample in the case of this country; from every criterion of economic activity, the present state is primitive which is another way of saying that enterprise, under the right auspices and in the right directions, has the biggest chance of proving vastly and markedly fruitful. The soil, figuratively speaking, is virginal; and the crops, reared in such a soil, hold the promise of sturdy growth and rich harvesting. On the one hand, enterprise has the largest possibilities; on the other hand, the standard of living would show immediate response. If we can assume that business in India, be it banking or insurance or commerce or agriculture or industry, expands in a heady fashion in all ways; and that, as a result, the masses are able to afford a higher mode of living, would not that increased consuming power of the Indian population make all the difference to a world suffering from glut in every market?

If each Indian consumes one yard per annum more than the present average of 10.5 yards per head, the cotton mills of the world will not be afflicted any more with the nightmare of unsold stocks; and far from planning short hours working, they will have to devise measures for working overtime. If each Indian drinks a cup of tea more per day, the tea industry of the world will be producing barely enough for meeting world demand. If a pinch of sugar is included in the daily diet of the millions and millions in India who love sugar but never see it month-end to month-end, Cuba and Java need not bother themselves with restriction agreements but embark on a wise policy of expansion.

India contains one-fifth of the world's population; nine-tenths of that one-fifth live only in the sense that they are not dead; it is, in their case, lingering perdition unkindler than death. This could not be destiny, for aye and for ever, for so large a proportion of the world's population. When steps are taken by India and the world for the conferring of a sunnier, ampler and happier life for this nine-tenths of the one-fifth of the human race, then will these people, in their new-found happiness and their new-enlarged scale of life, repay the world by causing so vast an increase in consumer demand as to end, once and for all, the irritating problem of world surfeit of commodities.

Swollen stocks in all countries and in all goods will vex and harass the businessman and the economist so long as they seek to feed the well-fed, clothe the well-clothed and otherwise cater to those who are not already badly looked after. Feed those who are really hungry; your food-stuffs will be consumed in the way in which they should be; and you need not think of burning

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wheat in Canada or throwing coffee into the sea. Clothe those who are naked for all practical purposes; you will be serving the highest sartorial ideal; and impracticable schemes for restriction or high-sounding schemes for rationalisation will not mock and tease you by their ultimate futility. What is needed is that the needy in India should be catered to; by pampering the non-needy in other countries, you solve no problems—you add a few to the already long list of world problems which baffle understanding and defy solution. We are firmly persuaded that, in the interests of world trade and world prosperity, the economic well being of India should receive wider and keener world attention. Indian finance is, in our view, inextricably bound up with world finance.

Our dream of the morrow of India's economy has, thus, a special, all-embracing significance. If we allow ourselves to dream as we do, our view and our vision should not, we urge, be lightly brushed aside as impractical idealism. We believe that there can be such a thing as a well-proportioned blend of idealism and realism—of dream and fact. That is the blend we have, ever, aimed at. Fully three years ago, we stated our views, from this standpoint, in the form of a study in comparison and contrast between India and America; we crave leave to reproduce the relevant passage here, as it is most apt to this discussion:

"India, like the U.S.A., is richly endowed by a beneficent Providence in every manner and with the utmost abundance of raw materials and primary agricultural produce; Mother Earth is rich in minerals of every description. To win these minerals from the womb of the earth and to convert the raw products into manufactured goods, factories and workshops are necessary and abundant capital will be required. This country is not suffering from any paucity of capital, provided the psychology of the investing public is properly tackled. The experience of the boom period in 1919-20-21 affords final and conclusive testimony that the stream of domestic capital flowing towards industrial enterprise can be hydra-headed. The psychological factors to draw out the savings and hoardings of the masses in that period were apt and appropriate; and money was forthcoming in abundance and for any manner of industrial venture. That much of the capital so invested in industries was lost is an argument not altogether relevant to the present discussion. The point we seek to make out is that there was then no paucity of capital from domestic sources; and if efforts are made to inaugurate an industrial renaissance on sound, proper and healthy lines, the capital required for the purpose would be readily and adequately available. As for the building of the factories, plenty of land is available and the fullest conveniences in regard to their erection. Labour to work those factories is also available in any quantity. Power for those factories is to be had from hydro-electric sources in certain provinces and from coal in certain other provinces—power for the fullest requirements and at an economic price. All this is on the production side. On the consumption side, India, with a population aggregating one-fifth of the world's population, affords one of the largest markets at the very door of the indigenous industries. And, it may be added, China is next door; and if these two Eastern countries be taken together, there is a market composed of half the world's total population.

In other words, we have all possible advantages on the production side—raw material, minerals, capital, conveniences for erection of factories, cheap

power and abundant labour. In regard to consumption, there is an unlimited market. How is it, then, that when India is exactly like America in regard to all the natural advantages for a successful organisation of industry, U.S.A. is to-day in the forefront of Industrial nations and India is amongst the backward members? The answer to this query is to be found in the absence of a national economic policy on the part of the State. The American Government were determined to make the most of what nature has, in her abundance, given her; the Indian Government have been either ignorant of, or indifferent to, the great blessings which Nature has endowed this country with. We are firmly persuaded that if the Indian Government, like the American Government, make up their minds, now and here, that they would take all possible measures for converting the potential wealth of the country into kinetic wealth, India could occupy a proud place amongst the industrial nations of the world within a decade or two. If the old saying that where there is a will there would be a way is anywhere full of the most fruitful significance, it is in the case of a proper economic policy to be accepted, adopted and put into effect by the Government of India. Let us once again repeat: If the Government of India have the will to make India economically as strong as she could be, the way is both easy and short."

If such is *what India might be*, stern realism demands that we should pause and ascertain *what India is*. In the following pages, every section of economic activity is examined in detail; and tabular statements are furnished for a number of years, so that the reader may have an intensive and extensive idea of the progress or regress which India has made or suffered in a decade. There is overwhelming evidence that, judged by every criterion, there has been considerable deterioration; in some sections, there has been even disruption. Meanwhile, the Government have been content with repeating pious platitudes about the inevitability of distress in India at a time when the whole world is in the grip of acute distress. We will readily grant that the economic difficulties of India are, in part, due to world causes. But we are not prepared to admit that the Government have done all that they could to alleviate distress or mitigate the crisis. Just as the authorities have diagnosed the disease as due to foreign sources, they have been themselves doing nothing and weakly hoping for relief from outside.

The Finance Member did realise the force of our arguments in regard to the establishment of a National Economic Council and the adumbration of a national economic plan and policy. Towards this end, he invited Sir Arthur Salter to visit India, study local conditions and make suitable recommendations. Sir Arthur Salter did put forward an important scheme. Nothing further has been done. And the reason for this policy of inaction is said to be the pre-occupation of the Government of India with political troubles and constitutional reforms. This plea that their hands are full with far bigger political issues has been advanced, time and again, whenever the authorities are asked to embark on any forward policy in matters that matter.

The worst sufferers from the country's economic debility which is itself due to the lack of a national economic policy and a suitable

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agency to adumbrate and carry out that policy, are the Government themselves. Budget after budget has gone awry; there has been, over the past two years, a wide gulf between revenue and expenditure; no bridge has yet been thrown across that gulf.

On February 28, 1931, the Finance Member announced his budget for 1931-32 and expected a surplus of Rs. 1 lakh. This surplus was anticipated after considerable new taxes had been imposed. By September-end, there was so much deterioration in income and expenditure that on the basis of the estimates made in February, a net deficit of Rs. 19.55 crores was apprehended in each of the years, 1931-32 and 1932-33. Emergency proposals were put forward with a view to rectify the position, on the basis of which 1931-32 was expected to close with a deficit of Rs. 10.17 crores and 1932-33 with a surplus of Rs. 5.23 crores. The combined result of the two years was thus to be a deficit of Rs. 4.94 crores, which deficit was to be regarded as covered by making a reduction of Rs. 2.47 crores in each year from the provision for Reduction or Avoidance of Debt.

By March there had been further worsening in the budgetary position. On March 7, the Finance Member announced that against the September estimate of Rs. 10.17 crores as deficit in 1931-32, the revised estimate would be Rs. 13.06 crores; and that against an original estimated surplus of Rs. 5.23 crores for 1932-33, the revised surplus would be Rs. 2.15 crores. So far as the Central Government are concerned, the position is that in 1930-31 there was a realised deficit of Rs. 11.58 crores; that in 1931-32, the estimated deficit is Rs. 13.06 crores; and that the small surplus of Rs. 2.15 crores for 1932-33, is very doubtful of realisation. That is, since April 1930, there has already been an addition of Rs. 25 crores to our unproductive debt through the budgetary deficits of the Central Government.

The position of Railway finance is even worse. The loss on the working of railways in 1931-32 was 5.18 crores. In order to pay the railway contribution to general revenues, Rs. 5.74 crores was required. In all, Rs. 10.92 crores was withdrawn from the Railway Reserve Fund, reducing the reserve to Rs. 5.42 crores. The loss for 1931-32 was placed, in the revised estimates, at Rs. 9.47 crores. Contribution to general revenue had to be postponed. To meet the loss on the results of the railway working, Rs. 4.95 crores was drawn from the reserve; and a further sum of Rs. 4.52 crores was borrowed from the Railway Depreciation Fund. That is, at the end of 1931-32, the reserve fund had been practically wiped out of existence; and heavy inroads into the only other existing fund had to be resorted to. So far as 1932-33 is concerned, the net loss is expected to be Rs. 7.59 crores; and it is again proposed to have recourse to a temporary loan from the depreciation fund. The earnings of the railways in the first quarter of the new financial year have proved so unsatisfactory that the deficit, which the Railway Member will have to announce in his revised estimates in February

1933, should be anything like Rs. 12 crores. This should be a very severe strain, indeed, on the depreciation fund; and it would be a great pity if this fund also melts into thin air as has the railway reserve fund.

The Provincial Budgets, which are dealt with, province by province, in a series of statements at the end of this section, showed a combined deficit of Rs. 11.17 crores in 1930-31. In the case of one or two provinces, the figures for 1931-32 and 1932-33 are not available in our office. But taking the nine provincial budgets for which figures are available, the revised estimates for 1931-32 anticipate a deficit of Rs. 16.18 crores; the budget estimates for 1932-33 show a gap of Rs. 2.55 crores. There can be no doubt that the provincial Finance Members were unduly optimistic in their estimates of revenue for the current year; and that when they appear before their representative legislatures in February 1933, they would have to tell a uniformly cheerless story, the end of which would be that the combined deficit, on account of provincial governments, would be not Rs. 2½ crores but anything like Rs. 15 crores.

Taking the Central Government, the Railways and the Provincial Governments, 1931-32 would result in a total deficit of nearly Rs. 40 crores. In spite of new taxations on the stiffest scale imaginable, 1932-33 might well witness a deficit which is nearer Rs. 40 crores than Rs. 30 crores.

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**Statement of the Receipts and Disbursements of the Central Government, in India and in England**  
(In Thousands of Rupees)

	Accounts, 1921-22		Accounts, 1922-23		Accounts, 1923-24		Accounts, 1924-25		Accounts, 1925-26		Accounts, 1926-27	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
<b>Principal Heads of Revenue—</b>												
Customs .. .. .	33,75,11	...	40,64,03	...	33,98,28	...	44,98,10	...	46,96,18	...	46,56,84	...
Taxes on Income .. .. .	18,51,02	...	17,54,85	...	17,60,88	...	15,41,10	...	15,27,21	...	15,03,21	...
Salt .. .. .	4,77,80	...	5,31,10	...	8,65,30	...	6,18,84	...	5,07,91	...	5,40,85	...
Opium .. .. .	1,27,20	...	1,02,82	...	1,66,02	...	1,44,10	...	2,03,52	...	3,32,69	...
Other Heads .. .. .	1,17,07	...	1,65,10	...	2,13,47	...	1,63,19	...	1,52,03	...	1,60,98	...
<b>TOTAL</b> .. .. .	<b>50,40,70</b>	...	<b>67,07,40</b>	...	<b>69,04,04</b>	...	<b>69,65,51</b>	...	<b>70,86,85</b>	...	<b>72,03,57</b>	...
Forest and other Capital outlay charged to Revenue .. .. .	...	...	...	...	...	...	...	17,92	...	7,18	...	7,18
Irrigation .. .. .	...	8,54	...	2,85	...	5,88	...	11,44	...	8,12	...	5,25
Railways .. .. .	...	9,09,00	1,21,00	...	6,44,21	...	6,78,42	...	5,49,04	...	6,01,10	...
Posts and Telegraphs .. .. .	...	1,00,48	45,81	...	70,75	...	80,37	...	1,88,25	...	...	5,18
Debt Services .. .. .	...	14,88,00	...	15,00,19	...	14,16,85	...	15,27,23	...	14,12,20	...	12,05,00
Civil Administration .. .. .	...	8,68,51	...	9,49,07	...	8,05,46	...	9,88,61	...	9,86,51	...	10,27,30
Currency and Mint .. .. .	3,20,04	...	2,58,93	...	2,18,67	...	3,27,92	...	3,93,78	...	3,30,14	...
Civil Works .. .. .	...	1,42,87	...	1,20,43	...	1,33,26	...	1,64,52	...	1,47,57	...	1,73,05
Miscellaneous .. .. .	1,59,05	...	...	4,58,00	...	3,51,72	...	3,80,42	...	3,71,42	...	3,30,15
Military Services .. .. .	...	69,81,04	...	65,26,80	...	56,22,76	...	55,63,40	...	55,00,86	...	55,00,00
Provincial contributions and Miscellaneous adjustments between Central and Provincial Governments .. .. .	12,08,78	...	9,22,04	...	8,89,56	...	8,74,47	...	6,08,41	...	5,13,23	...
Extraordinary Items .. .. .	...	...	...	...	...	81,30	2,53,51	...	37,80	...	...	2,30,11
<b>GRAND TOTAL</b> .. .. .	<b>77,38,11</b>	<b>1,05,03,13</b>	<b>80,56,57</b>	<b>95,58,33</b>	<b>87,10,23</b>	<b>84,77,23</b>	<b>91,80,20</b>	<b>86,11,04</b>	<b>88,64,13</b>	<b>85,32,05</b>	<b>80,57,07</b>	<b>80,57,07</b>

Statement of the Receipts and Disbursements of the Central Government, in India and in England—(Contd.)

(In Thousands of Rupees)

	Accounts, 1927-28		Accounts, 1928-29		Accounts, 1929-30		Accounts, 1930-31		Revised Estimate, 1931-32		Budget Estimate, 1932-33	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
<b>Principal Heads of Revenue—</b>												
Customs ... ..	47,86,60	...	48,84,42	...	50,80,15	...	45,87,87	...	45,81,10	...	51,40,24	...
Taxes on Income ... ..	14,40,83	...	16,01,38	...	15,98,76	...	15,25,61	...	16,57,28	...	17,90,10	...
Salt ... ..	5,86,67	...	6,86,67	...	5,49,50	...	5,56,80	..	7,81,91	...	8,30,02	...
Opium ... ..	3,07,52	...	2,71,64	...	2,55,28	...	1,78,91	...	1,17,07	...	61,01	...
Other Heads ... ..	1,75,00	...	1,62,43	...	1,62,25	...	1,39,03	...	1,56,58	...	1,22,06	...
<b>TOTAL</b> ... ..	<b>71,96,62</b>	...	<b>75,06,59</b>	...	<b>75,95,94</b>	...	<b>69,87,72</b>	...	<b>71,98,84</b>	...	<b>79,43,43</b>	...
Forest and other Capital outlay charged to Revenue ... ..	...	12,58	...	8,62	...	5,13	...	4,02	...	1,22	...	3,16
Irrigation ... ..	...	8,33	...	12,85	...	20,02	...	30,73	...	12,22	...	2,46
Railways ... ..	6,27,83	...	5,23,19	...	6,11,86	...	5,73,57	...	...	...	...	...
Posts and Telegraphs ... ..	...	47,28	...	74,22	...	81,18	...	1,55,37	...	80,73	...	22,26
Debt Services ... ..	...	11,99,23	...	12,82,41	...	12,18,07	...	14,08,71	...	17,77,91	...	18,12,23
Civil Administration ... ..	...	10,22,09	...	10,42,58	...	11,49,32	...	12,36,93	...	11,87,81	...	8,74,82
Currency and Mint ... ..	1,89,79	...	2,16,71	...	1,99,48	...	27,34	...	81,24	...	2,61,15	...
Civil Works ... ..	...	1,42,41	...	1,42,24	...	2,35,62	...	2,35,47	...	1,99,23	..	1,67,40
Miscellaneous ... ..	...	3,22,85	...	3,16,45	...	3,50,02	...	3,84,43	...	2,61,73	...	3,33,22
Military Services ... ..	...	54,79,45	...	55,10,00	...	55,10,00	...	54,30,00	...	51,76,00	...	46,74,00
Provincial contributions and Miscellaneous adjustments between Central and Provincial Governments ... ..	2,60	...	2,92	...	3	...	...	...	...	...	...	1,02,00
Extraordinary Items ... ..	2,17,38	...	1,03,42	...	1,88,88	...	83,53	...	5,48	...	1,81	...
<b>GRAND TOTAL</b> ... ..	<b>82,84,22</b>	<b>82,34,22</b>	<b>83,52,83</b>	<b>83,84,37</b>	<b>85,96,19</b>	<b>85,69,36</b>	<b>76,72,21</b>	<b>88,30,66</b>	<b>72,80,56</b>	<b>86,46,40</b>	<b>82,06,39</b>	<b>79,91,55</b>



**Abstract Statement of the Receipts and Disbursements of the Central Government, in India and in England**  
(In Thousands of Rupees)

	Accounts, 1921-22		Accounts, 1922-23		Accounts, 1923-24		Accounts, 1924-25		Accounts, 1925-26		Accounts, 1926-27	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
Surplus or Deficit ... ..	...	27,65,02	...	15,01,76	2,39,00	...	5,68,25	...	3,31,18	...	...	...
<b>Capital Accounts—</b>												
Capital outlay on Security Press ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Railway Capital not charged to Revenue ... ..	68,88	22,96,39	28,27	18,43,42	...	21,82,93	..	13,95,24	..	22,72,70	...	29,85,93
Payment for discharge of Railway Debentures ... ..	...	7,85	...	63,34	...	...	...	...	...	...	...	...
Construction of Irrigation Works	...	1,18	...	2,25	...	18	...	96	...	-97	...	-70
Capital outlay on Posts and Telegraphs ... ..	...	81,62	...	65,62	...	75,21	...	1,17,56	...	2,28,54	...	82,50
Capital outlay on Vizagapatam Port ... ..	...	...	...	...	...	...	...	...	...	64,77	...	81,86
Capital outlay on Lighthouses and Light Ships ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Currency Capital outlay	...	...	...	...	...	...	...	...	...	...	...	...
Initial Expenditure on New Capital at Delhi ... ..	...	1,85,27	...	1,84,80	...	1,54,74	...	1,42,19	...	99,06	...	8,66
Payment of commuted value of Pensions ... ..	...	...	...	...	...	...	...	...	...	...	...	61,63
Capital outlay on Bombay Land Scheme ... ..	...	...	...	...	...	...	...	...	...	...	...	28,85
Payments to Retrenched Personnel ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>Debt Deposits Advances and Remittances—</b>												
Permanent Debt ... ..	42,26,70	...	66,22,99	...	37,13,70	...	11,74,77	...	...	4,03,35	3,31,66	...
Floating Debt ... ..	6,92,60	...	...	40,61,80	...	19,46,70	...	2,11,80	...	25	...	8,18,00
Unfunded Debt ... ..	4,62,47	...	2,06,51	...	9,80,07	...	8,06,12	...	18,45,51	...	12,72,14	...
Deposits and Advances	18,71,20	...	17,82,39	...	7,19,17	...	2,32,84	...	15,54,74	...	23,73,26	...
Loans and Advances by Central Government ... ..	...	1,47	20,42	...	...	3,25	...	1,22,69	...	8,02,45	...	5,88,77
Loans between Central and Provincial Governments ... ..	...	6,38,28	...	9,59,53	...	10,12,12	...	8,86,61	...	...	...	...
Remittances ... ..	8,24,86	...	87,92	...	...	70,67	1,18,36	...	...	85,91	1,21,88	...
Balances of Provincial Governments ... ..	...	8,53,01	6,85	...	8,67,86	...	2,64,95	...	3,20,25	...	...	4,85,26
Opening Balance ... ..	21,04,55	...	34,65,67	...	35,78,00	...	41,52,05	...	45,25,29	...	40,19,51	...
Closing Balance ... ..	...	84,65,67	...	85,78,00	...	41,52,05	...	45,25,29	...	40,19,51	...	81,11,10
	97,45,76	97,45,76	1,22,60,52	1,22,60,52	95,97,80	95,97,80	74,02,34	74,02,34	80,76,97	80,76,97	81,18,45	81,18,45

**Abstract Statement of the Receipts and Disbursement of the Central Government, in India and in England— (Contd.)**

*(In Thousands of Rupees)*

	Accounts, 1927-28		Accounts, 1928-29		Accounts, 1929-30		Accounts, 1930-31		Revised Estimate, 1931-32		Budget Estimate, 1932-33	
	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges	Net Receipts	Net Charges
Surplus or Deficit ... ..	...	...	...	81,54	26,83	...	...	11,58,45	...	18,65,84	2,14,84	...
<b>Capital Accounts—</b>												
Capital outlay on Security Press ... ..	...	-9,77	...	-4,76	...	23	...	4,02	...	-3,94	...	4
Railway Capital not charged to Revenue ... ..	...	33,14,99	15	29,35,07	2,44	30,18,34	...	13,20,87	...	8,35,00	...	4,15,00
Payment for discharge of Railway Debentures ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Construction of Irrigation Works	...	7	...	36	...	2,99	...	27	...	15	...	...
Capital outlay on Posts and Telegraphs ... ..	...	46,88	...	53,33	...	33,07	...	-3,68	...	87,63	...	23,15
Capital outlay on Vizagapatam Port ... ..	...	29,05	...	29,23	...	35,75	...	38,73	...	37,52	...	55,55
Capital outlay on Lighthouses and Light Ships ... ..	...	...	...	...	...	13	...	-13	...	-2	...	...
Currency Capital outlay ... ..	...	12,95	...	3,37	...	69	...	1,35	...	1	...	4
Initial Expenditure on New Capital at Delhi ... ..	...	46,58	...	36,65	...	72,72	...	48,27	...	12,22	...	...
Payment of commuted value of Pensions ... ..	...	44,26	...	36,09	...	38,09	...	42,66	...	33,26	...	46,55
Capital outlay on Bombay Land Scheme ... ..	...	20,74	...	...	...	...	...	2,10,37	...	...	...	...
Payments to Retrenched Personnel ... ..	...	...	...	...	...	...	...	...	...	10,00	...	25,00
<b>Debt Deposits Advances and Remittances—</b>												
Permanent Debt ... ..	4,38,83	...	28,01,91	...	20,39,57	...	46,97,54	...	1,20,70	...	...	12,06,19
Floating Debt ... ..	...	1,91,60	3,62,25	...	30,10,65	...	...	6,59,36	37,99,70	...	49,20	...
Unfunded Debt ... ..	11,86,63	...	8,40,95	...	13,01,22	...	5,78,41	...	9,87,94	...	11,71,03	...
Deposits and Advances ... ..	12,89,97	...	3,17,90	...	...	2,31,63	...	9,56,15	...	8,68,53	7,24,23	...
Loans and Advances by Central Government ... ..	...	7,77,43	...	12,72,24	...	7,20,11	...	10,97,02	...	14,09,60	...	11,00,96
Loans between Central and Provincial Governments ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Remittances ... ..	19,22	...	75,66	...	...	51,12	6,15	...	3,29	...	4,37	...
Balances of Provincial Governments ... ..	...	4,78	...	56,84	...	3,70,76	...	7,07,63	...	2,29,00	1,02,63	...
Opening Balance ... ..	32,18,88	...	16,70,97	...	16,19,83	...	31,27,91	...	24,68,67	...	24,90,50	...
Closing Balance ... ..	...	16,70,97	...	16,19,83	...	31,27,91	...	24,68,67	...	24,90,50	...	17,94,37
	61,53,58	61,53,58	60,69,79	60,69,79	80,03,54	80,03,54	87,10,01	87,10,01	73,80,30	73,80,30	47,56,33	47,56,33

## Total Revenue and Expenditure charged to Revenue of the various Provincial Governments since 1921-22.

(In Thousands of Rs.)

GOVERNMENT OF	Accounts, 1921-22		Accounts, 1922-23		Accounts, 1923-24		Accounts, 1924-25		Accounts, 1925-26		Accounts, 1926-27	
	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure
1. Madras ...	11,74,89	12,73,61	12,57,75	12,60,77	12,99,38	12,63,07	12,79,03	13,08,50	14,71,35	13,72,99	15,18,50	14,17,02
2. Bombay ...	13,10,73	15,01,93	14,17,20	13,53,17	14,52,82	14,23,45	14,99,18	14,72,57	15,24,18	16,15,52	14,58,07	16,23,67
3. Bengal ...	8,32,44	10,47,91	9,84,96	9,59,21	10,13,16	9,77,95	10,34,24	9,76,02	10,70,17	10,30,63	10,50,36	10,70,95
4. United Provinces ...	10,01,55	11,49,42	10,06,05	10,70,98	10,31,14	10,47,50	9,99,53	10,42,49	10,86,68	11,17,43	11,38,71	11,33,80
5. Punjab ...	7,09,69	8,81,12	8,27,90	8,85,44	9,15,83	8,04,01	9,77,72	7,94,73	11,52,00	9,94,38	10,85,71	11,46,70
6. { Burma ...	9,17,71	9,03,68	8,67,94	10,24,28	8,58,19	8,85,08	9,85,76	9,86,74	10,18,82	10,79,53	10,06,04	11,41,75
{ Shan States Federation ...	...	...	18,18	11,25	58,28	39,44	45,32	44,92	50,02	50,49	48,21	47,89
7. Bihar and Orissa ...	4,42,62	4,57,96	4,94,11	4,63,24	5,28,29	4,84,34	5,36,53	5,13,12	5,78,94	5,54,93	5,73,97	6,05,00
8. Central Provinces and Berar ...	4,71,88	4,95,40	5,15,34	4,89,57	5,17,12	4,94,42	5,25,34	4,89,26	5,35,14	5,32,62	5,07,02	5,74,38
9. Assam ...	1,81,53	2,05,23	1,84,43	2,05,47	2,10,88	1,90,02	2,30,49	2,00,29	2,50,05	2,28,21	2,43,49	2,43,21
10. Coorg ...	...	...	...	...	...	...	15,04	13,06	13,85	12,80	13,08	12,86
TOTAL ...	70,43,04	79,16,26	75,73,86	77,23,38	78,85,00	76,09,28	81,28,18	78,40,70	87,51,20	85,89,53	86,43,16	90,17,23
NET ...	-8,73,22		-1,49,53		+2,75,81		+2,87,48		+1,61,67		-3,74,07	
GOVERNMENT OF	Accounts, 1927-28		Accounts, 1928-29		Accounts, 1929-30		Accounts, 1930-31		Revised, 1931-32		Budget, 1932-33	
	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure	Total Revenue	Total Expenditure
1. Madras ...	16,99,86	14,98,13	17,53,11	16,13,97	18,08,87	16,84,78	16,83,93	17,89,69	15,87,73	16,38,47	15,50,18	15,50,18
2. Bombay ...	15,34,48	15,63,26	15,21,74	15,55,60	15,91,53	15,80,80	13,80,86	15,61,91	14,40,24	15,47,68	14,48,01	15,07,00
3. Bengal ...	10,81,29	10,85,57	10,98,67	10,90,47	11,35,87	11,33,64	9,66,27	11,40,79	9,06,39	11,13,89	9,49,84	11,12,98
4. United Provinces ...	12,86,38	11,74,82	11,45,15	12,28,49	12,98,61	12,33,20	11,96,73	12,87,77	10,91,89	12,03,33	11,01,95	11,58,75
5. Punjab* ...	12,06,37	11,86,53	11,15,69	11,61,20	11,27,19	11,32,25	10,56,15	10,98,74	...	...	...	...
6. { Burma ...	10,72,09	11,96,70	10,54,55	11,52,97	10,31,83	10,98,97	7,22,34	10,77,38	10,35,69	10,74,06	9,21,46	9,15,04
{ Shan States Federation* ...	53,53	56,41	57,62	60,31	54,58	51,67	47,84	53,84	...	...	...	...
7. Bihar and Orissa ...	5,72,42	5,87,11	5,78,22	5,85,27	5,94,54	6,09,42	5,27,59	6,06,13	5,15,19	5,50,24	5,30,08	4,99,07
8. Central Provinces and Berar ...	5,39,77	5,37,67	5,35,88	5,55,01	5,28,24	5,42,47	4,70,06	5,14,23	4,22,21	4,64,74	4,92,88	4,88,67
9. Assam ...	2,69,36	2,51,52	2,73,70	2,75,17	2,71,95	2,97,72	2,44,43	2,78,93	2,32,63	2,56,71	2,24,72	2,40,67
10. Coorg ...	13,99	12,71	14,42	12,92	15,72	15,35	11,88	15,47	13,12	13,88	13,20	13,30
TOTAL ...	93,29,54	91,50,43	91,48,75	92,91,38	94,57,93	93,80,27	83,08,08	94,24,88	...	...	...	...
NET ...	+1,79,11		-1,42,63		+77,66		-11,16,80					

\* Budgets for the current year were not received in this office at the time of compilation.

## Accounts of the Revenue of the Government of Madras since 1921-22

(In Thousands of Rupees)

	Revised Budget											
	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33
Taxes on Income ...	39,89	...	10,82	1,57	4,27	4,64	5,94	5,48	7,27	6,75	3,00	3,00
Land Revenue ...	6,07,48	6,09,21	5,86,78	6,15,06	6,39,79	6,22,00	6,28,77	5,24,89	5,21,06	4,88,62	7,53,87	7,55,35
Excise ...	4,88,17	4,90,14	5,18,87	4,90,14	4,94,85	5,10,53	5,84,87	5,58,76	5,92,26	5,24,28	4,05,55	3,65,06
Stamps ...	1,89,85	2,19,84	2,84,05	2,41,56	2,45,08	2,52,30	2,50,11	2,51,17	2,50,92	2,34,71	2,26,34	2,24,52
Forest ...	48,57	52,78	54,16	55,74	51,81	56,24	53,44	61,55	63,56	52,60	44,59	47,27
Registration ...	82,56	85,98	86,86	37,90	38,61	40,53	39,06	34,12	35,58	31,30	29,33	30,28
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ...	<b>14,06,52</b>	<b>14,07,90</b>	<b>14,41,54</b>	<b>14,41,92</b>	<b>14,73,91</b>	<b>14,86,24</b>	<b>15,06,69</b>	<b>14,35,97</b>	<b>14,70,65</b>	<b>13,38,35</b>	<b>14,62,68</b>	<b>14,25,43</b>
Railways ...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	91,76	94,70	1,02,34	88,74	96,85	91,27	86,62	1,83,41	1,88,65	1,86,01	-45,81	-34,90
Interest Receipts ...	6,20	9,58	11,18	12,80	16,21	20,86	25,17	34,27	40,88	42,52	31,02	27,86
Civil Administration ...	54,87	71,40	63,75	61,51	60,81	60,25	68,78	68,62	74,94	72,17	97,89	95,28
Civil Works ...	6,53	7,56	6,62	5,92	9,67	8,87	9,25	18,06	11,52	24,89	25,08	21,82
Miscellaneous ...	10,96	11,58	13,27	15,54	18,09	16,69	13,85	17,69	22,13	19,95	16,84	14,68
Contribution to the Central Government by Provincial Government ...	-3,83,81	-3,48,00	-3,48,00	-3,48,00	-2,21,93	-1,65,19	...	...	...	...	...	...
Miscellaneous adjustments between Central and Provincial Governments (net) ...	-18,14	3,08	8,68	60	88	...	-5,51	...	...	...	...	...
Extraordinary Receipts ...	...	...	...	...	17,90	...	...	...	...	...	...	...
Transfers from Revenue Reserve Fund ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Revenue in India</b> ...	<b>11,74,89</b>	<b>12,57,75</b>	<b>12,99,38</b>	<b>12,79,08</b>	<b>14,71,34</b>	<b>15,18,49</b>	<b>16,99,85</b>	<b>17,53,02</b>	<b>18,03,77</b>	<b>16,83,89</b>	<b>15,87,70</b>	<b>15,50,17</b>
Revenue in England with Exchange ...	...	...	...	...	1	1	1	9	10	4	8	1
<b>TOTAL REVENUE</b> ...	<b>11,74,89</b>	<b>12,57,75</b>	<b>12,99,38</b>	<b>12,79,08</b>	<b>14,71,35</b>	<b>15,18,50</b>	<b>16,99,86</b>	<b>17,53,11</b>	<b>18,03,87</b>	<b>16,83,93</b>	<b>15,87,78</b>	<b>15,50,18</b>

Expenditure—Government of Madras.

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income-Tax ...	1,10	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	1,28,58	1,33,16	40,30	37,22	38,15	38,96	39,16	39,73	28,39	28,45	25,68	19,96
Excise ...	30,70	29,02	27,93	26,62	47,12	42,69	42,96	43,67	45,19	46,38	37,83	34,10
Stamps ...	5,60	6,01	5,27	5,82	5,62	5,78	6,25	6,71	7,67	5,96	5,43	5,41
Forests ...	51,23	47,69	46,06	39,22	42,88	44,52	42,31	41,80	43,81	42,50	36,97	35,80
Registration ...	22,61	21,93	22,64	23,84	24,75	25,58	26,84	27,04	29,03	29,51	28,29	26,85
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	2,89,82	2,87,81	1,42,29	1,82,22	1,58,02	1,57,53	1,57,02	1,50,04	1,54,14	1,52,80	1,34,10	1,22,12
Forest and other Capital out- lay charged to Revenue ...	...	...	...	2,91	4,16	5,48	5,35	4,77	4,81	4,27	3,03	2,85
Railways ...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	78,59	73,58	78,38	80,30	83,34	93,90	97,34	1,05,82	1,23,71	1,27,47	59,02	40,84
Debt Services ...	-8,71	8,16	6,60	28,11	40,24	45,18	53,08	58,00	39,33	21,80	95,25	97,50
Civil Administration	7,32,42	7,34,52	8,16,19	8,44,32	8,61,81	8,85,35	9,24,80	10,08,48	10,45,41	11,06,05	10,23,19	9,87,53
Civil Works ...	1,19,70	1,01,51	99,04	77,19	95,54	1,10,36	1,40,27	1,58,73	1,82,04	2,34,02	1,90,62	1,58,74
Miscellaneous ...	87,17	78,87	85,67	81,00	81,03	73,89	78,15	83,07	86,93	95,43	80,86	80,81
Extraordinary Items	...	...	...	22,92	...	...	...	...	...	...	...	...
Total Expenditure in India ...	12,53,99	12,29,45	12,28,17	12,68,97	13,30,04	13,71,69	14,56,64	15,68,77	16,85,87	17,43,14	15,95,07	15,07,95
Expenditure in England with Exchange ...	19,62	31,32	34,90	39,53	42,95	45,33	41,49	45,20	48,91	46,55	48,40	42,23
TOTAL EXPENDITURE	12,73,61	12,60,77	12,63,07	13,08,50	13,72,99	14,17,02	14,98,13	16,13,97	16,84,78	17,89,69	16,33,47	15,50,18

## Revenue—Government of Bombay

( In Thousands of Rupees )

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income ...	1,14,58	3,00	...	...	...	...	...	...	...	...	20	...
Land Revenue ...	5,47,44	5,58,69	5,08,89	5,16,53	5,41,11	4,66,94	5,23,19	4,84,68	4,79,63	4,74,45	4,86,92	4,88,48
Excise ...	3,42,69	4,22,79	4,34,59	4,42,08	4,15,33	4,09,39	3,96,21	3,92,26	4,07,89	3,04,35	3,14,76	3,35,79
Stamps ...	1,64,36	1,76,62	1,79,89	1,73,06	1,76,35	1,67,58	1,75,40	1,68,39	1,77,15	1,58,06	1,47,70	1,52,97
Forest ...	74,94	70,37	71,50	73,05	75,28	76,56	72,94	73,43	79,75	52,24	59,16	56,50
Registration ...	13,27	13,03	12,87	12,49	12,78	12,04	11,82	11,75	12,83	10,89	10,96	11,00
Scheduled Taxes ...	...	2,66	9,40	9,04	15,30	19,55	21,20	21,52	20,12	16,39	19,35	21,97
Total ...	12,57,23	12,47,16	12,17,14	12,32,18	12,36,15	11,52,06	12,00,76	11,52,03	11,76,87	10,16,38	10,39,05	10,66,71
Railways ...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	35,70	53,27	54,02	53,28	42,11	49,24	42,94	65,72	46,80	33,12	41,91	25,01
Interest Receipts ...	66,14	80,07	1,02,92	1,32,67	1,65,80	1,63,13	1,58,27	1,51,52	1,45,86	1,47,23	1,44,21	1,44,51
Civil Administration	35,91	52,80	56,36	53,37	57,77	59,10	56,04	76,01	82,51	89,77	92,41	96,11
Civil Works ...	20,88	16,36	17,89	15,42	16,13	16,39	31,70	38,71	52,93	53,06	77,70	67,50
Miscellaneous ...	24,81	23,95	32,85	27,74	30,67	34,54	33,82	38,87	82,93	33,02	36,11	32,36
Contribution to the Central Government by Provincial Governments ...	-1,55,86	-56,00	-56,00	-56,00	-34,00	-28,00	...	...	...	...	...	...
Miscellaneous adjust- ments between Central and Pro- vincial Govern- ments (net) ...	26,37	-39	27,64	40,52	9,55	4,03	4	-4,00	-4	...	...	...
Extra-ordinary Receipts ...	...	...	...	...	...	2,58	7,01	1,96	3,56	7,06	8,77	15,80
Transfer from Reve- nue Reserve Fund	...	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India ...	13,10,73	14,17,22	14,52,82	14,99,18	15,24,18	14,58,07	15,84,48	15,21,72	15,91,42	13,80,54	14,40,16	14,48,00
Revenue in England with Exchange ...	...	-2	...	...	...	...	...	2	11	32	8	1
<b>TOTAL REVENUE ...</b>	<b>13,10,73</b>	<b>14,17,20</b>	<b>14,52,82</b>	<b>14,99,18</b>	<b>15,24,18</b>	<b>14,58,07</b>	<b>15,34,48</b>	<b>15,21,74</b>	<b>15,91,53</b>	<b>13,80,86</b>	<b>14,40,24</b>	<b>14,48,01</b>

## Expenditure—Government of Bombay.

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income-Tax	1,66	...	...	...	...	...	...	...	...	...	...	...
Land Revenue	1,64,20	1,66,81	1,82,18	61,99	68,98	65,51	66,48	64,77	66,08	61,93	70,95	66,55
Excise	28,65	32,51	35,28	40,15	54,03	63,92	47,94	46,32	44,25	41,68	40,41	50,72
Stamps	8,52	3,59	3,88	48	1,26	1,75	1,32	2,67	2,65	2,42	2,42	2,44
Forest	49,78	39,47	48,83	42,69	40,54	40,94	40,58	41,25	43,27	40,65	40,30	39,09
Registration	6,67	7,40	6,63	6,75	6,68	6,64	6,53	6,55	6,64	6,88	6,24	6,28
Scheduled Taxes	...	...	18	18	18	19	20	20	21	21	31	33
<b>TOTAL</b>	<b>2,54,43</b>	<b>2,49,78</b>	<b>2,70,98</b>	<b>1,52,19</b>	<b>1,66,62</b>	<b>1,78,95</b>	<b>1,63,05</b>	<b>1,61,76</b>	<b>1,63,10</b>	<b>1,56,27</b>	<b>1,60,63</b>	<b>1,65,41</b>
Forest & other Capital outlay Charged to Revenue	...	...	...	...	2,08	2,22	2,43	2,33	2,22	1,76	64	1,29
Railways	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation	1,23,92	72,51	1,00,04	91,85	94,05	95,50	1,05,20	99,05	1,12,24	99,73	88,90	94,27
Debt Services	84,78	1,09,15	1,55,07	2,01,91	2,76,99	2,49,81	2,25,88	2,18,31	2,13,73	1,80,23	1,90,44	2,02,60
Civil Administration	6,96,80	6,40,39	6,40,65	7,62,81	7,87,55	7,85,75	7,85,77	8,05,22	8,26,10	8,33,05	8,10,27	7,65,42
Civil Works	1,86,85	1,01,77	96,81	90,77	90,28	1,20,84	1,47,35	1,45,96	1,40,26	1,54,41	1,55,43	1,32,63
Miscellaneous	1,36,96	1,50,11	1,27,03	1,40,38	1,56,21	1,46,89	96,58	80,60	82,63	87,42	93,67	1,02,09
Extra ordinary Items	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Expenditure in India</b>	<b>14,83,74</b>	<b>13,23,71</b>	<b>13,90,58</b>	<b>14,39,41</b>	<b>15,73,73</b>	<b>15,79,96</b>	<b>15,25,76</b>	<b>15,18,23</b>	<b>15,40,28</b>	<b>15,22,52</b>	<b>15,05,98</b>	<b>14,63,77</b>
Expenditure in England with Exchange	18,19	29,46	32,87	33,16	41,79	43,71	37,50	42,37	40,52	39,89	41,70	43,23
<b>TOTAL EXPENDITURE</b>	<b>15,01,93</b>	<b>13,53,17</b>	<b>14,23,45</b>	<b>14,72,57</b>	<b>16,15,52</b>	<b>16,23,67</b>	<b>15,63,26</b>	<b>15,55,60</b>	<b>15,80,80</b>	<b>15,61,91</b>	<b>15,47,68</b>	<b>15,07,00</b>

## Revenue—Government of Bengal

( In Thousands of Rupees )

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income ...	93,00	...	...	...	...	...	...	...	...	...	...	...
Salt ...	...	...	...	...	...	...	...	...	...	...	3,58	6,00
Land Revenue ...	3,01,89	3,12,62	3,13,02	3,10,74	3,00,57	3,11,18	3,15,12	3,26,76	3,24,74	3,08,93	3,10,25	3,15,69
Excise ...	1,83,01	2,01,10	2,09,85	2,15,07	2,28,03	2,25,17	2,24,31	2,24,91	2,26,25	1,80,16	1,58,00	2,05,00
Stamps ...	2,73,84	3,02,24	3,16,75	3,36,68	3,57,98	3,31,60	3,46,81	3,54,88	3,91,97	3,12,95	2,76,00	1,68,00
Forest ...	18,99	23,11	22,61	24,75	28,57	31,24	38,49	31,18	30,52	23,12	16,25	18,00
Registration ...	25,48	24,67	24,49	25,85	38,92	38,50	40,17	39,94	31,69	23,72	19,00	20,25
Scheduled Taxes ..	...	25,12	23,73	21,52	19,81	16,91	19,47	16,99	16,29	13,00	13,40	24,00
<b>Total ...</b>	<b>8,96,21</b>	<b>8,88,86</b>	<b>9,10,45</b>	<b>9,34,61</b>	<b>9,73,88</b>	<b>9,54,60</b>	<b>9,79,37</b>	<b>9,94,66</b>	<b>10,21,46</b>	<b>8,61,88</b>	<b>7,69,41</b>	<b>8,36,94</b>
Railways ...	1,68	...	98	93	81	1,24	2,45	1,02	1,19	92	29	92
Irrigation ...	-20	29	3,44	3,40	41	45	-4,62	-1,19	-2,65	-2,09	-2,04	-2,70
Interest Receipts ...	4,21	2,77	3,12	3,48	3,19	4,11	6,29	6,24	6,18	4,67	4,36	4,71
Civil Administration	64,46	57,84	66,36	61,94	62,45	64,03	68,36	77,85	82,41	71,53	72,21	69,91
Civil Works ...	5,75	7,74	5,85	6,57	5,82	6,03	6,61	5,54	5,25	10,36	18,62	22,50
Miscellaneous ...	15,71	27,91	22,43	21,41	23,62	20,20	18,34	12,90	17,04	16,48	14,05	16,39
Contribution to the Central Govern- ment by Pro- vincial Govern- ments ...	-1,55,05	...	...	...	...	...	...	...	...	...	...	...
Miscellaneous adjust- ments between Central and Pro- vincial Govern- ments ...	-33	-43	3	2,03	...	...	1,59	...	...	...	...	...
Extraordinary Receipts ...	...	...	...	...	...	...	2,41	49	5,06	2,17	1,80	1,16
Transfer from Reve- nue Reserve Fund	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Revenue in India ...</b>	<b>8,32,44</b>	<b>9,34,98</b>	<b>10,13,16</b>	<b>10,34,37</b>	<b>10,70,18</b>	<b>10,50,66</b>	<b>10,81,30</b>	<b>10,97,01</b>	<b>11,35,39</b>	<b>9,65,92</b>	<b>9,02,84</b>	<b>9,49,83</b>
Revenue in England with Exchange	...	-2	...	-13	-1	-30	-1	1,66	-2	35	5	1
<b>TOTAL REVENUE ...</b>	<b>8,32,44</b>	<b>9,34,96</b>	<b>10,13,16</b>	<b>10,34,24</b>	<b>10,70,17</b>	<b>10,50,36</b>	<b>10,81,29</b>	<b>10,98,37</b>	<b>11,35,37</b>	<b>9,66,27</b>	<b>9,06,39</b>	<b>9,49,84</b>



## Expenditure—Government of Bengal

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income-Tax ...	94	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	35,82	28,88	28,05	30,82	35,50	38,48	38,45	46,73	45,00	45,36	41,05	41,25
Excise ...	15,32	15,37	13,17	12,88	20,04	24,03	23,87	22,03	22,26	21,80	19,70	17,80
Stamps ...	7,67	8,57	10,30	9,47	8,68	8,43	8,03	9,00	6,23	5,23	4,43	5,38
Forest ...	12,88	12,81	12,43	14,02	12,84	13,90	14,40	15,78	15,47	15,17	15,44	16,13
Registration ...	15,64	17,57	17,70	18,08	18,73	18,76	20,71	20,25	22,13	19,95	19,20	18,90
Scheduled Taxes ...	...	20	16	15	15	15	15	15	15	16	15	15
<b>TOTAL ...</b>	<b>88,27</b>	<b>82,90</b>	<b>81,90</b>	<b>85,42</b>	<b>1,01,53</b>	<b>1,04,65</b>	<b>1,06,51</b>	<b>1,14,84</b>	<b>1,11,33</b>	<b>1,07,67</b>	<b>1,00,93</b>	<b>99,70</b>
Forest and other Capital outlay charged to Revenue ...	...	...	...	...	...	3,23	2,02	1,04	1,17	78	1,73	1,20
Railways ...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	62,40	7,98	54,54	35,80	30,80	35,12	35,17	36,02	34,13	30,73	29,85	29,61
Debt Services ...	-8,30	-7,02	-6,32	-8,38	-8,48	-7,44	-7,17	-7,92	-1,68	23	1,01	15,02
Civil Administration	6,66,10	6,82,96	6,55,87	6,69,13	6,80,43	7,07,21	7,09,72	7,29,86	7,54,92	7,73,99	7,61,17	7,52,64
Civil Works ...	1,41,53	1,00,98	92,81	95,30	1,10,12	1,11,37	1,01,06	97,32	94,54	1,01,40	88,03	85,56
Miscellaneous ...	78,20	66,36	71,98	68,00	79,10	75,49	97,74	80,57	97,53	84,20	91,06	91,48
Extraordinary Items	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Expenditure in India ...</b>	<b>10,28,14</b>	<b>9,33,76</b>	<b>9,50,78</b>	<b>9,45,27</b>	<b>9,94,02</b>	<b>10,29,63</b>	<b>10,45,65</b>	<b>10,52,63</b>	<b>10,01,94</b>	<b>10,99,13</b>	<b>10,73,81</b>	<b>10,75,21</b>
Expenditure in England with Exchange ...	19,77	25,45	27,17	30,75	36,01	41,32	39,92	37,84	41,70	41,61	40,08	37,77
<b>TOTAL EXPENDITURE</b>	<b>10,47,91</b>	<b>9,59,21</b>	<b>9,77,95</b>	<b>9,76,02</b>	<b>10,30,63</b>	<b>10,70,95</b>	<b>10,85,57</b>	<b>10,90,47</b>	<b>11,33,64</b>	<b>11,40,79</b>	<b>11,13,89</b>	<b>11,12,98</b>

## Revenue—Government of the United Provinces

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income ... ..	24,78	33	...	...	8	...	...	...	71	1,40	...	...
Salt ... ..	...	...	...	...	...	...	...	...	...	...	6	10
Land Revenue ... ..	6,80,01	6,70,53	6,92,22	6,71,08	6,90,25	6,87,97	6,92,56	6,04,88	6,85,83	6,47,09	5,92,77	5,77,80
Excise ... ..	1,48,92	1,41,20	1,30,90	1,30,50	1,32,72	1,31,00	1,40,97	1,30,86	1,30,35	1,12,22	98,46	1,00,28
Stamps ... ..	1,51,23	1,60,70	1,75,41	1,74,40	1,76,46	1,69,29	1,71,87	1,72,70	1,80,65	1,69,67	1,62,47	1,72,81
Forest ... ..	86,47	83,73	73,56	69,22	64,26	58,20	66,08	61,80	61,80	49,76	45,44	45,36
Registration ... ..	12,73	12,60	12,33	12,49	13,70	13,31	12,92	13,54	13,77	11,98	10,90	11,86
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ... ..	<b>11,05,04</b>	<b>10,78,09</b>	<b>10,84,42</b>	<b>10,57,69</b>	<b>10,77,42</b>	<b>10,59,86</b>	<b>10,83,90</b>	<b>9,83,28</b>	<b>10,72,61</b>	<b>9,93,02</b>	<b>9,10,10</b>	<b>9,08,15</b>
Railways ... ..	83	83	2,09	2,14	2,07	84	2,23	1,87	1,85	1,45	87	94
Irrigation ... ..	92,89	85,73	90,06	66,27	85,82	99,35	97,88	84,99	1,27,86	1,09,71	97,27	1,14,76
Interest Receipts ... ..	14,93	22,43	17,55	13,19	12,90	9,23	11,76	10,29	16,92	15,26	15,40	14,10
Civil Administration ... ..	30,95	35,73	39,15	41,16	41,96	44,85	47,70	46,65	43,47	49,77	45,19	44,83
Civil Works ... ..	5,00	5,80	5,07	6,48	4,08	3,92	3,84	3,45	3,28	6,78	6,89	3,71
Miscellaneous ... ..	13,97	19,96	23,68	46,41	46,33	41,11	38,06	14,25	27,85	20,28	16,08	15,46
Contribution to the Central Government by Provincial Governments ... ..	-2,61,58	-2,40,00	-2,40,00	-2,40,00	-1,83,83	-1,50,65	..	...	...	...	...	...
Miscellaneous adjustments between Central & Provincial Governments ... ..	-43	-1,99	13	1,25	45	-15	67	...	...	...	...	...
Extraordinary Receipts ... ..	...	...	...	...	13	30,55	36	...	...	...	...	...
Transfers from Revenue Reserve Fund ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Revenue in India</b> ... ..	<b>10,01,55</b>	<b>10,06,07</b>	<b>10,31,15</b>	<b>9,99,59</b>	<b>10,36,68</b>	<b>11,33,71</b>	<b>12,30,40</b>	<b>11,44,78</b>	<b>12,98,84</b>	<b>11,96,27</b>	<b>10,91,89</b>	<b>11,01,95</b>
Revenue in England with Exchange ... ..	...	-2	-1	-6	...	...	-2	37	27	46	...	...
<b>TOTAL REVENUE</b> ... ..	<b>10,01,55</b>	<b>10,06,05</b>	<b>10,31,14</b>	<b>9,99,53</b>	<b>10,36,68</b>	<b>11,33,71</b>	<b>11,36,38</b>	<b>11,45,15</b>	<b>12,98,61</b>	<b>11,96,7</b>	<b>10,91,89</b>	<b>11,01,95</b>

## Expenditure—Government of the United Provinces

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income-Tax	1,21	...	...	...	...	...	...	...	...	...	...	...
Land Revenue	77,62	77,86	80,88	79,46	81,73	85,94	86,02	90,61	92,02	95,53	91,60	75,27
Excise	6,59	6,51	6,63	6,14	15,09	12,79	13,13	13,41	13,26	12,81	12,24	11,87
Stamps	3,46	3,26	4,04	4,09	3,42	3,43	3,31	3,75	3,41	3,24	3,01	2,82
Forests	71,50	61,22	43,19	86,53	86,64	81,68	92,26	81,42	92,53	82,02	28,66	27,95
Registration	4,69	4,63	4,54	4,57	4,75	4,64	4,74	4,90	4,97	4,96	4,71	4,89
Scheduled Taxes	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b>	<b>1,65,16</b>	<b>1,53,43</b>	<b>1,40,18</b>	<b>1,30,79</b>	<b>1,41,63</b>	<b>1,38,48</b>	<b>1,40,06</b>	<b>1,44,09</b>	<b>1,46,79</b>	<b>1,48,55</b>	<b>1,40,22</b>	<b>1,22,30</b>
Forest and other capital outlay charged to Revenue	...	...	..	...	85	1,33	1,73	1,01	1,34	74	16	4
Railways	15	26	22	17	16	17	13	13	13	13	8	8
Irrigation	52,20	52,69	58,62	64,07	74,03	78,63	86,08	1,05,07	94,12	1,02,80	1,08,26	1,09,54
Debt Services	42,03	32,96	29,59	29,79	33,09	41,06	59,59	62,28	66,75	89,80	70,49	85,31
Civil Administration	6,60,93	6,24,96	6,17,06	6,85,88	6,93,63	6,95,09	7,14,99	7,22,30	7,44,56	7,41,69	7,08,52	6,73,33
Civil Works	1,01,75	77,39	73,55	80,26	69,62	67,90	65,74	70,32	59,02	65,64	39,63	45,44
Miscellaneous	9,00	1,07,18	1,03,13	71,60	69,12	70,38	67,17	82,95	88,41	92,37	86,92	81,90
Extraordinary Items	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Expenditure in India</b>	<b>11,30,62</b>	<b>10,48,92</b>	<b>10,22,85</b>	<b>10,12,51</b>	<b>10,81,63</b>	<b>10,93,04</b>	<b>11,35,49</b>	<b>11,39,15</b>	<b>11,92,12</b>	<b>12,41,78</b>	<b>11,00,28</b>	<b>11,17,94</b>
Expenditure in England with Exchange	18,80	22,06	25,15	29,08	35,80	40,76	39,83	39,34	41,08	45,99	43,05	40,81
<b>TOTAL EXPENDITURE</b>	<b>11,49,42</b>	<b>10,70,98</b>	<b>10,47,50</b>	<b>10,42,49</b>	<b>11,17,43</b>	<b>11,33,80</b>	<b>11,74,32</b>	<b>12,28,49</b>	<b>12,33,20</b>	<b>12,87,77</b>	<b>12,03,33</b>	<b>11,58,75</b>

**Revenue—Government of the Punjab**  
(In Thousands of Rupees.)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Taxes on Income ...	14,11	5,60	4,24	1,90	8,82	4,02	4,88	4,02	8,60	2,00
Land Revenue ...	2,45,56	3,23,14	3,64,40	3,58,68	3,07,13	3,21,26	3,00,15	2,77,93	2,57,76	2,69,43
Excise ...	1,15,96	1,02,84	1,04,18	1,18,96	1,28,12	1,24,31	1,17,78	1,21,86	1,15,07	1,11,52
Stamp ...	81,86	88,65	95,90	1,16,61	1,14,85	1,13,27	1,17,94	1,21,03	1,15,08	1,10,02
Forest ...	49,91	34,44	33,86	37,27	41,12	39,08	31,94	35,28	31,58	23,85
Registration ...	6,37	6,81	7,16	8,83	9,44	9,11	9,08	9,21	9,33	8,33
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ...	<b>5,13,78</b>	<b>5,61,57</b>	<b>6,19,74</b>	<b>6,37,25</b>	<b>5,98,98</b>	<b>6,11,05</b>	<b>5,81,67</b>	<b>5,68,83</b>	<b>5,32,42</b>	<b>5,25,20</b>
Railways ...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	3,32,79	3,63,79	3,02,12	4,30,13	4,57,08	3,80,08	4,08,33	3,74,39	3,94,45	3,61,59
Interest Receipts ...	4,40	6,65	5,04	5,91	11,76	8,79	10,39	8,59	9,70	10,02
Civil Administration ...	31,54	37,46	41,50	40,74	40,99	45,50	52,75	57,49	60,23	54,93
Civil Works ...	4,07	3,80	4,64	5,32	5,80	4,89	3,60	6,35	7,01	9,74
Miscellaneous ...	25,19	30,15	27,80	33,30	2,22,96	26,72	28,36	27,54	35,70	38,03
Contribution to the Central Government by Provincial Governments ...	-1,88,82	-1,75,00	-1,75,00	-1,75,00	-1,13,84	-85,73	...	...	...	...
Miscellaneous adjustments between Central and Provincial Governments ...	-13,26	-51	1	18	44	...	28	...	...	...
Extraordinary Receipts ...	...	...	...	...	1,27,84	34,69	1,16,05	73,24	73,27	46,46
Transfers from Revenue Reserve Fund ...	...	...	...	...	...	10,00	...	...	15,00	9,86
<b>Total Revenue in India</b> ...	<b>7,09,69</b>	<b>8,27,91</b>	<b>9,15,85</b>	<b>9,77,83</b>	<b>11,52,00</b>	<b>10,85,99</b>	<b>12,06,43</b>	<b>11,15,43</b>	<b>11,27,78</b>	<b>10,55,83</b>
Revenue in England with Exchange ...	...	-1	-2	-11	...	-28	-6	26	-59	32
<b>TOTAL REVENUE</b> ...	<b>7,09,69</b>	<b>8,27,90</b>	<b>9,15,83</b>	<b>9,77,72</b>	<b>11,52,00</b>	<b>10,85,71</b>	<b>12,06,37</b>	<b>11,15,69</b>	<b>11,27,19</b>	<b>10,56,15</b>

Expenditure—Government of the Punjab

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Income-Tax ...	30	...	...	...	...	...	...	...	...	...
Land Revenue ...	48,44	45,51	41,52	41,75	48,60	42,99	41,50	40,95	40,87	39,63
Excise ...	8,72	8,71	8,98	4,56	17,82	15,22	15,49	11,71	13,73	12,74
Stamps ...	2,79	2,47	1,99	2,50	2,75	2,40	2,32	2,43	3,46	1,87
Forest ...	43,76	48,93	28,95	25,93	24,95	26,80	25,52	24,93	24,73	23,38
Registration ...	1,11	1,21	1,07	95	1,00	99	1,03	1,04	99	96
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ...	<b>1,00,12</b>	<b>1,01,83</b>	<b>77,51</b>	<b>75,69</b>	<b>90,12</b>	<b>88,40</b>	<b>85,95</b>	<b>81,06</b>	<b>83,78</b>	<b>78,58</b>
Forest and other Capital outlay charged to Revenue ...	...	...	...	1	1,98	4,22	4,02	4,71	4,95	...
Railways ...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	91,20	87,11	99,85	1,04,90	1,91,79	2,56,63	2,87,34	1,50,62	1,31,46	1,37,53
Debt Services ...	-4,28	2,59	6,80	95	-4,18	-10,70	-22,89	-22,05	-16,27	-11,86
Civil Administration	4,48,01	4,75,27	4,64,63	4,71,23	5,18,37	5,44,69	5,69,67	6,17,05	6,50,91	6,39,57
Civil Works ...	1,22,03	1,05,18	88,17	68,78	1,07,58	1,49,25	2,05,99	2,45,00	1,83,11	1,44,73
Miscellaneous ...	1,05,67	98,29	50,31	43,24	54,76	56,79	57,16	46,62	54,95	70,70
Extraordinary Items	...	...	...	...	...	...	...	...	...	...
Transfer to Revenue Reserve Fund ...	...	...	...	...	...	20,00	15,00	...	...	...
<b>Total Expenditure in India</b> ...	<b>8,62,85</b>	<b>8,65,22</b>	<b>7,81,87</b>	<b>7,64,89</b>	<b>9,60,42</b>	<b>11,09,28</b>	<b>11,52,24</b>	<b>11,23,01</b>	<b>10,92,89</b>	<b>10,59,25</b>
Expenditure in Eng- land with Exchange	18,77	20,22	22,14	29,84	33,96	37,42	34,29	38,19	39,86	39,49
<b>TOTAL EXPENDITURE</b>	<b>8,81,12</b>	<b>8,85,44</b>	<b>8,04,01</b>	<b>7,94,73</b>	<b>9,94,38</b>	<b>11,46,70</b>	<b>11,86,53</b>	<b>11,61,20</b>	<b>11,32,25</b>	<b>10,98,74</b>

## Revenue—Government of Burma

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income...	88,52	...	88	5,90	8,92	14,81	14,93	12,90	11,40	10,36	12,00	7,50
Land Revenue ...	5,80,59	4,96,15	4,71,54	5,71,88	5,84,48	5,22,93	5,85,62	5,40,38	5,27,73	2,82,77	5,49,56	4,90,02
Excise ...	97,95	1,11,62	1,19,36	1,16,09	1,23,68	1,32,69	1,23,68	1,33,37	1,26,94	1,07,48	1,09,27	91,45
Stamps ...	40,48	50,56	57,89	62,45	66,59	65,84	70,05	70,65	69,84	59,48	61,50	61,51
Forest ...	2,21,17	1,82,83	1,77,58	1,81,85	2,09,62	2,17,86	2,07,88	1,60,75	1,87,82	1,44,07	1,56,86	1,28,29
Registration ...	4,97	5,05	5,50	5,80	6,37	6,89	7,02	6,48	6,40	6,42	7,20	6,85
Scheduled Taxes ...	...	...	...	...	...	...	...	4,57	4,15	3,06	12,25	10,25
<b>TOTAL ...</b>	<b>9,37,68</b>	<b>9,46,21</b>	<b>8,82,25</b>	<b>9,43,47</b>	<b>9,49,66</b>	<b>9,59,72</b>	<b>9,59,18</b>	<b>9,28,40</b>	<b>9,33,78</b>	<b>6,13,64</b>	<b>9,08,64</b>	<b>7,95,87</b>
Railways ...	...	80	86	-21	10	-2	-1	...	...	...	...	...
Irrigation ...	3,90	42,08	35,94	39,09	43,58	23,87	31,63	33,41	14,83	19,85	27,50	31,44
Interest Receipts...	4,57	6,40	8,40	12,61	13,28	11,68	11,24	11,32	10,90	9,46	8,09	9,45
Civil administration	22,17	25,46	26,77	34,23	34,53	36,67	44,48	49,48	54,59	52,44	53,63	49,62
Civil works ...	6,35	7,59	10,38	13,10	9,26	13,12	21,52	24,41	8,85	16,02	28,50	11,98
Miscellaneous ...	30,82	5,94	7,63	7,31	5,49	10,02	5,23	7,06	5,20	9,31	8,43	23,10
Contribution to the Central Govern- ment by Provin- cial Governments	-93,67	-64,00	-64,00	-64,00	-44,35	-50,28	...	...	...	...	...	...
Miscellaneous adjust- ments between Central and Pro- vincial Govern- ment ...	5,80	-2,04	-13	16	-1,39	...	-58	...	...	...	...	...
Extraordinary Re- ceipts ...	...	...	...	...	8,78	3,20	-61	44	2,62	1,17	...	...
Transfers from Revenue Reserve Fund ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Revenue in India ...</b>	<b>9,17,71</b>	<b>8,67,94</b>	<b>8,58,19</b>	<b>9,85,76</b>	<b>10,18,94</b>	<b>10,06,03</b>	<b>10,72,08</b>	<b>10,54,52</b>	<b>10,30,77</b>	<b>7,21,80</b>	<b>10,35,69</b>	<b>9,21,46</b>
Revenue in Eng- land with Ex- change ...	...	...	...	...	-12	1	1	3	6	45	...	...
<b>TOTAL REVENUE ...</b>	<b>9,17,71</b>	<b>8,67,94</b>	<b>8,58,19</b>	<b>9,85,76</b>	<b>10,18,82</b>	<b>10,06,04</b>	<b>10,72,09</b>	<b>10,54,55</b>	<b>10,30,83</b>	<b>7,22,34</b>	<b>10,35,69</b>	<b>9,21,46</b>

Expenditure—Government of Burma

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 21931-3	Budget 1932-33
Income-Tax ...	44	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ...	58,76	50,60	50,85	56,99	67,91	67,61	65,83	64,12	61,78	53,33	64,21	58,38
Excise ...	14,74	19,70	17,45	17,82	80,69	22,18	22,18	22,08	22,59	24,20	22,06	21,25
Stamps ...	1,98	1,45	1,84	1,43	1,39	1,50	1,78	1,76	1,59	1,39	1,53	1,22
Forest ...	90,83	93,87	99,72	92,96	77,05	79,08	75,01	60,13	65,04	64,03	68,69	55,60
Registration ...	1,89	1,42	1,47	1,53	1,58	1,63	1,81	1,87	1,88	1,87	1,87	1,79
Scheduled Taxes ...	...	...	...	...	...	...	...	...	4	8	2	2
TOTAL ...	1,62,54	1,71,54	1,70,83	1,70,73	1,78,62	1,72,05	1,66,11	1,50,86	152,92	1,44,85	1,58,38	1,38,23
Forest and other capital outlay charged to revenue	...	...	...	...	8,08	8,41	9,06	14,85	7,69	6,40	...	...
Railways ...	37,49	64,62	-1,08,46	-40	15	-4,70	...	...	...	...	...	...
Irrigation ...	23,72	67,58	51,88	52,29	67,72	57,80	60,22	43,14	36,04	36,77	42,75	27,95
Debt Services ...	-14,23	-16,83	-13,09	-13,54	-14,08	-25,11	-25,48	-20,73	-21,64	-16,09	-15,00	2,95
Civil Administration	4,26,24	5,59,58	4,80,99	4,84,64	4,97,95	5,52,44	5,77,10	5,87,40	5,71,52	5,51,88	5,80,01	5,22,07
Civil Works ...	1,62,29	1,90,94	2,01,12	1,82,46	2,33,01	2,17,60	2,51,21	2,50,21	2,11,64	2,10,78	1,74,01	94,79
Miscellaneous ...	43,73	47,08	63,89	67,74	59,01	75,27	89,55	62,31	78,75	82,42	73,69	72,25
Extraordinary Items	...	...	...	...	...	81,61	11,63	1,52	28	...	8	2
Total Expenditure in India ...	8,40,78	9,84,46	8,46,96	9,43,86	10,30,41	10,85,37	11,89,39	10,89,06	10,37,20	10,17,01	10,14,82	8,58,29
Expenditure in England with Exchange ...	62,90	89,82	38,12	42,88	49,12	56,88	57,31	63,91	61,77	60,37	59,24	54,75
TOTAL EXPENDITURE	9,03,68	10,24,28	8,85,08	9,86,74	10,79,53	11,41,75	11,96,70	10,52,97	10,98,97	10,77,38	10,74,06	9,13,04

## Revenue—Shan States Federation

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Taxes on Income ... ..	...	...	...	...	...	...	...	...	...	..
Land Revenue ... ..	...	8	2,33	5,31	4,18	2,47	6,06	4,79	5,24	4,24
Excise ... ..	...	...	...	8	2	24	1,06	1,27	1,35	94
Stamps ... ..	...	...	...	...	...	...	...	33	23	19
Forest ... ..	...	6,61	16,63	14,93	13,85	18,58	16,20	20,26	15,84	12,61
Registration ... ..	...	...	...	...	1	1	1	1	1	1
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...	...
TOTAL ... ..	...	6,64	18,96	20,32	18,06	21,30	24,23	26,66	22,67	17,99
Railways ... ..	...	...	...	...	...	...	...	...	...	...
Irrigation ... ..	...	...	...	...	...	...	...	...	...	...
Interest Receipts ... ..	...	...	...	...	...	...	1	1	1	...
Civil Administration ... ..	...	19	98	43	82	72	75	89	80	56
Civil Works ... ..	...	8	38	1,00	1,39	45	23	46	51	37
Miscellaneous ... ..	...	11,27	37,96	23,57	29,75	25,74	28,31	28,52	30,59	28,92
Contribution to the Central Government by Provincial Governments ... ..	...	..	...	...	...	...	...	...	...	...
Miscellaneous adjustment between Central and Provincial Governments ... ..	...	...	...	...	...	...	...	1,08	...	...
Extraordinary Receipts ... ..	...	...	...	...	...	...	...	...	...	...
Transfer from Revenue Reserve Fund ... ..	...	...	...	...	...	...	...	...	...	...
Total Revenue in India ... ..	Nil	18,18	58,28	45,32	50,02	48,21	53,53	57,62	54,58	47,84
Revenue in England with Exchange ... ..	...	...	...	...	...	...	...	...	...	...
TOTAL REVENUE ... ..	Nil	18,18	58,28	45,32	50,02	48,21	53,53	57,62	54,58	47,84



Expenditure—Shan States Federation

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Land Revenue ... ..	...	...	...	26	26	25	26	48	57	61
Excise ... ..	...	9	1	1	1	2	1,00	81	87	88
Stamps ... ..	...	...	...	...	...	...	...	1	...	...
Forest ... ..	...	1,36	3,28	3,86	3,99	4,43	4,29	4,47	4,97	4,52
Registration ... ..	...	...	...	...	1	1	1	1	1	1
<b>TOTAL</b> ... ..	...	<b>1,45</b>	<b>3,29</b>	<b>4,13</b>	<b>4,27</b>	<b>4,71</b>	<b>5,56</b>	<b>5,78</b>	<b>6,42</b>	<b>6,02</b>
Forest and other Capital outlay charged to Revenue ... ..	...	...	...	...	...	...	...	40	33	60
Railway ... ..	...	...	...	...	...	...	...	...	...	...
Irrigation ... ..	...	...	4	4	8	2	...	2	5	5
Debt Services ... ..	...	...	...	...	...	...	...	-1	19	71
Civil Administration ... ..	...	3,82	13,03	13,84	14,40	13,87	13,99	15,85	16,27	16,29
Civil Works ... ..	...	5,26	20,29	23,86	28,66	26,31	32,30	34,27	24,47	26,67
Miscellaneous ... ..	...	72	2,79	3,05	2,74	2,52	3,16	3,29	3,02	2,82
Extraordinary items ... ..	...	...	...	...	...	...	...	...	...	...
<b>Total Expenditure in India</b> ... ..	...	<b>11,25</b>	<b>39,44</b>	<b>44,92</b>	<b>50,15</b>	<b>47,43</b>	<b>55,01</b>	<b>59,60</b>	<b>50,75</b>	<b>53,16</b>
Expenditure in Eng- land with Ex- change ... ..	...	...	...	...	34	46	1,40	71	92	68
<b>TOTAL EXPENDITURE</b> ... ..	...	<b>11,25</b>	<b>39,44</b>	<b>44,92</b>	<b>50,49</b>	<b>47,89</b>	<b>56,41</b>	<b>60,31</b>	<b>51,67</b>	<b>53,84</b>

## Revenue—Bihar and Orissa

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income ... ..	10,55	2,87	2,55	2,54	2,41	3,24	3,20	4,74	4,49	3,14	2,80	2,82
Salt ... ..	...	...	...	...	...	...	...	...	...	...	4,02	...
Land Revenue ... ..	1,64,02	1,65,40	1,65,62	1,67,58	1,67,03	1,69,21	1,68,66	1,73,08	1,77,83	1,80,04	1,77,70	1,79,38
Excise ... ..	1,23,64	1,53,97	1,83,28	1,75,99	1,96,63	1,97,35	1,96,40	1,89,27	1,90,82	1,42,09	1,20,00	1,20,00
Stamps ... ..	87,30	95,12	96,33	1,00,43	1,07,52	1,07,12	1,09,75	1,10,36	1,11,34	1,07,80	1,05,00	1,05,00
Forest ... ..	9,00	8,82	10,29	10,71	10,29	8,45	9,39	10,97	9,39	8,11	6,13	7,28
Registration ... ..	8,78	12,66	13,65	13,74	15,01	15,42	16,74	17,03	17,08	14,54	13,00	13,00
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ... ..	<b>4,03,38</b>	<b>4,38,84</b>	<b>4,71,72</b>	<b>4,70,99</b>	<b>4,98,89</b>	<b>5,00,79</b>	<b>5,04,14</b>	<b>5,06,35</b>	<b>5,10,95</b>	<b>4,55,72</b>	<b>4,28,65</b>	<b>4,27,48</b>
Railways ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ... ..	17,78	16,75	18,16	18,25	22,54	24,27	22,44	20,92	17,91	17,68	18,04	19,80
Interest Receipt ... ..	3,04	3,30	4,32	5,04	7,52	9,33	7,29	7,72	7,56	5,92	5,22	5,59
Civil Administration ... ..	14,51	20,31	21,20	26,98	29,20	25,51	24,20	29,10	31,42	28,76	27,22	28,67
Civil Works ... ..	6,63	5,84	5,82	8,36	6,66	6,50	8,21	6,46	6,46	6,86	8,87	10,71
Miscellaneous ... ..	7,46	9,22	7,25	6,28	13,83	7,22	5,65	7,33	20,25	10,85	27,19	7,83
Contribution to the Central Government by Provincial Governments ... ..	-9,97	...	...	...	...	...	...	...	...	...	...	...
Miscellaneous adjustment between Central and Provincial Governments ... ..	-21	-15	-16	64	30	37	51	...	...	...	...	...
Extraordinary Receipts ... ..	...	...	...	...	...	...	...	...	...	1,58	...	...
Transfer from Revenue Reserve Fund ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Revenue in India</b> ... ..	<b>4,42,62</b>	<b>4,94,11</b>	<b>5,28,31</b>	<b>5,36,54</b>	<b>5,78,94</b>	<b>5,73,99</b>	<b>5,72,44</b>	<b>5,77,88</b>	<b>5,94,5</b>	<b>5,27,37</b>	<b>5,15,19</b>	<b>5,00,08</b>
Revenue in England with Exchange ... ..	...	...	-2	-1	...	-2	-2	84	-1	22	...	...
<b>TOTAL REVENUE</b> ... ..	<b>4,42,62</b>	<b>4,94,11</b>	<b>5,28,29</b>	<b>5,36,53</b>	<b>5,78,94</b>	<b>5,73,97</b>	<b>5,72,44</b>	<b>5,78,22</b>	<b>5,94,54</b>	<b>5,27,59</b>	<b>5,15,19</b>	<b>5,00,08</b>

## Expenditure—Bihar and Orissa

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income Tax ... ..	26	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ... ..	14,60	15,76	18,57	21,14	21,21	21,39	28,34	27,50	25,72	24,63	22,24	19,38
Excise ... ..	9,86	8,93	9,86	9,90	22,75	19,89	19,16	18,08	18,33	18,14	15,42	15,28
Stamps ... ..	2,60	2,61	3,27	2,86	2,97	3,06	3,18	3,39	2,53	2,89	2,37	2,26
Forests ... ..	9,95	7,06	7,45	7,79	6,53	8,41	6,68	7,19	7,62	7,34	7,92	7,22
Registration ... ..	5,49	5,37	5,50	5,45	5,88	6,08	6,24	6,23	6,49	6,41	6,22	5,94
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ... ..	<b>42,35</b>	<b>39,73</b>	<b>44,15</b>	<b>47,14</b>	<b>59,34</b>	<b>58,83</b>	<b>58,55</b>	<b>62,84</b>	<b>60,60</b>	<b>58,91</b>	<b>54,17</b>	<b>50,03</b>
Forest and other Capital outlay charged to Revenue ... ..	...	...	...	...	99	1,81	1,20	1,32	1,40	1,51	...	...
Railways ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ... ..	24,45	23,57	24,01	25,18	25,43	27,64	27,41	25,76	23,49	25,47	24,00	22,61
Debt Services ... ..	2,52	2,28	3,36	3,55	3,42	2,43	1,93	1,23	1,82	1,99	1,95	2,20
Civil Administration ... ..	2,77,87	2,87,29	2,99,59	3,15,30	3,31,72	3,62,40	3,53,35	3,62,66	3,78,84	3,30,88	3,49,48	2,28,31
Civil Works ... ..	59,82	56,99	64,29	66,85	72,98	88,18	84,82	76,42	85,63	80,25	60,04	40,43
Miscellaneous ... ..	37,22	41,06	36,46	37,61	39,91	40,43	37,70	32,47	34,12	32,70	37,00	33,27
Extra-ordinary Items ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Expenditure in India</b> ... ..	<b>4,44,23</b>	<b>4,50,92</b>	<b>4,71,86</b>	<b>4,95,63</b>	<b>5,33,70</b>	<b>5,81,22</b>	<b>5,64,54</b>	<b>5,62,25</b>	<b>5,85,99</b>	<b>5,81,80</b>	<b>5,26,64</b>	<b>4,76,04</b>
Expenditure in England with Exchange ... ..	13,73	12,32	12,48	17,49	21,14	23,78	22,57	23,02	22,43	24,33	23,60	32,13
<b>TOTAL EXPENDITURE</b> ... ..	<b>4,57,96</b>	<b>4,63,24</b>	<b>4,84,34</b>	<b>5,13,12</b>	<b>5,54,83</b>	<b>6,05,00</b>	<b>5,87,11</b>	<b>5,85,25</b>	<b>6,08,42</b>	<b>6,06,13</b>	<b>5,50,24</b>	<b>4,99,07</b>

## Revenue—Government of the Central Provinces.

(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income ...	9,08	1,49	3,42	2,30	1,36	2,18	1,72	2,23	2,74	2,65	1,00	1,00
Land Revenue ...	2,64,93	2,55,45	2,38,44	2,25,72	2,21,38	2,32,88	2,45,26	2,19,31	2,04,99	2,18,59	2,07,13	2,72,57
Excise ...	1,01,90	1,25,75	1,30,78	1,50,44	1,56,57	1,35,45	1,20,67	1,22,76	1,24,45	86,27	67,00	63,00
Stamps ...	50,22	53,25	67,28	68,34	71,05	61,45	65,20	69,72	67,18	59,19	56,50	56,00
Forest ...	41,84	47,07	51,05	52,33	49,88	53,21	50,78	54,46	59,97	51,12	47,64	48,53
Registration ...	6,44	6,83	6,62	6,79	6,66	6,48	6,57	7,30	7,00	5,35	4,55	4,76
Scheduled Taxes ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ...	<b>4,77,51</b>	<b>4,04,84</b>	<b>4,97,54</b>	<b>5,05,92</b>	<b>5,06,90</b>	<b>4,91,65</b>	<b>4,90,20</b>	<b>4,75,78</b>	<b>4,67,33</b>	<b>4,23,17</b>	<b>3,82,82</b>	<b>4,45,56</b>
Railways ...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ...	-2,82	1,86	1,63	91	92	1,92	1,23	-18	-26	3,20	-1,73	-1,92
Interest Receipts ...	3,98	8,19	5,14	3,30	2,72	2,49	3,77	3,82	2,86	4,13	4,42	7,18
Civil Administration ...	12,40	17,51	18,99	21,02	20,85	20,15	21,58	22,81	22,65	22,18	24,47	22,47
Civil Works ...	4,03	4,03	4,62	4,47	4,76	5,10	5,26	4,90	5,04	5,10	5,85	13,35
Miscellaneous ...	8,12	11,40	11,09	11,97	9,55	7,67	17,29	23,53	30,22	12,08	5,66	51,35
Contribution to the Central Government by Provincial Government ...	-30,78	-22,00	-22,00	-22,00	-13,09	-22,00	...	...	...	...	...	...
Miscellaneous adjustments between Central and Pro- vincial Governments ...	-63	-52	+20	-25	1,99	-41	27	...	...	...	...	...
Extraordinary Receipts ...	...	...	...	...	45	45	26	18	34	13	45	10
Transfers from Revenue Reserve Fund ...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Total Revenue in India</b> ...	<b>4,71,88</b>	<b>5,15,34</b>	<b>5,17,12</b>	<b>5,25,34</b>	<b>5,35,14</b>	<b>5,07,02</b>	<b>5,39,77</b>	<b>5,35,84</b>	<b>5,28,18</b>	<b>4,69,99</b>	<b>4,21,94</b>	<b>4,92,58</b>
Revenue in England with exchange ...	...	...	...	...	...	...	...	4	6	7	27	...
<b>TOTAL REVENUE</b> ...	<b>4,71,88</b>	<b>5,15,34</b>	<b>5,17,12</b>	<b>5,25,34</b>	<b>5,35,14</b>	<b>5,07,02</b>	<b>5,39,77</b>	<b>5,35,88</b>	<b>5,28,24</b>	<b>4,70,06</b>	<b>4,22,21</b>	<b>4,92,58</b>

**Expenditure—Government of the Central Provinces**  
(In Thousands of Rupees)

	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income-Tax ... ..	51	...	...	...	...	...	...	...	...	...	...	...
Land Revenue ... ..	37,76	44,74	46,20	23,80	25,00	26,64	28,74	29,22	28,01	28,67	23,08	10,40
Excise ... ..	7,84	7,20	9,51	7,44	21,02	17,85	14,75	12,93	11,43	11,70	9,53	8,47
Stamps ... ..	1,58	1,64	2,46	2,53	2,13	1,89	1,86	1,79	1,60	2,49	1,24	1,34
Forest ... ..	27,31	30,12	30,26	31,42	33,25	36,14	36,56	38,22	38,64	38,31	35,70	34,15
Registration ... ..	2,54	2,65	2,47	2,35	2,16	2,17	2,21	2,20	2,22	2,16	1,97	1,79
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ... ..	<b>77,40</b>	<b>86,35</b>	<b>90,90</b>	<b>67,54</b>	<b>83,56</b>	<b>84,69</b>	<b>84,12</b>	<b>84,30</b>	<b>82,80</b>	<b>83,33</b>	<b>71,52</b>	<b>63,24</b>
Forest and other Capital outlay charged to Revenue ... ..	...	...	...	...	2,42	2,52	2,00	2,21	1,12	1,29	98	40
Railways ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation ... ..	39,64	32,72	23,01	25,60	26,60	28,00	27,48	29,82	29,59	30,61	31,25	31,87
Debt Service ... ..	3,95	4,20	3,48	2,41	1,55	28	4,43	8,86	-1,26	30	2,95	39,12
Civil Administration ... ..	2,34,05	2,35,30	2,24,68	2,42,42	2,51,18	2,66,11	2,62,18	2,79,92	2,70,51	2,71,01	2,51,40	2,37,86
Civil Works ... ..	65,78	62,76	68,19	68,85	75,80	1,02,12	1,09,93	96,57	81,68	69,92	52,35	57,78
Miscellaneous ... ..	64,51	58,29	74,88	72,14	78,54	71,33	29,06	39,80	56,40	37,88	34,94	37,77
Extraordinary Items ... ..	...	...	...	...	28	9	...	...	...	...	...	...
<b>Total Expenditure in India</b> ... ..	<b>4,86,32</b>	<b>4,79,62</b>	<b>4,85,23</b>	<b>4,78,96</b>	<b>5,14,88</b>	<b>5,55,09</b>	<b>5,19,20</b>	<b>5,36,04</b>	<b>5,20,93</b>	<b>4,94,34</b>	<b>4,44,70</b>	<b>4,69,99</b>
Expenditure in England with Exchange ... ..	9,08	9,95	9,19	14,30	17,74	19,29	18,47	18,97	21,54	19,80	19,95	18,08
<b>Total Expenditure ...</b> ... ..	<b>4,95,40</b>	<b>4,89,57</b>	<b>4,94,42</b>	<b>4,88,26</b>	<b>5,32,62</b>	<b>5,74,88</b>	<b>5,37,67</b>	<b>5,55,01</b>	<b>5,42,47</b>	<b>5,14,23</b>	<b>4,64,74</b>	<b>4,88,07</b>

## Revenue—Government of Assam

(In Thousands of Rupees)

			1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Taxes on Income	...	...	...	...	...	...	...	...	...	...	...	...	8,00	8,00
Salt	...	...	8,29	1,15	4,16	5,54	5,20	4,92	5,62	6,68	5,53	4,94	42	42
Land Revenue	...	...	96,17	92,02	1,03,29	1,05,14	1,07,11	1,06,72	1,12,79	1,17,13	1,20,74	1,15,26	1,18,10	1,17,50
Excise	...	...	59,58	54,13	60,50	65,96	73,82	71,93	70,94	66,39	66,23	58,37	47,00	44,17
Stamps	...	...	15,23	18,08	19,84	20,65	22,22	23,50	23,50	22,01	19,98	19,49	18,50	19,00
Forest	...	...	13,22	17,14	19,74	24,79	30,89	31,67	36,14	37,63	35,20	22,63	20,54	08,29
Registration	...	...	1,25	1,33	1,78	1,87	2,18	2,28	2,30	2,32	2,09	1,97	2,04	2,22
Scheduled Taxes	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	TOTAL	...	1,88,74	1,83,85	2,09,31	2,23,95	2,40,96	2,41,08	2,51,29	2,52,16	2,49,77	2,22,06	2,09,60	2,04,60
Railways	...	...	-84	-14	-12	17	29	17	12	...	...	...	...	...
Irrigation	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Interest Receipt	...	...	45	98	87	61	80	1,02	1,59	1,57	2,74	95	91	1,04
Civil Administration	...	...	6,48	9,23	8,52	9,66	9,13	8,53	9,06	12,09	12,70	13,10	12,66	11,91
Civil works	...	...	3,17	4,52	4,32	5,50	4,51	4,30	4,21	4,68	4,48	5,90	7,83	5,28
Miscellaneous	...	...	1,42	99	2,04	4,09	3,35	3,84	2,95	3,12	2,25	2,41	1,60	1,89
Contribution to the Central Government by Provincial Governments	...	...	-18,27	-15,00	-15,00	-15,00	-9,00	-15,00	...	...	...	...	...	...
Miscellaneous adjustments between Central and Provincial	...	...	-12	...	+4	52	1	5	14	...	...	...	...	...
Extra-ordinary Receipts	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Transfers from Revenue Reserve Fund	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Revenue in India	...	...	1,81,53	1,84,43	2,10,88	2,30,49	2,50,05	2,43,49	2,69,36	2,73,02	2,71,94	2,44,42	2,32,60	2,24,72
Revenue in England with exchange	...	...	...	...	...	...	...	...	...	8	1	1	3	...
Total Revenue	...	...	1,81,53	1,84,43	2,10,88	2,30,49	2,50,05	2,43,49	2,69,36	2,73,70	2,71,95	2,44,43	2,32,63	2,24,72

## Expenditure—Government of Assam

(In Thousands of Rupees)

Cr			1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised 1931-32	Budget 1932-33
Income-Tax	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Land Revenue	...	...	18,31	14,72	15,72	16,29	17,29	18,09	19,10	19,07	20,55	21,88	20,50	18 90
Excise	...	...	2,32	2,27	1,37	1,75	13,88	10,99	7,08	9,60	9,15	8,48	6,09	6,21
Stamps	...	...	60	71	93	92	90	92	97	94	64	59	52	56
Forests	...	...	9,88	11,18	11,39	13,19	14,64	13,27	12,92	19,53	20,43	19,50	16,08	15,43
Registration	...	...	1,13	1,17	1,31	1,32	1,33	1,41	1,52	1,57	1,74	1,70	1,65	1,61
Scheduled Tax	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		TOTAL	27,26	30,00	31,22	33,47	48,04	44,68	42,49	50,71	5,251	52,15	44,84	42,71
Forest and other capital outlay charged to Revenue	...	...	...	...	...	...	89	1,03	1,15	1,70	177	1,06	68	50
Railways	...	...	1,38	37	48	1,15	1,09	35	53	58	59	60	52	50
Irrigation	...	...	61	53	68	74	78	64	98	1,13	90	71	78	67
Debt Services	...	...	-43	-50	-66	-65	-68	-67	-75	-86	-102	-65	2,30	5,55
Civil Administration	...	...	1,12,76	1,13,88	97,63	1,02,12	1,11,58	1,18,19	1,24,61	1,29,88	1,36,58	1,39,59	1,34,89	1 26,09
Civil Works	...	...	42,23	40,85	37,13	37,40	39,53	49,43	58,05	67,64	77,17	57,57	45,45	36,37
Miscellaneous	...	...	16,06	15,87	14,33	19,03	17,19	18,59	14,78	14,85	18,52	16,54	16,78	17,73
Extra-ordinary Items	...	...	...	...	...	...	84	...	...	...	...	...	...	...
Total Expenditure in India	...	...	1,99,87	2,00,95	1,82,63	1,98,26	2,18,76	2,32,24	2,41,84	2,65,63	2,37,02	2,68,17	2,40,33	2,30,72
Expenditure in England with Exchange	...	...	5,36	4,52	7,39	703	9,45	10,97	9,68	9,54	10,70	10,76	10,38	9,95
TOTAL EXPENDITURE	...	...	2,05,23	2,05,47	1,90,02	2,00,29	2,28,21	2,43,21	2,51,52	2,75,17	2,97,72	2,78,93	2,50,71	2,40,67

## Indian Finance Year-Book : 1932

### Revenue—Government of Coorg

(In Thousands of Rupees)

		1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised Budget 1931-32	Budget 1932-33
Taxes on Income ... ..	...	...	...	...	...	...	...	...	...	...
Land Revenue ... ..	...	8,56	8,76	8,75	8,78	8,68	8,87	8,45	4,04	8,75
Excise ... ..	...	8,48	8,40	8,30	8,67	8,77	8,88	8,80	2,61	8,16
Stamps ... ..	...	87	84	92	98	1,00	1,08	98	87	1,10
Forest ... ..	...	6,68	5,89	4,58	4,98	5,26	5,72	8,09	4,71	8,92
Registration ... ..	...	7	7	7	8	7	9	5	4	12
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ... ..	...	<b>14,66</b>	<b>18,46</b>	<b>12,62</b>	<b>18,89</b>	<b>18,78</b>	<b>14,64</b>	<b>10,96</b>	<b>12,27</b>	<b>12,05</b>
Railways ... ..	...	...	...	...	...	...	...	...	...	...
Irrigation ... ..	...	...	...	...	...	...	...	...	...	...
Interest Receipts ... ..	...	...	...	...	...	...	...	...	...	...
Civil Administration ... ..	...	82	88	84	41	47	57	67	66	94
Civil Works ... ..	...	16	14	15	15	12	86	28	17	18
Miscellaneous ... ..	...	2	4	10	4	5	8	2	2	8
Contribution to Central Government ... ..	...	-12	-12	-12	...	...	...	...	...	...
<b>Total Revenue in India</b> ... ..	...	<b>15,04</b>	<b>18,85</b>	<b>18,08</b>	<b>18,99</b>	<b>14,42</b>	<b>15,65</b>	<b>11,88</b>	<b>13,12</b>	<b>18,20</b>
Revenue in England with Exchange ... ..	...	...	...	...	...	...	7	...	...	...
<b>TOTAL REVENUE</b> ... ..	...	<b>15,04</b>	<b>18,85</b>	<b>18,08</b>	<b>18,99</b>	<b>14,42</b>	<b>15,72</b>	<b>11,88</b>	<b>13,12</b>	<b>18,20</b>



Expenditure—Government of Coorg.

(In Thousands of Rupees)

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	Revised Budget 1931-32	Budget 1932-33
Income-tax ... ..	...	...	...	...	...	...	...	...	...
Land Revenue ... ..	72	77	78	78	80	83	94	82	72
Excise ... ..	6	6	10	7	9	11	12	11	10
Stamps ... ..	2	2	2	3	4	2	2	1	2
Forests ... ..	3,18	2,80	2,65	2,34	2,57	2,21	2,41	2,63	2,63
Registration ... ..	1	2	2	2	2	2	2	2	2
Scheduled Taxes ... ..	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ... ..	<b>3,99</b>	<b>3,67</b>	<b>3,57</b>	<b>3,24</b>	<b>3,52</b>	<b>3,19</b>	<b>3,51</b>	<b>3,59</b>	<b>3,12</b>
Forest and other Capital outlay char- ged to Revenue ... ..	88	23	19	16	13	90	56	...	...
Railways ... ..	...	...	...	...	...	...	...	...	...
Irrigation ... ..	7	14	9	10	8	11	8	8	6
Debt Services ... ..	-1	-8	-4	-5	-5	-8	-14	-17	-17
Civil Administration ... ..	4,81	5,12	5,17	5,26	5,27	5,85	6,23	6,02	5,65
Civil Works ... ..	2,48	2,46	2,48	2,39	2,49	3,97	3,85	3,28	3,49
Miscellaneous ... ..	92	88	86	1,06	70	1,02	1,02	1,02	1,11
Extra-ordinary items ... ..	...	...	...	...	...	...	...	...	...
<b>Total Expenditure in India</b> ... ..	<b>12,64</b>	<b>12,47</b>	<b>12,32</b>	<b>12,16</b>	<b>12,14</b>	<b>14,96</b>	<b>15,11</b>	<b>13,83</b>	<b>13,80</b>
Expenditure in Eng- land with exchange ... ..	42	33	54	55	78	39	36	...	...
<b>TOTAL EXPENDITURE</b> ... ..	<b>13,06</b>	<b>12,80</b>	<b>12,86</b>	<b>12,71</b>	<b>12,92</b>	<b>15,35</b>	<b>15,47</b>	<b>13,83</b>	<b>13,80</b>

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# RAILWAY BUDGET—PAST, PRESENT AND FUTURE

## A Brief Sketch

By Mr. P. R. RAU,  
*Financial Commissioner of Railways*

Indian railways present many problems of very great importance and complexity and it is not possible in the space of a short article to deal with more than a very few of these, nor indeed to do more than call attention to the points requiring consideration without making any attempt to arrive at conclusions. Of all these problems by far the most important and urgent at present is that of making railways pay their way. The economic depression through which the world is passing at present has hit railways in all quarters of the globe: and, though Indian railways are not the worst sufferers, (Canadian railways for instance having lost in 1931 nearly 40 per cent. of receipts as compared with 1928) their total traffic revenue in 1931-32 fell from the high-water mark of three years earlier by 17 crores or 16½ per cent. In spite of drastic reductions in working expenses, net traffic receipts amounted to less than 24 crores or about 15 crores lower than the maximum reached in recent times. It is too early to make any prognostications of what 1932-33 will bring forth: but so far there are few signs of its redressing last year's balance.

2. A succession of disastrous years has, luckily not been a common feature of Indian railways in the past, and recent experience justifies optimism. A short historical retrospect will not be amiss in this connection; and the most suitable starting point for such a retrospect is 1924-25 when railway revenues were separated from general revenues, a depreciation fund was created, and other accounting changes introduced which make comparisons with past years difficult. In all but the last two of the eight years that have elapsed since, Indian railways were able to show a handsome profit after meeting all interest charges and providing from current revenues for depreciation accruing in the year. The total profits during these years amounted to 52½ crores of rupees; the last two years on the other hand resulted in a loss of 14½ crores. The net gain in these eight years may thus be taken as 38 crores, and, if railways had been allowed to keep their previous profits as a reserve, they would not have been unprepared for a succession of bad years. They would at any rate have had a wider choice of methods to meet the situation. But during the six years when they were making a profit, and for one year thereafter, railways paid to general revenues an average contribution of 6 crores a year—or 41½ crores in all. It was only in the last of the eight years that they were not only unable to pay a contribution, but had to borrow to pay their interest charges.

3. Again, in these eight years, railways provided from revenue 94 crores towards depreciation of their assets, while the total amount actually spent on replacements and renewals was only 75 crores. The depreciation reserve thus built up would have amounted to 19 crores at the end of 1931-32, had it not been necessary to utilise temporarily part of it during 1931-32 to meet the railway deficit.

4. To complete the picture, railways have borrowed 172 crores for capital expenditure in these eight years, of which 15 crores were for purchase of existing lines, 47 crores for construction of new lines, and 110 crores for improvements to existing lines and equipment. As a corollary, interest charges which amounted to 24 crores in 1924-25 have, in 1932-33, risen by nearly 10 crores. Another incidental result of increased capital expenditure is the growth in the provision for depreciation which, in 1932-33, is about 3½ crores higher than in 1924-25. In other words, even if other things had been equal, railways would have had to increase their net receipts by 13 crores to retain the position they had in 1924-25. It is true that in the same period the State-owned railways increased their mileage by over 4,500 miles, of which a quarter represents existing private-owned lines purchased by the State in the period, but most of the newly constructed lines are in their infancy and have not yet really had time to prove their earning capacity. Consequently even in normal circumstances the net receipts now from these lines could hardly have been expected to suffice to meet the interest charges on the capital expended on their construction; but while they were still in bud, and before they had begun to blossom, came a killing frost that nipt their roots. The net traffic receipts in 1931-32, amounted to less than 24 crores, or 14 crores lower than in 1924-25, while the interest charges to be met out of these had increased by over 9 crores.

5. Turning from the past to the present, there is unfortunately little cause for optimism. The estimates for 1932-33, anticipate a deficit of 7½ crores, based on net traffic receipts of about 25 crores, after providing nearly 13½ crores for depreciation, which is 8 crores in excess of actual requirements for the drastically reduced programme of the year. In effect, therefore, if these estimates are realised, Indian railways will have met from their current revenues, all their working expenses, including the actual expenditure on replacements and renewals, and their interest charges. But at the present moment, it is difficult to say with confidence that these estimates will be realised. The estimates of receipts assume the same volume of traffic as last year, but April has been very disappointing; and receipts have been 10 per cent. below last year, notwithstanding a certain measure of enhancement of fares and freights. This emphasises the necessity for railway administrations to see that their efforts at reduction of expenditure are not relaxed, and that no avenues of possible economies are left unexplored.

6. The difficulties of the position of Indian railways in the immediate future were fully realised by the Railway Retrenchment Sub-Committee when investigating the problem last year. They assumed that gross traffic receipts for some time to come would be somewhere between 90 and 95 crores and

net receipts would be 27 to 28 crores (actually the gross and net receipts in 1931-32, are now estimated at 86½ crores and 24 crores respectively). From these figures they came to the conclusion that the net receipts of railways must be increased by at least six crores annually if they were to remain solvent, and by thirteen or fourteen crores if they were to earn what could, in their opinion, be considered a reasonable return (5½ per cent.) on the capital invested on them. Now ordinary working expenses were reduced, in 1931-32, by over six crores compared with the previous year: and part of this reduction was admittedly no more than a postponement of expenditure on maintenance of line and equipment which cannot be put off indefinitely; and, as the Retrenchment Sub-Committee observe, it is difficult to count with certainty on further large reductions of expenditure, except by 'drastic changes in organisation or drastic cuts in salaries and wages.' A cut in salaries and wages, estimated to yield 2½ crores, has already been imposed as a temporary measure, but has not availed to avoid a large deficit. It is possible that the committee of experts envisaged by the Railway Retrenchment Sub-committee may be able to suggest a drastic reorganisation of railway administration resulting in large economies. It is also possible that detailed investigation may prove that the lives assumed for assets for purposes of calculating depreciation are an under-estimate and that some reduction in the annual contribution for depreciation is possible. On the other hand, as the Railway Retrenchment Sub-Committee point out, the fact must not be overlooked that 'the contribution do not take into account obsolescence, and that they aim at providing at the end of the assumed life only the original value of the asset and not the actual cost of replacement.' The chief hope of Indian railways must obviously lie in a large increase in their traffic receipts.

7. A return to normal conditions will naturally result in such an increase; but it is doubtful whether an increase adequate to bridge the present gap between receipts and expenditure and still more an increase sufficient to provide a definite surplus can be achieved within a relatively short period at the present level of rates and fares, including the recent increases which have brought them back to about the same level as before the reductions of four or five years ago. It is moreover an open question whether, unless there is a substantial rise in prices particularly of agricultural produce—the present level of rates and fares can be maintained in all cases. Then again the effect of a protectionist policy in India on the distribution of traffic and the possibility of changes in the relative importance of short load and long load traffic on railways has to be allowed for. Finally the growing competition from road transport which is making itself felt all over the world and not in India alone is a potent factor in preventing any undue enhancements in rates and fares.

8. The last is one of the major problems that face Indian railways at present. Elsewhere in the world, attempts have been made by railways to find a solution to this problem—but without conspicuous success—by various methods, *e.g.*, by starting motor buses themselves as a subsidiary activity, by getting the Government to regulate motor traffic and so on. India is such a vast country and its communications are so little developed that there is plenty of room for both railways and road transport to grow side by side, but it is essential in the larger interests of the country as a whole that they do not engage in ruinous competition, but are complementary to each other. The experience of the last few years seems to show that while it is very necessary to spare no efforts in developing communications in those large tracts of the country in which there are none at present, it is equally necessary to

do so at as little cost as possible; and that constructing new railway lines and equipping them according to the latest standard may be more than India can afford. Cheap transport is one of India's most crying needs, and much can be done by concentrating on building roads which will serve as feeders to railways. It is conceivable that in future railways will be restricted to main or trunk lines of communication, and that there will be a net-work of bus services for both passengers and goods connecting them with vast tracks of yet unopened country. Keen and active co-operation between the Provincial Governments responsible for road building and the Central (or Federal) Government responsible for railways is necessary to see that money which could be better utilised is not wasted in competitive activities. The Indian State railway system, on which has been sunk a capital of nearly 800 crores, is almost entirely the property of the Indian tax-payer; and every tax-payer is individually interested in seeing it perform its function of providing cheap and efficient transport without incurring a loss and being a burden to him. It seems, however, that this elementary proposition is yet insufficiently realised, for it is found that some Provincial Governments still too often employ their available resources, supplemented by their share of the grants from the Road Fund, in merely improving existing main lines of communication and assisting road motor traffic to compete with railways rather than in constructing new roads which will open new country and assist in moving agricultural produce and other commodities as required.

9. When railways emerge from the present slough of despond and from the era of deficits return to an era of surpluses, the problem will arise of the disposal of such surpluses. Opinions have always been divided on whether railways should be required to make a contribution to general revenues; or whether, they should not rather aim only at a revenue sufficient, after providing for the working expenses necessary for their efficient working and setting by an adequate sum for depreciation of assets, to meet the interest charges on the capital sunk. If we accept the argument that cheap and efficient transportation is a primary necessity for a vast and predominately agricultural country like India, it follows that freights and fares must be kept down to the lowest possible, and there should be no attempt to use railways as a means of avoiding taxation. The Federal Finance Committee have, however, assumed that the Federation, when it comes into being, can count on a net annual revenue of 5 crores from railways on the average. They consider that without making a contribution of that order or magnitude, railways cannot be considered to be self-supporting. One of the arguments in support of this contention is that, regarding the capital in the railways as an investment, the Central Government is entitled to expect to receive, in the form of interest at a higher rate than the rate at which it borrows, a sum sufficient to provide not only for the interest which it has itself to pay, but also for the writing down of the capital invested as a reserve against obsolescence. The Committee guard themselves against being understood to associate themselves definitely with this suggestion, but point out that if interest were charged at 5 per cent. the difference would materially exceed 5 crores. A similar idea underlies the suggestion made by the Incharge Committee—and tentatively supported by the Railway Retrenchment Sub-Committee in 1931—that railways should be worked so as to give a return of 5 per cent. on capital. Whether it is wiser to insist on a definite cash return from railways, or to prefer to obtain the more intangible, but possibly larger, benefits to the country as a whole derived from cheaper transport facilities is a question on which different opinions will always exist. It will no doubt be vigorously

debated when the details of the new constitution are being worked out; but the suggestion noticed by the Committee that it is necessary to arrange for amortisation of debt which is, strictly speaking, productive is an interesting one. If the necessity of such a course is accepted, railways can possibly claim that the amounts so set aside should not be treated as a contribution to general revenues, but should be used by themselves to write down their capital, and incidentally reduce their interest charges. An amortisation fund can be said to be really complementary to the depreciation reserve fund which railways are required to build up at present. It is arguable that the latter would be sufficient, in the case of a public utility undertaking like railways, were there no danger of obsolescence.

10. The Federal Finance Committee have expressed their belief that railways should be able, in fact, to provide an annual contribution of the magnitude of five crores. They have no doubt been led to this conclusion by past experience. In the first six years from the separation, railways did earn an average profit of 8½ crores, and handed over to general revenues 6 crores annually on the average. During the whole period of 8 years from 1924-25 to 1931-32 which includes two very bad years when they were working at a deficit, their profits averaged 4½ crores. While considering these figures, however, it is desirable to remember that there is no little doubt whether the profits referred to can be considered a true surplus. Sir Arthur Dickinson, who examined the accounting system of Indian Railways thoroughly in 1926-27, drew attention to the fact that under the present arrangements, the depreciation reserve fund built up from revenue provides only for the original cost of an asset and any excess cost of replacement due to a higher level of prices is a charge to capital. There is great force in the view that it is the first duty of every commercial undertaking to meet from revenue the cost of keeping its assets unimpaired, and that the present procedure is not, financially, quite sound. Sir Arthur Dickinson has also pointed out the desirability of revenue meeting charges for improvements to the assets which do not directly result in improved earning capacity. If these and other suggestions of Sir Arthur Dickinson based on con-

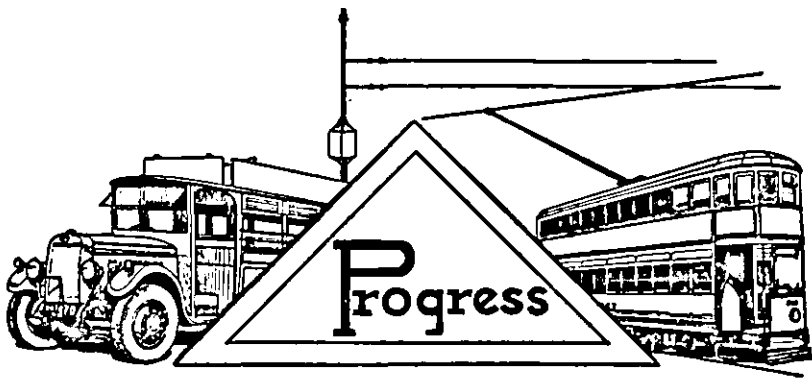
servative principles of sound finance had been in force from 1924-25, it is probable that the average net profits of railways would have dropped by about three crores to less than six crores a year taking only the first six more or less prosperous years into account, or to less than two crores a year, if we take the whole period since the separation into consideration.

11. Looking at the question from another point of view, the working of railways in 1931-32 resulted in a deficit of about 10 crores. An increase in net railway receipts of 15 crores is necessary merely to enable railways to pay this contribution, without providing for any reserve against adverse conditions; and in the absence of any very large further reductions of expenditure, this can only follow from an increase in gross receipts of about 20 to 25 crores. To say with any confidence that by about 1935-36 the gross traffic receipts of Indian State railways will reach a figure round about 110 crores requires no little optimism and no ordinary courage.

12. The last important problem to which a reference has to be made in this short sketch is one which has attracted much attention recently and which, in some respects, is the most important of all. It is the control of railways in the future constitution. The question was debated at considerable length in the Legislative Assembly in March last; and while there was great difference of opinion as to detail, there seemed to be general agreement that there should be a definite separation between the general policy and the detailed commercial administration of railways, and while the former should be controlled by the Legislature, the latter should be under a body free, as far as possible, from political pressure or influence. Every one will probably agree with President Hadley and Sir William Acworth that a close association between railways and politics is very undesirable since, if past experience be any guide, they are certain to corrupt each other, but the working out of the details of a suitable scheme which, while retaining control over policy with the Government and the Legislature, will leave matters of detail to the unfettered discretion of a properly selected management will be no easy task.

[A detailed account of Railways and Railway Finance appears in another section.—ED., I. F.]





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# CURRENCY AND MONETARY SECTION

## INDIAN FINANCE IN 1931-32.

The Indian financial situation, during the past year, was dominated, to a greater extent than in the two previous years, by momentous developments in the realm of international finance, which culminated in the widespread abandonment of the Gold Standard under the lead of Great Britain. The collapse of the Credit Anstalt of Austria in May 1931 was the first signal of an impending banking crisis in Austria and Germany; and though ultimately, negotiations were successfully concluded for the reconstruction of the Bank with a substantial credit from the Bank of England, the embarrassment of this leading Continental bank created a general distrust of banks and financial houses of Central Europe and led to a steady withdrawal of short-term deposits from Germany, firstly by America and later by Great Britain, Holland and Switzerland. To arrest the rot which was threatened in world finance President Hoover announced on June 20th the proposal of a twelve months' Moratorium for reparations and war debts. But the beneficial effect of this gesture was, to a large extent, nullified by French hesitancy and reluctance to accept the proposals in their entirety. During the interval between President Hoover's announcement and its ultimate acceptance by France, the withdrawal of credits from Germany gathered momentum; and though, up to a point, the Reichs Bank was willing to allow its reserves of gold and foreign exchange to be depleted by this process, a stage arrived when the German banks had to suspend payment of foreign short-term commercial debts.

London was known to have extensive commitments in Germany and the immobilisation of these assets started a run on the London money market.

The London market was, at that moment, in a particularly vulnerable position. Large foreign balances had been left on deposit; and, though subject to withdrawal at short notice, these balances had, in practice, never been so withdrawn, so that London had come to treat such credits as a permanent fund and utilised them in loans to Germany and other European countries. When the crisis came and balances were called up, the British houses found that their loans to the Continent were largely frozen and were not available for payment of their foreign creditors. This led to erratic fluctuations of foreign exchanges and a depreciation of sterling to well below the lower gold point. Credits were found necessary to support sterling and between the first week in August and the fateful September 21, the equivalent of £130 million at par of dollars and francs was thrown on the market in a futile endeavour to arrest the fall of sterling and maintain its nominal gold parity. It soon became evident that any further attempt at the pursuit of the same policy was foredoomed to failure and on September 21, the momentous decision to abandon the gold standard was taken.

The decision had world-wide repercussions. One important country after another stepped off the gold standard; and in the course of a month there was not a single country barring the United States, Holland, Switzerland, Belgium and France which had not either stopped payment in gold or imposed some kind of restriction or other on the operation of the exchanges. India decided to relinquish even such type of attenuated gold bullion standard as was set up in pursuance of the Hilton-Young Com-

mission Report and to link the rupee to sterling on the basis of the old nominal parity.

**Gold movements in 1931.**—One of the most noteworthy features of this critical period was the redistribution of the world's stock of monetary gold in a manner that could scarcely have been conceived of before. Balances held in the central banks of gold standard countries were no longer trusted as the equivalent of gold for the purpose of covering the note issue; and a wide-spread tendency to convert holdings of gold exchange into actual gold had begun to manifest itself. Withdrawals of gold and their geographical transfer were initiated on a frenzied scale. In the four months ending October 31, 1931, the United States lost £100 million, Germany £60 million and England £12 million, while Switzerland acquired £58 million, France £52 million, Belgium £32 million and Holland £30 million. France and Switzerland came to be regarded more and more as safe depositories for funds seeking refuge. Even after the markets had adjusted themselves to the changed circumstances of international finance, France continued to accumulate gold on a large scale, her holding on March 31, 1932 amounting to £618 million at par against £451 million on May 31, 1931.

**Money rates in International centres.**—Another noteworthy feature was the effect on bank rates in all the principal money centres. The era of easy money, which had commenced soon after the Wall Street debacle of 1929 came definitely to an end; and as far as England was concerned, the hopes entertained earlier in the year of a successful conversion operation to deal with the £2,000 million of 1929-47. War Loan had to be abandoned to a time which was hardly foreseeable at the time. The Bank of England rate, which was lowered to 3 per cent. on May 1, and to 2½ per cent. on May 14, 1931 in anticipation of this conversion, had soon to be raised to 3½ per cent. on July 23, 4½ per cent. on July 30 and 6 per cent. on September 21; and it was not till February 18, 1932, when the sterling crisis was more or less over and arrangements had been made for repayment of the greater part of the foreign credits outstanding, that the Bank rate was reduced to 5 per cent. and, in two successive steps later on, to 3½ per cent. The Federal Reserve Bank rediscount rate in New York was reduced from 2 per cent. to 1½ per cent. on May 7, 1931; but owing to the disturbed financial conditions which accompanied the fall of the pound, the rate was put up to 2½ per cent. on October 8, and to 3½ per cent. on October 15. The rate was changed to 3 per cent. on February 26, 1932. The immunity of the Bank of France from the storm which raged over practically the whole of the rest of the world may be seen from the fact that its official rate was subject only to very mild changes. The French bank rate was raised from 2 per cent. to 2½ per cent. on October 9, 1931 but was lowered to the old level of 2 per cent. on January 27, 1932.

**Effect on Rupee-Sterling Exchange.**—The difficulties of Indian finance, during the year under review, were not wholly due to the adverse trend of international events, at any rate, in the early months of this period. On the contrary, the year opened in a distinctly favourable atmosphere created by the Irwin-Gandhi agreement; and it appeared, for

the moment, as if the conclusion of this pact was the turning point in the history of Indian finance. The persistent demand for Reverse Councils, which was the outstanding feature of the four months, November 1930, to February, 1931, fell off suddenly early in March; and exchange showed signs of steadying up. This was due, in a large measure, to the interest taken by London financial houses in Rupee Treasury Bills and, to a certain extent, to the stoppage of the efflux of capital on Indian account and to the liquidation of speculative purchases of sterling.

The sale of sterling necessitated by investment in Rupee Treasury Bills, was, in all cases, hedged by forward purchases of sterling; but there is reason to believe that the Indian offices of the exchange banks who financed these exchange doubles, were in no anxiety to cover themselves against any sudden fall in the rupee-rate but were content to take the difference and carry their sales forward. This oversold position in sterling continued right up to the middle of June. Despite this favourable feature, the ready rate never strayed very far from the lower gold point of 1s. 5½d.; and, for several weeks in succession, the forward rate was quoted at a heavy discount below this level.

It was at about this time that the adverse developments in Central Europe began to have marked influence on the Indian monetary situation; the London houses found themselves obliged, as a measure of self-defence, to repatriate their investment in Rupee Bills. Even otherwise, developments in the Indian financial situation were heading towards a crisis. The failure of the sterling loan floated in London in May was the signal for a fresh wave of diffidence in exchange; and the existence of large blocks of short-term sterling loans maturing in quick succession tended to show up the inadequacy of the resources at the disposal of the Government of India for the defence of the rupee. An exchange crisis of first-class importance was imminent and was only averted by the announcement made by the Prime Minister in the House of Commons at the end of June that "His Majesty's Government were determined not to allow a state of affairs to arise which might jeopardise the financial stability of India and, to that end, were prepared to give financial support to the Government of India.

This announcement was interpreted to mean that in the event of a further big drain on the gold and foreign exchange resources of the Paper Currency Reserve, the British Government would lend sterling funds to the Government of India for the purpose of maintaining exchange at 1s. 6d.

The return of confidence was, however, short-lived; and though the demand for Reverse Councils dropped away immediately after the Prime Minister's announcement, sales of sterling had to be resumed soon after and over £10 million was sold during August and September. Early in September, the tone of the exchange market was one of extreme weakness; and a stage was reached when banks were reluctant to quote for remittances except against cover. Even the Calcutta market which had, at all times, offered powerful resistance to any serious decline in spot exchange below the lower gold point, had adopted an attitude of extreme nervousness and began to distrust Government's continued ability to maintain the ratio. Such was the position at the close of business on September 19, when not even the most well-informed banker had the least idea of what was to follow in London on the Monday following.

It may be stated that the Government themselves dared not contemplate the outlook ahead with any degree of hope or confidence.

The divorce of the pound from gold came at the most opportune moment; and by an Ordinance, the Government immediately divested themselves of their statutory obligation to sell gold or gold exchange; and after a closure of the banks for three days, a further Ordinance was promulgated imposing restrictions on remittances out of India and linking the

rupee to sterling on the basis of 1s. 6d. It was commonly believed, at that time, that the banks were still keeping considerable positions uncovered, and that the first effect of the Ordinance would be a rush to square up the sterling accounts. Careful enquiries, however, showed that the aggregate oversold position of all the banks in India was inconsiderable; and to the relief of the Government, no applications were made for Reserve Councils for any amount worth mention.

Exchange soon took an upward trend, deriving its first impetus from the widely hoped-for prevalent hopes of an improvement in exports, and sustained later by the emergence of bills drawn against exports of gold. The Government were, at last, enabled to enter the exchange market to secure their remittance requirements. The year closed with exchange strong at 1s. 6 3/32d.

**Exports of Gold.**—Soon after the abandonment of the gold standard, sterling began to fluctuate erratically in terms of gold currencies. Although prior to September 21, enormous amounts of foreign funds had been withdrawn from London, there yet remained substantial sums awaiting repatriation. The French commercial banks, the Naderlandsche Bank and the South African Reserve Bank proceeded, in turn, to liquidate their sterling assets, unmindful of the heavy loss entailed by the operation. Sterling was unable to withstand this strain and sank to the low level of 3.25 and 82.0 in terms of dollars and francs. This depreciation was duly reflected in the rise in the price of gold in the bullion market; and as the rupee was linked to sterling, the advance in the London price of gold was automatically communicated to the Indian markets.

The conditions, which set in the bullion market after the abandonment of the gold standard, were in strong contrast to those which prevailed in the months immediately preceding. Since the commencement of the year 1931, the gold market was particularly depressed; and the outflow of gold from the Bombay market to the consuming centres gave place to an influx of "distress" gold from upcountry. Substantial amounts were thereafter tendered to the Mint at the statutory price Rs. 21-3-10 per tola. When exchange went down in March, there was a slight additional margin of profit obtainable from the export of gold to London with the result that part of the inflowing gold was shipped; but the greater part continued to be tendered to the Bombay Mint for refinement and sale. The amount thus sold to the Currency authorities during the first six months of 1931-32 amounted to approximately Rs. 7½ crores.

The Ordinance, which was promulgated upon the abandonment of the gold standard to control exchange operations, did not make any change in the Mint's buying price of gold; and a disparity resulted between this price and the rupee equivalent of the London price. It was obviously a more profitable course to export gold to London than to sell it to the Mint. The premium on gold gave a strong stimulus to the disposal of distress gold; and at every fall in the American cross-rate and the consequent rise in the London price of gold, larger and larger quantities of gold were despatched from all over India to the Bombay market for shipment. The bulk of this gold consisted of melted jewellery and had to be refined and assayed in Bombay or in London for final disposal.

In the early days, when the course of bullion prices could not be assessed with any degree of confidence, substantial amounts of gold were despatched in unrefined form and had to be treated in the London refineries before sale in the open market. Subsequently, however, when banks' assistance became necessary, in an increasing measure, to finance these exports, practically all the gold was refined in the Bombay Mint prior to shipment. The bulk of the bullion was consigned to London and only small parcels were despatched to New York, Paris and Amsterdam.



As the proceeds of the sale of gold were realised in terms of rupees and no part of it was left in any gold standard country, the exports created not only sterling bills for negotiation with Indian exchange banks, but they led to the offer on the London foreign exchange market of enormous amounts of francs and dollars for conversion into sterling. The significance of Indian gold exports from the point of view of the gold value of sterling is at once obvious. At a time when sterling was subjected to a heavy strain by reason of the withdrawal of foreign monies at any price, the sale of francs and dollars on Indian account afforded invaluable support to sterling and enabled foreign banking houses to liquidate their commitments in sterling with no greater loss than they actually incurred.

By the first week of December, the efflux of foreign money from London had come to an end; and thereafter all offers of gold exchange were absorbed by the Bank of England for the purpose of accumulating *devisen* with which to repay the balance of the credits extended to it in August by the Bank of France and the Federal Reserve Bank of New York.

It may be confidently asserted that Indian shipments of gold not only played a prominent part in arresting a precipitate fall of sterling early in December, but that it brought about the subsequent appreciation of the pound. The realisation that Indian shipments were a new and totally unexpected factor consequent upon the abandonment of the gold standard, and that they would continue for a considerable time was, in no small measure, responsible for the change of front adopted by international speculators in sterling, who at once closed up their bear accounts and turned to bull sterling. Looking back on the critical days of September, there can now be no doubt that Indian exports of gold played a decisive part in the rally of sterling.

**Improvement in Financial Situation.**—The effect of gold shipments on the Indian financial situation was of a far-reaching character. On the re-opening of the money markets after a three days' enforced holiday in that eventful week in September, the undertone of exchange was one of mild uncertainty as to the future. But in less than two days, it became clear that the combined over-sales of sterling of all the banks put together were comparatively small and were practically covered by the bills resulting from gold shipped that week and awaiting shipment the week following. The exchange market developed a buoyant tendency; and the Government were relieved of the nightmare of Reverse Councils sales. By the end of October, the outlook for Government finances and Ways and Means position was changed beyond recognition. The Government were able to enter the exchange market as a buyer of sterling to replenish their depleted Home Treasury and incidentally to prevent exchange from rising very much above 1s. 6d.

Simultaneously a strong demand for currency to finance the movement of gold from upcountry districts to Bombay set in, which the Government were able to meet by expanding currency against the deposit of *ad hocs* in the Paper Currency Reserve. The Government were also enabled to reduce the amounts of Treasury Bills outstanding with the public; and although, in the early stages, it was found necessary to offer unprecedentedly high rates of discounts on Bills, it was only a question of time for them to regain control over the money market and bring about successive reductions in the borrowing rate. The transfer of Treasury Bills from the hands of the public to the Paper Currency Reserve gave the Government a substantial profit on the note issue which is more clearly reflected in the Central Budget for 1932-33.

**Government's Attitude to Gold Exports.**—While practically every country had found itself obliged to impose restrictions of some kind or other on the

foreign exchange market, and also place an embargo on the export of gold, the Government of India alone refused to include within the scope of their Ordinance any control over the outward movement of gold. Ostensibly, the intention of the Government in promulgating the Ordinance was to prevent the export of capital by the nationals and the withdrawal of short-term funds by foreigners. But the failure to prohibit the export of gold defeated the objective of the Government to a certain extent; and private withdrawal of foreign capital from India was allowed to continue unchecked.

On an examination of the statistics of foreign trade for the year under review, the following facts emerge: The balance of trade in merchandise in favour of India in 1931-32 was Rs. 34.88 crores as against Rs. 62.03 crores in 1930-31. Imports of silver in 1931-32 fell away considerably and amounted only to Rs. 2.59 crores. Moreover, gold appeared on the export side of the balance-sheet. The net visible balance of trade in favour of India was Rs. 90.50 crores. In 1930-31, the Government's sale of sterling counterbalanced their purchases in the open market and the net balance realised on foreign trade account was absorbed by export of capital and by the much smaller invisible charges such as banking, insurance and shipping services. In the year 1931-32, Government's purchases of sterling in the open market came to Rs. 53.04 crores; and if we deduct therefrom Reverse Councils aggregating to Rs. 18.98 crores sold between April and September, the net remittance secured by the Government out of the export surplus of Rs. 90.50 crores was only Rs. 34.06 crores. In spite of the Ordinance whose avowed object was to prevent an exodus of capital from the country, a sum of no less than Rs. 56.44 crores has flowed out of India.

The benefit, that has accrued to the Government from this policy of indifference to gold exports, has been of very little significance compared to the advantage reaped by the foreign financial houses. The exchange Ordinance, throughout its currency, was a dead letter; and the Government enjoyed a false sense of security born of their ability to buy large parcels of sterling and paid no heed to the fundamentals of the situation.

Had the control over exchange been tightened, and Government obtained all the remittances resulting from gold exports and private merchandise account; and had they utilised the surplus over current Home Treasury requirements in the repayment of the external debt, there would have been some justification for Government's policy of *laissez faire*.

From the beginning, it was urged by Indian critics of Government's financial policy that gold exports should be totally prohibited and that the currency authorities should buy all gold offering in the market at a price based on the current London-New York cross rate. Had this policy been pursued, the Paper Currency Reserve would have been very considerably strengthened; and although the exigencies of the Home Treasury would have necessitated transfer of a part of this gold to London, the net effect was bound to have been a considerable accession of strength to the Reserve position. The advantages of this policy from the standpoint of future monetary reform are obvious, as it would have enabled the Government to establish the Reserve Bank with ample resources at any time they think it fit to do so. The Government, however, chose to turn a deaf ear to this advice and urged, in defence of their policy, the theoretical objection that the currency authority should not acquire gold at a higher price than that fixed by statute and that any purchases in contravention of this rule would amount to an unwarrantable speculation in gold.

It is incredible that the Government should have thought that England would ever return to the gold standard at the old parity of 4.86 or that the British monetary authorities would aim at fixing the

pound anywhere near that level. That was the only contingency which would bring down the price of gold in terms of the rupee. But even granting the remote risk of loss, it would amount to no more than a legitimate charge for the insurance of certain contingencies; and, in any case, it is hardly proper for a Government which bought silver at 82d. an ounce and resold it at 16d. an ounce, to urge this defence.

Monetary conditions, throughout the year, were exceptionally tight; and the Imperial Bank and the joint stock banks had to work on an exceptionally low margin of cash. Treasury Bills were issued both by tender and on tap without interruption; and owing to the very attractive rates at which they were sold, private individuals and other non-money market interests turned to Treasury Bills as a means of investment of their short-term funds. This had a correspondingly deleterious effect on bank deposits.

The Government of India and the authorities of the Imperial Bank co-ordinated currency and credit control in such a manner that the Imperial Bank's cash balance remained at a more or less steady level. One effect of this policy was that the technical position of the Bank, as measured by the customary standards of cash balance and reserve percentage, ceased to be the governing factor in changes in bank rate.

The demand for money on trade account showed a falling-off in May; and the Bank rate was reduced from 7 per cent. to 6 per cent. on May 28, 1931. The course of money rates would have taken the seasonal downward trend in the monsoon months but for the totally unexpected development of the banking crisis in Europe. When the London market was subject to heavy withdrawals of funds in July and it became necessary for the Bank of England to arrange credits abroad to meet the drain, the authorities in India deemed it essential to put up the Bank rate from 6 per cent. to 7 per cent. as a precautionary measure, calculated to discourage similar withdrawals of funds from India. The Bank rate was again raised to 8 per cent. on September 24, as part of the comprehensive measures adopted at that time to meet the exchange crisis that had supervened and to discourage export of capital.

The improvement in the situation, which was subsequently brought about by gold exports, rendered a continuance of a control over money rates no longer necessary; and the Government of India felt themselves free to decontrol money rates and bring about progressive reductions in Bank rate to 6 per cent. before the end of the financial year. The borrowing rate on Treasury Bills showed remarkable fluctuations. After touching 5½ per cent. on July 17, the rate for three months' Bills rapidly mounted up to 7¼ per cent. in November and December. Six months' Bills were sold during the same period at 7¼ per cent. by tender, and 7 per cent. on tap.

**Emergency Currency Regulations:**—Ways and means advances were freely availed of by the Government and the maximum amount outstanding at any one time was Rs. 13½ crores during the weeks ending 4th and 11th March, 1931. The Bank was, however, unable to finance these advances except by recourse to the Paper Currency Department for emergency currency.

The state of trade was at such a low ebb that the Imperial Bank had, at no time, bills eligible for deposit as security to the extent of more than Rs. 4 crores or Rs. 5 crores and a situation arose in which expansion of currency could not be effected to the full extent that was desirable. This situation was, however, met by amending the regulations governing the issue of emergency currency.

The Paper Currency Act gives a very wide latitude as regards the composition of the currency reserve; and it was possible to devise measures to

meet the requirements of the money market without having to approach the Legislature for an amendment of the Paper Currency Act. The Act prescribed a limit of Rs. 50 crores for the created securities of the Government of India, but the total limit for the fiduciary issue was higher than this and it was permissible to expand currency against marketable Government of India securities. This was taken advantage of in the revised emergency currency regulations whereby the Paper Currency Department purchased securities temporarily from the Imperial Bank of India and effected expansion of currency thereagainst, with the proviso that the same securities would be re-sold to the Imperial Bank of India at such a price as would give the Paper Currency Reserve interest at Bank rate on the currency issued.

It is impossible to estimate, with certainty, the exact amount of currency so expanded against securities. But, on the assumption that during the period that the Bank rate stood at 8 and 7 per cent. there were no Treasury Bills transactions of any considerable size by the Imperial Bank of India, it should appear that the total expansion was Rs. 7 crores to Rs. 8 crores. The Ways and Means advance to the Government was thus financed, in part, out of the resources of the Bank itself.

With the commodity prices at an exceptionally low level and with export activity very considerably restricted owing to the financial crisis in the overseas buying markets, demand for money for the movement of merchandise was exceptionally small. After the abandonment of the gold standard, however, when export of gold assumed large dimensions there was keen demand for money and currency had to be expanded by no less than Rs. 50 crores, mostly against *ad hoc* securities. The Government met the increased demand for currency with commendable promptitude and showed no hesitation to reverse their earlier policy of contraction. Concurrently with the demand for finance of gold shipments, there was a steady efflux of silver rupees from the Paper Currency Reserve; and there is no doubt that part of the currency released during last year has been used for purposes of hoarding in place of the gold disgorged. The funds sent out on gold account have been exceptionally slow to return to the ports; and they have not afforded the money markets the relief that one might have expected.

**Sterling Loan.**—The difficulties experienced by the Government in the earlier part of the year in securing their remittance requirements forced them to have recourse to the London market for a sterling loan of £10 million in May. Although the issue bore interest at 6 per cent. it was a comparative failure and acted almost like a warning to Government that any further issues of India loans on the London market would be looked upon with disfavour. The total short-term liabilities on sterling loans maturing in the near future had reached such dimensions that some anxiety was felt in regard to their ultimate repayment, in view of the exchange position in India. At one time the big banks in London were inclined to frown on the inclusion of more than a moderate percentage of India Bonds in any parcel of securities tendered to them against money market loans.

**Rupee Loan.**—The Rupee loan operations of the Government were not more satisfactory. It is common knowledge that in recent years the rupee loan programmes of the Government had been subordinated to exigencies of exchange. The borrowing rate had been progressively put up year after year. This had a disastrous effect on giltedged market and banks were forced to provide annually considerable sums of their profits to meet depreciation on Government securities. Knowing that the banks in any case would not co-operate in their new issues, the Government, in utter disregard of the probable effect on the giltedged market, floated a short-term rupee loan in the form of 6½ per cent.

Bonds. The issue was an unlimited one and was on offer for practically an unlimited period. The banks took no interest in the loan; but fairly gratifying amounts were received throughout the post offices.

It is questionable, however, whether it has really provided the Government with any new moneys as the operation merely represented a transfer of funds from Post Office savings bank balances to the higher interest-bearing Government loan. The reactions of the ill-conceived operations of the Government in the money market during this period were so intensified by the repercussions of the international financial situation that giltedge prices declined by 10 per cent. in the case of short-term bonds and 20 per cent. in the case of long-term loans. The effect on banks and insurance companies of such a sharp fall in values can best be imagined. When the time came for the issue of balance-sheets ending December 31, 1931, there was no single institution which was not faced with the problem of how to tackle the colossal depreciation in their holding of giltedge securities. In certain cases, reserve funds were drawn upon to meet the loss; in other cases, investments continued to be shown at cost price in the balance sheet. The general tendency was, however, to write down non-terminable and long-term loans to market values and keep terminable short-dated loans at their book value or redemption value.

A noteworthy change occurred during the year in the relative level of prices of sterling and rupee securities of the Government of India. In the year 1930-31, sterling securities were approximately 3 to 4 points lower than similar rupee securities. As a result of this disparity, there was a persistent tendency for Indian funds to seek investment in London and for arbitrageurs to sell rupee securities and buy sterling loans. Immediately after the abandonment of the gold standard, when confidence in sterling was at the lowest ebb, India sterling securities depreciated to a larger extent than corresponding rupee issues. For instance,  $3\frac{1}{2}$  per cent. India Sterling Stock declined to £45 on September, 28, when  $3\frac{1}{2}$  per cent. Rupee Paper was quoting Rs. 52. Generally speaking, India sterling loans other than the recently floated 6 per cent. Bonds declined by nearly 20 per cent. whereas the rupee issues did not fall to anything like the same extent. After the recent revival of confidence on the London Stock Exchange in regard to Indian loans, the trend has been altogether reversed and sterling loans now stand at a higher level than rupee loans.

The effect of this has been to inaugurate arbitrage operation contrary to those indulged in previous years; and the tendency has been to sell sterling loans and invest the proceeds in rupee loans. Notwithstanding this movement, the gap between the

prices of the two classes of securities remains wide; and this is to be attributed to such special factors as the exceptionally easy money conditions which are at present prevailing in London and which are expected to continue for some considerable time.

Silver.—The silver market recovered somewhat from the low record of a shilling an ounce touched in February and fluctuated within narrow limits round about 13d. When sterling was divorced from gold, the price of silver rose in the London market to the extent of sterling's depreciation, while the New York price remained fairly steady. Renewed agitation for the remonetisation of silver and hope of a world conference on silver temporarily succeeded in raising the New York price; and the London quotation touched the highest spot price of the year at 21 9/16d., in November.

The rise was, however, short-lived and prices dropped over 3d. an ounce in mid-November.

The production of silver fell from 240,000,000 ounces in 1930, to 190,000,000 in 1931. Sales of demonetised silver by Siam and India continued unchecked but one or two Continental countries made small purchases for coinage requirements. Export of silver from India on Government account amount to about 30 million ounces while there was a net import of silver on private account of 19 million ounces valued at Rs. 2,59 lakhs.

Monthly figures of exports and imports of silver showed rather erratic fluctuations. Owing to the heavy arrivals in February, in anticipation of enhanced duties in the Central Budget, March and April recorded sharp declines; and before the surplus stock could be absorbed and before trade could revert to its normal condition, the intensification of the economic depression reduced considerably the silver offtake of the Indian masses. After the abandonment of the gold standard and the imposition of a further surcharge on the import duty on silver, the white metal figures more on the export side of the balance sheet than on the import side. Government's anticipations of the yield of silver duty failed to materialise; and in the latter half of the year, even the output of the Burma Corporation's mines had to be exported to London owing to absence of demand in the Bombay and Calcutta markets.

In previous years, the proceeds of the Government of India silver were converted into sterling securities and lodged in the Paper Currency Reserve and the loss on silver covered by *ad hoc* securities. During the current year, it would appear that the amount realised by the sale of silver was in the first instance credited to the Home Treasury; and, at a later stage, sterling securities were purchased with this money and deposited in the Gold Standard Reserve against release of a corresponding amount of gold for lodgment in the Paper Currency Reserve.



## Balance of Trade In India from 1922-23 to 1931-32.

(In Lakhs of Rs.)

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Exports of Indian Merchandise (private) ...	+ 2,99,16	+ 3,48,84	+ 3,84,66	+ 3,74,84	+ 3,01,44	+ 3,19,15	+ 3,30,13	+ 3,10,80	+ 2,20,49	+ 1,55,89
Re-exports of foreign ,, ( ,, ) ...	+ 15,16	+ 18,07	+ 13,51	+ 10,49	+ 8,01	+ 9,54	+ 7,83	+ 7,13	+ 5,15	+ 4,66
Imports of foreign ,, ( ,, ) ...	- 2,24,81	- 2,17,08	- 2,48,16	- 2,24,20	- 2,20,98	- 2,46,71	- 2,51,49	+ 2,38,95	- 1,63,61	- 1,25,60
Balance of trade in Merchandise ...	+ 90,01	+ 1,44,88	+ 1,55,01	+ 1,61,13	+ 79,47	+ 81,98	+ 86,47	+ 78,98	+ 62,03	+ 34,86
Gold (private) ...	- 41,18	- 29,19	- 73,93	- 84,85	- 19,40	- 18,10	- 21,20	- 14,22	- 12,75	+ 57,97
Silver ( ,, ) ...	- 18,17	- 18,38	- 20,06	- 17,15	- 19,79	- 18,85	- 13,04	- 11,80	- 11,65	- 2,50
Currency Notes (private) ...	- 91	- 1,08	- 28	+ 12	- 14	- 24	- 12	- 9	- 8	+ 26
Balance of transactions in Treasure (private)	- 60,26	- 48,65	- 91,27	- 51,88	- 39,33	- 32,10	- 34,36	- 26,20	- 24,43	+ 55,64
Total Visible Balance of Trade ...	+ 29,75	+ 96,23	+ 60,74	+ 1,09,25	+ 40,14	+ 49,79	+ 52,11	+ 52,78	+ 37,60	+ 90,50
Council Bills, purchases of sterling and other Government remittances to the United Kingdom ...	- 7,06	- 33,39	- 56,35	- 61,24	- 2,82	- 37,77	- 41,02	- 20,89	- 7,26	- 58,04
Sterling transfers on London sold in India ...	...	...	...	...	+ 1,93	...	...	...	+ 7,75	+ 18,98
Transfers of Government Securities ...	+ 2,62	- 35	- 38	- 1,27	+ 3	+ 28	- 1	- 29	- 8	+ 6
Interest drafts on India in respect of Govern- ment of India Securities ...	- 35	- 44	- 41	- 36	- 34	- 35	- 36	- 33	- 33	- 32
Balance of remittance of funds ...	- 4,79	- 34,18	- 57,14	- 62,87	- 1,20	- 37,84	- 41,39	- 21,01	+ 8	- 34,32
Total Visible Balance of Accounts ...	+ 24,96	+ 62,05	+ 3,60	+ 46,38	+ 38,94	+ 11,95	+ 10,72	+ 31,77	+ 37,68	+ 56,18

NOTE—(1) Imports of merchandise are exclusive of railway materials imported direct by State Railways working under Company management, as the charges of these are not paid for in the ordinary way.

(2) In the balances, + means net Export and - net Import.

(3) All transactions which do not enter into the balance of trade are excluded.

**Monthly Exports and Imports into India of Gold from 1927-28 to 1931-32.**  
(In thousands of Rs.)

		1927-28		1928-29		1929-30		1930-31		1931-32	
		Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
April	...	1,87,41	10	2,30,00	82	1,83,25	48	1,63,40	20	16,45	...
May	...	1,36,01	16	2,40,67	...	1,68,77	...	1,76,78	...	19,06	...
June	...	1,98,08	24	1,78,28	...	99,26	4	2,52,16	1	16,04	64,08
July	...	1,05,14	24	59,26	16	1,15,66	...	93,25	...	20,67	42,67
August	...	79,54	8	88,25	9	77,81	85	8,68,82	8	21,57	28,95
September	...	92,84	26	46,83	17	94,17	...	97,74	...	31,00	29,20
October	...	75,01	42	1,28,08	18	87,89	1	26,48	...	49,27	9,05,44
November	...	1,22,77	83	1,78,52	4	1,22,44	...	86,24	...	27,02	8,57,45
December	...	1,09,18	41	2,73,43	15	1,27,91	5	23,22	4,54	27,94	17,76,58
January	...	2,38,70	9	1,81,48	8	1,47,21	10	24,53	82,87	20,11	0,27,38
February	...	1,93,35	25	2,13,90	...	1,05,81	...	24,11	...	18,92	7,57,12
March	...	2,65,91	80	8,68,20	83	94,43	...	87,93	12,10	14,90	0,88,87
<b>TOTAL</b>	...	<u>18,13,44</u>	<u>3,44</u>	<u>21,21,90</u>	<u>2,02</u>	<u>14,23,11</u>	<u>1,03</u>	<u>13,24,06</u>	<u>49,84</u>	<u>79,95</u>	<u>00,77,23</u>

NOTE—Value is at the market rate at the time of import or Export and the metal is of unknown fineness.

Monthly Exports from and Imports into India of Silver from 1927-28 to 1931-32  
( In thousands of Rs. )

	1927-28		1928-29		1929-30		1930-31		1931-32	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
April ...	2,63,74	4,58	1,40,79	3,20	87,80	79,77	1,44,67	21,77	46,20	28
May ...	1,96,38	17,73	1,17,30	56,88	1,15,17	26,51	1,54,34	7,40	50,80	27
June ...	1,72,98	12,57	1,53,91	1,98,93	1,26,51	49,84	1,23,18	1,02	54,06	23,40
July ...	78,01	17,82	3,89,29	75,32	94,18	25,80	94,44	1,12	86,35	73,68
August ...	91,08	28,49	1,41,60	27,34	1,03,77	24,70	1,44,73	80,34	28,63	84,47
September ...	57,63	24,53	90,92	66,27	76,01	35,14	65,28	49,03	54,00	84,41
October ...	1,11,38	4,23	1,08,50	27,42	88,74	22,32	11,75	55,99	47,05	12,95
November ...	95,80	88,65	96,54	82,88	1,03,30	41,26	43,81	10,01	30,49	9,04
December ...	1,37,93	42,81	57,75	82,82	63,85	73,81	35,57	51,42	67,96	43,47
January ...	1,28,76	2,66	1,14,54	12,15	1,07,83	33,82	1,03,53	19,78	16,50	77,39
February ...	1,99,15	1,03	1,24,75	1,12	2,45,10	25,47	3,51,31	16,24	6,41	64,77
March ...	1,14,52	18,59	56,29	31,28	1,30,15	41,35	74,00	15,57	4,19	10,68
<b>TOTAL</b> ...	<b>16,47,36</b>	<b>2,63,69</b>	<b>15,92,18</b>	<b>6,15,11</b>	<b>13,41,91</b>	<b>4,79,79</b>	<b>13,46,61</b>	<b>8,88,69</b>	<b>4,42,64</b>	<b>4,84,81</b>

Note—Value is at the market rate at the time of Export or Import and the metal is of unknown fineness.

Total Imports and Exports of Silver and Gold for each of the years 1900-01 to 1931-32.

(Value, in Thousands of Rs.)

	GOLD		SILVER	
	Imports Rs.	Exports Rs.	Imports Rs.	Exports. <sup>*</sup> Rs.
1900-01	11,89,80	11,05,59	12,67,87	3,17,15
1901-02	8,30,75	6,36,99	12,29,38	5,10,10
1902-03	18,19,24	4,43,78	12,18,65	5,22,98
1903-04	20,14,79	10,21,62	18,37,82	4,82,77
1904-05	21,81,20	12,10,61	17,69,62	4,32,27
1905-06	14,75,90	14,29,10	16,90,20	1,17,90
1906-07	18,53,84	3,67,73	26,04,64	2,04,09
1907-08	20,75,26	3,38,49	21,53,19	2,06,36
1908-09	8,40,42	4,04,88	14,34,00	2,27,15
1909-10	25,08,10	3,35,17	12,49,25	3,04,75
1910-11	27,89,25	3,91,39	11,84,34	3,21,31
1911-12	41,40,36	3,73,38	11,97,72	6,64,01
1912-13	41,29,08	7,28,96	20,54,10	3,34,22
1913-14	28,22,64	4,90,26	15,21,32	2,18,08
1914-15	10,70,38	3,05,64	11,10,45	2,23,30
1915-16	5,28,17	6,39,08	6,66,46	1,33,50
1916-17	13,33,70	10,25	25,11,43	6,31,47
1917-18	29,09,49	3,91,63	22,66,94	3,62,76
1918-19	2,27,63	7,84,00	69,08,92	1,17,02
1919-20	48,25,16	12,92,13	29,98,78	75,84
1920-21	23,57,38	21,46,56	11,11,32	4,70,57
1921-22	13,32,04	16,48,49	17,47,36	2,33,24
1922-23	41,32,39	13,31	20,94,33	2,58,36
1923-24	20,25,31	6,63	22,10,27	3,40,47
1924-25	74,28,03	36,32	24,28,07	4,20,67
1925-26	35,22,99	37,54	19,89,70	2,77,29
1926-27	19,50,12	10,07	21,76,34	1,89,54
1927-28	18,13,34	3,44	16,47,37	2,63,69
1928-29	21,21,90	2,03	15,92,13	6,15,11
1929-30	14,23,11	1,03	13,41,91	4,79,79
1930-31	13,24,66	49,34	13,46,63	3,33,70
1931-32	2,79,95	60,77,23	4,42,64	4,84,81

## London-New York cross rate, price of gold in London and Bombay

Month	LONDON-NEW YORK CROSS RATE \$ PER £ 100 STERLING		LONDON PRICE OF GOLD PER OUNCE				BOMBAY PRICE OF GOLD PER TOLA					
	Highest	Lowest	Lowest		Highest		Highest		Lowest			
			s.	d.	s.	d.	Rs.	A. P.		Rs.	A. P.	
April 1931	486½	485½	84	9½	84	10½	21	4	0	21	8	9
May "	486½	486½	84	9½	84	11½	21	4	0	21	4	0
June "	486½	486½	84	9½	85	0½	21	4	6	21	3	9
July "	486½	488½	84	9½	84	11½	21	4	0	21	8	6
August "	486½	484½	84	9½	84	11½	21	5	6	21	9	9
September "	486½	860	84	9½	114	9	25	4	0	21	4	0
October "	897	888	108	8	108	6	26	4	0	24	10	0
November "	888½	851½	107	6	116	6	28	7	6	26	0	0
December "	845½	825½	117	11	128	9	30	12	0	28	14	0
January 1932	849½	835½	118	8	122	9	29	12	0	28	14	6
February "	848½	841½	118	7	120	9	29	6	0	29	2	0
March "	879½	848½	108	11	118	10	29	4	6	26	8	0

## Monthly Sales of Sterling

(In Thousands of £)

	1930-31	1931-32
April	...	...
May	...	...
June	...	8,001
July	2	140
August	82	4,317
September	...	6,590
October	...	...
November	908	...
December	1,382	...
January	2,287	...
February	1,165	...
March	8	...
<b>TOTAL</b>	<b>5,784</b>	<b>14,048</b>



Price of Silver—Bombay (per 100 tolas country bar), London (per standard ounce) and New York (per fine ounce) for 1927-28 to 1931-32

Month	1927-28								1928-29				1929-30			
	BOMBAY		LONDON		NEW YORK		BOMBAY		LONDON		NEW YORK		BOMBAY			
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest		
	Rs. A.	Rs. A.	d.	d.	Cents	Cents	Rs. A.	Rs. A.	d.	d.	Cents	Cents	Rs. A.	Rs. A.		
April	60 2	58 1	26¾	25½	57¼	55½	60 5	58 18	26½	26¼	58½	57	58 18	56 12		
May	59 11	57 15	26½	25¾	57½	55¾	65 7	60 2	28¾	26¾	68½	58¼	57 6	56 2		
June	59 8	58 4	26½	25½	57¼	56¾	62 15	60 12	28½	27¾	61¾	59½	55 12	54 11		
July	60 2	58 4	26¼	25¼	56¾	56	62 8	61 2	27½	27½	59¾	58¾	56 6	54 8		
August	58 11	55 12	26½	24½	56¾	54¾	61 11	60 8	27½	26½	59¼	59¾	55 5	54 12		
September	57 12	56 4	25¾	25	56½	54¾	59 15	58 6	26½	26½	57¾	56¾	54 14	52 12		
October	58 2	57 4	26½	25¾	56¼	55¾	60 2	59 2	26½	26½	58¾	57¾	52 11	51 11		
November	60 2	58 7	26½	26½	58¼	56¾	59 14	59 4	26½	26½	58¼	57¾	51 14	51 2		
December	59 14	58 11	27	26¾	58½	57¼	59 6	58 10	26½	26¼	57¾	56¾	51 4	48 4		
January	59 4	58 0	26½	26½	57¾	56½	59 2	58 6	26¾	26	57½	56½	50 4	46 8		
February	59 6	58 2	26¾	26½	57¾	56½	58 18	57 12	26½	25½	56¼	55¾	49 6	46 7		
March	59 9	58 10	26½	26½	57½	57	59 0	58 0	26½	25¾	56¾	56½	55 0	51 12		

Month	1929-30				1930-31				1931-32							
	LONDON		NEW YORK		BOMBAY		LONDON		NEW YORK		BOMBAY		LONDON		NEW YORK	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
	d.	d.	Cents	Cents	Rs. A.	Rs. A.	d.	d.	Cents	Cents	Rs. A.	Rs. A.	d.	d.	Cents	Cents
April	25½	25½	56¼	54¾	56 14	52 15	19¾	19¾	42¾	41½	48 14	41 11	18½	12½	29¼	27¼
May	25½	24½	55	58½	55 18	49 7	19½	17½	42½	37¼	48 10	41 15	18¼	12½	28¾	26
June	24½	24	58	51¾	49 8	44 4	16¾	15¾	37¼	38¼	44 12	41 6	18¾	12¼	29½	26¼
July	24¾	28½	58½	51¾	46 14	45 5	16¾	15½	35¾	38½	44 10	42 14	18¾	12½	29¾	27¾
August	24¾	24¾	52¾	52¼	47 9	45 14	16¾	15¾	36¼	34¼	44 0	42 11	18¾	12½	28¾	27¾
September	24¾	28¾	52¼	50¾	47 14	46 4	17	16¾	37	35½	57 8	42 18	16¾	12¾	31	27½
October	28¼	22½	50¼	49¾	47 5	46 10	16¾	16¾	36¾	35½	57 8	52 12	18¾	15½	30½	27½
November	22½	22¼	50	49¼	47 8	46 6	16¾	16½	36½	35¾	65 14	57 8	21¾	18	37¼	29¾
December	22½	21½	49¾	46¾	46 5	48 0	16¾	14½	35¾	31¼	68 8	60 6	20¼	19¾	31¾	28¾
January	21¾	20	46¾	48¾	48 7	40 12	14¾	18¾	31¼	28½	62 4	60 4	20¾	18½	30¾	29¼
February	20¾	19¾	44	42¼	48 4	38 10	18¼	12¾	28¾	25¾	60 4	60 4	20	19¼	31	29½
March	20	18½	48½	39¾	45 5	41 5	14½	12¾	31¾	27	56 14	54 4	19¾	17½	31	29

Monthly rates for Telegraphic Transfers (Calcutta—London) from 1927-28 to 1931-32.  
(Pence per Rupee)

	1927-28		1928-29		1929-30		1930-31		1931-32	
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
April ...	17 $\frac{7}{8}$	17 $\frac{1}{8}$	17 $\frac{3}{4}$	17 $\frac{1}{4}$	17 $\frac{3}{4}$	17 $\frac{2}{4}$	17 $\frac{3}{8}$	17 $\frac{1}{8}$	17 $\frac{1}{8}$	17 $\frac{3}{4}$
May ...	17 $\frac{5}{8}$	17 $\frac{1}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	17 $\frac{2}{4}$	17 $\frac{2}{4}$	17 $\frac{1}{8}$	17 $\frac{2}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{8}$
June ...	17 $\frac{2}{4}$	17 $\frac{2}{8}$	17 $\frac{3}{4}$	17 $\frac{2}{4}$	17 $\frac{7}{8}$	17 $\frac{1}{8}$	17 $\frac{1}{8}$	17 $\frac{2}{8}$	17 $\frac{3}{8}$	17 $\frac{3}{4}$
July ...	17 $\frac{2}{4}$	17 $\frac{1}{8}$	17 $\frac{7}{8}$	17 $\frac{2}{8}$	17 $\frac{1}{8}$	17 $\frac{2}{8}$	17 $\frac{1}{8}$	17 $\frac{3}{4}$	17 $\frac{1}{8}$	17 $\frac{7}{8}$
August ...	17 $\frac{7}{8}$	17 $\frac{1}{8}$	17 $\frac{3}{4}$	17 $\frac{7}{8}$	17 $\frac{2}{4}$	17 $\frac{3}{4}$	17 $\frac{2}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$
September	17 $\frac{5}{8}$	17 $\frac{7}{8}$	18	17 $\frac{5}{8}$	17 $\frac{2}{4}$	17 $\frac{1}{8}$	17 $\frac{2}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$
October	17 $\frac{5}{8}$	17 $\frac{2}{8}$	18 $\frac{1}{8}$	18	17 $\frac{2}{8}$	17 $\frac{1}{8}$	17 $\frac{1}{8}$	17 $\frac{2}{8}$	18 $\frac{1}{8}$	17 $\frac{3}{4}$
November	18	17 $\frac{1}{8}$	18 $\frac{1}{8}$	18 $\frac{1}{8}$	17 $\frac{7}{8}$	17 $\frac{1}{8}$	17 $\frac{2}{8}$	17 $\frac{3}{4}$	18 $\frac{5}{8}$	18 $\frac{1}{8}$
December	18 $\frac{3}{8}$	18	18 $\frac{1}{8}$	18 $\frac{1}{8}$	17 $\frac{2}{8}$	17 $\frac{7}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	18 $\frac{1}{8}$	18 $\frac{1}{8}$
January	18 $\frac{3}{8}$	18 $\frac{1}{8}$	18 $\frac{1}{8}$	18	17 $\frac{1}{8}$	17 $\frac{7}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	18 $\frac{1}{8}$	18 $\frac{1}{8}$
February	18 $\frac{1}{8}$	17 $\frac{5}{8}$	18	17 $\frac{5}{8}$	17 $\frac{7}{8}$	17 $\frac{2}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	18 $\frac{1}{8}$	18 $\frac{3}{8}$
March ...	17	17 $\frac{5}{8}$	17 $\frac{3}{4}$	17 $\frac{3}{4}$	17 $\frac{2}{4}$	17 $\frac{1}{8}$	17 $\frac{7}{8}$	17 $\frac{3}{4}$	18 $\frac{1}{8}$	18 $\frac{3}{8}$

Monthly Purchase of Sterling from 1927-28 to 1931-32  
(In Thousands of £)

	1927-28		1928-29		1929-30		1930-31		1931-32	
	Amount £	Average rate per rupee d.	Amount £	Average rate per rupee d.	Amount £	Average rate per rupee d.	Amount £	Average rate per rupee d.	Amount £	Average rate per rupee d.
April ...	...	...	3,670	18'	280	18'	2,680	17'84	...	...
May ...	1,875	17'95	4,405	18'	...	...	2,040	17'84	...	...
June ...	2,765	17'91	700	18'	30	17'88	...	...	...	...
July ...	1,128	17'88	...	...	...	...	...	...	...	...
August ...	1,177	17'88	...	...	1,985	17'88	...	...	...	...
September	3,925	17'95	1,195	18'	1,045	17'88	...	...	...	...
October	985	17'97	4,585	18'05	2,180	17'88	25	17'81	1,260	18'11
November	4,120	17'98	3,060	18'06	1,255	17'89	650	17'81	4,467	18'13
December	7,468	18'08	3,433	18'06	7,725	17'93	...	...	13,854	18'12
January	2,852	18'09	1,978	18'06	190	17'95	...	...	7,133	18'11
February	135	18'03	3,865	18'01	525	17'91	...	...	7,126	18'13
March	2,395	18	3,919	18	...	...	...	...	6,209	18'13
TOTAL	28,325	...	30,810	...	15,215	...	5,395	...	40,049	...

Summary of Ways and Means transactions of the Government of India in India  
(In Crores of Rupees)

	1927-28	1928-29	1929-30	1930-31	1931-32
<b>Disbursements</b>					
Army, Marine and M. E. S. issued ... ..	40'12	38'85	38'10	37'95	36'11
Drawings by Iraq Government ... ..	1'10	'97	'78	'85	'86
Capital outlay on Delhi, Security Printing, etc. ... ..	'95	'72	1'05	3'02	'59
Remittances from India to London ... ..	42'87	37'52	...	...	...
(i) By purchase of Sterling ... ..	...	...	20'39	7'26	53'43
(ii) By withdrawal from the P. C. R. in London against opposite payment in India ... ..	...	...	15'77	2'34	...
(iii) By withdrawal from the G. S. R. in London against opposite payment in India ... ..	...	...	...	9'29	30'73
Permanent Debt discharged (net) ... ..	3'17	...	...	...	...
Cancellation of Indian Treasury Bills in the P. C. R. ... ..	9'11	...	11'75	28'62	...
Net discharges of Treasury Bills (public) ... ..	...	8'59	...	...	7'84
Sinking Fund purchases ... ..	...	...	'33	1'97	3'41
Silver withdrawn from the P. C. R. against contraction Posts and Telegraphs issue (excluding receipts from Cash Certificates) ... ..	...	'21	'42	5'96	2'12
Other items ... ..	...	1'09	3'55	...	...
Reduction in the balances of Provincial Governments ... ..	...	2'59	6'05	7'55	1'13
Increase in Treasury balance (including investments) ... ..	...	...	16'50	...	'32
<b>TOTAL ... ..</b>	<b>97'32</b>	<b>85'54</b>	<b>117'63</b>	<b>104'81</b>	<b>136'54</b>
<b>Receipts</b>					
Excess of Civil Revenue over Civil Expenditure ... ..	40'22	44'51	48'67	32'71	34'20
Excess of Railway receipts over issues ... ..	19'49	21'60	21'00	20'02	22'19
Cash Certificates (net receipts) ... ..	'52	1'60	2'70	3'44	6'16
Permanent Debt incurred ... ..	4'08	10'58	13'22	12'13	5'96
Ways and Means Advances from the Imperial Bank of India ... ..	...	...	...	...	9'50
Sale of Sterling ... ..	...	...	...	7'75	18'98
Sale of Treasury Bills to the public (net) ... ..	7'60	...	32'04	19'34	...
Issue of Treasury Bills to the P. C. R. ... ..	...	1'00	...	...	...
Other items ... ..	'19	...	...	1'08	...
Gain on revaluation, sale, transfer etc., of Assets of the P. C. R. ... ..	7'09	...	...	...	...
Decrease in Treasury balances (including investments) ... ..	17'33	30	...	8'29	5'05
Net addition to balances of Provincial Governments ... ..	'85	...	...	...	...
Expansion against Indian Treasury Bills issued to P. C. R. ... ..	...	...	...	...	34'50
<b>TOTAL ... ..</b>	<b>97'32</b>	<b>85'54</b>	<b>117'63</b>	<b>104'81</b>	<b>136'54</b>

Monthly Sales and Discharges of Treasury Bills, 1928-29 to 1931-32

(In Lakhs of Rupees)

Month	1928-29		1929-30		1930-31		1931-32	
	Sales	Discharges	Sales	Discharges	Sales	Discharges	Sales	Discharges
April ... ..	5,02	43	5,72	3,56	7,77	4,60	26,54	22,86
May ... ..	3,47	72	4,24	43	12,90	4,95	24,26	9,55
June ... ..	3,88	90	...	38	14,23	10,02	18,75	17,07
July ... ..	...	4,09	...	1,06	10,28	11,96	19,69	11,89
August ... ..	...	5,81	9,83	2,02	12,92	15,34	16,79	15,79
September ... ..	2,99	7,10	10,43	...	20,60	18,80	9,76	19,24
October ... ..	6,00	89	1,05	...	18,27	9,74	19,14	31,27
November ... ..	1,02	2	5,12	11,25	9,71	9,48	17,51	17,76
December ... ..	...	...	5,26	3,16	10,10	15,51	8,25	10,17
January ... ..	...	2,48	5,77	5,47	12,80	10,13	13,25	20,91
February ... ..	...	59	5,32	10,18	8,20	12,72	16,38	20,92
March ... ..	...	2,95	11,99	6,34	21,26	16,42	10,95	11,65

Composition of the Gold Stand Reserve on the 31st March of each of the years 1927-28 to 1931-32

(Figures in £)

31st March	1927-28	1928-29	1929-30	1930-31	1931-32	
Cash at the Bank of England ...	4,028	8,042	8,748	1,085	29	
British Treasury Bills, and other British and Dominion Government Securities	87,848,688	87,844,624	87,848,918	81,599,381	10,694,637	
Gold {	In England ...	2,152,334	2,152,884	2,152,884	2,152,834	2,152,884
	In India ...	...	...	...	6,247,200	27,158,000
TOTAL ...	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000	

Balances of the Government of India with the Treasuries and the Imperial Bank of India

(In Lakhs of Rupees)

At the end of	1927-28		1928-29		1929-30		1930-31		1931-32	
	Treasuries	Imperial Bank	Treasuries	Imperial Bank	Treasuries	Imperial Bank	Treasuries	Imperial Bank	Treasuries	Imperial Bank
April ...	2,44	14,54	2,13	7,14	2,56	9,27	2,61	17,51	2,64	12,15
May ...	2,29	11,88	2,15	6,68	2,46	8,48	2,48	15,15	2,23	17,31
June ...	2,87	9,81	2,20	7,90	3,19	20,62	2,17	18,72	2,22	15,73
July ...	2,14	15,58	2,29	6,20	2,28	18,80	2,10	22,69	2,26	21,13
August ...	2,18	15,74	2,11	10,92	3,03	14,05	2,88	16,43	2,41	19,45
September ...	2,07	12,56	2,87	5,76	2,78	20,65	1,96	12,48	2,27	8,86
October ...	2,06	8,76	2,41	6,82	2,19	13,17	2,08	15,19	2,17	8,44
November ...	2,21	9,66	2,64	7,09	2,42	13,67	2,07	8,70	2,25	7,29
December ...	2,16	7,04	2,29	7,78	2,21	7,45	2,07	7,19	2,04	8,06
January ...	2,25	7,88	2,48	8,06	2,45	17,26	2,88	8,17	2,07	6,85
February ...	2,25	7,82	3,05	10,29	2,89	17,95	2,81	7,51	2,26	7,78
March ...	3,13	6,08	3,59	5,61	3,64	22,12	3,80	18,49	4,55	5,13

Amounts and Distribution of Treasury Balances and Reserves of the Government of India, 1927-28 to 1931-32

(In Lakhs of Rupees)

	1927-28		1928-29		1929-30		1930-31		1931-32	
	Opening Balance	Closing Balance	Opening Balance	Closing Balance	Opening Balance	Closing Balance	Opening Balance	Closing Balance	Opening Balance	Closing Balance
Treasury Balance ...	82,28	16,77	16,71	16,15	16,19	84,85	84,27	24,72	24,69	88,90
<i>Paper Currency Reserve:—</i>										
Silver ...	1,04,47	1,06,88	1,06,88	99,89	99,89	1,10,96	1,10,96	1,24,80	1,24,80	1,11,19
Gold ...	29,76	29,76	29,76	32,22	32,22	32,27	32,27	25,85	25,85	5,26
Securities ...	40,47	87,96	87,96	48,28	48,28	38,85	38,85	10,19	10,19	57,94
<i>Gold Standard Reserve:—</i>										
Gold ...	2,81	2,87	2,87	2,87	2,87	2,87	2,87	11,20	11,20	89,07
Securities ...	51,02	50,46	50,46	50,46	50,46	50,46	50,46	42,18	42,18	14,26

**MONTHLY EXPANSIONS (+) AND CONTRACTIONS (—) OF CURRENCY 1927-28 TO 1931-32.**

*(In Lakhs of Rupees)*

Month	1927-28				1928-29				1929-30					1930-31				1931-32									
	Sterling Securities	Securities of the Government of India	Advances to the Imperial Bank	TOTAL	Sterling Securities	Securities of the Government of India	Advances to the Imperial Bank	Gold	TOTAL	Sterling Securities	Securities of the Government of India	Advances to the Imperial Bank	Gold	Silver (against un-current coin)	TOTAL	Sterling Securities	Securities of the Government of India	Advances to the Imperial Bank	Gold	TOTAL	Government of India Securities	ADVANCES TO THE IMPERIAL BANK AGAINST	Internal Bills of Exchange	Government of India rupee Securities	Gold	TOTAL	
April ...	-5,33	-3,00	-2,00	-10,33	...	...	+50	...	+50	-2,00	...	-2,00	...	-63	-1,63	...	-2,93	...	...	-2,96	-3,00	...	...	...	...	+1,70	-1,30
May ...	...	-2,00	...	-2,00	...	...	+1,50	...	+1,50	...	...	...	...	-31	-31	...	-6,03	...	...	-6,03	-6	...	...	...	...	-7,34	-7,40
June ...	-2,10	...	...	-2,10	...	...	-9,00	...	-9,00	...	...	...	...	...	...	...	-5,92	...	...	-5,92	-2,98	...	...	...	...	-3,07	-6,00
July ...	...	...	...	...	...	...	...	...	...	-8,00	...	...	...	-11	-8,11	...	...	...	...	...	-50	...	...	...	...	-58	-1,17
August ...	...	...	...	...	...	...	...	...	...	...	-4,01	...	...	-55	-4,56	-11	-5,00	...	...	-5,11	-58	...	...	...	...	-4,19	-4,72
September ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	-62	+2,50	...	...	...	-8,16	-6,28
October ...	...	...	...	...	...	...	...	...	...	...	-2,85	...	...	-41	-3,26	...	-3,96	...	...	-3,96	+14,30	-2,50	...	...	...	+0	+11,98
November ...	...	...	...	...	...	...	...	+34	+34	-2,67	...	...	...	-88	-3,55	-1,00	-5,04	...	...	-6,04	+4,64	...	...	...	...	+10	+4,83
December ...	+2,00	...	+4,00	+6,00	+1,00	+95	+7,00	+1,00	+9,95	...	...	...	...	...	...	-1,45	...	...	-53	-1,98	+19,57	+2,50	...	...	...	+8	+22,15
January ...	+1,00	+1,00	+4,00	+6,00	...	...	...	+1,11	+1,11	...	...	...	+5	...	+5	-39	...	+1,00	-5,53	-4,92	+1,01	+1,00	+2,50	...	+26	+4,97	
February ...	-67	...	...	-67	+2,50	...	-50	...	+2,00	...	...	...	...	...	...	-17	...	-1,00	-2,44	-3,61	-0	-50	+4,50	...	+0	+4,00	
March ...	...	...	-1,00	-1,00	...	...	-4,50	...	-4,50	-3,10	-4,89	...	...	...	-7,99	-19	...	...	+2,08	+1,89	-34	+75	-1,24	...	+34	-40	
<b>TOTAL ...</b>	<b>-5,10</b>	<b>-4,00</b>	<b>+5,00</b>	<b>-4,10</b>	<b>+3,50</b>	<b>+95</b>	<b>-5,00</b>	<b>+2,45</b>	<b>+1,90</b>	<b>-15,77</b>	<b>-11,75</b>	<b>-2,00</b>	<b>+5</b>	<b>-2,94</b>	<b>-32,41</b>	<b>-3,31</b>	<b>-28,91</b>	<b>...</b>	<b>-6,42</b>	<b>-38,64</b>	<b>+31,65</b>	<b>+3,75</b>	<b>+5,76</b>	<b>-20,65</b>	<b>+20,57</b>		

Indian Finance Year-Book: 1932

Imperial Bank Statistics in the last week of each of the months of 1931-32.

(In Lakhs of rupees)

	April	May	June	July	August	September	October	November	December	January	February	March
<b>Liabilities—</b>												
Public Deposits ... ..	14,82	16,53	16,85	21,27	19,60	10,91	10,41	8,03	8,66	7,12	8,01	7,28
Other Deposits ... ..	67,89	65,75	64,56	65,02	64,83	64,69	62,21	62,44	60,57	60,51	61,10	61,06
Loans from Government of India under Section 20 of the Paper Currency Act against inland bills ... ..	...	...	...	...	...	...	...	...	2,50	2,50	3,50	3,75
<b>Assets</b>												
Government Securities ... ..	26,52	27,13	28,15	28,68	29,81	30,85	29,49	28,96	28,83	21,76	16,81	15,87
Ways and Means advances to the Gov- ernment of India ... ..	...	...	...	...	...	...	...	1,00	3,50	4,50	11,00	11,50
Loans ... ..	12,81	11,85	8,89	9,05	9,59	13,13	8,92	8,54	8,86	9,33	9,35	9,44
Cash Credits ... ..	30,09	29,68	29,20	28,66	26,61	28,68	23,81	24,00	24,81	25,53	24,68	25,04
Inland bills discounted and purchased ...	3,11	4,07	3,19	3,79	2,71	2,58	5,00	4,27	4,74	5,53	6,23	5,93
Foreign bills discounted and purchased ...	51	88	85	42	46	37	31	22	25	21	28	28
Cash ... ..	15,82	15,08	17,27	21,85	21,58	6,46	11,69	10,05	8,05	8,90	9,87	9,73
Percentage of Cash to liabilities ...	18'91	18'68	20'78	24'99	25'19	8'88	15'78	18'90	10'86	12'53	13'40	13'28
Bank rate ... ..	7	6	6	6	7	8	8	8	8	7	6	6

Indian Money Rates at the beginning of each month from 1927-28 to 1931-32

	1927-28		1928-29		1929-30		1930-31		1931-32						
	Imperial Bank rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE		Imperial Bank rate	CALL MONEY RATE				
		Calcutta	Bombay		Calcutta	Bombay		Calcutta	Bombay		Calcutta	Bombay			
April ...	7	6	6½-6¾	7	5½	5½-5¾	8	5	6½	6	5	6	7	4½-5	6¼
May ...	7	5	6-5½	7	5½-5¾	5¾-6	7	2½	3½	6	4½-4¾	5	7	4½	6¼
June ...	7	4-4½	6-5½	7	4	5¼-6	6	1½	3¼	6	4½	5	6	5	5½
July ...	5	1½	3	6	3	4¼-4½	5	1½	1½	6	4½	5	6	4	4½
August ...	4	1½-2¼	2-1¾	5	2¼	2½-3	5	Nil	1½	5	2½	2½	6	4½	5
September ...	4	2	2½-2¾	5	3½	3½-3¾	5	1½	1½	5	1¾	2	7	4	5½
October ...	5	1½	2	5	2¼	2-2¼	5	2½	3-3½	5	2½	2¼	8	5	6½
November ...	5	1½	2	5	2-1½	3	7	2	2½	5	2¼	2	8	4	4½
December ...	5	3	4-4½	6	1½	3	7	1½	4½	6	2	2¼	8	4-4½	6½
January ...	7	5½-6	5¾-6	7	4-4¼	6½	7	3	5	6	3	3	8	4½-5	6½
February ...	7	6	6¼-6½	7	6	6¼-6½	7	4½-5¼	6½	7	3½-4	5½	7	4	5
March ...	7	4¾-5	6-6¼	8	6	7¼	7	5	4¾	7	4½-5	5¾	6	3½	4

## Rates of Discount of Central Banks of certain countries 1930-31 and 1931-32

(Rates per cent.)

End of	1930-31										1931-32										
	UNITED STATES		Germany	France	British India	Japan	Switzerland	Italy	Russia U. S. S. R.	UNITED STATES		Germany	France	British India	Japan	Switzerland	Italy	Russia U. S. S. R.			
	United Kingdom	F. R. B. rate for 60--90 days Paper								F. R. B. average rate	F. R. B. rate for 60--90 days Paper								F. R. B. average rate		
April	...	8½	8½	4'08	5	2'5	6	5'48	3	6	8	3	2	8'08	5	2	7	5'11	2	5½	8
May	...	8	8	8'93	4'5	2'5	6	5'48	3	5½	8	2½	1½	2'31	5	2	6	5'11	2	5½	8
June	...	8	2½	8'81	4	2'5	6	5'48	3	5½	8	2½	1½	2'81	7	2	6	5'11	2	5½	8
July	...	8	2½	8'59	4	2'5	5	5'48	2'5	5½	8	(a) 4½	1½	2'81	10	2	6	5'11	2	5½	8
August	...	8	2½	8'50	4	2'5	5	5'48	2'5	5½	8	4½	1½	2'81	(d) 10	2	7	5'11	2	5½	8
September	...	8	2½	8'40	4	2'5	5	5'48	2'5	5½	8	6	1½	2'81	8	2	8	5'11	2	7	8
October	...	8	2½	8'38	5	2'5	5	5'11	2'5	5½	8	6	(c) 3½	8'54	8	2½	8	5'84	2	7	8
November	...	8	2½	8'38	5	2'5	6	5'11	2'5	5½	8	6	3½	8'58	8	2½	8	6'57	2	7	8
December	...	8	2	8'37	5	2'5	6	5'11	2'5	5½	8	6	3½	8'58	7	2½	8	6'57	2	7	8
January	...	8	2	8'18	5	2	7	5'11	2	5½	8	6	3½	8'58	7	2½	7	6'57	2	7	8
February	...	8	2	8'08	5	2	7	5'11	2	5½	8	5	3	8'46	7	2½	6	6'57	2	7	8
March	...	8	2	8'08	5	2	7	5'11	2	5½	8	(b) 8½	3	8'46	6	2½	6	5'84	2	6	8

(a) 8½% from 23rd to 29th July

(b) 4% from 9th to 16th March

(c) 2½% from 8th to 14th October

(d) 8% from 4th to 6th May



## Gold and foreign assets reserves of certain principal countries during 1931-32

(Figures in millions of units)

END OF	UNITED STATES						UNITED KINGDOM	GERMANY			FRANCE			CANADA		SWITZERLAND		BRITISH INDIA (GOVERNMENT)		
	Federal Reserve Banks and Government		Gold coin in circulation	Total gold stock	Bank of England	Reichs Bank		Bank of England	Foreign Assets			Government	Chartered Banks		Gold	Foreign Assets	Gold		Foreign Assets	
	Gold against certificates	Other Gold Reserves				Gold	Foreign Assets		Funds available at sight	Negotiable securities	Gold		Gold	Foreign Assets			At Home	Abroad		
			Dollars	£'s	Reichsmark			Francs				Dollars			Francs	Rupees				
April 1931	...	1,035	3,039	352	4,726	147.2	2,370	169	55,616	6,906	19,374	88	81	27	643	315	359	29	466	
May "	...	1,020	3,425	353	4,798	152.1	2,390	186	55,634	5,430	20,704	88	82	8	643	310	375	29	422	
June "	..	997	3,596	363	4,956	164.0	1,421	300	56,426	6,419	19,768	73	84	26	840	411	384	29	410	
July "	...	976	3,610	363	4,949	133.3	1,363	246	58,407	11,218	14,944	73	82	12	1,164	469	404	29	395	
August "	...	989	3,643	363	4,995	134.6	1,366	356	58,563	14,255	11,56	75	78	15	1,189	565	415	29	315	
September "	...	1,037	3,328	376	4,741	136.1	1,301	139	59,346	12,364	10,342	70	84	26	1,699	341	415	29	212	
October "	...	972	2,933	387	4,282	136.9	1,145	131	64,648	14,857	10,252	75	81	29	2,188	100	415	29	171	
November "	...	928	3,108	383	4,414	121.7	1,005	170	67,844	15,941	7,433	69	99	29	2,201	131	415	29	210	
December "	...	877	3,174	409	4,460	121.3	984	172	68,863	12,354	7,857	67	76	37	2,347	104	415	29	322	
January 1932	...	850	3,159	407	4,416	121.4	948	145	71,625	8,882	8,966	69	76	25	2,446	110	415	29	215	
February "	...	820	3,128	406	4,354	121.3	928	149	75,059	6,268	8,714	67	73	20	2,498	98	415	29	294	
March "	...	779	3,206	404	4,389	121.4	879	142	76,832	3,849	8,576	66	69	17	2,439	106	415	29	327	

Monthly Index Numbers of wholesale prices of some principal countries from 1928-29 to 1931-32

			1928-29				1929-30				1930-31				1931-32											
			INDIA			INDIA			INDIA			INDIA			INDIA			INDIA								
			Calcutta	Bombay	United Kingdom	United States of America	Japan	France	Calcutta	Bombay	United Kingdom	United States of America	Japan	France	Calcutta	Bombay	United Kingdom	United States of America	Japan	France	Calcutta	Bombay	United Kingdom	United States of America	Japan	France
Base			(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
April	...	...	146	142	143	97	170	624	140	144	139	96	170	627	123	134	124	90	146	548	98	110	106	75	119	484
May	...	...	147	145	144	98	172	633	139	141	136	95	169	623	121	130	122	89	143	546	97	106	104	73	116	470
June	...	...	145	149	143	97	169	626	138	143	136	95	168	610	116	127	121	87	137	540	93	108	103	72	114	467
July	...	...	148	147	141	97	169	624	142	145	137	86	166	613	115	124	119	84	134	558	93	108	102	72	116	456
August	...	...	143	146	139	98	170	617	143	146	136	86	165	596	114	121	118	84	133	561	92	107	100	72	115	446
September	...	...	142	148	138	99	174	620	143	147	136	96	164	597	111	120	116	84	130	556	91	107	99	71	113	428
October	...	...	143	150	138	97	174	617	140	146	136	95	163	590	107	117	113	83	124	552	96	107	104	70	111	414
November	...	...	146	149	138	96	173	626	137	143	134	93	160	584	104	112	112	81	123	551	97	107	106	70	111	408
December	...	...	145	147	138	96	174	624	134	141	133	93	155	576	101	110	109	80	122	541	98	111	106	69	114	404
January	...	...	145	148	138	96	172	631	131	139	131	93	152	576	98	111	107	78	120	541	97	114	106	67	121	405
February	...	...	144	150	138	95	171	639	126	137	128	91	151	567	99	112	106	77	119	538	97	113	105	66	122	412
March	...	...	143	147	140	96	171	639	125	137	125	90	148	558	100	111	106	76	120	539	94	112	105	66	120	413

(1) Indian Trade Journal (1914=100).  
 (2) Bombay Labour Gazette (1914=100).

(3) Board of Trade (1914=100).  
 (4) Bureau of Labour Statistics (1928=100)

(5) League of Nations Bulletin (1914=100).  
 (6) Official original base 1901-1910=100  
 Converted into base 1913=100

## Cost of living Index Numbers for India and Foreign Countries.

NAME OF COUNTRY			INDIA (BOMBAY)	UNITED KINGDOM	UNITED STATES OF AMERICA	FRANCE (PARIS)	GERMANY
Items included in the Index			Food, fuel and lighting, clothing and house rent	Food, fuel and lighting, clothing, rent and miscellaneous	Food, fuel and light, rent, clothing, house, furnishing goods and miscellaneous	Food, fuel and light, rent, clothing and miscellaneous	Not known
Base Period			July, 1914	July, 1914	1923	1914	October, 1913, January, April and June, 1914
1926	...	...	157	170	104	505	...
1927	...	...	156	166	102	514	150
1928	...	...	147	165	100	105	158
1929	...	...	148	161	100	118	154
1930	...	...	180	155	96	118	140
1931 April	...	...	111	147	88	...	187
1931 May	...	...	110	145	87	...	188
1931 June	...	...	109	147	86	120	187
1931 July	...	...	108	145	86	...	185
1931 August	...	...	108	145	86	...	184
1931 September	...	...	108	145	86	115	188
1931 October	...	...	108	146	85	...	188
1931 November	...	...	108	148	84	...	182
1931 December	...	...	109	147	88	108	180
1932 January	...	...	110	147	81	...	124'5
1932 February	...	...	110	146	80	...	122
1932 March	...	...	111	144	80	108	122

## Composition of Paper Currency Reserve

Last day of Month	Gross Note Circulation	GOLD			SILVER		SECURITIES		Internal Bills of Exchange	Percentage of Gold to Note Circulation		
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities			Sterling Securities	
<b>1914</b>												
March	...	66,12	22,44	9,15	31,59	20,59	...	20,53	10,00	4,00	...	47'8
April	...	65,46	20,34	9,15	29,49	21,97	...	21,97	10,00	4,00	...	45'1
May	...	66,77	18,91	9,15	28,06	24,71	...	24,71	10,00	4,00	...	42'0
June	...	70,26	18,00	9,15	27,15	29,11	...	29,11	10,00	4,00	...	38'6
July	...	75,45	18,86	9,15	27,51	33,94	...	33,94	10,00	4,00	...	36'5
August	...	65,79	6,16	7,65	18,81	37,98	...	37,98	10,00	4,00	...	21'0
September	...	60,52	3,92	7,65	11,57	34,95	...	34,95	10,00	4,00	...	19'1
October	...	60,78	6,34	7,65	13,99	32,79	...	32,79	10,00	4,00	...	23'0
November	...	61,19	8,86	7,65	16,51	30,68	...	30,68	10,00	4,00	...	27'0
December	...	60,83	9,31	7,65	16,96	29,87	...	29,87	10,00	4,00	...	27'0
<b>1915</b>												
January	...	60,26	8,31	7,65	15,96	30,30	...	30,30	10,00	4,00	...	26'5
February	...	59,55	6,71	7,65	14,36	31,19	...	31,19	10,00	4,00	...	24'1
March	...	61,63	7,64	7,65	15,29	32,34	...	32,34	10,00	4,00	...	24'8
April	...	60,24	7,69	7,65	15,34	30,90	...	30,90	10,00	4,00	...	25'5
May	...	61,99	7,75	7,65	15,40	32,59	...	32,59	10,00	4,00	...	24'8
June	...	66,43	7,77	7,65	15,42	37,06	...	37,06	10,00	4,00	...	23'2
July	...	68,06	7,82	6,15	13,97	40,09	...	40,09	10,00	4,00	...	20'5
August	...	66,41	6,34	6,15	12,49	39,92	...	39,92	10,00	4,00	...	18'8
September	...	63,81	5,91	6,15	12,06	37,75	...	37,75	10,00	4,00	...	18'0
October	...	63,59	7,05	6,15	13,20	36,89	...	36,89	10,00	4,00	...	20'8
November	...	62,06	8,31	6,15	14,46	33,60	...	33,60	10,00	4,00	...	23'3
December	...	62,34	12,75	6,15	18,90	29,44	...	29,44	10,00	4,00	...	30'3

## Composition of Paper Currency Reserve

Last day of Month	Gross Note Circulation	GOLD			SILVER		SECURITIES		Internal Bills of Exchange	Percentage of Gold to Note Circulation		
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities			Sterling Securities	
<b>1916</b>												
January	...	62,42	12,74	8,18	20,92	26,02	...	26,02	10,00	5,48	...	33.5
February	...	64,01	12,58	8,93	21,51	24,00	...	24,00	10,00	8,50	...	33.6
March	...	67,73	12,24	11,92	24,16	23,06	51	23,57	10,00	10,00	...	35.8
April	...	65,47	12,25	11,92	24,17	18,55	1,47	20,02	10,00	11,23	...	36.9
May	...	66,31	12,12	11,92	24,04	17,68	1,53	19,21	10,00	13,06	...	36.3
June	...	71,39	12,51	11,92	24,43	22,43	1,47	23,90	10,00	13,06	...	34.2
July	...	75,48	12,29	11,92	24,21	26,83	1,38	28,21	10,00	13,06	...	32.1
August	...	74,01	11,66	11,92	28,58	26,81	56	27,37	10,00	13,06	...	31.9
September	...	71,55	10,99	11,92	22,91	24,24	1,34	25,58	10,00	13,06	...	32.0
October	...	73,32	12,56	11,92	24,48	23,97	1,67	25,64	10,00	13,06	...	33.4
November	...	76,50	12,38	11,92	24,30	18,07	1,39	19,96	10,00	22,24	...	31.8
December	...	82,17	11,92	11,92	23,84	14,39	2,98	17,37	10,00	30,96	...	29.0
<b>1917</b>												
January	...	84,36	12,57	10,42	22,99	15,04	2,44	17,48	10,00	33,33	...	27.8
February	...	86,76	12,17	8,92	21,09	15,82	2,52	18,34	10,00	37,32	...	24.3
March	...	86,37	12,00	6,67	18,67	17,03	2,13	19,21	10,00	38,49	...	21.6
April	...	82,72	11,39	5,17	16,56	13,67	1,70	15,37	10,00	40,78	...	20.0
May	...	83,81	9,94	5,17	15,11	14,68	85	15,53	10,00	47,67	...	17.1
June	...	93,29	7,07	4,80	11,87	19,61	63	20,24	10,00	51,17	...	12.7
July	...	99,31	7,03	4,42	11,45	25,90	43	26,33	10,00	51,43	...	11.5
August	...	1,05,15	12,12	2,55	14,67	28,55	45	29,00	10,00	51,43	...	14.0
September	...	1,08,43	15,86	1,52	17,38	28,88	69	29,57	10,00	51,43	...	16.0
October	...	1,14,77	21,91	1,92	23,83	23,88	58	29,46	10,00	51,43	...	20.8
November	...	1,12,93	24,65	2,30	26,95	24,01	49	24,50	10,00	51,43	...	23.9
December	...	1,08,31	26,73	1,04	27,77	18,27	79	19,06	10,00	51,43	...	24.7

**Composition of Paper Currency Reserve**  
(In Lakhs of Rs.)

Last day of month	Gross Circulation Note		GOLD			SILVER			SECURITIES		Internal Bills of Exchange	Percentage of Gold to Note Circulation
			In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities		
<b>1918</b>												
January	...	1,04,82	27,19	1,04	28,23	14,92	19	15,11	10,00	51,48	...	26.9
February	...	1,08,46	28,30	67	28,97	12,56	45	13,01	10,00	51,48	...	28.0
March	...	99,70	26,85	67	27,52	10,40	39	10,79	10,00	51,48	...	27.6
April	...	1,05,96	22,64	45	23,09	7,26	6,46	13,72	10,00	59,19	...	21.8
May	...	1,11,58	19,12	45	19,57	5,14	10,42	15,56	10,00	64,16	...	17.5
June	...	1,14,79	21,04	45	21,49	5,66	9,29	14,95	10,00	68,40	...	18.7
July	...	1,21,41	20,21	12	20,33	8,02	10,40	18,42	10,00	72,65	...	16.7
August	...	1,31,41	20,33	12	20,45	11,18	13,78	24,96	10,00	76,00	...	15.5
September	...	1,34,88	20,38	12	20,50	12,38	15,50	27,88	10,00	76,00	...	15.3
October	...	1,36,43	20,41	12	20,53	10,49	19,42	29,91	10,00	75,99	...	15.0
November	...	1,40,76	20,45	12	20,57	8,48	25,71	34,19	10,00	76,00	...	14.6
December	...	1,47,03	19,68	12	19,80	10,56	21,57	32,13	12,66	82,50	...	13.5
<b>1919</b>												
January	...	1,49,74	18,91	12	19,03	11,58	20,54	32,12	16,08	82,50	...	13.4
February	...	1,51,48	18,14	12	18,26	13,50	21,15	34,65	16,08	82,50	...	12.1
March	...	1,53,46	17,37	12	17,49	16,66	20,78	37,89	16,08	82,50	...	11.4
April	...	1,53,72 *	14,55	3,00	17,55	18,01	19,58	37,59	16,08	82,50	...	11.4
May	...	1,55,18	16,11	1,50	17,61	19,61	19,38	38,99	16,08	82,50	...	11.4
June	...	1,62,76	17,69	...	17,69	23,55	22,94	46,49	16,08	82,50	...	10.9
July	...	1,67,11	19,18	...	19,18	23,49	20,91	44,40	16,08	82,50	...	11.4
August	...	1,68,92	19,26	9	19,35	31,48	19,51	50,99	16,08	82,50	...	11.4
September	...	1,71,86	18,45	2,92	21,37	34,35	16,62	50,97	17,03	82,50	...	12.4
October	...	1,75,29	19,25	5,59	24,84	35,59	15,33	50,92	17,03	82,50	...	14.2
November	...	1,79,67	23,54	9,16	32,70	32,84	14,60	47,44	17,03	82,50	...	18.2
December	...	1,82,91	23,61	10,10	33,71	29,64	14,03	43,67	17,03	82,50	...	21.7

**Composition of Paper Currency Reserve**  
(In Lakhs of Rs.)

S	Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES			Percentage of Gold to Note Circulation	
			In India	Out of India	Total	Coin	Bullion	Total	Rupree Securities	Sterling Securities	Internal Bills of Exchange		
<b>1920</b>													
	January	...	1,85,15	85,10	11,62	46,72	28,38	11,95	40,33	15,60	82,50	...	25'2
	February	...	1,83,03	41,80	4,65	45,95	29,85	9,14	38,99	15,60	82,50	...	25'1
	March	...	1,74,52	44,36	3,45	47,81	33,22	6,63	39,85	19,59	67,27	...	27'4
	April	...	1,70,74	45,38	95	46,33	33,81	5,56	39,37	23,77	61,27	...	27'1
	May	...	1,66,92	42,86	74	43,60	37,10	4,27	41,37	31,18	50,77	...	26'1
	June	...	1,64,84	43,48	2,49	45,97	41,94	3,61	45,55	35,53	37,27	...	28'0
	July	...	1,63,87	44,62	...	44,62	46,75	3,61	50,36	40,62	28,27	...	27'2
	August	...	1,63,27	89,12	...	39,12	51,62	3,67	55,29	47,83	21,53	...	24'0
	September	...	1,57,68	86,15	...	86,15	54,34	3,72	58,06	47,14	16,23	...	22'0
	October	...	1,59,58	23,75	...	23,75	55,60	3,81	59,41	63,07	8,35	...	14'0
	November	...	1,60,21	23,86	...	23,86	56,05	3,88	59,93	68,07	8,35	...	14'0
	December	...	1,61,40	23,89	...	23,89	57,18	3,96	61,09	68,07	8,95	...	14'8
<b>1921</b>													
	January	...	1,63,41	24,00	...	24,00	58,95	4,04	62,99	68,07	8,35	...	14'7
	February	...	1,64,60	24,06	...	24,06	60,03	4,09	64,12	68,07	8,35	...	14'6
	March	...	1,66,16	24,17	...	24,17	61,42	4,14	65,56	68,07	8,35	...	14'5
	April	...	1,67,32	24,26	...	24,26	62,45	4,20	66,65	68,06	8,35	...	14'5
	May	...	1,67,81	24,30	...	24,30	62,97	4,20	67,17	67,99	8,35	...	14'5
	June	...	1,71,76	24,35	...	24,35	66,87	4,20	71,07	67,99	8,35	...	14'2
	July	...	1,75,56	24,35	...	24,35	70,60	4,21	74,81	63,05	8,35	...	13'0
	August	...	1,76,02	24,35	...	24,35	72,19	4,21	76,40	66,92	8,35	...	13'8
	September	...	1,78,87	24,34	...	24,34	74,55	4,21	78,76	66,92	8,35	...	13'6
	October	...	1,79,72	24,34	...	24,34	75,76	4,21	79,97	67,06	8,35	...	13'5
	November	...	1,73,48	24,33	...	24,33	74,20	4,21	78,41	64,40	6,34	...	14'0
	December	...	1,72,53	24,32	...	24,32	69,76	4,21	73,97	68,40	5,85	...	14'1

**Composition of Paper Currency Reserve.**  
(In Lakhs of Rs.)

Last day of Month	Gross Note Circulation	GOLD			SILVER			SECURITIES		Internal Bills of Exchange	Percentage of Gold to Note Circulation	
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities			
<b>1922</b>												
January	...	1,74,40	24,82	...	24,82	70,28	4,55	74,83	69,89	5,85	...	13'9
February	...	1,73,87	24,82	...	24,82	71,72	4,55	76,27	67,43	5,85	...	14'0
March	...	1,74,76	24,82	...	24,82	72,96	4,56	77,52	65,08	5,85	2,00	13'9
April	...	1,71,76	24,82	...	24,82	71,95	4,56	76,51	65,09	5,85	..	14'2
May	...	1,72,89	24,82	...	24,82	72,50	4,56	77,06	65,17	5,85	...	14'1
June	...	1,76,01	24,82	...	24,82	76,17	4,56	80,73	65,12	5,85	...	13'8
July	..	1,80,41	24,82	...	24,82	80,53	4,56	85,09	65,15	5,85	...	13'5
August	..	1,82,26	24,82	...	24,82	83,76	4,56	88,32	63,78	5,85	...	13'8
September	...	1,80,76	24,82	...	24,82	85,11	4,56	89,67	60,92	5,85	...	13'5
October	...	1,79,63	24,82	...	24,82	86,54	4,56	91,10	58,37	5,85	...	13'5
November	...	1,77,30	24,82	...	24,82	85,16	4,56	89,72	57,42	5,85	...	13'7
December	...	1,74,18	24,82	..	24,82	82,08	4,56	86,64	57,42	5,85	..	14'0
<b>1923</b>												
January	...	1,72,65	24,82	...	24,82	80,49	4,56	85,05	57,48	5,85	...	14'1
February	...	1,73,80	24,82	...	24,82	81,78	4,56	86,34	57,43	5,85	...	14'0
March	...	1,74,70	24,82	...	24,82	82,50	4,56	87,06	57,48	5,85	...	13'9
April	...	1,78,87	24,82	..	24,82	79,09	4,56	83,65	57,55	5,85	2,00	14'0
May	...	1,71,23	24,82	...	24,82	79,01	4,56	83,57	57,50	5,85	...	14'2
June	...	1,78,61	24,82	...	24,82	81,39	4,56	85,95	57,50	5,85	...	14'0
July	...	1,75,72	24,82	...	24,82	85,48	4,56	90,04	57,51	5,85	..	13'8
August	...	1,76,30	24,82	...	24,82	89,91	4,56	94,47	57,51	...	...	13'8
September	...	1,79,29	24,82	..	24,82	92,66	4,83	97,49	57,48	..	...	13'6
October	...	1,80,82	24,82	...	24,82	93,48	5,54	99,02	57,48	...	...	13'4
November	...	1,78,30	22,32	...	22,32	89,88	5,62	95,50	57,48	3,00	...	12'3
December	...	1,83,41	22,32	...	22,32	89,97	5,64	95,61	57,48	9,00	8,00	12'2



**Composition of Paper Currency Reserve.**  
(In Lakhs of Rs.)

Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES		Internal Bills of Exchange	Percentage of Gold to Note Circulation	
		In India	Out of India	Total	Coin	Bullion	Total	Rupce Securities	Sterling Securities			
<b>1924</b>												
January	...	1,84,02	22,82	...	22,82	76,49	5,69	82,18	57,52	14,00	8,00	12'1
February	...	1,86,10	22,82	...	22,82	74,64	5,70	80,34	57,53	14,00	12,00	12'0
March	...	1,85,85	22,82	...	22,82	74,18	5,82	80,00	57,53	14,00	12,00	12'0
April	...	1,81,83	22,82	...	22,82	71,50	5,99	77,49	57,53	14,00	10,00	12'3
May	...	1,74,51	22,82	...	22,82	70,56	6,10	76,66	57,53	14,00	4,00	12'8
June	...	1,72,49	22,82	...	22,82	72,47	6,18	78,65	57,53	14,00	...	12'0
July	...	1,76,24	22,82	...	22,82	76,23	6,84	82,57	57,35	14,00	...	12'7
August	...	1,78,18	22,82	...	22,82	78,06	6,42	84,48	57,84	14,00	...	12'5
September	...	1,79,26	22,82	...	22,82	79,15	6,48	85,63	57,81	14,00	...	12'4
October	...	1,80,98	22,82	...	22,82	80,07	6,47	86,54	57,18	15,00	...	12'3
November	...	1,80,06	22,82	...	22,82	78,18	6,49	84,62	57,13	16,00	...	12'4
December	...	1,79,21	22,82	...	22,82	74,21	6,56	80,77	57,18	17,00	2,00	12'4
<b>1925</b>												
January	...	1,81,12 <sup>f</sup>	22,82	...	22,82	71,11	6,56	77,67	57,18	20,00	4,00	12'3
February	...	1,83,72	22,82	...	22,82	69,51	6,77	76,28	57,18	20,00	8,00	12'2
March	...	1,84,10	22,82	...	22,82	70,02	6,78	76,75	57,18	20,00	8,00	12'1
April	...	1,79,61	22,82	...	22,82	67,40	6,77	74,17	57,18	20,00	6,00	12'4
May	...	1,78,23	22,82	...	22,82	66,95	6,80	73,75	57,16	20,00	...	12'9
June	...	1,78,25	22,82	...	22,82	71,86	6,89	78,75	57,18	20,00	...	12'5
July	...	1,84,80	22,82	...	22,82	77,85	6,95	84,80	57,18	20,00	...	12'1
August	...	1,88,21	22,82	...	22,82	81,79	6,99	88,78	57,12	20,00	...	11'9
September	...	1,89,51	22,82	...	22,82	83,04	7,05	90,09	57,11	20,00	...	11'8

**Composition of Paper Currency Reserve.**  
(In Lakhs of Rupees).

Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES			Percentage of Gold to Note Circulation	
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities	Internal Bills of Exchange		
<b>1926</b>												
January	...	1,91,18	22,32	...	22,32	75,38	7,37	82,75	57,11	29,00	...	11'67
February	...	1,91,76	22,32	...	22,32	75,91	7,42	83,33	57,11	29,00	...	11'63
March	...	1,93,34	22,32	...	22,32	77,25	7,66	84,91	57,11	29,00	...	11'54
April	...	1,85,13	22,32	...	22,32	77,04	7,66	84,70	57,11	21,00	...	12'05
May	...	1,87,08	22,32	...	22,32	78,85	7,75	86,60	57,16	21,00	...	12'00
June	...	1,91,44	22,32	...	22,32	88,05	7,87	90,92	57,20	21,00	...	11'65
July	...	1,97,43	22,32	...	22,32	88,91	7,94	96,85	57,81	21,00	...	11'30
August	...	2,00,53	22,32	...	22,32	91,96	7,87	99,83	57,38	21,00	...	11'13
September	...	1,96,45	22,32	...	22,32	94,86	7,87	1,02,73	57,40	14,00	...	11'36
October	...	1,93,79	22,32	...	22,32	96,83	8,04	1,04,87	52,60	14,00	...	11'50
November	...	1,89,15	22,32	...	22,32	97,52	8,04	1,05,56	51,27	10,00	...	11'80
December	...	1,81,18	22,32	...	22,32	95,82	8,20	1,03,52	49,77	5,57	...	12'30
<b>1927</b>												
January	...	1,80,47	22,32	...	22,32	94,47	8,84	1,02,81	49,77	5,57	...	12'37
February	...	1,82,74	22,32	...	22,32	94,64	8,44	1,03,08	49,77	5,57	2,00	12'35
March	...	1,84,13	22,32	...	22,32	95,94	8,53	1,04,47	49,77	5,57	2,00	12'25
April	...	1,73,71	29,76	...	29,76	95,53	8,86	1,03,89	37,46	2,10	...	17'13
May	...	1,71,44	29,76	...	29,76	95,20	8,92	1,04,12	35,46	2,10	...	17'36
June	...	1,72,57	29,76	...	29,76	98,36	8,99	1,07,85	35,46	...	...	17'24
July	...	1,77,63	29,76	...	29,76	1,03,86	9,06	1,12,42	35,45	...	...	16'75
August	...	1,90,43	29,76	...	29,76	1,06,00	8,90	1,14,90	35,63	19	...	16'49
September	...	1,91,82	29,76	...	29,76	1,07,84	7,35	1,14,69	36,35	1,02	...	16'37
October	...	1,83,33	29,76	...	29,76	1,08,27	7,31	1,15,58	36,75	1,29	...	16'25
November	...	1,81,55	29,76	...	29,76	1,06,33	7,17	1,13,50	36,89	1,40	...	16'40
December	...	1,82,64	29,76	...	29,76	1,01,11	7,42	1,08,53	36,92	3,43	4,00	16'66

**Composition of Paper Currency Reserve.**  
(In Lakhs of Rupees).

Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES			Percentage of Gold to Note Circulation
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities	Internal Bills of Exchange	
<b>1928</b>											
January ... ..	1,86,02	29,76	...	29,76	98,46	7,47	1,05,93	37,89	4,44	8,00	16.70
February ... ..	1,85,78	29,76	...	29,76	98,79	7,57	1,06,36	37,89	3,77	8,00	16.72
March ... ..	1,84,87	29,76	...	29,76	98,72	7,66	1,06,38	37,96	3,77	7,00	16.78
April ... ..	1,82,78	29,76	...	29,76	96,11	6,66	1,02,77	38,98	3,77	7,30	17.00
May ... ..	1,83,01	29,76	...	29,76	94,58	6,80	1,00,88	39,60	3,77	9,00	17.10
June ... ..	1,77,16	29,76	...	29,76	97,45	8,59	1,01,04	41,84	4,52	...	16.80
July ... ..	1,80,70	29,76	...	29,76	1,00,79	2,84	1,03,18	42,73	5,17	...	16.46
August ... ..	1,82,90	29,76	..	29,76	1,02,51	2,71	1,05,22	42,60	5,32	...	16.27
September ... ..	1,84,60	29,76	...	29,76	1,04,02	2,87	1,06,89	42,84	5,61	...	16.72
October ... ..	1,84,66	29,76	...	29,76	1,03,81	3,02	1,06,83	42,33	5,74	...	16.11
November ... ..	1,83,15	80,00	...	80,00	1,01,18	3,76	1,04,89	42,33	5,84	...	16.48
December ... ..	1,89,00	81,10	...	81,10	96,16	4,62	1,00,78	43,27	6,85	7,00	17.00
<b>1929</b>											
January ... ..	1,89,74	82,21	...	82,21	94,67	4,88	99,55	43,27	7,71	7,00	17.62
February ... ..	1,92,47	82,21	...	82,21	94,85	5,11	99,96	43,27	10,53	6,50	17.32
March ... ..	1,88,08	82,22	...	82,22	94,94	4,95	99,89	43,23	10,69	2,00	17.82
April ... ..	1,83,66	82,22	...	82,22	94,90	4,43	99,38	43,23	8,88	...	17.82
May ... ..	1,84,16	82,22	...	82,22	95,40	4,17	99,57	43,23	9,14	...	17.50
June ... ..	1,87,71	82,22	...	82,22	97,77	4,88	1,02,65	43,22	9,62	...	17.11
July ... ..	1,85,72	82,22	...	82,22	1,03,82	4,62	1,03,44	43,19	1,87	...	17.35
August ... ..	1,85,20	82,22	...	82,22	1,07,23	4,58	1,11,81	39,13	2,04	...	17.40
September ... ..	1,86,30	82,22	...	82,22	1,08,05	4,95	1,13,00	39,17	2,41	...	17.25
October ... ..	1,84,88	82,22	...	82,22	1,08,98	4,65	1,13,58	36,32	2,71	...	16.99
November ... ..	1,80,77	82,22	...	82,22	1,07,19	3,97	1,11,16	36,32	1,07	...	17.82
December ... ..	1,79,41	82,22	...	82,22	1,03,77	4,28	1,08,05	37.33	1,81	...	17.98

**Composition of Paper Currency Reserve.**  
(In Lakhs of Rupees).

Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES			Percentage of Gold to Note Circulation	
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities	Internal Bills of Exchange		
<b>1926</b>												
January	...	1,91,18	22,32	...	22,32	75,38	7,37	82,75	57,11	29,00	...	11'67
February	...	1,91,76	22,32	...	22,32	75,91	7,42	83,33	57,11	29,00	...	11'63
March	...	1,93,34	22,32	...	22,32	77,25	7,66	84,91	57,11	29,00	...	11'54
April	...	1,85,13	22,32	...	22,32	77,04	7,66	84,70	57,11	21,00	...	12'05
May	...	1,87,08	22,32	...	22,32	78,85	7,75	86,60	57,16	21,00	...	12'00
June	...	1,91,44	22,32	...	22,32	88,05	7,87	90,92	57,20	21,00	...	11'65
July	...	1,97,48	22,32	...	22,32	88,91	7,94	96,85	57,81	21,00	...	11'30
August	...	2,00,53	22,32	...	22,32	91,96	7,87	99,83	57,38	21,00	...	11'13
September	...	1,96,45	22,32	...	22,32	94,86	7,87	1,02,73	57,40	14,00	...	11'36
October	...	1,93,79	22,32	...	22,32	96,83	8,04	1,04,87	52,60	14,00	...	11'50
November	...	1,89,15	22,32	...	22,32	97,52	8,04	1,05,56	51,27	10,00	...	11'80
December	...	1,81,18	22,32	...	22,32	95,82	8,20	1,03,52	49,77	5,57	...	12'30
<b>1927</b>												
January	...	1,80,47	22,32	...	22,32	94,47	8,84	1,02,81	49,77	5,57	...	12'37
February	...	1,82,74	22,32	...	22,32	94,64	8,44	1,03,08	49,77	5,57	2,00	12'35
March	...	1,84,13	22,32	...	22,32	95,94	8,53	1,04,47	49,77	5,57	2,00	12'25
April	...	1,73,71	29,76	...	29,76	95,53	8,86	1,03,39	37,46	2,10	...	17'13
May	...	1,71,44	29,76	...	29,76	95,20	8,92	1,04,12	35,46	2,10	...	17'36
June	...	1,72,57	29,76	...	29,76	98,36	8,99	1,07,85	35,46	...	...	17'24
July	...	1,77,63	29,76	...	29,76	1,03,36	9,06	1,12,42	35,45	...	...	16'75
August	...	1,80,43	29,76	...	29,76	1,06,00	8,90	1,14,90	35,63	19	...	16'49
September	...	1,31,32	29,76	...	29,76	1,07,34	7,35	1,14,69	36,35	1,02	...	16'37
October	...	1,83,33	29,76	...	29,76	1,08,27	7,31	1,15,58	36,75	1,29	...	16'25
November	...	1,81,55	29,76	...	29,76	1,06,33	7,17	1,13,50	36,30	1,40	...	16'40
December	...	1,82,64	29,76	...	29,76	1,01,11	7,42	1,08,53	36,92	3,43	4,00	16'66

**Composition of Paper Currency Reserve.**  
(In Lakhs of Rupees).

Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES			Percentage of Gold to Note Circulation
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities	Internal Bills of Exchange	
<b>1928</b>											
January ... ..	1,86,02	29,76	...	29,76	98,46	7,47	1,05,93	37,89	4,44	8,00	16.70
February ... ..	1,85,78	29,76	...	29,76	98,70	7,57	1,06,36	37,89	3,77	8,00	16.72
March ... ..	1,84,87	29,76	...	29,76	98,72	7,66	1,06,38	37,96	3,77	7,00	16.73
April ... ..	1,82,78	29,76	...	29,76	96,11	6,66	1,02,77	38,98	3,77	7,50	17.00
May ... ..	1,83,01	29,76	...	29,76	94,58	6,80	1,00,88	39,60	3,77	9,00	17.10
June ... ..	1,77,16	29,76	..	29,76	97,45	8,59	1,01,04	41,84	4,52	...	16.80
July ... ..	1,80,79	29,76	...	29,76	1,00,79	2,84	1,03,13	42,73	5,17	...	16.46
August ... ..	1,82,90	29,76	..	29,76	1,02,51	2,71	1,05,22	42,60	5,32	...	16.27
September ... ..	1,84,60	29,76	...	29,76	1,04,02	2,87	1,06,89	42,84	5,61	...	16.72
October ... ..	1,84,66	29,76	...	29,76	1,08,81	3,02	1,06,83	42,83	5,74	...	16.11
November ... ..	1,83,15	80,00	...	80,00	1,01,13	3,76	1,04,89	42,33	5,84	...	16.43
December ... ..	1,89,00	31,10	...	31,10	96,16	4,62	1,00,78	43,27	6,85	7,00	17.09
<b>1929</b>											
January ... ..	1,89,74	32,21	...	32,21	94,67	4,88	99,55	43,27	7,71	7,00	17.62
February ... ..	1,92,47	32,21	...	32,21	94,85	5,11	99,96	43,27	10,53	6,50	17.32
March ... ..	1,88,03	32,22	...	32,22	94,94	4,95	99,89	43,23	10,69	2,00	17.32
April ... ..	1,83,66	32,22	...	32,22	94,90	4,43	99,33	43,23	8,83	...	17.32
May ... ..	1,84,16	32,22	...	32,22	95,40	4,17	99,57	43,23	9,14	...	17.50
June ... ..	1,87,71	32,22	...	32,22	97,77	4,88	1,02,65	43,22	9,62	...	17.11
July ... ..	1,85,72	32,22	...	32,22	1,03,82	4,62	1,08,44	43,19	1,87	...	17.85
August ... ..	1,85,20	32,22	...	32,22	1,07,23	4,58	1,11,81	39,18	2,04	...	17.40
September ... ..	1,86,30	32,22	...	32,22	1,08,05	4,95	1,13,00	39,17	2,41	...	17.25
October ... ..	1,84,33	32,22	...	32,22	1,08,93	4,65	1,13,58	36,32	2,71	...	16.99
November ... ..	1,80,77	32,22	...	32,22	1,07,19	3,97	1,11,16	36,32	1,07	...	17.32
December ... ..	1,79,41	32,22	...	32,22	1,03,77	4,28	1,08,05	37,33	1,81	...	17.98

## Composition of Paper Currency Reserve.

(In Lakhs of Rupees)

Last day of month	Gross Note Circulation	GOLD			SILVER			SECURITIES			Percentage of Gold to Note Circulation
		In India	Out of India	Total	Coin	Bullion	Total	Rupee Securities	Sterling Securities	Internal Bills of Exchange	
<b>1930</b>											
January ... ..	1,80,21	32,27	...	32,27	1,04,29	2,33	1,06,62	33,85	2,47	...	17.91
February ... ..	1,81,60	32,27	...	32,27	1,05,69	1,82	1,07,51	33,88	2,94	...	17.77
March ... ..	1,77,23	32,27	...	32,27	1,08,11	2,85	1,10,96	33,85	15	...	18.20
April ... ..	1,78,90	32,27	...	32,27	1,07,22	3,38	1,10,60	30,73	80	...	18.55
May ... ..	1,67,78	32,28	...	32,28	1,07,04	3,48	1,10,52	24,86	62	...	19.24
June ... ..	1,63,73	32,28	...	32,28	1,08,91	3,48	1,12,39	18,33	78	...	19.10
July ... ..	1,68,26	32,28	...	32,28	1,13,87	3,49	1,16,86	18,39	73	...	19.18
August ... ..	1,68,87	32,28	...	32,28	1,15,43	5,25	1,20,68	14,68	1,23	...	19.11
September ... ..	1,71,47	32,28	...	32,28	1,15,92	5,83	1,21,75	15,59	1,85	...	18.82
October ... ..	1,70,14	32,28	...	32,28	1,17,47	5,63	1,23,10	12,73	2,03	...	18.97
November ... ..	1,64,84	32,28	...	32,28	1,16,90	5,76	1,22,66	8,67	1,23	...	19.58
December ... ..	1,61,34	31,74	...	31,74	1,14,60	5,30	1,19,90	9,61	...	...	19.67
<b>1931</b>											
January ... ..	1,58,20	26,21	...	26,21	1,15,32	5,80	1,21,12	9,87	...	1,00	16.67
February ... ..	1,56,53	23,77	...	23,77	1,16,09	6,58	1,22,67	10,09	...	...	15.18
March ... ..	1,60,84	25,85	...	25,85	1,17,86	6,94	1,24,80	10,19	...	...	16.00
April ... ..	1,60,14	27,54	...	27,54	1,18,20	7,20	1,25,40	7,20	...	...	17.20
May ... ..	1,54,79	20,21	...	20,21	1,19,61	7,83	1,27,44	7,14	...	...	18.05
June ... ..	1,52,54	17,14	...	17,14	1,22,44	7,59	1,30,03	5,37	...	...	11.23
July ... ..	1,55,65	16,56	...	16,56	1,25,66	6,90	1,32,56	6,53	...	...	10.64
August ... ..	1,53,58	12,37	...	12,37	1,26,94	5,11	1,32,05	9,16	...	...	14.63
September ... ..	1,48,74	4,21	...	4,21	1,26,81	5,78	1,32,54	9,49	...	2,50	2.88
October ... ..	1,59,75	4,30	...	4,30	1,24,65	6,92	1,31,57	23,38	...	...	2.77
November ... ..	1,62,35	4,48	...	4,48	1,21,61	7,44	1,29,05	23,52	...	...	2.76
December ... ..	1,70,30	4,57	...	4,57	1,15,04	7,94	1,22,98	49,25	...	2,50	2.58
<b>1932</b>											
January ... ..	1,79,16	4,33	...	4,33	1,08,88	6,95	1,15,83	55,00	...	3,50	2.74
February ... ..	1,70,54	4,92	...	4,92	1,04,11	8,09	1,12,20	59,42	...	3,00	2.73
March ... ..	1,78,14	5,26	...	5,26	1,01,96	9,22	1,11,18	57,94	...	3,75	3.01

**Market Rates of Discount of certain Principal Countries 1930-31 and 1931-32.**  
(Monthly average is the average of daily quotations).

		United Kingdom (London), Bankers' Drafts, 90 days			France (Paris), Market Discount, Commercial Paper, 45-90 days			Germany (Berlin), Private Discount, 56-90 days' bills			Japan (Tokyo), Commercial Paper, 60 days		Switzerland (Zurich), Market Discount, 8 months' bills			United States (New York), Commercial Paper 4-6 months			United States (New York), Bankers' Acceptances 90 days.			India Bazaar Bill Rate		
		Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.	Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.	Monthly average	Max.	Min.	Monthly average
April	1930	2'56	2'38	2'50	2'63	2'50	2'52	4'75	4'25	4'46	...	...	2'68	2'56	2'61	4	8'75	8'88	8	2'88	2'91	11	7½%	
May	"	2'81	2'06	2'16	2'50	2'06	2'41	4'12	8'75	8'89	...	...	2'68	2'25	2'44	4	8'50	8'79	2'68	2'88	2'48	10-11	7½%	
June	"	2'50	2'09	2'81	2'12	1'88	2'06	8'75	8'50	8'88	...	...	2'25	2	2'06	8'75	8'25	8'55	2'88	1'88	2'09	10	8½%	
July	"	2'50	2'19	2'88	2'50	1'94	2'11	8'50	8'88	8'40	...	...	2	1'81	1'92	8'50	8	8'19	1'88	1'88	1'88	8-9	8½%	
August	"	2'81	2'08	2'22	2'12	2	2'05	8'88	8'18	8'24	...	...	1'81	1'69	1'75	8	8	8	1'88	1'88	1'88	7-8	8½%	
September	"	2'18	2	2'06	2	1'94	2	8'88	8'18	8'30	...	...	1'69	1'88	1'50	8	8	8	1'88	1'88	1'88	7-8	8½%	
October	"	2'16	2'06	2'09	2	2	2	5	8'88	4'66	...	...	1'88	1'25	1'29	8	8	8	1'88	1'88	1'88	7-8	6%	
November	"	2'81	2'06	2'19	2	2	2	4'88	4'75	4'81	...	...	1'25	1'12	1'16	8	2'75	2'88	1'88	1'88	1'88	7-8	6%	
December	"	2'50	2'18	2'81	2'12	2	2'00	4'88	4'75	4'88	...	...	1'50	1'06	1'18	8	1'75	2'88	1'88	1'88	1'88	7-8	6%	
January	1931	2'50	2'18	2'25	2'06	1'75	1'84	4'88	4'75	4'29	...	...	1'50	1	1'16	2'75	2'75	2'85	1'75	1'88	1'54	7-8	6%	
February	"	2'69	2'88	2'56	1'88	1'62	1'69	4'88	4'88	4'88	...	...	1	1	1	2'50	2'50	2'68	1'50	1'88	1'89	7-8	6%	
March	"	2'69	2'56	2'59	1'62	1'50	1'61	4'88	4'75	4'76	5'11	4'75	1'06	0'84	0'99	2'50	2'50	2'52	1'50	1'50	1'50	9-10	7½%	
April	"	2'68	2'56	2'58	1'50	1'44	1'45	4'75	4'68	4'65	5'11	4'88	1'12	1	1'06	2'50	2'25	2'88	1'05	1'50	1'44	9-10	7½%	
May	"	2'56	2	2'25	1'41	1'06	1'25	4'75	4'68	4'65	5'11	4'88	1'12	1'12	1'18	2'25	2	2'20	1'18	0'88	1'02	8-9	6%	
June	"	2'17	2'01	2'09	1'09	1'06	1'06	7	4'75	6'09	5'11	4'88	1'12	1'12	1'13	2	2	2	0'88	0'88	0'88	7-8	6	
July	"	4'84	1'81	2'59	1'68	1'06	1'81	7(a)	7(a)	7(a)	4'75	4'02	2	1'12	1'55	2	2	2	0'88	0'88	0'88	7-8	8%	
August	"	4'84	4'06	4'28	1'68	1'25	1'44	(a)	(a)	(a)	4'75	4'02	2	1'88	1'98	2	2	2	0'88	0'88	0'88	7-8	8%	
September	"	5'81	4'16	4'75	1'50	1'88	1'44	8'25	7'09	7'94	4'75	4'02	1'88	1'75	1'80	2	2	2'02	1'25	0'88	0'08	7-8	8½%	
October	"	5'75	5'44	5'69	2	1'50	1'88	8	8	8	4'98	4'75	1'94	1'88	1'90	4'25	2	8'50	8'75	1'25	2'48	7-8	8½%	
November	"	5'88	5'68	5'75	1'88	1'88	1'88	8	8	8	5'84	4'75	1'94	1'75	1'77	4'25	8'75	4'08	8'25	2'88	2'09	7-8	4½%	
December	"	5'91	5'63	5'88	1'88	1'88	1'88	8	7	7'82	6'21	5'11	1'75	1'75	1'75	4	8'75	8'88	8	8	8	7-8	5¼%	
January	1932	5'81	4'75	5'56	1'88	1'75	1'78	6'94	6'94	6'94	6'21	5'11	1'75	1'56	1'68	4	8'75	8'88	8	2'75	2'86	7-8	6	
February	"	5'19	8'50	4'66	1'88	1'81	1'84	6'81	6'56	6'67	5'84	5'11	1'56	1'50	1'52	4	8'75	8'84	2'88	2'75	2'75	7-8	6	
March	"	8'50	2'12	2'60	1'88	1'88	1'88	6'56	8'75	6'09	...	...	1'50	1'50	1'50	8'75	8'50	8'88	2'68	2'88	2'50	7-8	6	

## Prices of representative securities of the Government of India and of the British 4% Funding Loan (1960—90)

	1925-26						1926-27						1927-28						1928-29																	
	3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960—90)		3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960—90)		3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960—90)		3½% Rupee Paper		3½% India Sterling		4% British Funding Loan (1960—90)													
	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L												
April ...	68	67/12	49½	49½	88/12/6	88/5	77/6	74/6	56	54½	87/10	85/10	79/5	78/11	58	57½	87½	86½	75/9	75/6	56	56	92½	88½												
May ...	68/7	67/11	50	49½	88/7/6	87/12/6	78/9	76/6	57	56	87/7/6	86/10	79/4	77/13	58	58	87½	86½	75/9	75/8	56	56	90½	90												
June ...	70/8	68/7	51	50	87/12/6	86/2/6	77/6	76/8	57	56	86/5/	86/7/6	78/1	77/12	57½	57½	86½	85½	75/10	75/8	56	56	91	90½												
July ...	69/10	69/5	51½	51	88/17/6	86/10	77/8	77	57	57	86½	86	78	77/7	57½	57½	85½	86½	75/9	74/2	56	54½	90½	89½												
August ...	69/9	68/14	51½	51½	89/12/6	88/10	77/6	77/8	57	57	86	84½	77/13	75/12	57½	56	87	86½	74/1	73/6	54½	54½	90½	89½												
September ...	68/15	66/12	51½	51½	89/7/6	87/10	77/6	77/8	57	57	86	84½	76/5	75/7	56	56	87½	85½	73/14	72/14	54½	54	90½	88½												
October ...	68/13	67/12	51½	51	87/15	87/17/6	77/9	77/5	57	57	84½	84	76/6	76/2	56	56	85½	85½	73/8	73/1	54	54	88½	88½												
November ...	68/15	68/6	51	51	87/2/6	86/7/6	77/13	77/6	57	57	84½	84½	76/5	75/10	56	56	85½	85½	73/6	72/14	54	54	90½	89½												
December ...	69	68/9	51	51	86/7/6	86/5	78/15	77/10	57½	57	85½	84½	75/9	74/6	56	55½	88½	85½	73	72/4	54	53½	90½	89½												
January ...	70/8	69/2	52	51	88/2/6	85/15	78/2	77/5	57½	57	87½	85½	76/2	75/2	56	55½	89½	88½	73/6	72/8	54	53½	91½	90½												
February ...	71/12	70/8	52½	52	88/7/6	87/15	77/12	77/5	57½	57	87½	86½	76/8	75/13	56	56	89½	88½	73/6	71/14	54	53	91½	88½												
March ...	74/8	71	54½	52½	87/15/	86/2/6	78/14	77/7	57½	57	87½	86	76	75/6	56	56	89½	88½	72/8	71	53	52½	88½	86½												
	1929-30																																			
	3½% Rupee Paper						3½% India Sterling						4% British Funding Loan (1960—90)						3½% Rupee Paper						3½% India Sterling						4% British Funding Loan (1960—90)					
	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L												
April ...	...	...	72/4	71/3	53	52½	88½	86½	68/14	64/1	49½	47½	91	89½	63	62/9	45½	45½	94½	94½	92½	92½	...	...												
May ...	...	...	72/5	71/8	52½	52½	88½	87½	65/5	64/14	46½	46	90½	88½	62/9	61/13	45½	45	96½	94½	94½	94½	...	...												
June ...	...	...	71/6	67/14	52	51	88	85½	65/5	64/11	46½	46	90½	88½	61/8	68/18	45	48	97½	96½	96½	96½	...	...												
July ...	...	...	68/7	67/6	50	49½	87	85	65/2	62/1	46½	45	91½	89½	61/8	59/4	43½	43	97½	95½	95½	95½	...	...												
August ...	...	...	68/6	67/6	49½	49½	85½	84½	64/10	63	45½	45	91½	90½	59/8	57/1	43	42	92½	90½	90½	90½	...	...												
September ...	...	...	68/14	68/7	49½	49½	84½	82½	65/6	64/4	46	45½	92½	90½	57	52	41½	87	92½	79½	79½	79½	...	...												
October ...	...	...	68/13	67/14	49½	49½	87	82½	65/2	64/6	46	46	94½	90½	53/14	51	47	87	88½	83	83	83	...	...												
November ...	...	...	68/6	67/15	49½	49½	85½	84	65/3	64/10	46	46	96½	94½	55/10	53	40	89½	86½	81½	81½	...	...													
December ...	...	...	68	67/12	49½	49½	85½	85½	64/11	68	46	46	95	93½	53/2	51/12	39½	38½	82	72	72	72	...	...												
January ...	...	...	68	64/6	49½	47	87	85½	63/4	62/10	46	45½	95½	94½	54/8	51/7	59	51	86½(a)	84½(a)	84½(a)	84½(a)	...	...												
February ...	...	...	65/10	64/1	47	47	88	86½	62/11	61/9	45½	44½	94½	89½	61/12	53/9	63	56	86½(a)	84½(a)	84½(a)	84½(a)	...	...												
March ...	...	...	69/10	64/9	49½	47	98	87½	63/14	61/5	45½	44½	93½	91	61/12	60/2	68	62½	86½(a)	86½(a)	86½(a)	86½(a)	...	...												

NOTE—'H' means 'Highest' and 'L' 'Lowest'

(a) Quotations nominal.



Statement showing the interest-bearing obligations of the Government of India at the close of each financial year ending 31st March.

	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
(In Crores of rupees)										
In India.										
Loans (a) ...	839.8	859.8	870.3	868.3	874.4	872.3	890.7	405.1	417.2	422.7
Treasury bills in the hands of the Public	21.6	2.1	..	...	...	7.6	4.0	86.0	55.4	47.0
Treasury bills in the Paper Currency Reserve	49.7	49.7	49.7	49.6	41.5	31.0	39.2	29.2	5.9	49.8
Ways and Means Advances	...	...	...	...	...	...	...	...	...	9.5
<b>Total Loans, etc.</b>	<b>411.1</b>	<b>410.6</b>	<b>420.0</b>	<b>417.9</b>	<b>415.9</b>	<b>411.8</b>	<b>433.9</b>	<b>470.3</b>	<b>478.5</b>	<b>528.5</b>
Other Obligations—										
Post Office Savings Banks	28.2	24.8	25.6	27.2	29.5	32.7	34.5	37.1	37.0	38.2
Cash Certificates	8.1	8.4	18.1	21.0	26.7	30.7	32.8	35.0	38.4	44.6
Provident Funds, etc.	36.2	39.0	42.4	46.4	51.0	55.8	60.5	65.4	70.3	72.9
Depreciation and Reserve Funds	...	...	9.1	15.5	20.1	25.5	31.1	30.2	21.4	17.5
Provincial Balances (b) ...	2.9	4.2	4.8	11.8	10.5	10.5	10.4	10.2	6.1	8.8
<b>Total other Obligations</b>	<b>63.4</b>	<b>76.4</b>	<b>95.0</b>	<b>121.9</b>	<b>137.8</b>	<b>155.2</b>	<b>168.8</b>	<b>177.9</b>	<b>178.2</b>	<b>177.0</b>
<b>Total in India</b>	<b>476.5</b>	<b>487.0</b>	<b>515.0</b>	<b>539.8</b>	<b>553.7</b>	<b>567.0</b>	<b>602.7</b>	<b>648.2</b>	<b>651.7</b>	<b>705.5</b>

	(In millions of £)									
In England -			(c)	(e)						
Loans (a) ...	222.9	244.5	263.4	266.4	265.1	272.3	283.3	289.0	316.8	314.6
War Contribution	19.7	19.3	18.8	18.3	17.8	17.3	16.7	16.7	16.7	16.7
Capital value of Liabilities undergoing redemption by way of terminable Railway annuities	61.3	0.1	58.8	57.5	56.2	54.8	53.4	51.9	50.3	48.7
India Bills	...	...	...	...	...	...	...	6.0	...	...
Imperial Bank of India Loans	...	...	...	...	...	...	...	...	4.1	...
Provident Funds, etc.	0.05	0.1	0.2	0.2	0.8	0.2	0.4	2.5	0.7	0.8
<b>Total in England</b>	<b>303.95</b>	<b>324.0</b>	<b>341.2</b>	<b>342.4</b>	<b>339.4</b>	<b>344.6</b>	<b>353.8</b>	<b>366.1</b>	<b>388.6</b>	<b>380.8</b>

	(In Crores of rupees)									
Equivalent at 1 s. 6d, to the Rupee	405.3	432.0	454.9	456.6	452.5	459.5	471.8	488.2	518.1	507.5
<b>Total interest bearing Obligations</b>	<b>881.8</b>	<b>919.0</b>	<b>970.0</b>	<b>996.4</b>	<b>1,006.2</b>	<b>1,026.4</b>	<b>1,074.5</b>	<b>1,136.5</b>	<b>1,169.9</b>	<b>1,213.0</b>
Interest-yielding Assets held against the above obligations—			(d)	(f)						
(i) Capital advanced to Railways	517.2	537.0	578.0	605.6	635.5	668.6	700.7	730.8	744.0	752.3
(ii) Capital advanced to other Commercial Departments	19.4	20.1	22.0	17.8	19.2	20.7	21.8	22.7	23.7	25.5
(iii) Capital advanced to Provinces	87.5	97.6	106.4	114.6	120.2	126.3	137.5	142.6	151.8	165.0
(iv) Capital advanced to Indian States and other interest-bearing loans	8.9	8.9	10.2	11.8	12.1	13.9	15.5	17.6	19.4	20.4
<b>Total interest-yielding Assets</b>	<b>633.0</b>	<b>663.6</b>	<b>716.6</b>	<b>749.8</b>	<b>786.9</b>	<b>829.5</b>	<b>875.5</b>	<b>913.7</b>	<b>938.9</b>	<b>968.2</b>
Cash, Bullion, and Securities held on Treasury Account	44.8	50.5	57.4	52.0	30.5	24.3	28.3	45.4	84.0	38.3*
<b>Balance of total interest-bearing obligations not covered by above Assets</b>	<b>203.9</b>	<b>205.0</b>	<b>196.0</b>	<b>194.6</b>	<b>181.8</b>	<b>172.5</b>	<b>170.6</b>	<b>177.4</b>	<b>197.0</b>	<b>216.5</b>

\*Estimate only.

- (a) These figures represent the nominal amounts of loans outstanding and also include comparatively small amounts of expired loans which do not bear interest.
- (b) The figures represent those portions of Provincial balances which bear interest either because they form part of the Old Famine Insurance Fund or the present Famine Relief Fund or because they have been placed with the Government of India on fixed deposit.
- (c) Includes the liability assumed by the Secretary of State for East Indian Railway Debenture Stock, aggregating £ 18½ millions, on the termination of the Contract with that Railway on the 1st January, 1925. It therefore does not represent any increase in the foreign indebtedness of the country as a whole.
- (d) Includes 27.07 crores on account of the liability referred to in (c) above.
- (e) Includes the liability assumed by the Secretary of State for the Great Indian Peninsula Railway Debenture Stock, aggregating £ 8½ millions, on the termination of the Contract with that Railway on 1st July, 1925. *Vide* also last sentence under (c) above.
- (f) Includes 4.88 crores on account of the liability referred to in (e) above.

## Sales of Treasury Bills week by week.

Week ending	CALCUTTA WEEK-END RATES FOR			Week ending	CALCUTTA WEEK-END RATE FOR		
	Sales of Treasury Bills (In crores) Rs.	Call money	3½% Rupee Paper		Sales of Treasury Bills (In crores) Rs.	Call money	3½% Rupee Paper
1930							
January, 7	1.52	2½	67/8	March, 8	3.91	4½	61/5
" 14	1.87	3½	67/2	" 10	7.05	4½	63
" 21	0.79	4½	66/3	" 17	4.88	4½	63/5
" 28	1.32	4½	64/12	" 24	5.10	4½	63/3
February, 4	0.92	5	64/12	" 31	3.72	4½	63/3
" 11	0.98	5½	64/4	April, 7	3.46	4½	63
" 18	0.97	5½	64/2	" 14	7.68	4½	62/13
" 25	2.25	5	64/7	" 21	8.89	4½	62/14
March, 4	2.11	5	65/4	" 28	6.55	4½	62/13
" 11	3.82	5	65/14	May, 5	4.60	4½	62/8
" 18	2.36	4½	66/6	" 12	5.48	4½	62/7
" 25	1.87	4½	68/15	" 19	5.86	4½	62/9
April, 1	1.71	5	68/14	" 25	4.53	5½	62
" 8	2.56	4½	68/7	June, 2	4.82	5½	61/6
" 15	1.84	4½	67/8	" 9	3.99	5½	59/14
" 22	1.07	4½	66/12	" 16	5.10	4	59/14
" 29	2.43	4½	65/1	" 23	4.55	3½	59/14
May, 6	1.94	4½	63/7	" 30	3.96	4	60/7
" 13	2.54	4½	64/4	July, 7	4.80	4	61/4
" 20	2.03	4½	64/5	" 14	5.87	4½	59/10
" 27	2.07	4½	64/10	" 21	4.22	5	60/7
June, 2	2.72	4½	65	" 27	2.08	4½	59/14
" 10	2.98	4½	65	August, 4	3.40	4½	52/6
" 17	3.94	4½	65/5	" 11	3.32	5	58/12
" 24	3.98	4½	64/15	" 18	4.08	4½	57/11
July, 2	1.92	4½	65/2	" 25	5.25	4	57/13
" 8	3.15	4	64/12	September, 1	2.87	4	57
" 15	4.25	4 (went down to 2½)	63/1	" 9	3.60	4	56/2
August, 12	0.37	2½	63/1	" 14	2.06	4	55/10
" 19	5.48	2	63/12	" 25	1.91	5 (26th Sep.)	52 (26th Sep.)
" 26	4.95	1½	64/8	" 29	1.35	5	53/4
September, 2	4.65	2	64/14	October, 6	1.94	5	52
" 9	5.52	1½	64/4	" 13	3.94	4½	51
" 16	5.00	2	65/6	" 22	5.94	4	52/12
" 23	4.55	3	64/4	" 27	4.09	3½	53
October, 6	6.88	2½	64/10	November, 3	4.42	4	55/8
" 14	4.68	2½	64/9	" 11	4.32	4	55/8
" 23	5.14	1½	64/10	" 17	4.90	4½	54/14
" 29	3.44	2	64/14	" 24	4.53	4½	54/7
November, 4	1.97	3	65	December, 1	2.99	4½	53/2
" 11	1.61	3	64/13	" 8	1.88	4	52/10
" 18	2.35	3	64/15	" 15	1.84	4½	52/4
" 25	2.43	2½	64/13	" 22	1.81	4	51/12
December, 2	3.17	2	64/11	" 30	0.64	4	51/15
" 9	3.09	3	64/9	1932			
" 16	2.28	3	63/13	January, 5	1.46	4½	51/12
" 22	1.40	3½	63	" 12	2.81	4	52/12
" 30	1.73	3	63/8	" 19	3.26	4	54/4
1931				" 26	4.27	4	53/7
January, 6	3.70	2½	63/1	February, 2	3.55	4	53/12
" 13	3.95	2½	62/13	" 10	2.16	4	54/2
" 20	2.96	3½	62/14	" 16	5.08-3.79	3½	58
" 27	0.89	3½	63/3	" 23	5.08	3½	58
February, 3	1.82	3½	62/10	March, 1	4.30	3½	60/12
" 10	2.04	3½	62/8	" 8	3.42	3½	63
" 17	1.19	4½	62	" 15	2.59	3½	60/2
" 24	2.42	4½	61/14	" 22	2.76	3½	61/8
				" 31	0.92	3½	61/8

Rates of Exchange on London of some Principal Countries during 1931-32.

	NEW YORK	PARIS	BERLIN	BOMBAY	ZURICH (SWITZERLAND)	KOBE (JAPAN)
	Dollars to £	Francs to £	Marks to £	Sterling to Rupee	Francs to £	Sterling to Yen
Par level	4'86 $\frac{3}{4}$	124'21	20'42	18	25'22 $\frac{1}{2}$	24'582
Beginning of				(Pence)		(Pence)
April 1931	4'85 $\frac{2}{3}$	124'17	20'40	17 $\frac{5}{8}$	25'25 $\frac{3}{4}$	24 $\frac{2}{4}$
May "	4'86 $\frac{1}{4}$	124'47	20'42 $\frac{1}{2}$	17 $\frac{3}{4}$	25'24 $\frac{3}{4}$	24 $\frac{2}{4}$
June "	4'86 $\frac{1}{2}$	124'25	20'50 $\frac{1}{8}$	17 $\frac{1}{4}$	25'08 $\frac{1}{4}$	24 $\frac{3}{4}$
July "	4'86 $\frac{3}{4}$	124'24	20'50 $\frac{1}{8}$	17 $\frac{2}{8}$	25'11 $\frac{1}{2}$	24 $\frac{3}{8}$
August "	4'85 $\frac{3}{4}$	123'28	20'50	17 $\frac{1}{4}$	24'85	24 $\frac{3}{8}$
September "	4'85 $\frac{3}{4}$	123'95	20'81	17 $\frac{1}{4}$	24'91 $\frac{3}{4}$	24 $\frac{3}{4}$
October "	8'94	100'00	16'87	17 $\frac{1}{2}$	20'12 $\frac{1}{2}$	28 $\frac{1}{2}$
November "	8'74 $\frac{3}{4}$	95'81 $\frac{1}{2}$	15'78 $\frac{1}{2}$	18 $\frac{5}{8}$	19'21 $\frac{7}{8}$	81 $\frac{0}{8}$
December "	8'37 $\frac{1}{4}$	86'25	14'25	18 $\frac{3}{8}$	17'18 $\frac{3}{8}$	85 $\frac{1}{2}$
January 1932	8'38 $\frac{1}{4}$	86'37 $\frac{1}{2}$	14'25	18 $\frac{7}{8}$	17'37 $\frac{1}{2}$	85 $\frac{1}{4}$
February "	8'45 $\frac{1}{2}$	87'68	14'9 $\frac{9}{8}$	18 $\frac{3}{8}$	17 $\frac{1}{8}$	24 $\frac{3}{4}$
March "	8'67 $\frac{3}{8}$	88'63	14 $\frac{5}{8}$	18 $\frac{3}{8}$	18'05	22 $\frac{3}{4}$

Imperial Bank of India Official rates of interest.

1921	per cent.	Average for whole year	1926	per cent.	Average for whole year.]
8rd March	6	5'62	20th May	5	4'825
2nd June	5		10th June	4	
15th December	6				
20th December	7				
1927					
1922					
16th February	8	5'322	1st January	5	5'720
27th April	7		13th January	6	
1st June	6		10th February	7	
15th June	5		2nd June	6	
6th July	4		28rd June	5	
26th October	5		28th July	4	
14th December	6		8th September	5	
28th December	7		8th December	6	
			22nd December	7	
1928					
1923					
11th January	8	5'947	21st June	6	6'196
25th May	7		19th July	5	
31st May	6		15th November	6	
7th June	5		13th December	7	
28th June	4				
15th November	5				
29th November	6				
20th December	7				
1929					
1924					
8rd January	8	6'682	14th February	8	6'328
14th February	9		11th April	7	
10th April	8		9th May	6	
29th May	7		6th June	5	
19th June	6		10th October	6	
8rd July	5		31st October	7	
31st July	4				
21st August	5				
16th October	6				
1930					
1925					
22nd January	7	5'642	3rd April	6	5'887
21st May	6		10th July	5	
18th June	5		20th November	6	
2nd July	4				
24th September	5				
3rd December	6				
1931					
1926					
1932					
1927					
1928					
1929					
1930					
1931					
1932					
22nd January	7		14th January	7	
28th May	6		25th February	6	
6th August	7				
24th September	8				

# NETHERLANDS TRADING SOCIETY

Nederlandsche Handel-Maatschappij, N. V.

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## TRADE SECTION

# FOREIGN TRADE

A review of the trade of India in 1931-32 is an unpleasant task for the reviewer and even more unpleasant reading for the student. It was a year in which distress was spread at once even and thick on all classes and sections of the population. Regret that it should have been so is heightened by the fact that agricultural conditions during the year were quite favourable. According to official estimates, the output of rice during 1931-32 was 32.8 million tons, a rise of .6 million over the previous year and of 1.6 million tons over 1929-30. The wheat crop had a slight setback. Production for 1930-31 was 9.3 million tons against 10.5 million tons in the previous year and an estimated forecast of 9.1 million tons for the crop now under cultivation. Sugarcane has shown during the last three years a steady rise from 2.8 million tons through 3.2 million tons to 3.9 million tons. Both cotton and jute have had a reduction in cultivation, the former having gone down from 5.2 million bales which was the figure for the last two years to 4.1 million bales for 1931-32. The output of jute in 1931 is less than a half of the previous year; and in this respect it may be noted that, unlike the other agricultural commodities of India in which reduction of output is not necessarily a factor making for increased welfare, jute called clearly for a drastic reduction of acreage and output. Though it is well that such has been achieved, it is regrettable that there has been no appreciable effect on the prices of jute and jute manufactures. Unless one argues that without such reduction prices might have touched even lower levels, there is hardly any consolation derivable in the present state of affairs. Groundnuts, during 1931-32 had gone back from 3.1 million tons for 1930-31 to a level of 2.7 million tons which is the figure for 1929-30. The other commodities like linseed, rape and mustard, sesamum, castor seed and indigo have been maintained at their former levels.

As has already been said, in spite of the plentiful yield of agriculture in India conditions had gone from bad to worse. For those who might feel that the economist's assertions about the distress in India are no more than mere inferences from statistics remotely connected with the actual life of the people and therefore of questionable validity, there was throughout the year the amazing phenomenon of the Indian peasant overcoming his age-old love of gold and selling the precious metal only to eke out a bare living. For the greater part of the year this distress gold, as it has come to be called, was bought presumably, through the pawn-brokers by the agents of bullion dealers in the urban areas. When the metal reached the cities they were tendered to the authorities at the statutory price, the dealer making a profit equivalent to the difference between the price paid to the peasant and the cost of transporting it to the cities, and the price realised from the currency authorities. Later when the abandonment of the gold standard in September, 1931 brought about not only a very considerable rise in the rupee price of gold but also a substantial profit on the export and sale of gold in foreign countries, the pent-up stocks in rural areas began to flow more vigorously, towards the ports. The amazing persistence of this phenomenon is a conclusive proof, if such were needed, of the unprecedented stress and

strain to which the agricultural masses of this country have been subject during the last one year and more.

For this distress many causes may be cited. But one all-embracing development—a development which is confined not to India but extends to the farthest corners of the world—may be deemed a fully adequate explanation and this is the disastrous fall in the prices of commodities. In this short review of the trade of India, it is neither possible nor desirable to go into the causes of that decline in prices. But it may be useful to mention here that the fall is attributed by some to changes in the monetary factor and by some to a state of overproduction. Whether it is due to the one or the other, the fall in prices, or in other words, a change in the value of money, brings about such a thorough dislocation of the machinery of national and world economy that the man who realises much lower value for his product hardly gets any compensation in the decrease in the prices which he has to pay for the products of others. So far as the Indian peasant is concerned, his lot has always been strangely susceptible to the vicissitudes of monsoons and other factors that are of a local character. But during 1931-32 with world factors pressing down on him with such intolerable weight, it is no wonder that he has been flattened out completely. The decrease in his purchasing power sets up vicious circles. His demand for the imported commodities suffer a shrinkage. Shrunken imports lead to a reduction in exports. And so the adverse forces gain increasing strength by acting and reacting on one another.

The following table shows the changes in the index prices of our principal products:

(Basis 100 end of July 1914)

	Mar. 1929	Sept. 1929	Mar. 1930	Mar. 1931	Sept. 1931	Mar. 1932
Cereals ... ..	129	128	108	85	73	70
Pulses ... ..	146	155	140	82	91	86
Tea ... ..	157	129	121	114	63	60
Oil seeds ... ..	148	175	142	90	78	74
Jute, raw ... ..	106	90	72	45	51	49
Jute, manufactured ...	189	122	89	80	69	76
Cotton, Raw ... ..	161	146	107	93	74	89
Hides and skins ... ..	130	109	100	80	51	54

The significance of the month of September lies in the fact that the gold standard was abandoned during that period with the natural consequences that the value of the rupee in terms of gold, and generally speaking, commodities went down. To the extent that since the abandonment of the gold standard prices have improved there has been a relief for the Indian peasant. His price realisations in terms of rupees are high. But one must be on guard against the exaggeration of the significance of this factor in the general economic well-being of the country. For, in the first place, the rise in prices since September has by no means been even. Cereals, pulses, tea, oil seeds and raw jute have actually shown a decline; and it is only in the case of cotton, hides and skins and manufactured jute that there is an increase; so that even if the relief gained from the devaluation of the rupee had been considerable it was by no means evenly spread amongst all the agricultural classes.

It is on the background of such economic conditions that one must set the foreign trade of India in 1931-32. The total exports fell to Rs. 160.54 crores from Rs. 225.64 crores in 1930-31 and Rs. 317.93 crores in the year previous. If we leave the re-exports out of account, exports fell to Rs. 156 crores from Rs. 220 crores in the previous year which represents less than half of the annual average of the 10 post-War years and roughly 20 per cent below the 10 pre-War years ending 1913-14. And the total export of merchandise including re-exports on private account were Rs. 195 crores. Imports also fell heavily, the total imports being Rs. 125.69 crores as against Rs. 163.61 crores in the previous year. The import figure is practically a half of the post-War average and only slightly above the pre-War. The balance of trade in merchandise fell to Rs. 34.86 crores from Rs. 62.03 crores in 1930-31 and Rs. 78.98 crores in 1929-30. Thus within a couple of years the balance of trade has fallen much less than a half of the level of 1929-30.

But our foreign balance of payments has been helped during the year by the sudden emergence of the phenomenon of gold exports to which a brief reference has already been made. The economic distress in the country had, in the primary stages, the effect of checking the imports of gold and silver for satisfying the normal demand of the Indian population for precious metals and in the later stage actually brought about a reversal of the movement of the metals. Imports of silver during the year amounted only to Rs. 4.42 crores which is about a third of the imports of each of the two previous years. And as for exports, if Government operations are taken into account, there was a total export of silver from India of Rs. 4.84 crores, the result being that during the year 1931-32 there was a net export of silver of Rs. 42 lakhs. Imports of gold amounted to Rs. 2.80 crores against Rs. 13.25 crores in the previous year and Rs. 14.23 crores in 1929-30. Exports of gold amounted to Rs. 60.77 crores during the year against Rs. 49 lakhs in 1930-31 and barely a lakh in 1929-30. In fact, over the past many years, this country has not been an exporter of gold at all; and even such gold as was exported in 1930-31 should really be considered as due to those developments which resulted in India becoming a large-scale exporter of the yellow metal in 1931-32. The tiny parcels of gold that were shipped in 1930-31 were the first specimens and samples of the colossal quantities of distress gold disgorged from Indian hoards. On the other hand, the import of gold in 1931-32 was on the markedly low side. The favourable balance of transactions in Treasure came to Rs. 55.64 crores as against an adverse balance of Rs. 24.43 crores in 1930-31 and Rs. 26.20 crores in 1929-30. The total visible balance of trade thus came, in spite of the poor trade conditions in India, to Rs. 90.50 crores against Rs. 37.60 crores and Rs. 52.78 crores in the two years immediately preceding. The amount remitted by Government during the year increased from Rs. 7.26 crores to Rs. 53.04 crores. Against this, sales of reverse councils amounted to Rs. 18.98 crores. The net balance of remittances of funds thus came to Rs. 34.32 crores during the year. The report of the Controller of the Currency for 1931-32 affords the information that the net payment in India of British postal orders and of foreign money orders of countries which settle their accounts through London as also the Government transfers on account of Iraq and Mauritius came to Rs. 1.45 crores and that taking this amount into consideration, the total visible of trade during the year under review should be put down at Rs. 54.73 crores. In other words, this is the amount which has been swallowed up amongst the so-called invisible items. That this is the most impressive and conclusive testimony of the continuance of the flight of capital at an accelerated rate, there can be no doubt.

So far, no attempt has been made to draw up

a balance-sheet of India's international payments covering both visible items and invisible items. In the case of even those countries in regard to which elaborate researches, careful enquiries and authoritative gauging of trends and tendencies have resulted in the formulation of figures pertaining to the invisible items with some degree of concreteness and accuracy, it cannot be denied that a large part of the conclusions arrived on the respective figures for the varied heads composing the invisible items comes within the realm of guess work. In the case of India, even such guess work has not been attempted in regard to elucidating all the invisible items in our international balance sheet. In broad terms, in a study of the invisible items, we have to take note of the following factors:

(1) Net payments due from India in respect of profits on foreign banking, foreign insurance and shipping; (2) Tourist expenditure of foreigners in India as well as expenses incurred by Indian students going abroad for studies or other Indian princes and merchants, etc., going abroad for pleasure or otherwise; (3) Movements of short-term capital as a result of the disparity in money rates in India and abroad; (4) Payments in respect of dividends or interest on the capital sunk in India by foreigners, offset to some extent by what is due to us in respect of our investments in sterling or other foreign securities and (5) Repatriation of capital on account of foreigners or transfers of capital from India to abroad by nationals owing to political causes or otherwise.

We may briefly discuss these factors with particular reference to 1931-32. As regards (1): Obviously, the profits earned by foreign banks, insurance companies and shipping in India in the last year should make a poor showing; and we should think that the net payment in respect of these items should not have been more than Rs. 2 crores in 1931-32. As regards (2): There has been a marked falling off in foreign tourists to India while owing to the Round Table Conference delegation comprising a number of Princes and owing to other activities, the expenditure incurred by Indians in foreign countries should have been larger than usual. On balance, the outflow on this account could be put down at another Rs. 2 crores. The most noteworthy factor in regard to movements of short-term capital is that because of a heavy inflow of short-term funds immediately after the conclusion of the Gandhi-Irwin Pact on March 7, there should have been on April 1, anything like Rs. 10 crores of foreign funds invested in rupee Treasury Bills; that for a few weeks following April 1, investments of London funds in rupee bills continued on an appreciable scale; and that, however, owing to the difficulties experienced by the London market in the wake of international complications arising from the Credit Anstalt affair more or less the entire amount of London's outlay in Indian Treasury Bills was recalled inclusive of Rs. 10 crores put out prior to April 1, so that the net result as regards movements of capital is that whatever was invested in India since April 1 was withdrawn as well as whatever was invested before April 1. On balance there was an exodus of short-term capital to the amount of Rs. 10 crores in 1931-32. Coming to item (4), we have to remember that every manner of industrial security and industrial concern was subject to the depression in trade. The profits earned on shares held in business concerns or from businesses in India could not have been considerable in 1931-32. On the other hand, investments held by Indians especially in India's sterling loans have increased enormously in recent years. As the interest payable in respect of these giltedge stocks is uninfluenced by the general economic depression, it follows that, whereas the income of foreigners from India was greatly reduced because of their investments being in the shape of equity shares or running business concerns, the in-

come of India from foreign investments was not liable to any such decrease; but, on the contrary, showed a great rise on account of the larger holdings of foreign securities by Indian investors. In the result, we are inclined to think that these two factors should have offset each other. To arrive at No. 5, we may construct the balance sheet as under and treat final residue as the net result of long-term movements of capital :

	1931-32
	(In crores of Rs.)
Visible balance of trade ... ..	-54.73
Foreign banking, insurance and shipping	-2.00
Net tourist expenditure ... ..	-2.00
Movement of short-term capital ... ..	-10.00
Dividend, interest, etc. ... ..	...
Movement of long-term capital ... ..	-40.73
	-54.73

From our calculations, which are based mostly on our judgment and our view of the probables and which we do not claim to be scientific in any sense, we are inclined to the view that there has been a net export of long-term capital to the amount of Rs. 40½ crores in 1931-32. While we have advanced our view with much diffidence and with many qualifications, we believe that it can be safely said that the flight of capital on long-term account in the past fiscal year should be roundabout Rs. 40 crores.

Our analysis of the invisible items in our foreign trade, especially of the movement of long-term capital which is generally described as a flight of capital, shows that our entire visible balance of trade has been eaten up by these invisible items. We may now proceed to delineate the chief features of our import trade. Imports have fallen from Rs. 163.61 crores in 1930-31 to Rs. 125.69 crores. It would be interesting to find those items of our import trade which have contributed most to this reduction. On the basis of the divisions allotted in the accounts of the Seaborne Trade and Navigation of British India, the section which shows the greatest fall in the imports is "Articles Wholly or Mainly Manufactured". This section accounts for a fall of Rs. 25.46 crores as compared with 1930-31 and a fall of Rs. 89 crores as compared with 1929-30. Of the articles that come under this section cotton yarns and manufactures naturally show the most serious fall being Rs. 6.10 crores as compared with 1931-32. Iron and steel manufactures account for a fall of 4.59 crores, machinery of all kinds of Rs. 3.55 crores and metals other than iron and steel manufactures, Rs. 1.57 crores. Vehicles other than locomotive etc., for railways contribute Rs. 2.82 crores to the total fall. Cutlery, hardware, implements and instruments have gone down by Rs. 1.32 crores; electrical goods by Rs. 87 lakhs and miscellaneous items also show a shortage of Rs. 1.73 crores as compared with 1930-31 and Rs. 3.88 crores as compared with 1929-30. It is significant of the very poor conditions that for the last two years of the 21 classes into which "articles wholly or mainly manufactured" are divided, there are only three instances of an increase as compared with the previous years, the increase in each case amounting to only a few tons of lakhs. In all the other instances, there are formidable minus figures. Next only to articles wholly or mainly manufactured, come food, drink and tobacco. A decline in the value of the imports of these commodities amounts to Rs. 10.84 crores as from last year and Rs. 22.01 crores from the year previous thereto. Sugar accounts for a serious fall of Rs. 4.79 crores and if 1929-30 is adopted as the basis of comparison the fall is as high as Rs. 9.61 crores. Grain, pulse and flour are down by Rs. 1.64 crores of which wheat has the lion's share owing to the high duties prevailing; liquors are down by Rs. 1.46 crores. Raw materials and articles mainly manufactured show a

fall of Rs. 1.90 crores of which Rs. 1.19 crores is accounted for by oils of all kinds.

Turning to exports, the story is not less depressing. In fact, one wonders whether we are not having in the events of 1931-32 an exemplification of the commonsense principle that if you wish to sell you must also buy. In other words, a reduction in imports cannot but mean a shrinkage in exports. Let us take one concrete instance, the higher and higher tariff walls which India has been building up against Japan in regard to the imports of piecegoods from the latter. There have been repercussions of this policy on Japan's off-take of Indian cotton, rice and pig-iron. At the time the Imperial Legislative Assembly was considering the yarn bill about five years ago, it was openly hinted that if this mode of handicap were to be imposed upon Japan's imports of yarn, the Far Eastern island would have to consider what her attitude should be as regards Indian rice and Indian pig-iron. A sharp and steep decline has, since then, taken place in the quantities of rice and pig-iron that we have been shipping to Japan. To the extent that Japan could sell only lesser quantities of yarn and piecegoods in India, her consumption of Indian cotton is also reduced. It becomes an extremely difficult task to plan our tariffs in a manner that would afford protection to genuine industrial interests at home and, at the same time, to be free from any adverse influence on the export trade.

On the basis of the main divisions adopted in the official report, our exports show a fall of Rs. 15.33 crores under food, drink and tobacco of which Rs. 9.51 crores is on account of grain, pulse and flour and Rs. 4.12 crores on account of tea. Raw materials and produce and articles mainly unmanufactured slumped by Rs. 34 crores, of which raw cotton is responsible for Rs. 23 crores. Articles wholly or mainly manufactured have declined by Rs. 14.64 crores. Of this fall jute is to blame for Rs. 9.97 crores; hides and skins Rs. 1.03 crores, metals and manufactures for about Rs. 1½ crores.

Though the above analysis affords a fairly adequate description of the state of our import and export trade, it seems to be appropriate to examine in brief the experience of our chief staple exports during the year under review. As compared with the previous year raw jute fell by 33,000 tons to 587,000 tons in volume and by Rs. 1.69 crores to Rs. 11.19 crores in value. Considering that the price of jute even in 1930-31 was very low, the setback in 1931-32 must be considered extremely grave. Jute manufactures fell from 767,000 tons to 664,000 tons and in value from Rs. 31.86 crores to Rs. 21.92 crores. Throughout the year demand from consuming centres was sluggish; and it was obvious that the foreign buyers were in no anxiety to secure their requirements in advance and were mostly content with a hand-to-mouth policy. Our exports especially to the Americas show substantial fall. Exports of raw cotton were nearly halved in value as the decline was from Rs. 46.33 crores to Rs. 23.45 crores. The reduction in volume is 710,000 tons to 423,000 tons. The main cause of the poor shipments of cotton is the reduced purchases by Japan of East Indian cotton mainly because the production of Japanese cotton mills had to be curtailed. Rice is alone among our staple exports in not only maintaining its ground, but showing a mild increase. The total quantity exported in 1931-32 was 2,301,415 tons as against 2,253,784 tons in 1930-31 and 2,298,229 tons in 1929-30. But as may be expected, the value of our rice exports declined considerably from Rs. 31.28 crores in 1929-30 and Rs. 25.81 crores in 1930-31 to Rs. 17.84 crores in 1931-32. Our consuming markets, have with a few exceptions, maintained their normal demand for Indian rice. Of those who have increased their offtake, China is the first as her demand has improved from 260,000 tons in 1929-30 to 416,000 tons in 1931-32; but as compared with the year 1930-31 it is a fall

from the level of 467,000 tons. The United Kingdom has steadily increased her consumption of Indian rice from 39,000 tons in 1929-30 to 58,000 tons in 1930-31 to 131,000 tons in the year under review. Egypt after a fall in her offtake from 44,819 tons to 21,921 tons in 1930-31, increased her demand to the high figure of 111,502 tons. Among the others who have increased the offtake, are Belgium, Italy, Mauritius and dependencies, West Indies, Australia and New Zealand. Among those who have reduced their imports of Indian rice Japan, the Argentine Republic, Sweden, France and Portugal are the most conspicuous.

Oilseeds have made a poor showing during the year falling from 1,370,000 tons in 1930-31 to 988,000 tons in volume and Rs. 17.86 crores to Rs. 14.59 crores in value.

Tea suffered a greater reduction in the value of the exports than in the volume. 342 million lbs. were exported in the year under review against 356 million lbs. in the previous year, the value declining from Rs. 23.56 crores to Rs. 19.41 crores.

The distribution of our foreign trade among the nations of the world who are our principal customers, has shown marked changes as between the two years 1930-31 and 1931-32. In the import trade the share of the United Kingdom has fallen from 37.18 per cent. to 35.50 per cent. Java and Belgium have also had a fall; the share of the trade of the former suffered a most serious decline from 6.27 per cent. to 3.84 per cent. All the other countries have had marked increases, the increase in the case of Japan being the highest from 8.80 per cent. to 10.58 per cent. The miscellaneous countries have imported more into India, their percentage having gone up from 16.4 per cent. to 17.33 per cent. The United States and the British Empire other than the United Kingdom, have increased their slice of India's import trade.

In exports only the United Kingdom and Germany have shown an improvement, the former taking 27.89 per cent. of the total exports of India as against 23.48 per cent. in the previous year. The Empire nations other than Great Britain have also placed more of their custom with India, their percentage of the export trade for 1931-32 being 16.21 per cent., an increase of 0.63 per cent. Germany's share shows a mild rise from 6.47 per cent. to 6.53 per cent.

It is remarkable that barring the British Empire and Germany, all the countries who have had an increased share of our import trade have taken less of our exports during the year. Germany has shown a virtual reciprocity of trade relation by effecting a more or less equal increase as well in her imports from India as her exports to this country. So far at least as our trading experiences of the last two

years go, it would seem that the present opposition to a scheme of Imperial Preference would seem to lack the warrant of reason. Those who oppose the idea for political reasons are apparently on far safer and surer ground; for, neither the great United States of America nor Japan, the two countries which figure most in our foreign trade next to the United Kingdom and the Empire outside it, have increased its off-take of Indian goods.

Though the experiences of our foreign trade during the last two years are very discouraging and depressing, they would afford no ground for an attitude of pessimism in regard to the future. To say this is one thing; but to adopt, as a consequence a "do nothing" policy is quite another. While the governments of other countries have been—may be fruitlessly—considering plans, taking part in important conferences and otherwise showing a keen awareness of the present tragedy and the need on their part to do ought to overcome that tragedy, all that the Government of India have done is to levy more taxes and expect taxpayers to continue their efforts in this direction. What is needed is a consciousness on the part of the Government that their attitude to the economy and trade of the country consists in doing a lot more than in planning new taxes and collecting them. In other words, if India's international trade is to improve, there has to be a definite plan and a practical programme in regard to which the Government should take an important lead and a constructive initiative. Thus, for instance, it should have been possible for the Government to intervene in the jute situation by taking such measures as would make short crop in the raw staple and cut in production of jute manufactures a definite certainty; and by so doing, the prices of these two commodities, in regard to which India enjoys a unique position, could have been raised to a reasonable level. Greater prosperity in the jute agricultural districts and in the various branches of the jute trade, would have increased the consuming power of the masses in this province to such an extent that it should have given a good fillip to trade and industry. Such an improvement in the price of jute and jute manufactures could also have made the exchange position of the Government tremendously strong. Government revenue realisations would also have received considerable benefit from such a movement. The policy of *laissez faire*, which the Government of this province as well as the Central Government adopted in this matter, has meant a continuance of an uneconomic level of prices in respect of commodities which are economically suitable for enlightened State action and guidance. The future of Indian trade and industry depends, in some measure, on a more active and more enlightened economic policy on the part of the Government.



Exports of Indian Merchandise

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24
April	13,65	24,04	27,37	24,98	25,29	26,77	32,04	29,45	29,39
May	13,11	21,43	25,73	29,14	24,15	24,41	32,53	27,75	28,54
June	12,19	20,14	26,12	27,66	22,10	24,18	33,10	28,29	28,68
July	12,17	20,57	24,99	26,29	25,73	22,70	27,15	24,49	24,80
August	12,81	17,27	26,74	26,17	26,32	25,39	28,30	24,02	22,62
September	11,60	19,17	25,78	24,34	26,98	22,85	26,96	27,05	22,60
October	12,66	17,68	25,62	28,66	25,02	23,10	28,25	29,06	24,55
November	13,77	16,80	26,79	27,66	28,24	21,15	29,63	32,41	26,41
December	15,59	16,39	23,51	26,18	26,92	24,14	30,74	34,92	29,75
January	13,20	16,87	26,46	29,75	29,06	27,29	34,61	39,07	36,14
February	12,25	14,72	24,40	27,92	28,17	25,35	34,50	42,85	34,91
March	12,89	15,42	27,43	31,36	31,19	33,83	37,02	45,30	40,55
TOTAL	1,55,89	2,20,49	3,10,90	3,30,13	3,19,15	3,01,44	3,74,84	3,84,67	3,48,84

Exports of Foreign Merchandise (Re-Exports)

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24
April	43	53	78	80	65	80	96	1,26	1,28
May	89	41	65	64	76	53	90	1,82	1,56
June	89	57	60	62	68	68	1,04	1,25	1,22
July	89	39	64	54	66	44	1,06	1,44	1,29
August	45	88	63	76	82	55	94	1,18	92
September	46	24	49	49	95	60	92	1,30	38
October	45	46	63	84	85	80	81	76	98
November	85	48	54	67	86	61	88	1,20	1,22
December	84	84	73	77	91	86	77	1,16	95
January	87	51	44	58	88	70	67	1,06	82
February	30	41	41	57	72	66	65	69	82
March	84	43	63	55	79	78	87	94	1,20
TOTAL	4,66	5,14	7,18	7,83	9,54	8,01	10,48	13,51	13,07

Imports of Merchandise

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24
April	12,56	18,06	24,54	22,01	22,60	20,05	18,48	20,40	21,00
May	11,39	17,90	21,23	20,38	20,69	19,90	18,93	20,60	19,28
June	12,13	13,86	16,52	18,79	18,84	16,32	16,33	18,82	18,01
July	10,72	13,67	19,06	18,73	18,65	20,63	17,74	20,00	16,39
August	9,67	12,74	20,34	20,41	21,26	19,79	18,80	20,65	17,01
September	9,38	11,18	19,23	20,71	21,17	19,05	18,54	22,82	18,71
October	10,00	12,78	19,24	21,64	21,10	19,98	19,56	20,84	20,59
November	8,93	11,91	22,50	23,21	21,68	18,40	18,73	22,32	21,10
December	9,26	11,56	17,03	18,50	20,15	16,58	16,16	17,22	15,41
January	10,93	14,50	22,94	26,86	22,21	20,89	22,50	24,34	22,61
February	9,95	13,65	17,30	19,82	19,73	17,40	18,03	18,77	18,19
March	10,91	13,01	20,88	22,18	21,76	22,23	22,40	19,86	19,31
TOTAL	1,26,34	1,64,82	2,40,80	2,53,24	2,49,85	2,31,22	2,26,18	2,46,63	2,27,61

## Balance of Trade in Merchandise

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24
April	+ 1.51	+ 6.52	+ 3.57	+ 3.77	+ 3.33	+ 7.52	+ 14.52	+ 10.31	+ 9.66
May	+ 2.11	+ 3.95	+ 5.14	+ 9.40	+ 4.22	+ 5.11	+ 14.51	+ 8.47	+ 10.82
June	+ 45	+ 6.85	+10.19	+ 9.49	+ 3.94	+ 8.53	+ 17.81	+ 10.72	+ 11.89
July	+ 1.83	+ 7.30	+ 6.57	+ 8.11	+ 7.73	+ 2.52	+ 10.47	+ 5.93	+ 9.70
August	+ 3.59	+ 4.90	+ 7.03	+ 6.52	+ 5.88	+ 6.34	+ 10.45	+ 4.50	+ 6.42
September	+ 2.18	+ 8.23	+ 7.04	+ 4.12	+ 6.76	+ 4.40	+ 9.35	+ 5.54	+ 4.71
October	+ 3.11	+ 5.36	+ 7.02	+ 7.87	+ 4.77	+ 3.92	+ 9.49	+ 8.99	+ 4.94
November	+ 5.20	+ 5.36	+ 4.84	+ 5.12	+ 7.42	+ 3.36	+ 11.79	+ 11.29	+ 6.53
December	+ 6.67	+ 5.17	+ 7.07	+ 8.46	+ 7.69	+ 8.42	+ 15.37	+ 18.87	+ 15.30
January	+ 2.83	+ 2.88	+ 3.96	+ 3.48	+ 7.73	+ 7.10	+ 12.73	+ 15.79	+ 14.34
February	+ 2.60	+ 1.48	+ 7.50	+ 8.68	+ 9.18	+ 8.61	+ 17.12	+ 24.77	+ 17.54
March	+ 2.32	+ 2.79	+ 7.19	+ 9.66	+10.22	+12.39	+ 15.60	+ 26.38	+ 22.45
TOTAL	+34.21	+60.77	+77.14	+84.66	+78.84	+78.22	+1,59.26	+1,51.55	+1,34.30

## Exports of Treasure

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24
April	1	18	4	4	5	7	16	5	9
May	1	8	6	6	18	19	87	40	18
June	65	2	14	1,84	13	12	12	84	18
July	1,02	2	11	14	18	15	31	26	14
August	54	63	5	11	29	15	12	19	12
September	52	49	17	50	20	80	44	36	51
October	9,84	32	10	12	5	5	18	86	32
November	8,72	Nil	17	11	89	16	21	25	41
December	17,86	5	45	38	48	5	18	1,83	1,51
January	9,45	83	24	13	3	4	45	19	11
February	7,80	5	4	2	1	68	68	12	1
March	6,99	13	1	4	19	5	40	4	8
TOTAL	62,91	2,43	1,58	2,94	2,68	2,00	3,52	4,91	3,55

## Imports of Treasure

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24
April	63	3,08	2,71	3,78	4,00	3,86	4,09	5,61	3,05
May	69	3,81	2,84	3,62	3,33	5,04	4,62	5,40	4,66
June	71	3,82	2,29	3,80	3,74	3,34	3,58	4,65	4,00
July	58	1,91	2,11	4,51	2,50	2,72	4,88	3,25	3,99
August	50	5,14	1,82	2,26	1,73	2,26	3,50	5,74	3,32
September	85	1,63	1,70	1,39	1,54	2,19	5,06	7,36	3,61
October	96	39	1,76	2,37	1,88	3,05	5,92	3,69	5,04
November	58	81	2,26	2,75	2,19	3,52	4,30	9,06	4,17
December	98	59	1,91	3,32	2,48	3,24	3,92	6,19	2,08
January	87	1,29	2,63	2,46	3,67	2,70	4,50	10,63	4,66
February	20	3,75	3,50	3,39	3,93	4,57	4,49	15,44	4,56
March	20	1,18	2,23	4,20	3,81	4,32	6,10	17,15	4,07
TOTAL	7,25	26,85	27,76	37,30	34,80	41,81	55,40	99,18	52,20

Balance of Transactions in Treasure

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24		
April	...	...	-62	-2,90	-2,67	-3,69	-3,95	-3,79	-3,98	-5,56	-7,96
May	...	...	-68	-3,23	-2,78	-3,56	-3,15	-4,85	-4,25	-5,00	-4,53
June	...	...	-6	-3,80	-2,15	-1,96	-3,61	-3,72	-3,46	-4,31	-3,82
July	...	...	+44	-1,89	-2,00	-4,37	-2,32	-2,57	-4,52	-2,99	-3,85
August	...	...	+4	-4,51	-1,77	-2,15	-1,44	-2,11	-3,88	-5,55	-3,20
September	...	...	-88	-1,14	-1,53	-89	-1,84	-1,89	-4,62	-7,00	-3,10
October	...	...	+8,38	-7	-1,66	-2,25	-1,83	-3,00	-5,74	-7,83	-4,72
November	...	...	+8,14	-81	-2,09	-2,64	-1,30	-3,36	-4,59	-3,81	-3,76
December	...	...	+16,88	-54	-1,46	-2,99	-2,05	-3,19	-3,79	-4,36	-57
January	...	...	+9,08	-96	-2,39	-2,38	-3,64	-2,66	-4,05	-10,44	-4,55
February	...	...	+7,60	-3,70	-3,46	-3,37	-3,92	-3,89	-3,86	-15,32	-4,55
March	...	...	+6,79	-1,00	-2,22	-4,16	-3,62	-4,27	-5,70	-17,11	-4,04
TOTAL	...	...	+55,66	-24,55	-26,18	-34,36	-32,17	-39,31	-51,88	-94,27	-48,65

Balance of Trade in Merchandise and Treasure

(In Lakhs of Rs.)

Month	1931-32	1930-31	1929-30	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24		
April	...	...	+89	+3,62	+90	+8	+62	+3,73	+10,59	+4,75	+1,70
May	...	...	+1,43	+72	+2,36	+5,84	+1,07	+26	+10,26	+3,47	+6,29
June	...	...	+39	+3,05	+3,04	+7,53	+38	+4,81	+14,85	+6,41	+3,07
July	...	...	+2,27	+5,41	+4,57	+3,74	+5,41	-5	+5,95	+2,94	+5,85
August	...	...	+3,63	+39	+5,26	+4,37	+4,44	+4,23	+7,07	-1,05	+3,22
September	...	...	+1,85	+7,09	+5,51	+3,23	+5,42	+2,51	+4,73	-1,46	+1,61
October	...	...	+11,49	+5,29	+5,36	+5,62	+2,94	+92	+3,75	+1,16	+22
November	...	...	+13,84	+4,55	+2,75	+2,48	+6,12	...	+7,20	+2,48	+2,77
December	...	...	+28,55	+4,63	+5,61	+5,47	+5,62	+5,23	+11,53	+14,51	+14,73
January	...	...	+11,71	+1,92	+1,57	+1,15	+4,09	+4,44	+3,73	+5,85	+9,79
February	...	...	+10,20	-2,22	+4,04	+5,29	+5,24	+4,72	+13,26	+9,45	+12,99
March	...	...	+9,11	+1,79	+4,97	+5,50	+6,60	+3,12	+9,90	+9,27	+13,41
TOTAL	...	...	+39,87	+36,22	+50,96	+50,30	+46,67	+38,91	+1,07,38	+57,28	+35,65

## PRINCIPAL EXPORTS

## I.—JUTE RAW

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)
April ...	46	72	43	1,23	51	1,90	42	1,43	76	2,61	27	1,56	38	1,87	40	1,38	25	1,02
May ...	38	64	42	1,19	36	1,33	59	2,18	46	1,50	17	88	26	1,39	24	81	17	62
June ...	32	52	41	1,15	40	1,42	50	1,83	39	1,22	26	1,34	15	82	19	63	21	78
July ...	43	70	31	84	36	1,23	36	1,33	38	1,25	24	1,19	9	46	12	41	22	80
August ...	34	54	25	59	42	1,48	45	1,72	45	1,59	30	1,30	38	1,94	15	56	25	83
September ...	40	66	37	77	89	3,06	65	2,49	87	3,26	60	2,17	83	4,25	78	3,04	69	2,06
October ...	61	1,09	66	1,19	109	3,77	120	4,36	88	3,28	84	3,06	127	6,95	91	3,70	89	2,39
November ...	103	2,10	79	1,43	137	4,54	149	5,30	124	4,26	89	3,10	98	6,17	137	6,08	110	2,86
December ...	94	2,13	87	1,62	92	2,99	105	3,81	134	4,47	120	4,26	74	4,81	92	4,06	111	3,36
January ...	44	1,02	69	1,24	74	2,36	81	2,96	89	2,98	88	3,05	65	4,21	89	3,96	64	1,94
February ...	21	44	50	84	58	1,76	81	2,96	74	2,47	86	2,98	44	2,96	50	2,20	60	1,89
March ...	30	59	51	82	45	1,33	65	1,99	52	1,73	53	1,94	33	2,11	48	2,26	44	1,46
TOTAL ...	587	11,19	620	12,88	809	27,17	898	32,35	892	30,66	703	26,78	647	37,95	696	29,09	660	20,00

## II.—JUTE MANUFACTURES

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)
April ...	49	1,70	61	2,79	65	3,99	64	4,08	67	4,12	63	4,44	62	4,31	57	3,30	46	2,93
May ...	44	1,52	63	2,91	71	4,13	78	4,74	68	4,00	62	4,18	61	4,23	58	3,41	58	3,60
June ...	48	1,62	67	3,09	68	3,97	62	3,87	58	3,42	69	4,46	65	4,41	62	3,69	55	3,36
July ...	51	1,67	67	3,22	84	5,00	65	4,21	76	4,32	63	4,06	67	4,58	66	3,33	52	3,00
August ...	61	1,90	68	2,96	100	5,41	89	5,63	91	5,30	104	6,15	85	5,74	79	4,76	73	3,98
September ...	60	1,80	92	3,88	85	4,75	96	6,14	95	5,80	80	4,89	69	4,93	69	4,39	79	4,15
October ...	78	2,33	79	3,22	87	4,81	90	5,89	66	4,19	95	5,78	78	5,66	71	4,54	77	4,27
November ...	68	2,16	70	2,72	83	4,37	92	5,63	83	6,14	64	3,80	63	5,10	79	5,32	64	3,47
December ...	60	2,00	53	2,13	99	4,99	75	4,57	71	4,38	66	3,91	75	5,78	74	5,19	71	3,85
January ...	50	1,77	53	1,95	75	3,68	65	3,82	66	4,10	70	4,14	53	4,20	60	4,13	51	2,84
February ...	51	1,80	43	1,47	71	3,42	68	4,34	74	4,48	60	3,49	70	5,30	67	4,65	61	3,46
March ...	45	1,58	44	1,51	70	3,45	68	3,99	69	4,30	66	3,94	60	4,59	63	5,05	58	3,37
TOTAL ...	664	21,92	767	31,86	958	51,91	912	56,90	885	53,56	761	53,18	811	53,84	812	51,77	747	42,28

### III.—RAW COTTON

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)	Volume (1,000 tons)	Value (lakhs Rs.)
April ...	55	8,10	76	6,20	69	6,74	58	5,77	40	3,78	69	7,68	77	11,33	62	10,10	76	9,43
May ...	51	2,83	61	4,83	72	7,03	67	6,80	86	8,81	52	5,79	72	10,47	51	8,39	50	7,61
June ...	47	2,59	44	3,15	68	6,63	54	5,83	43	4,07	50	5,45	81	11,28	45	7,50	55	7,35
July ...	88	2,18	46	3,29	57	5,18	51	5,41	82	3,17	42	4,57	55	7,39	25	4,10	50	6,14
August ...	46	2,57	45	3,09	41	3,32	39	4,02	86	3,61	37	3,95	87	5,02	20	3,24	18	2,39
September ...	20	1,01	51	3,52	38	3,50	34	3,42	27	2,92	19	1,89	24	3,20	20	3,24	15	1,93
October ...	22	98	40	2,75	31	2,86	45	4,31	16	1,67	7	76	16	2,30	11	1,81	24	3,33
November ...	24	1,34	41	2,57	40	3,19	31	3,03	17	1,74	11	1,18	21	2,33	11	1,73	33	4,70
December ...	34	1,85	64	3,57	53	4,52	49	4,73	85	3,51	27	2,59	55	6,75	43	7,09	48	7,80
January ...	30	1,70	78	4,47	81	6,88	71	6,93	72	7,27	80	7,82	96	10,39	82	11,77	105	17,12
February ...	20	1,62	77	4,32	83	7,45	64	6,21	53	5,75	71	6,80	113	12,73	106	15,52	96	15,65
March ...	30	1,68	78	4,56	91	7,27	100	9,79	69	6,92	103	10,15	97	10,98	113	16,72	92	15,00
<b>TOTAL ...</b>	<b>423</b>	<b>23,45</b>	<b>701</b>	<b>46,33</b>	<b>729</b>	<b>65,07</b>	<b>663</b>	<b>66,25</b>	<b>480</b>	<b>47,72</b>	<b>569</b>	<b>53,60</b>	<b>745</b>	<b>94,99</b>	<b>594</b>	<b>91,23</b>	<b>672</b>	<b>93,47</b>

### IV.—TEA

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)	Volume (Million lb)	Value (lakhs Rs.)
April ...	4	85	8	58	6	53	4	85	5	39	4	36	5	33	4	32	5	34
May ...	6	47	11	77	7	59	7	67	7	51	9	72	7	60	7	61	7	44
June ...	19	1,28	14	96	19	1,46	17	1,42	16	1,23	17	1,49	16	1,33	6	56	16	1,52
July ...	31	1,70	44	3,11	33	2,35	36	2,31	32	3,03	33	2,91	30	2,30	30	2,32	23	2,14
August ...	39	2,08	43	2,91	54	4,27	46	3,76	43	4,10	47	4,03	53	4,33	43	4,16	40	4,13
September ...	55	3,22	52	2,28	57	3,92	47	3,40	46	4,27	53	4,66	41	3,07	46	4,45	50	4,37
October ...	47	2,59	47	2,97	60	3,93	56	3,73	61	5,52	37	3,10	41	3,19	47	4,55	43	4,09
November ...	43	2,34	47	2,96	51	3,27	46	3,17	59	5,26	49	3,87	50	4,14	43	4,39	46	4,31
December ...	43	2,68	39	2,50	36	2,24	43	3,10	39	3,56	43	3,34	37	3,35	50	5,40	46	4,29
January ...	30	1,69	27	1,79	32	1,99	28	2,11	27	2,33	28	2,23	25	2,39	31	3,23	35	3,12
February ...	16	98	17	1,15	14	97	24	1,63	19	1,62	19	1,46	15	1,30	21	1,34	17	1,42
March ...	5	29	9	62	7	48	5	40	8	61	11	82	8	70	7	57	11	99
<b>TOTAL ...</b>	<b>342</b>	<b>10,41</b>	<b>356</b>	<b>23,56</b>	<b>376</b>	<b>26,09</b>	<b>360</b>	<b>26,60</b>	<b>362</b>	<b>32,43</b>	<b>349</b>	<b>29,05</b>	<b>326</b>	<b>27,12</b>	<b>340</b>	<b>33,39</b>	<b>339</b>	<b>31,65</b>

## V.—RICE

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)
April ...	246	1,82	403	4,97	261	3,63	194	2,80	340	5,29	310	4,85	254	3,86	303	4,81	273	4,57
May ...	246	1,72	272	3,35	247	3,30	203	2,97	337	5,20	326	5,07	311	4,86	241	3,80	183	3,06
June ...	198	1,84	279	3,64	203	2,76	176	2,50	153	2,51	155	2,51	222	3,40	258	4,03	131	2,13
July ...	165	1,12	181	2,33	120	1,76	146	2,15	174	2,70	119	2,03	196	3,00	151	2,59	135	2,33
August ...	145	1,12	109	1,41	124	1,84	110	1,53	149	2,39	122	2,06	184	2,39	161	2,78	189	2,38
September ...	115	99	114	1,47	109	1,62	111	1,64	141	2,26	115	1,94	147	2,37	87	1,53	129	2,02
October ...	135	1,11	129	1,58	130	1,94	77	1,25	92	1,47	116	2,03	120	1,95	124	2,17	122	1,88
November ...	135	1,09	110	1,33	139	2,10	102	1,66	92	1,46	77	1,37	117	1,36	96	1,70	113	1,77
December ...	151	1,21	102	1,09	84	1,26	64	1,00	97	1,55	77	1,33	104	1,68	67	1,17	126	1,98
January ...	168	1,31	146	1,41	135	1,88	114	1,31	81	1,36	80	1,32	142	2,22	102	1,74	165	2,52
February ...	241	1,96	146	1,29	253	3,31	157	2,29	129	2,07	112	1,31	243	3,30	233	3,66	133	2,33
March ...	357	3,05	264	1,94	433	5,90	310	4,25	361	5,37	426	6,53	503	7,73	450	6,39	426	6,61
TOTAL ...	2,301	17,34	2,254	22,54	2,293	31,30	1,765	25,09	2,152	33,64	2,035	32,06	2,549	37,61	2,273	36,97	2,177	34,62

## VI.—OIL SEEDS

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)	Volume (1,000 tons)	Value (Lakhs Rs.)
April ...	94	1,35	95	1,97	112	2,36	125	2,68	68	1,65	77	1,66	110	2,77	79	1,39	113	2,33
May ...	180	1,67	120	2,52	99	2,15	153	3,33	74	1,77	86	1,92	152	3,32	132	3,11	136	4,45
June ...	70	88	85	1,74	109	2,37	141	3,13	80	1,72	79	1,79	145	3,51	92	2,13	135	3,27
July ...	75	1,06	84	1,67	100	2,13	116	2,59	70	1,60	62	1,49	110	2,43	79	1,92	109	2,65
August ...	73	1,03	70	1,34	131	2,37	94	2,04	86	1,90	57	1,25	64	1,59	54	1,31	75	1,30
September ...	61	85	78	1,40	116	2,62	52	1,15	56	1,10	47	1,03	70	1,64	88	2,35	65	1,53
October ...	67	94	56	1,01	79	1,34	54	1,20	33	1,34	49	1,03	95	2,20	39	2,31	33	2,05
November ...	64	92	70	1,11	93	2,35	72	1,71	103	2,52	65	1,43	94	2,26	103	2,32	36	2,03
December ...	93	1,33	73	1,10	69	1,56	80	1,96	120	2,42	57	1,32	75	1,73	104	2,63	73	1,35
January ...	94	1,42	115	1,47	133	2,92	179	4,06	134	2,75	101	2,15	123	2,39	161	3,92	33	1,91
February ...	91	1,47	114	1,43	60	1,39	150	3,33	174	3,99	76	1,77	92	2,03	170	4,33	102	2,29
March ...	39	1,60	77	1,09	39	1,92	107	2,41	153	3,43	90	2,04	121	2,77	173	4,30	137	3,10
TOTAL ...	933	14,59	1,037	17,36	1,195	26,43	1,323	29,63	1,210	26,69	333	19,09	1,250	29,64	1,323	33,17	1,255	29,32

Exports of Manganese Ore from India

(In Thousands of tons)

To	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	193	386	245	58	234	167	202	114	53'8
Germany ...	7	8	5	6	15	20	22	15	1'8
Netherlands ...	19	...	15	18	15	8	34	11	2'5
Belgium ...	150	15	194	186	182	168	178	78	35'4
France ...	97	47	108	168	150	230	208	188	80'8
Italy ...	8	12	12	7	6	9	4	1	...
Japan ...	4	12	2	21	8	...	15	6	...
U. S. A. ...	182	48	66	71	97	72	51	49	28
Other Countries ...	2	1	1	6	2	7	12	24	9'7
<b>TOTAL</b> ...	<b>607</b>	<b>474</b>	<b>648</b>	<b>586</b>	<b>704</b>	<b>681</b>	<b>816</b>	<b>486</b>	<b>212</b>

Exports of Shellac from India

(In Thousands of Rs.)

Year	U.S.A.	U.K.	Japan	France	Germany	Phillipine	Netherland	Other countries	TOTAL
1915-16	1,07,83	42,74	9,09	6,06	...	8	...	6,01	1,71,76
1917-18	2,78,24	67,96	17,65	5,18	...	1,71	...	7,10	2,80,32
1919-20	4,78,52	2,06,91	8,91	9,80	68	5,20	100	15,85	7,26,87
1921-22	5,04,27	1,78,60	24,26	18,05	31,60	15	298	81,67	7,91,58
1923-24	5,34,81	1,90,48	81,49	86,28	59,15	66	169	51,71	9,06,27
1925-26	8,67,55	1,88,10	28,61	25,86	62,99	1,70	708	58,11	6,90,10
1927-28	8,12,55	1,87,58	25,88	14,00	1,06,59	52	429	47,95	6,98,86
1929-30	3,23,05	1,58,52	82,90	16,10	98,07	60	321	64,27	6,96,72
1931-32	71,60	44,92	15,47	4,71	15,46	...	...	81,76	1,83,94

# Birla Bros., Ltd.

*Managing Agents:*

BIRLA JUTE MANUFACTURING CO., LTD. . CALCUTTA  
 KESORAM COTTON MILLS, LTD. . . . . CALCUTTA  
 BIRLA COTTON SPINNING & WEAVING MILLS, LTD. . DELHI  
 JIJAJEE RAO COTTON MILLS, LTD. . GWALIOR (State)

## Fire - Marine - Motor Accident Insurances

*Branch Office:*  
 11-13, Church Gate Street  
 BOMBAY.

*Head Office:*  
 8, Royal Exchange Place,  
 CALCUTTA

## PRINCIPAL IMPORTS

### I—COTTON TWIST YARN

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25		1923-24	
	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)	Volume (Million lbs.)	Value (Lakhs Rs.)
April ...	3.5	32	2.8	33	5.0	70	1.9	30	5.4	74	6.3	87	4.0	65	4.1	84	3.5	66
May ...	2.3	23	3.2	38	3.7	54	3.4	48	6.0	75	5.6	80	6.2	89	4.2	84	4.8	88
June ...	2.1	20	3.0	35	3.7	53	3.4	51	5.6	68	4.4	65	6.0	81	4.3	82	3.7	70
July ...	2.3	23	2.6	28	4.5	62	3.0	45	4.7	56	4.1	61	5.7	80	5.7	96	3.6	60
August ...	1.7	17	1.4	15	3.2	46	3.1	47	3.9	52	2.5	41	2.9	49	5.9	98	3.3	56
September ...	2.6	25	2.5	23	3.0	43	3.9	56	5.7	70	3.0	44	2.5	45	5.9	98	3.8	64
October ...	2.7	26	2.6	27	3.0	43	3.9	56	4.1	51	3.8	54	2.8	43	3.9	70	4.5	73
November ...	2.4	21	2.0	20	4.0	54	4.3	63	5.2	68	4.0	49	3.7	60	4.7	81	3.6	65
December ...	3.5	32	1.8	19	3.5	46	3.7	50	3.8	52	3.7	41	3.3	52	5.0	68	2.9	43
January ...	4.1	36	2.3	24	4.0	51	5.4	77	2.9	41	5.1	55	5.9	83	5.3	88	5.0	86
February ...	2.2	22	2.1	20	3.4	41	3.8	53	2.3	33	2.5	31	3.7	54	3.4	59	3.0	59
March ...	2.0	21	2.8	27	3.0	38	3.8	54	2.6	39	4.5	53	4.9	71	3.6	60	2.8	58
<b>TOTAL</b> ...	<b>31.6</b>	<b>2.99</b>	<b>29.1</b>	<b>3.08</b>	<b>43.9</b>	<b>6.00</b>	<b>43.8</b>	<b>6.29</b>	<b>52.3</b>	<b>6.79</b>	<b>49.1</b>	<b>6.62</b>	<b>51.7</b>	<b>7.77</b>	<b>55.9</b>	<b>9.66</b>	<b>44.6</b>	<b>7.94</b>

### II—COTTON PIECE GOODS

Month	1931-32		1930-31		1929-30		1928-29		1927-28		1926-27		1925-26		1924-25	
	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)	Volume (Million yds.)	Value (Lakhs Rs.)
April ...	72	1,412	1,65	3,97	215	5,77	188	5,18	194	5,36	147	4,83	141	5,32	150	5,79
May ...	55	1,06	1,36	3,23	157	4,32	162	4,53	179	4,74	157	4,96	131	4,70	143	5,55
June ...	72	1,33	92	2,14	103	2,91	110	3,23	158	4,20	131	4,10	110	3,89	144	5,55
July ...	72	1,31	73	1,64	144	3,85	126	3,50	162	4,41	173	5,28	125	4,22	139	5,34
August ...	64	1,23	74	1,70	174	4,59	194	5,43	181	5,00	169	5,28	142	4,98	151	5,96
September ...	67	1,26	49	1,17	163	4,44	177	4,90	165	4,76	151	4,79	119	4,21	157	6,22
October ...	65	1,21	43	96	135	3,58	163	4,56	158	4,50	145	4,61	118	4,20	143	5,62
November ...	50	91	36	76	152	3,97	153	4,25	162	4,50	131	3,95	115	3,93	158	5,68
December ...	47	92	46	91	135	3,39	132	3,61	139	3,83	116	3,43	100	3,37	98	3,79
January ...	73	1,38	62	1,25	197	4,89	197	5,46	163	4,83	166	4,84	172	5,82	206	7,73
February ...	64	1,19	46	98	160	3,99	148	4,09	137	4,02	122	3,73	122	4,12	163	5,75
March ...	74	1,46	68	1,32	182	4,54	187	5,09	175	4,98	179	5,30	169	5,71	172	6,22
<b>TOTAL</b> ...	<b>776</b>	<b>14,67</b>	<b>890</b>	<b>20,05</b>	<b>1,919</b>	<b>50,25</b>	<b>1,937</b>	<b>53,81</b>	<b>1,973</b>	<b>55,13</b>	<b>1,788</b>	<b>55,11</b>	<b>1,564</b>	<b>54,50</b>	<b>1,823</b>	<b>69,42</b>



## BANKING SECTION I :

# THE INDIAN BANKING PROBLEM

BY SIR OSBORNE A. SMITH,

Managing Governor of Imperial Bank of India

I have been asked to write an article on the *Indian Banking Problem* and the first thing is to decide what the greatest problem is. I do not think however, that there can be any two opinions about that. When we have agriculture, which is by far the largest "industry" in India, entirely out of touch with the commercial banking organization, all other banking problems are relatively of less importance.

It is of course true that in all countries cultivators have complained of the inadequacy of the finance granted them by commercial banks and much has been written on this question. In general, the evidence is to the effect that a farmer, like everyone else, can always obtain what he wants if he can put up suitable, tangible or personal security.

As a result of the clamour of the farmers in England the Agricultural Credits Act was passed. Part I of the Act set up an Agricultural Mortgage Corporation. Part II provided legal sanction for the obtaining by commercial banks of a charge, ranking as a pledge, of all the farmers' movable assets, although the bankers were anything but unanimous in seeking such protection. Part I merely resulted in cheaper finance for the well-to-do landowners. It is reported that very little use has been made of Part II of the Act, the experience being that the charges provided for usually cause more trouble than they are worth. No farmer will submit to give the charge to his bankers unless under compulsion, as it naturally impairs his general credit. On the other hand, if the banker takes a charge, it is only of use so long as the goods it covers are in existence and saleable. It follows, therefore, that banks depend as much as ever on the character of the borrowers.

As regards America I can do no better than quote Mr. Moulton's forcible words in his *Money and Banking* :—

There is an immutable law in loaning money; the greater the risk the higher the rates; and whenever the American farmer qualifies himself and his conditions the same as the German and French farmer has done he will get just as good accommodations, but not until then. Under the laws of compensation most everyone gets what is coming to him. The rich man gets his ice in the summer and the poor man gets his ice in the winter, but they all get ice. A bunch of farmers came into my office the other day kicking on the rates of interest. I informed them that not one of them was a genuine farmer; they were simply speculators; they demanded loans up to almost the actual value of the land, based on their earning capacity; they expected to scratch around on the surface of the ground to make expenses and no improvements, hoping and expecting that some sucker would come along a year or two and give them twice what they paid for it.

India is no exception to the general rule that character is an asset with a definite financial value and without it no man can be a good borrower. Banks may, on occasions, even prefer to give *unsecured* advances to those on whom they can confidently rely to use the money for short term productive and profitable purposes, which will ensure a capacity for punctual repayment, rather than to give *secured*

advances to those who may tie it up, in spite of their promises and possibly their best efforts not to do so, necessitating realisation of the security. The people who grumble that the banks are too conservative in their lending policy are mostly of the latter class, and usually in addition have no suitable offer.

There are however, certain features which are peculiar to India. Agriculture has been its main activity from time immemorial and a system of finance has grown up suitable to the conditions of the country. Until recently large irrigation schemes were unknown and famines were of frequent occurrence. The financial system had therefore to be elastic and has been more akin to money lending than to banking. The village money-lender charged high rates but did not exact them in years of poor crops, and in years of crop failures he would even on occasions make the cultivators an allowance for necessary expenditure in order to keep them alive so that they could work and so enable him to recover his dues in future years. This system has resulted in a growing capital debt and has placed the cultivators almost in the position of slaves to the money-lenders. It is questionable however whether a banking system which provided a much lower rate of interest but expected punctual repayments or sale of land, would have been more welcome to the cultivators. If they had had a reserve to fall back in bad years they would have been more independent, but laws of inheritance, which have resulted either in more and more people expecting support from the same piece of land or in its partition into smaller and smaller fractions, have militated against accumulation of liquid wealth.

Progress in irrigation and transport has greatly modified these conditions and it is highly probable that, at any rate in well irrigated districts, the money-lender could theoretically be successfully replaced by the banker. There are however, two great practical difficulties. Firstly, the cultivators must free themselves from their debts to the money-lenders. This is a matter for economic enquiry, but I doubt whether any method short of direct Government assistance or legislation can effect any appreciable result. The second difficulty is equally important. For generations the cultivators have been used to repaying under pressure when they had the money, and to forbearance when they had not. If they saved, the money-lender took the money—they got no advantage. A radical change in their outlook will be necessary if they are to obtain the benefits of cheaper money, and only long and hard experience will effect this. I think this aspect of the problem has been demonstrated very clearly in the Co-operative Societies where, unless constant pressure has been used to force members to repay, overdues have mounted higher and higher, and, when repayments have been made, they have been frequently from borrowings elsewhere and not from savings.

# IMPERIAL BANK OF INDIA.

Constituted Under The Imperial Bank of India Act, 1920

BANKERS TO THE GOVERNMENT OF INDIA.

AUTHORISED CAPITAL	::	Rs. 11,25,00,000
PAID-UP CAPITAL	::	,, 5,62,50,000
RESERVE FUND	::	,, 5,00,00,000
RESERVE LIABILITY OF SHAREHOLDERS	,,	5,62,50,000

## LOCAL HEAD OFFICES :

CALCUTTA

BOMBAY

MADRAS

## LONDON OFFICE :

25, OLD BROAD STREET, E. C. 2.

## BRANCHES :

Abbottabad	Conjeeveram (Sub-Agency) (UNDER MADRAS LOCAL Head Office)	Jubbulpore	Negapatam
Abohar (Sub-Agency) (UNDER FEROZEPUR)	Cuddalore	Kasur	Nellore
Agra	Cuddapah	Khanewal (Pay Office) (UNDER MULTAN)	Okara (Pay Office) (UNDER MONTGOMERY)
Akyab	Dacca	Khurja (Pay Office) (UNDER BULANDSHAHR)	Ootacamund
Aligarh	Darbhanga	Kosi Kalan (Pay Office) (UNDER MUTTRA)	Park Street (Calcutta)
Allahabad	Darjeeling	Karachi	Patna
Ambala Cantt.	Dehra Dun	Katni	Peshawar
Ambala City	Delhi	Khamgaon (Berar)	Peshawar City
Amritsar	Deoband (Pay Office) (UNDER MUZAFFARNAGAR)	Khandwa	Phullerwan (Pay Office) (UNDER SARGODHA)
Amroha (Pay Office) (UNDER MORADABAD)	Dhanbad	Kumbakonam	Purnea
Asansol	Dibrugarh	Lahore	Poona
Ahmedabad	Dhulia	Lakhimpore (Pay Office) (UNDER SITAPUR)	Poona City
Ahmedabad City	Etawah	Lucknow	Porbandar
Ahmednagar	Etawah City (Pay Office) (UNDER ETWAH)	Ludhiana	Palacole (Pay Office) (UNDER RAJAMUNDRY)
Ajmer	Ellore	Lyallpur	Quetta
Akola	Erode	Larkana	Raneegunge (Pay Office) (UNDER ASANSOL)
Amraoti	Farrukhabad	Mandalay	Rangoon
Adoni	Ferozepore	Mandalay City (Pay Office) (UNDER MANDALAY)	Rangpur
Alleppey	Fyzabad	Meerut	Rawalpindi
Auraiya (Pay Office) (UNDER ETAWAH)	Gaya	Mian Channu (Pay Office) (UNDER MULTAN)	Rawalpindi City (Pay Office) (UNDER RAWALPINDI)
Bareilly	Ghaziabad (Pay Office) (UNDER DELHI)	Mirzapur	Raipur
Bassein	Gojra	Moga (Pay Office) (UNDER FEROZEPUR)	Rajkot
Benares	Gorakhpur	Montgomery	Rajahmundry
Benares City (Pay Office) (UNDER BENARES)	Gujranwala	Moradabad	Saharanpur
Bhagalpur	Gadag (Pay Office) (UNDER HUBLI)	Moulmein	Sargodha
Bulandshahr	Godhra	Muksar (Pay Office) (UNDER FEROZEPUR)	Shillong
Burra Bazaar (Calcutta)	Gulmarg (Pay Office) (UNDER SRINAGAR)	Multan	Sialkot
Bhopal	Gwalior	Murree	Simla
Broach	Guntur	Mussoorie	Sitapur
Byculla (Bombay)	Hafizabad (Pay Office) (UNDER LYALLPUR)	Muttra	Sandhurst Road (Bombay)
Bangalore	Hapur (Pay Office) (UNDER MEERUT)	Muzaffarnagar	Secunderabad
Bellary	Hathras	Muzaffarpur	Sholapur
Berhampore (Ganjam)	Howrah	Myingyan	Srinagar (Kashmir)
Bezwada	Hubli	Mymensingh	Sukkur
Badhlada (Pay Office) (UNDER LUDHIANA)	Hyderabad (Deccan)	Madavi (Bombay)	Surat
Cawnpore	Hyderabad (Sind)	Madura	Salem
Cawnpore City (Pay Office) (UNDER CAWNPUR)	Indore	Mangalore	Tellicherry
Chandpur (Tipperah)	Jalpaiguri	Masulipatam	Tenali (Pay Office) (UNDER GUNTUR)
Chapra	Jamshedpur	Mount Road (Madras)	Tinnevely
Chandausi (Pay Office) (UNDER MORADABAD)	Jaranwala (Pay Office) (UNDER LYALLPUR)	Naini Tal	Tirupur
Chittagong	Jhansi	Naraingunge	Trichinopoly
Clive Street (Calcutta)	Jullundur	New Delhi	Trichur
Cuttack	Jaipur	Nowshera	Trivandrum
Calicut	Jalgaon	Nadiad	Tuticorin
Cocanada	Jodhpur	Nagpur	Ujjain
Cochin		Nanded	Vellore
Coimbatore		Nasik	Vizagapatam
Colombo		Nandyal	Vizianagram
			Wardha (C. P.)
			Yestmal

Office of the Manager Northern India Branches, Lahore.

Current Accounts—Opened free of charge.

Fixed Deposits—Received at interest.

Savings Bank—Deposits received and interest allowed.

Government and other Securities—Received for safe custody, Purchases and Sales effected, Interest and Dividends collected and credited to account or remitted in accordance with instructions.

The purchase and sale of Government Securities undertaken at all Branches for the Public generally.

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Rates, Copies of Rules, Powers of Attorney, etc., may be had on application at any of the Local Head Offices, or Branches of the Bank.

Having discussed the problem I suppose I shall be expected to say something about a solution. I am convinced that the solution lies outside the banking sphere. It seems to me to be of no use to attempt to remove the present indebtedness of the cultivator without first attacking the causes that led to this indebtedness. The principal of these are:—

- (a) the undivided family system of inheritance and unsuitable systems of land tenure,
- (b) expensive marriage and other ceremonies,
- (c) uneconomic marketing of produce,
- (d) illiteracy,
- (e) uncertainty of crops in certain districts owing to periodical droughts, and, in some parts, uneconomic transport charges.

The steps by which these evils may be removed are not for me to propose, but I would like to say something about the marketing of produce. If produce were graded in such a way

that purchasers could be sure of uniform quality a much higher price would be secured for India's produce. India's agricultural possibilities are among the greatest in the world if proper steps are taken to organise them, and, if a mere fraction of the industry and energy which is available in India were used on agricultural problems, some appreciable improvement in the condition of the country must result. In other countries experience has shown that far more can be done by the efforts of the individual than by Government, and it is probable that India is no exception to the rule.

Having removed, or at any rate greatly lessened, the causes, the actual indebtedness must be tackled and a system introduced by which the indigenous bankers and the co-operative societies conform to the practices of commercial banks. Then, and not before, will reasonably cheap finance be available to such cultivators as will comply with the commercial bank's concept of good borrowers.



## THE YOKOHAMA SPECIE BANK, LD.

(Registered in Japan)

(Established 1880)

Subscribed Capital	∴	Yen 100,000,000.00
Paid-up Capital	∴	„ 100,000,000.00
Reserve Fund	∴	„ 117,300,000.00

Head Office : YOKOHAMA.

Branches :

Alexandria.	Kaiyuan.	Rangoon.
Batavia.	Karachi.	Rio de Janeiro.
Berlin.	Kobe.	Samarang (Java).
Bombay.	London.	San Francisco.
Calcutta.	Los Angeles.	Seattle.
Canton.	Manila.	Shanghai.
Changchum.	Marunouchi.	Shimonoseki.
Dairen (Dalny).	Nagasaki.	Singapore.
Fengtien (Mukdon).	Nagoya.	Sourabaya.
Hamburg.	Newchwang.	Sydney.
Hankow.	New York.	Tientsin.
Harbin.	Osaka.	Tokyo.
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102-1, Clive Street, Calcutta,  
Post Box 406.

T. EBIHARA,  
Manager.

**THE**

# P. & O. BANKING

## CORPORATION, LTD.



(Incorporated in England)

With which is affiliated the ALLAHABAD BANK, LTD.

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Authorised Capital	-	-	£5,000,000
Subscribed Capital	-	-	£2,594,160
Paid-up Capital	-	-	£2,594,160
Reserve Fund	-	-	£180,000

HEAD OFFICE :

122, LEADENHALL STREET, LONDON, E.C. 3.

WEST END BRANCH :

14-16, COCKSPUR STREET, S.W. 1.

BRANCHES :

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SHANGHAI, SINGAPORE, HONGKONG.

The P. & O. Bank can transact business on behalf of its  
constituents at all centres where Branches of the Allahabad  
Bank, Ltd., are established.

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W. S. RYDE,

*Manager.*

1, FAIRLIE PLACE,  
CALCUTTA.

## BANKING SECTION II :

# BANKING IN INDIA—1931-32

In all its phases, in all its sections, in all its ramifications, banking in India was in doldrums throughout 1931. In earlier years, a good many of the banks had unpleasant experiences and embarrassing conundrums; there were a few, however, which were lucky enough to hold their own and make a brave showing. 1931 records the spread of gloom to one and all, to the lions and the mice, to the Brobdingnagian and the Lilliputian.

The all-puissant Imperial Bank had to report a shrinkage in deposits, emaciated profits and increasing loss on giltedge investments; and it had to have recourse to the extraordinary course of making a draft on the Reserve Fund for the purpose of providing for the difference between book value and market value of government securities.

Exchange banks, which were popularly believed to be impregnable and whose published reserves (large as they were) were said to be strengthened and further supported by inner reserves, found themselves bereft of the latter and were forced to invade on the former.

The more important Indian joint stock banks, in most instances, improved their position as regards deposits; but outlay on commercial business was restricted by the prevalent stagnation in trade. And so uniformly drooping, day by day, was every branch of trade that advances to the best of parties came to cause concern to bank managements. "Bad and Doubtful Debts" was, so to say, an unbalanced phrase—in this class of debts, there was more of the bad type than of the doubtful type. A "confidence crisis" of the first magnitude was the result. If loans to business concerns carried so great an element of risk, those to the State were not without risk—and great risk at that! Though, in respect of such amounts as were put out in Treasury Bills, banks were in the happy position of obtaining a succulent yield and of having, at the same time, a guarantee against capital depreciation, the investments in the long-term loans of the Government (of which banks naturally held an appreciable percentage of their total giltedge portfolio) declined so steeply in value, that every domestic bank, without almost any exception, had to be content with showing, at book value such securities as were redeemable in the comparatively near future. This headlong fall in giltedge started from 1928. In the first year or two, it was only one or two banks who had these difficulties in so grave a form as to compel some manner of action in the accounts of those years. Solution of the difficulty was found by drawing on the Reserve Fund. The difficulties did not end; they persisted year after year; and a stage was reached by 1931 when it might be said that what a bank made with difficulty on banking business, it lost in one lump in the decline in giltedge values. There were three courses open to the banks concerned: (1) They could have made full provision for the depreciation from current profits in which case they could not have declared any dividend; (2) They could make a raid on the Reserve Fund; but if the depreciation was a regular feature, half-year after half-year, recurrent raids on Reserve would take away the substance of the latter and leave only its shadow behind; (3) Terminable securities could be shown at cost; unduly long-term or non-terminable securities may be brought down

to market price. This course causes the least upsetting; and when every bank is doing it, there is no occasion for any critic to shrug his shoulders and exclaim that it is unscientific finance. The third course was the one adopted by the Indian joint stock banks; and we are concerned, in this context, not in defending or condemning their action, but in proving that this very action bears gloomy testimony to the trials and travails through which domestic banking institutions had to pass.

The smaller banks—called loan offices in Bengal and just banks in other provinces—that is, those institutions, which had their location and being and operations in the mofussil parts, were in the unhappy predicament of a slow but steady withdrawal of deposits combined to a freezing of most of the advances. Great economic distress has been prevailing in upcountry areas; those who had accumulated surplus cash and put it away on deposit with banks found themselves confronted with the "rainy day," and what they had put by against the rainy day was badly needed and swiftly withdrawn. Those who had borrowed from banks could not arrange for repayment; and, in many cases, not even for the due payment of interest. Loans frozen, interest in arrears, the mofussil banks were in an extremely tight corner for cash for meeting the recall of funds by depositors. It may be said that there would have been a heavy crop of failures in the case of banks of this kind, were it not for the local influence of those at the helm of management and their ability successfully to persuade depositors to rest content with return of their funds in dribbles. A widespread crash of banks has been avoided mainly by the tact of directors and managers and the forbearance of depositors. But the persuasive powers of the former have been strained a great deal; and there is a limit to the forbearance of the latter. For our part, we look to the future with the most serious misgivings. The advances of the mofussil banks are secured, in the generality of cases, on real property. And real property cannot be sold to-day for love or money. There are simply no buyers, however much you may search for them, like Diogenes, with a lantern in hand in broadlight. The collapse of values of land and buildings in the mofussil is the most menacing factor in rural economy and banks operating in the interior have, doubtless, a most anxious future.

For like reasons, the co-operative banks were faced in 1931 with lock-up investments on the one hand, and with an imperceptible drain on their deposits on the other. The central co-operative banks in the various provinces could not have as rhythmic a turnover of funds as, in normal times, they were used to in relation to the mofussil co-operative societies.

We have said enough to show that from the privileged and powerful Imperial Bank to the puny and pathetically helpless loan company, uneasy lay the head that wore the crown of management. From the foregoing description, five distinct features emerge as the head and fountain of anxiety:

(1) Due to poor trade, difficulty of finding suitable investment in directions which should be deemed the special field of commercial banks.

(2) Due to disrupted trade, preponderance of cases of bad and doubtful debt.

(3) Due to disruption in giltedge, colossal depreciation in investments.

(4) Due to general economic distress, heavy calls on the earlier years' savings left on deposit with banks.

(5) Due to sorry plight of property owners, emergence of considerable frozen loans and of interest in arrears.

At this stage, we may permit ourselves to introduce a joyous note in this sombre music. While in regard to the attitude of banks to their clients, a confidence crisis had arisen, there was, happily, no such crisis in the attitude of clients to banks. In other words, where banks were patrons as lenders, they were "nervy", whimsical, inclined to be over-cautious, always prone to suspicion. Where the public were patrons as depositors with banks, the public were singularly free from any tendency to sudden or unreasoning panic, altogether uninfluenced by the apparent deterioration in the position of banks. From this point of view, the Indian depositor comes off with flying colours in this contrast. No bank had the painful experience of a "run", heady and determined, at any time in 1931. The public knew that banks were not doing as well as in former years; they realised that exceptional losses were heavy; they had some manner of understanding of the anxieties and perplexities of banks. But he it said to their credit that they did not add to the difficulties of bankers by any inconvenient or ill-timed "raids."

It is a platitude to say that the Indian public are extremely sensitive in regard to banks; that they easily succumb to the merest whisper, to the vaguest report; and that runs on banks are more frequent in this country than in most advanced countries. That a class of depositors, who are proverbially nervous, kept their nerve in critical times like these is, indeed, a great good fortune of Indian banks. This is the more remarkable as the banks themselves, when it came to their turn, showed themselves incapable of a like nerve. Bankers, to put it bluntly, bullied their debtors. The depositors could have bullied their debtors, the banks; but they did not. Let it be recorded of 1931 that it celebrated a phase of sanity and sportsmanship on the part of the Indian depositor.

The attitude of Indian depositors, in pleasant contrast to their own past behaviour, is in even more striking contrast to that of the nationals of other countries—notably United States of America and France. Hoarding of notes (and even of gold coins) assumed grave proportions amongst American and French masses. Note circulation was, for that reason, increased; and the additional currency did not go to swell bank deposits but only accounts for more and more numerous "stockings" stuffed with aught more precious than human legs. The confidence of the public in the national banking of America and some of the European countries was rudely shaken; and the State in U. S. A. had to intervene with remedial measures in the shape of a colossal Rediscount Corporation (for paper not ordinarily eligible for discount with Reserve Banks). The strain thrown on gold reserves was thus two-fold—that due to violent movements of capital from financial centre to financial centre; and that due to the increased gold cover required for increased domestic note circulation. India maintained her faith in her banking system remarkably well; and she gave rise to no manner of complications in the world gold position.

On the contrary, India disgorged an unexpectedly large quantity of the yellow metal gathered over the previous years. In ordinary conditions, this country used to import, on the average, Rs. 18 crores of gold in a year. In 1931-32, we actually exported gold for a net total of Rs. 57.97 crores. Thus, so far as the international gold situation is concerned, India, in the first place, refrained from taking her

customary quota of Rs. 18 crores; and, in the second place, she released Rs. 57.97 crores for use of foreign countries. The complications of the international gold problem were relieved to the extent of Rs. 18 crores plus Rs. 57.97 crores, or Rs. 75.97 crores, by this country's attitude in the last fiscal year. That the world complications as regards gold were of a most grave character is no reflection adverse to India—it shows how India was on her best behaviour what time most other countries were on their worst. Above all, it proves that but for the part which India played in regard to gold, the world gold position might have not only worsened as it did but become a thing of "shreds and patches", beyond all repair or mending. Rs. 75.97 crores, which is the active and negative contribution of this country to international gold situation, is equivalent to £57 million or over half of the world's production of gold in the year.

Apart from the fact that India's cessation of imports of gold and her large-sized exports of gold were favourable to the world gold position to the extent of £57 million or Rs. 76 crores, the disgorged gold was also responsible for an increase of Rs. 7.25 crores in our currency reserves. Thus, the total transfer of gold from non-monetary to monetary uses, caused by the strange and welcome part played by India, is no less than Rs. 83.25 crores or nearly £62 million.

Let us sum up the position so far. (1) The Indian public did not embarrass the banks by withdrawal of deposits. (2) They did not hoard gold (or notes backed by gold) as did the nationals of more advanced countries. (3) On the other hand, they refrained from even the usual demand for gold of Rs. 18 crores; and, what is more, they unhoarded gold of the value of Rs. 58 crores. Bravo! India!

From the point of view of the banking development of the country, all this is most encouraging. In the evidence which the Editor and the Managing Editor of *Indian Finance* gave before the Central Banking Enquiry Committee, they laid the greatest emphasis on the necessity for taking steps to mobilise the hoarded gold of India in a way that will release to the monetary circles a part of the gold from non-monetary sources. Their idea was that banking development meant greater investment habit, which implied greater confidence in the country's monetary structure and banking system. For such confidence, a stronger reserve of gold was essential; and the best way of securing more gold was to tap the domestic sources. Some of the members of the committee were frankly sceptical about our proposal and wondered if there was ever any possibility of any of the hoarded gold being drawn out. Our scheme of Gold Certificates did not evoke any enthusiasm. An agency far more potent than Gold Certificates—the agency, namely, of Economic Distress—has brought the reform we were advocating. We are not happy at the way at which this reform has been worked out. We may, however, be permitted to infer from this that for the integrity of our monetary mechanism and the stability of our banking system, India is in a position to supply all the gold that is necessary. In another page, we deplore the suicidal policy of the Government in throwing away the present golden opportunity to enrich the gold backing of our reserves. The chance we were looking forward to did occur much earlier than we dared to hope. And that chance placed at the disposal of the Government an amount of gold far bigger than we, in our most sanguine moments, thought possible. That chance has been blindly, thoughtlessly missed. We may not get as big a chance; but we should certainly be able to demonstrate, when the time comes, that by self-reliance, our monetary, currency and banking systems could be placed on a sound footing. The developments as regards gold in the last year are,

therefore, of happy augury to the future of Indian banking.

To this line of reasoning, there may be the retort that the habit of hoarding precious metals (so pernicious to the growth of banking) has only been replaced by hoarding in silver rupees or currency notes. It is true that a considerable amount of silver rupees has gone out of the Reserve into circulation; the net absorption of silver coins in the period October to March was Rs. 18.55 crores, which compares with a return from circulation of Rs. 14.61 crores in the first half of the financial year and of Rs. 21.58 crores in 1930-31. It is argued that so sudden and so striking a change-over could be accounted for only on the assumption that the sellers of gold demanded in exchange silver coin for being hoarded again. That this demand for silver rupees synchronised with the heavy sales of gold is trotted forth as conclusive testimony on this point. The official theory is that "the renewed absorption was partly due to the revival of rupee prices in the latter half of the year, and also to the heavy return of gold from upcountry and the acceptance by the sellers of rupee coin in exchange". That the sellers of gold would have preferred rupee coin to paper notes is natural and intelligible as they are the class of people to whom precious metals have ever had a fascination and attraction. That they made the exchange only with a view to hoard the coin, and not for purposes of cash for meeting their expenditure or commitments, is a hypothesis with which we cannot agree.

On elaborate enquiries, we are persuaded that the disgorging of gold was not for the pleasant purpose of taking advantage of the better rupee price of gold, but for the painful necessity of "keeping the wolf from the door". The sale-proceeds of gold were not kept away in tiny, little parcels of savings not needed for the time being. The realisations from gold were for expenditure then and there. The original holders of gold had the short-lived satisfaction of getting shiny white coins against unburnished gold ornaments; they had not that satisfaction long; the white coins disappeared from their hands ere yet they knew they had them—so acute has been the pressure for money; they could now truthfully exclaim that silver and gold they have none. That the silver coins, that went out into circulation, have not come back to the Reserve is explained by the low velocity of circulation in mofussil parts.

Even less tenable is the theory that sellers of gold have hoarded notes. It is true that there has been, between October and March, an expansion of currency to the amount of Rs. 39.38 crores against *ad hoc* securities. All these additional notes have gone to regions far and beyond the proper money market circles. Once notes migrate to the mofussil, their return to the financial centres is a necessarily slow process. These notes are not secreted away in dark recesses; they are in movement—only the movement is so slow that notes of the value of Rs. 39.38 crores in the mofussil do the function of, say, Rs. 3.9 crores in the money centres. Let it not be forgotten that the country was starved of currency for over four years. The expansion of the latter half of the last financial year proves first that the earlier contractions were on too heavy a scale and second that mofussil needs of currency for ordinary circulation purposes are far larger than those of centres with highly developed banking habits. The notes have not certainly been hoarded.

The point we seek to make is that, whatever the cause, however unpleasant the need, the habit of hoarding, judging from the developments in 1931-32, is no longer the besetting sin of the Indian masses.

We believe that these aspects of the changes in the attitude of the Indian public have not, so far, received any notice. We consider it all the

more necessary to emphasise and underline them in this review of banking conditions. While every country was grabbing at gold, India was parting with the precious metal for undreamt-of amounts. While the nationals of a good few countries were grabbing at whatever gold coins they could lay their hands on, the Indian masses were unlearning their age-old habit of "hoarding" and were disgorging the hoards of earlier years without let or hindrance. While the depositor class of countries, which had highly developed banking systems, were hoarding notes by withdrawing bank deposits, causing a deal of anxiety to bank authorities and brought about a good crop of bank failures, the depositors in India, which is said to have a primitive banking system, stood by the banks, helped them to hold their own and were altogether so well-behaved that there was scarcely any instance of a run on a bank or of bank collapse. To the international banking world, this new development in India has a profound interest and a striking lesson. The Indian bankers themselves could not be sufficiently grateful for so favourable a modification in the attitude and behaviour of the Indian public.

Despite such satisfactory developments, banking in India was, as has been pointed out at the outset, a matter of utmost stress and strain to those in charge of affairs. Let us, in the first instance, take the case of the Imperial Bank of India, which stands in a class by itself. The Imperial has suffered alike in Public Deposits and Other Deposits, both of which had shrunk considerably, the first due to the difficulties of Government finances and the second due mainly to the more tempting yield available on Treasury Bills. The following table gives the Bank's annual average of the deposits of the Government:

	(In crores of Rs.)	
1925-26	...	16.38
1926-27	...	19.99
1927-28	...	10.56
1928-29	...	8.02
1929-30	...	14.87
1930-31	...	13.19
1931-32	...	11.37

In the old days, the average of Public Deposits used to be Rs. 18 crores to Rs. 20 crores. A drop of Rs. 6 crores or Rs. 7 crores from this level is a serious matter. Even allowing only 5 per cent. as the margin of profits on such balances, the Imperial Bank has had, on this factor alone, a shrinkage of profit of Rs. 30 lakhs or Rs. 35 lakhs. "Other Deposits" are, on the average, Rs. 10 crores down. Another big slice of potential profit cut off! Trade stagnation has largely restricted the scope of advances, with the result that the Bank has had to maintain a large volume of government securities. To say this is, perhaps, not strictly correct, as it must be admitted that one of the causes of the bulge in the giltedge portfolio of the Bank is the help which it had to render to the Government by subscribing liberally for the new loans year after year and by otherwise taking securities off the Government as in the case of the sale of Rs. 2 crores of 3½ per cent. Rupee Paper from Paper Currency Reserve in 1932. Except for circumstances like these, the Imperial Bank was not (even when embarrassed with idle funds) over-keen on investing large sums in the funded loans of the State. It was content with seeking an outlet in Treasury Bills. Of the total giltedge investments of round about Rs. 32 crores held by the Bank, perhaps only a fourth is in the form of short-term Rupee Bills. On the balance, which is considerable, the Bank was faced with heavy depreciation from time to time. Lesser deposits and lesser commercial advances cut into the profits. Larger giltedge investments caused a positive loss. In the result, the Bank has had to adhere to the reduced dividend; and in 1931, it was even found necessary to eat into the public

# NATIONAL BANK OF INDIA, LD.

(INCORPORATED IN THE UNITED KINGDOM).

(Established in India 1863)

Subscribed Capital - - £4,000,000

Paid-up Capital - - - £2,000,000

Reserve Fund - - - - £2,200,000

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**KENYA**

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Interest allowed at 2 per cent. per annum on Balances over Rs. 1,000 to Rs. 1,00,000/-

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104, Clive Street.

T. T. K. ALLAN,  
Manager.



Reserve Fund. The Bank may, however derive satisfaction from the thought that its earnings in the first half of 1932 should be up to the mark owing to the high bank rate and the large earnings on ways and means advances to the State; and that the appreciation, that has taken place in giltedge since the commencement of the year, should result in a considerable strengthening of the inner reserves of the Bank.

Let us now turn to exchange banks. No figures are available as regards the Indian deposits of these banks. But there are abundant indications that they should have been adversely affected by the offer of high yield on Treasury Bills. In a well-managed money market, Treasury Bills should be a proper mode of investment for purely money market interests. In India, on the other hand, Treasuries were availed of by firms and limited companies, and even by private parties. The result is that the short-term borrowings of the Treasury have set up a serious competition as against banks, who find their deposits diverted, in part, to Bills. It must be stated, however, that in the last quarter of the financial year, the Government were able to secure so good a grip over their cash position as to permit of their insisting on most competitive rates for Treasury Bills. The rates now available on short-term Bills are more in accord with a scientific financial policy. It is to be hoped that the authorities would be able to persevere in this policy and not revert to the old time policy of "frenzied borrowings at fantastic rates". The rivalry set up by the Government in the shape of attractive Treasury Bills was Handicap No. 1.

Nor were the Banks always able to take advantage of these very attractive rates on Bills by bringing in funds from London. In the early month or two of 1931-32, London did invest considerably in Rupee Bills; and exchange banks in India did a large business on their own account and on account of overseas operators. But the serious developments in international finance after the failure of the great Austrian Bank were responsible for the withdrawal of the foreign funds invested in Rupee Bills. We estimate that the amount invested with overseas moneys in March to May was anything like Rs. 30 crores. Almost the entire amount was recalled on the maturity of the Bills. Exchange banks were thus left without this profitable business. Trade was so bad and there was so little business on genuine trade account that exchange banks welcomed London's Treasury Bills operations with a sigh of relief. When the latter disappeared, they relapsed into the old state of stagnation. This was Handicap No. II.

Otherwise also, difficulties connected with the handling of London business were many. London interests always insisted on the simultaneous fixation of both sides of the exchange contracts. That is, the exchange banks in India doing this class of business had to sell ready or near T. T. and buy forward T. T. at the same time. The purchase of sterling for future deliveries had so great a depressing effect on forward rates that the gap between ready and forward rates swallowed a considerable portion of the margin between the London rate of interest and the rate forthcoming on Rupee Bills. The "other leg" of exchange pushed heavily on the forward rates so often that London offers had to be returned unfulfilled on a good many occasions. This was Handicap No. III.

The uncertainties of the future of the rupee rates were another complication. No exchange banker could afford to allow any large portion of his business remain uncovered, as there were current frequent rumours of an impending change of the ratio. The banks felt that what with the grave perplexities as regards the ways and means position in India of the Government, and what with the large-scale sales of Reverse Councils necessitated by the heady flight of capital, the Government might

not, even if they so wished, be able to maintain the rupee at 1s. 6d. level. Doubts as to the tenability of 1s. 6d. ratio were universal. No banker, in such a situation, could dare keep an oversold position on London. Bankers had to work, till the fateful announcement on September 21, under most trying conditions of uncertainty and suspense. This was Handicap No. IV.

Faced with handicaps so numerous and so grave it is to be feared that exchange banks should have had, in 1931, one of the worst years of their experience. The last quarter of the financial year brought some relief in one or two directions.

We have now to consider the plight of the Indian Joint stock banks.

The Indian public have, as we have already shown, accorded a kindlier treatment to the domestic banks, possibly due to the *Swadeshi* propaganda in the country. In this context, it is only necessary to say that a direct effect of the surer and wider patronage is to be found in an increase in the Deposits of the larger Indian joint stock banks in spite of the adverse circumstances in the shape of Treasury Bills alluring funds away. This is by far the most redeeming feature in the career of Indian banks through 1931. Otherwise, their lot had been unenviable. Paucity of eligible business of a purely commercial description was a riddle, to solve which more and more recourse was had to investment in Treasury Bills. Between the principal Indian banks nearly Rs. 10 crores is invested in Treasuries. These were the institutions which, in earlier years, did yeomen service to the State by subscribing, on a large scale, for the New Rupee Loan issues. For instance, the Central Bank of India used to top the list (barring, possibly, Imperial Bank) year after year in regard to New Loan subscriptions. Some of them like the Bank of India, Allahabad Bank and the Bank of Baroda were largely responsible for increased activity in the giltedge market by their policy of making advances on government securities at low rates and on most favourable terms and of giving the most satisfactory facilities for the transmission of securities between important centres like Bombay and Calcutta. To the fullest extent of their power, their resources and the amenities they can provide, the Indian Banks played a prominent part in the more wide-spread and more large-scale investments in government securities.

For all which service, what did they get in return? Neglect! Apathy! Worse than neglect and apathy! Positive disservice in the matter of their deposits by Treasury Bills drawing away a portion of such deposits! The savings bank departments of the Indian banks have a powerful rival in Postal Cash Certificates and issues of new loans like 6½ per cent. Treasury Bonds through Post Offices (with the privilege added, under certain conditions, of exemption from income-tax). The Government are innocent of one single act of friendliness to Indian banks. On the other hand, they have—unwittingly, let us hope—made it more difficult for the domestic banks to retain such funds as they had. Moreover, the credit policy of the Government was so planned as to pull down and disrupt their own credit. The most direct and the largest sufferers were Indian banks, which were unfortunate enough to be in possession of heavy holdings of securities at the time the debacle in giltedge started in a headlong fashion. On the deposits side, Indian banks have suffered from the competition set up by the borrowing programmes and plans of the Government. On the investments side, they have been seriously hit by the ill-conceived and ill-executed borrowings of the State. When all this was pointed out to the authorities, they said that it could not be helped.

A fresh occasion for difficulty was created by the Imperial Bank notifying the banks (this applied to all the banks, including exchange banks and Indian banks) that the cash credit arrangements against government securities, which the banks had

long enjoyed and come to rely on, could no longer be continued. So far as exchange banks were concerned, the withdrawal of this facility was not a serious matter as they could always sell T.T., relying on their ability to draw on their London offices. Liquid assets in the case of exchange banks are not essential in the shape of government securities. Their liquidity consists in their ability, at all times, to sell sterling on London. In the case of Indian banks, however, their liquidity was made up, next to cash and short deposits, of giltedge securities against a portion of which they had drawing facilities from the Imperial Bank. Once the latter insists on giving not cash credit limits but fixed loans and on interest being paid for a minimum of seven days, the Indian banks are, perforce, obliged to maintain a far larger balance in cash and short deposits than could be deemed economical. The effect of this action of the Imperial Bank is, on the one hand, to decrease the earning capacity of Indian banks; and, on the other, to take away a bit of the "gilt" from giltedge in the eyes of Indian banks. By this action, the Imperial Bank has, we regret to say, done a disservice both to the Indian banks and to the Indian Government. Many things have happened to make bankers look askance more and more at giltedge investments. The latest *fiat* of the Imperial Bank will render government securities even more unpopular with a class of people who were the largest investors in giltedge and whose support was, in no small degree, instrumental in the creation of the larger and livelier giltedge market which we knew especially in the period 1924 to 1928.

We know that the Imperial Bank authorities would retort by saying that their new reform is exactly on the lines of Bank of England policy. A policy fashioned on the Bank of England procedure would be appropriate to India if the Indian banks had the same status, resources and strength as the London Big Five or other British banks. The London

Money Market and British Banking world are so well-developed, so strong financially and have such other facilities as to render recourse to the Bank of England a last resort. It is the bill market in London which invests the banking institutions of England with a full measure of liquidity and with a rare capacity of self-reliance. There is no bill market in India; there are no transactions in Indian Treasury Bills; the Indian banks have no large facilities for bringing in funds from foreign agents when necessary. They have one, and only one, mode of liquid security—and that is Government securities. The Imperial Bank has a duty, alike to the banking world and to the Government, in regard to the maintenance of the liquidity of giltedge. We are definitely of the view that the Imperial Bank has a special duty to Indian banks. As the most powerful commercial banking institution, that is, as the eldest member in the family, it should do all it can to help the junior members in the commercial banking world. As a kind of central bank, its privilege is to extend understanding and sympathetic co-operation in a way that will be conducive to the growth and expansion of the domestic institutions. As banker to the Government; as a bank enjoying the privilege of interest-free deposits from them; as a beneficiary of the enormous facilities conferred by the use of Treasury chests; and as the Manager of the Public Debt of India, the Imperial Bank certainly owes it to the Government to do all it can to popularise government securities. We maintain that the present attitude of the Imperial Bank will seriously retard the popularising of giltedge. It is, therefore, to be hoped that ere yet the next issue of the *Indian Finance Year-Book* is published, the Imperial Bank would have taken steps to remove this grievance. This is a case which calls for the intervention of the Government and for the latter using their good offices in the interests of the god-fatherless Indian joint stock banks.

## THE BANK OF INDIA, LD.

ESTABLISHED 7th SEPTEMBER, 1905.

CAPITAL SUBSCRIBED	...	...	...	Rs. 2,00,00,000
CAPITAL PAID UP	...	...	...	„ 1,00,00,000
RESERVE FUND	...	...	...	„ 92,00,000

Head Office:—ORIENTAL BUILDINGS, BOMBAY.

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London Agents:—The Westminster Bank, Ltd.

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Mr. F. E. Dinshaw (Messrs. Payne & Co., Bombay).

Mr. Anubalal Sarabhai (Ahmedabad).

Sir Joseph Kay, Kt. (Messrs. W. H. Brady & Co., Ltd.)

Mr. Andrew Geddis (Messrs. James Finlay & Co., Ltd., Bombay).

Sir Dinshaw Petit, Baronet (of Messrs. D. M. Petit Sons & Co., Bombay.)

Sir Chunilal V. Mehta, K. C. S. I., of Bombay.

Mr. Paliram Mathradas.

**Current Deposit Accounts**—From 25th December to 25th June, interest is allowed at 2½% on daily balance, Rs. 800 to Rs. 1,00,000. From 25th June to 25th December, interest is allowed at 2% on daily balance. On sums exceeding Rs. 1,00,000, interest is allowed by special arrangement. No interest will be allowed which does not amount to Rs. 8 per half-year.

**Fixed Deposits**—Deposits are received fixed for one year or for shorter periods at rates of interest which can be ascertained on application.

**Savings Bank**—Accounts opened on favourable terms. Rules on application.

**The Bank Undertakes Executor and Trustee Business**—Rules may be obtained on application.

**General Banking Business**—transacted, rules for which can be obtained upon application.

Calcutta Branch:—10, CLIVE STREET.

J. N. ROSE, AGENT.

A. G. GRAY, MANAGER.

## BANKING SECTION III :

# REVIEWS OF BALANCE SHEETS

( Of The More Important Banks Doing Business In India )

### Bankers to the Govt. :

#### IMPERIAL BANK OF INDIA.

The Imperial Bank of India was constituted in 1920 by the amalgamation of the 3 Presidency banks and commenced business in January, 1921. It is not only the leading commercial bank in the country but it is also a bankers' bank fulfilling to a certain extent the functions of a central bank. The bank's profits in recent years have been affected by the heavy depreciation in Indian Government securities and it was necessary in 1931 to transfer Rs. 45 lakhs from the public reserves and Rs. 69 lakhs from inner reserves to write down securities to market value. The dividend has been reduced to 12 per cent. from the customary dividend of 18 per cent. paid since the inception of the bank. Owing to trade depression there was considerable shrinkage in the portfolio of commercial bills held by the bank. The bank's official rate of interest fluctuated in 1931 between 5 and 8 per cent. and averaged 7.04 per cent. for the year against 5.89 per cent. for 1930. As giltedge securities have appreciated considerably in the first half of 1932, the losses on giltedge for which provision was made in the last balance-sheet would have been made up. As the sum taken away from the Reserve would not be put back, the inner reserve of the Bank would be appreciably strengthened. The Managing Governors of the Bank are Sir Osborne A. Smith and Mr. K. M. MacDonald.

(In Rupees—000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	5,62,50	5,62,50	5,62,50
Reserves ... ..	5,32,50	5,40,00	5,00,00
Total of Capital & Reserves	10,95,00	11,02,50	10,62,50
Public Deposits ... ..	7,59,97	7,86,91	8,32,11
Current, Fixed and other Deposits ... ..	71,64,31	76,60,06	68,85,64
Total of Deposits ... ..	79,24,28	88,96,97	72,17,75
Due to Government ... ..	...	...	2,50,00
<b>Assets—</b>			
Cash ... ..	18,99,85	18,04,24	11,08,95
Giltedge investments ... ..	33,00,21	29,25,17	30,26,65
Bills discounted ... ..	6,25,71	8,77,49	4,60,82
Total of Liquid Assets ... ..	58,25,77	46,06,90	45,91,42
Loans & Advances ... ..	34,88,50	45,98,54	37,18,04
Percentage of total Capital and Reserves to total Deposits ... ..	18.8	18.1	14.7
Ratio of Liquid Assets to total Deposits ... ..	67.2	54.9	63.6
<b>Profit &amp; Loss Items—</b>			
Brought forward ... ..	16,72	15,26	12,56
Profits ... ..	1,05,59	1,01,74	74,00
Dividend distribution ... ..	90,00	90,00	67,50
Allocation to Funds ... ..	17,05	14,44	5,01
Carried forward ... ..	15,26	12,56	14,05
Dividend Rate per cent. ... ..	16	16	12

### Indian Joint Stock Banks :

#### THE ALLAHABAD BANK, LTD.

The Allahabad Bank is one of the oldest of Indian joint stock banks, established in the year 1865. Its original Head Office was Allahabad; but since its affiliation to the P. & O. Banking Corporation about 10 years ago, its registered office has been transferred to Calcutta. Though affiliated to the P. & O. Bank, it has maintained its entity intact and continued loyal to the traditions and nature of business it has from the beginning built up. The Allahabad Bank has paid particular attention to branch banking and finance of produce. Its branches are distributed practically throughout the United Provinces and a good part of the Punjab. The bank has also branches at other important centres like Bombay,

Rangoon, Karachi, Nagpur, etc. In the field of produce finance, it did considerable pioneer work; and though new entrants into the field seek to cut into its business, the facilities which the Allahabad Bank has always offered, and is ever in a position to offer, should retain for it its own clients and connections and business. The deposits of the bank declined in 1931-32 by about a crore of rupees to Rs. 9.94 crores. But this has been offset by a decline of nearly Rs. 80 lakhs in loans and advances. The result is that the proportion of liquid assets to deposit liabilities has increased from 62 to 66 per cent. The profits of the bank remain unchanged in spite of the above reshuffling of assets and dividend has been maintained at 18 per cent. per annum. Depreciation of Government Securities has been met by the transfer of Rs. 6 lakhs from the General Reserve Fund to a reserve fund No. 2 account specifically ear-marked to cover this depreciation. The Bank's year closes as at March 31.

(In Rupees—000's omitted)

	1930	1931	1932
<b>Liabilities—</b>			
Capital ... ..	35,50	35,50	35,50
Reserves ... ..	44,50	44,50	44,50
Total of Capital and Reserves ... ..	80,00	80,00	80,00
Current Deposits ... ..	2,56,92	2,86,59	1,95,67
Fixed and Other Deposits ... ..	8,80,00	8,66,21	7,98,79
Total Deposits ... ..	11,86,92	11,02,80	9,94,46
<b>Assets—</b>			
Cash ... ..	1,83,08	1,18,92	1,26,82
Giltedge investments ... ..	4,87,98	5,68,05	5,86,23
Total of Liquid Assets ... ..	6,70,96	6,86,97	6,63,05
Loans, Bills discounted, Pro-notes and other investments ... ..	1,80,99	1,22,15	1,20,14
Cash Credits and overdrafts ... ..	3,89,50	3,47,16	2,64,36
Percentage of Capital and Reserve to total Deposits ... ..	7.0	7.8	8.0
Percentage of total Liquid Assets to total Deposits ... ..	59.0	62.8	66.7
<b>Profit and Loss Items—</b>			
Brought forward ... ..	1,90	3,32	4,24
Profits ... ..	6,01	5,51	5,54
Dividend distribution ... ..	4,59	4,59	4,59
Allocation to Funds ... ..	...	...	1,50
Carried forward ... ..	3,32	4,24	3,69
Dividend Rate per cent. ... ..	18	18	18

year ends 31st March.

#### THE BANK OF BARODA.

The Bank of Baroda was started during the closing years of the first decade of this century under the patronage of, and largely supported by, the Government of H. H. the Maharaja of Gaekwar of Baroda. The Chairman of the bank is Sir Lalubhai Samaldas, Kt., C.I.E.; and the General Manager at the Head Office is Mr. C. E. Randle. The bank has got 15 branches of which a good number are situated in Baroda State. The bank is entrusted with the State's Treasury work the same way as the Imperial Bank carries out the Treasury work of the Government of India. It has also branches at important centres like Bombay, Ahmedabad, Surat, etc. The paid up capital of the bank is Rs. 30 lakhs. Owing to the heavy depreciation of Government securities in 1931, it was found necessary to transfer Rs. 5.25 lakhs from the Reserve Fund which now stands reduced to Rs. 20 lakhs. The subsequent appreciation of Government securities has left the bank possessed of a secret reserve to the extent of the difference between the market value and written down value of the securities. The deposits of the bank at Rs. 6.70 crores show a substantial rise over the previous year's figure of Rs. 5.95 crores. Profits have been well maintained and the usual dividend of 10 per cent. has been paid. The percentage of total liquid assets to deposit liabilities is exceptionally high at 70 per cent.

(In Rupees—000's omitted)

## Liabilities—

	1929	1930	1931
Capital ...	30,00	30,00	30,00
Reserves ...	23,50	24,15	19,40
Total of Capital & Reserves	53,50	54,15	49,40
Current Deposits ...	2,10,91	2,27,84	2,30,11
Fixed & other Deposits ...	3,62,88	3,67,82	4,40,27
Total of Deposits ...	5,78,79	5,95,66	6,70,41
Other Liabilities ...	4,13	5,24	7,40

## Assets—

Cash ...	81,89	63,26	84,49
Giltedge investment ...	2,63,84	2,98,08	3,85,84
Bills discounted ...	28	10	...
Total of Liquid Assets ...	3,46,01	3,66,89	4,70,33
Loans and Discount ...	2,67,75	2,70,98	2,89,00
Properties ...	17,22	17,05	17,76
Other Assets ...	3,23	3,29	2,95
Percentage of Capital and Reserves to total Deposits	9'3	9'1	7'4
Percentage of Total Liquid Assets to Total Deposits	60'8	61'5	70'2

## Profit and Loss Items—

Brought forward ...	88	55	87
Profits ...	3,95	3,61	3,97
Dividend distribution ...	3,00	3,00	3,00
Allocation to Funds ...	50	50	60
Bonus to Staff ...	28	29	15
Carried forward ...	55	37	59
Dividend Rate per cent. ...	10	10	10

## THE BANK OF INDIA.

The Bank of India, registered in 1906, is by far the most comfortably situated amongst Indian banks. Its Balance Sheet is neat and natty; and its business is of the soundest description. The Directors have never sought to achieve anything sensational and have ever been content with slow progress so long as it is steady. The Bank of India has a most illustrious and influential Board of Directors, with Sir Cowasji Jehangir Bart., as Chairman. The Manager is Mr. A. G. Gray. The bank has been fortunate in having restricted its holding of Government securities to a comparatively small figure, with the result that while other banks were faced with an exceptionally heavy shrinkage in their giltedge portfolio, the Bank of India was least affected by the debacle in security prices. A sum of Rs. 7½ lakhs was transferred from profits for writing down Government securities and the uncovered deficit on short-term Government Bonds was as low as 15 lakhs. Profits were, on the whole, well maintained and the dividend was unchanged at 10 per cent.

(In Rupees—000's omitted)

## Liabilities—

	1929	1930	1931
Capital ...	1,00,00	1,00,00	1,00,00
Reserves ...	86,00	90,00	92,00
Total of Capital and Reserves ...	1,86,00	1,90,00	1,92,00
Current Deposits ...	42,09	5,38,72	4,79,00
Fixed and other Deposits ...	6,75,23	7,51,48	8,16,47
Total Deposits ...	11,17,32	12,90,20	12,95,47

## Assets—

Cash ...	1,92,16	2,14,88	2,25,64
Giltedge Investments ...	2,52,34	5,01,82	5,43,78
Total Liquid Assets ...	4,44,50	7,16,70	7,69,42
Other Investments ...	77,55	78,49	70,83
Loans, Advances, etc. ...	8,00,79	7,06,00	6,49,49
Percentage of Capital & Reserve to Total Deposits	16	15	15
Percentage of Liquid Assets to Total Deposits	40	39	42

## Profit and Loss Items—

Brought Forward ...	3,64	4,31	4,44
Profits ...	18,72	15,98	19,77
Dividend Distribution ...	10,00	10,00	10,00
Allocation to Funds ...	5,50	4,00	7,50
Carry Forward ...	4,31	4,44	3,39
Dividend Rate per cent. ...	10	10	10

## BANK OF MYSORE.

The Bank of Mysore, started in 1913, is to the Government of Mysore what the Imperial Bank is to the Government of India. Its progress has been steady and satisfactory. The paid up capital is Rs. 20 lakhs; and the reserve fund is Rs. 16.75 lakhs; with the building fund standing at Rs. 2.25 lakhs. The Bank has maintained deposits roundabout Rs. 2 crores. In 1930 there was a considerable increase in deposits which touched Rs. 2.31 crores. In 1931, however, there was a fall; and the figure was Rs. 2 crores. Owing to the difficult trading conditions, the profits in 1931 were slightly less than in 1930. At the same time, a bigger provision had to be made for contingencies, with the result that against a dividend of 12 percent per annum plus a bonus of 2 percent per annum, paid in the previous years, the Bank paid a dividend of 12 percent in 1931. The Bank has had its share of depreciation in giltedge investment. But the intrinsic position of the Bank, judged by every criterion, remains exceptionally strong. The management is in the hands of Mr. P. W. O'Brien.

(In Rupees—000's omitted.)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ...	20,00	20,00	20,00
Reserves ...	14,75	15,75	16,75
Total of Capital and Reserves ...	34,75	35,75	36,75
Current Deposits ...	51,43	91,94	77,70
Fixed and other Deposits ...	1,42,86	1,38,87	1,21,81
Total of Deposits ...	1,94,29	2,30,81	1,99,51
<b>Assets—</b>			
Cash ...	24,76	18,65	22,18
Giltedge Investments ...	39,67	89,06	69,81
Bills discounted ...	4,43	5,97	7,60
Total of Liquid Assets ...	78,86	1,13,68	99,59
Loans and Advances ...	1,57,06	1,55,55	1,89,04
Properties, etc. ...	4,94	4,51	4,93
Percentage of Capital and Reserves to Total Deposits	17'9	15'5	18'4
Percentage of Total Liquid Assets to Total Deposits	38'0	49'3	49'9
<b>Profit and Loss Items—</b>			
Brought forward ...	28	12	26
Profits ...	4,31	4,62	4,27
Dividend distribution ...	2,80	2,80	2,40
Allocation to Funds ...	1,50	1,50	1,75
Bonus to Staff ...	17	18	9
Carried forward ...	12	26	30
Dividend Rate per cent. ...	14	14	12

## THE BENARES BANK, LTD.

(In Rupees—000's omitted.)

	1929	1930
<b>Liabilities—</b>		
Capital ...	11,25	11,25
Reserves ...	5,00	4,50
Total of Capital and Reserves ...	16,25	15,75
Current Deposits ...	5,10	5,44
Fixed & Other Deposits ...	84,14	87,68
Total of Deposits ...	89,38	93,12

( In Rupees—000's omitted. )

	1929	1930
<b>Assets—</b>		
Cash ... ..	8,84	6,80
Giltedge Investments ... ..	7,75	9,02
Total of Liquid Assets ... ..	16,59	15,82
Loans & Advances ... ..	84,13	87,41
Properties, &c. ... ..	3,16	3,10
Percentage of Capital and Reserve to Total Deposits ... ..	18'2	16'9
Percentage of Total Liquid Assets to Total Deposits ... ..	18'6	17'0
<b>Profit and Loss Items—</b>		
Brought Forward ... ..	5	1
Profits ... ..	1,27	1,43
Dividend Distribution ... ..	1,01	84
Allocation to Funds ... ..	...	...
Carried Forward ... ..	1	6
Dividend Rate per cent. ... ..	9	7½

THE CENTRAL BANK OF INDIA, LD.

The Central Bank of India was started in 1911 mainly due to the efforts, enthusiasm and organising skill of Mr. S. N. Pochkhanawalla. The latter was fortunate in securing Sir Pherozshah Mehta as the first Chairman of the Bank. Equally lucky was he in having as his lieutenant Mr. A. S. Balsekar who has, in a large measure, shared all the stress and strain of this institution in the various stages of its growth. The capital of the Bank was increased, in successive stages, till early in the last decade it stood at Rs. 50 lakhs paid up. The amalgamation of the Tata Industrial Bank to itself brought up the capital to Rs. 1,68 lakhs, so that the Central Bank has been, since then, the largest institution amongst the Indian joint stock banks. Its deposit figures also were higher than those of the others. In range of business, largeness of clientele, new and newer modes of service, the Central has always been in the forefront. An institution, so flourishing and so steadfastly marching onwards, has had, necessarily, its distractors and even unreasoning critics. In fact, it has been the target, for over a decade, of a virulent campaign of civil and criminal suits brought against it for most frivolous reasons. The Bank has come out successful in all this vexatious litigation. But suits are still being persisted in; and this means distraction of the attention of its officers, heavy expenses and constant worry. That a suit is ultimately won can be no satisfaction when defence costs a big bit. This kind of persecution has also meant the maintenance of an unduly large liquid position so as to be prepared for runs at any time. Excessive liquid assets mean lesser margin of profits. And runs mean disorganisation of normal business. The management of the Central Bank have had to contend against heaviest odds. Despite such difficulties, the progress of the Bank has been kept up. At all times, it has been ready and able to weather any the strongest storm. That it has stood up through good report and evil report and strengthened its position all the time is a measure of its intrinsic vitality and its sound business methods; it also shows how much headier its growth would have been if it had been left to develop unharassed and unhampered. Giltedge has been an anxious feature, as the Central Bank had

a large giltedge portfolio in view of the need for keeping a liquid position. Its misfortune in this respect is, it is some consolation, universal.

( In Rupees—000's omitted. )

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	1,68,13	1,68,13	1,68,13
Reserves ... ..	93,00	86,20	70,00
Total of Capital and Reserves	2,61,13	2,54,33	2,38,13
Current and Savings Bank Deposits and Bills Payable, &c. ... ..	6,13,92	7,88,39	7,41,38
Fixed Deposits ... ..	6,50,80	6,94,91	7,82,59
Total of Deposits ... ..	12,64,72	14,83,30	15,23,97
Due to Bankers ... ..	1,93,79	79,93	2,77,51
Acceptances, Bills for Collection, &c. ... ..	1,62,47	1,43,55	1,08,44
<b>Assets—</b>			
Cash ... ..	1,70,82	1,85,43	1,70,33
Giltedge Investments ... ..	5,85,37	7,76,26	10,52,24
Bills Discounted ... ..	91,20	56,60	44,18
Total Liquid Assets ... ..	8,47,39	10,18,30	12,66,75
Properties, &c. ... ..	1,12,93	1,12,00	1,19,69
Loans, Advances and other Investments ... ..	7,77,36	7,20,63	6,77,68
Acceptances, Bills receivable per contra ... ..	1,54,75	1,21,24	95,78
Percentage of Total Capital and Reserves to Total Deposits ... ..	20'6	17'1	15'6
Percentage of Total Liquid Assets to Total Deposits ... ..	67'0	68'7	80'1
<b>Profit and Loss Items—</b>			
Brought forward ... ..	4,56	3,71	5,00
Profits ... ..	13,48	17,63	17,62
Dividend distribution ... ..	10,09	10,09	10,09
Allocation to Funds ... ..	4,25	6,25	8,45
Carried forward ... ..	3,71	5,00	4,08
Dividend Rate per cent. ... ..	6	6	6

THE INDIAN BANK, LTD.

The founder of the Indian Bank was the late Mr. V. Krishnaswamy Iyer, no less renowned as a patriot and a Congress worker than as a judge of the High Court and a Member of the Executive Council of Madras. The bank was the recipient of considerable patronage of local depositors partly as a recoil from the Arbuthnot disaster and partly by its appeal to parochial patriotism. On the advice of Sir Lallubhai Samaldas, Mr. Vidvasagar Pandya was appointed as the first Secretary and he served the bank in this capacity for more than two decades. The progress of the bank, which was well-maintained during the Secretaryship of Mr. Pandya and which was specially noteworthy during Mr. Balaji Rao's tenure, has suffered a set-back; and the directors may have to think of new plans for the arrest of the decline and the resumption of the old pace of growth. The bank with its head office at Madras has got 14 branches distributed throughout South India. The Chairman of the Board of Directors is Mr. H. Md. Abdul Azees Badsha Sahib and the Secretary at the Head Office is Mr. P. S. Suryasekaran. Its subscribed capital is Rs. 48 lakhs while the paid up capital is about Rs. 13 lakhs. The reserve fund which was Rs. 9½ lakhs in 1929 has grown to Rs. 12½ lakhs in 1931. A contingency fund of Rs. 1½ lakhs is available for meeting any emergencies. Deposits which reached the total of 193 lakhs in 1930 have fallen off to Rs. 173 lakhs. The profits for 1931 showed a distinct falling off owing to the world-wide depression. There was a depreciation of Rs. 4.40 lakhs in the bank's holding of Government paper, part of which has since been made good by the recent recovery in giltedge prices. From the particulars given by the Chairman at the Annual General Meeting it is clear that the entire holding of the bank is in terminable loans most of them maturing within 1936. Notwithstanding the decline in profits the dividend has been maintained unchanged at 12 per cent. but the allocation to the contingency fund has been on a very much reduced scale.

(In Rupees—000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	12,79	12,79	12,79
Reserves and other Funds ... ..	9,72	11,72	12,96
Total of Cash and Reserves ... ..	22,51	24,51	25,75
Total Deposits ... ..	1,86,62	1,92,56	1,72,68

**Novel Features of**  
**CENTRAL BANK OF INDIA'S**  
**IMPORTANT SERVICES TO THE NATION**



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**FREE LIFE INSURANCE**  
*without payment of*  
**PREMIUMS**  
 FOR DEPOSITORS OF  
**THE CENTRAL BANK OF INDIA, LIMITED**

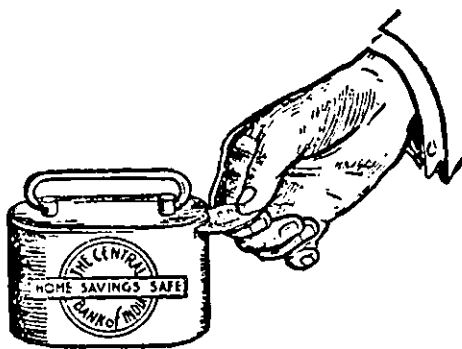
FREE LIFE INSURANCE POLICIES issued without payment of Premiums with the Bank's Cash Certificates and Fixed Deposit Receipts

and  
 For the benefit of SAVINGS DEPOSITORS LIFE POLICIES of Rs. 500 and Rs. 1,000 issued for Savings Depositors of the Central Bank of India, Ltd., on easy system of Premium payments of Re. 1 and Re. 1/8/- monthly on Policy of Rs. 500 and Rs. 2 and Rs. 3 monthly on Policy of Rs. 1,000 according to age.

**3 YEARS' CASH CERTIFICATES**  
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Issued in Multiples of Rs. 100, 500, 1,000, 10,000, 1,00,000, in one or more names, repayable to either or Survivor.

For every Rs. 85/12/- that you deposit with the Bank to-day, you will receive Rs. 100 after 3 years.



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**Money Work**  
**for You**

You can secure a neat safe, holding both coins and notes by becoming a Savings Bank Depositor with us. We retain the key and as often as you bring it to us, the safe is opened and contents deposited in your name.

The man on a small salary, who can save, but a small amount each month, will find this an admirable plan.

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 71, CROSS STREET.                      Head Office :—BOMBAY.                      10, LINDSAY STREET.

S. N. POCHKHANAWALLA—Managing Director.

(In Rupees—000's omitted)

	1929	1930	1931
<b>Assets—</b>			
Cash ... ..	52,72	54,86	30,19
Giltedge investments ... ..	80,96	45,96	61,68
Total of Liquid Assets ... ..	83,68	1,03,82	91,87
Loans and Advances ... ..	1,24,89	1,14,39	1,08,87
Properties, &c. ... ..	4,66	5,74	6,57
Percentage of Capital and Reserve to total Deposits ... ..	12'1	12'7	14'9
Percentage of total Liquid Assets to total Deposits ... ..	44'8	52'1	53'2
<b>Profit and Loss Items—</b>			
Brought forward ... ..	19	33	39
Profits ... ..	3,95	8,01	2,46
Dividend distribution ... ..	1,53	1,53	1,53
Allocation to Funds ... ..	2,08	1,80	1,09
Carried forward ... ..	43	39	23
Dividend Rate per cent. ... ..	12	12	12

**THE OUDH COMMERCIAL BANK, LTD.**

(In Rupees—000's omitted.)

	1929	1930
<b>Liabilities :—</b>		
Capital ... ..	5,00	5,00
Reserves ... ..	1,00	1,00
Total of Capital and Reserves ... ..	6,00	6,00
Current Deposits ... ..	8	18
Fixed and Other Deposits ... ..	8,19	2,84
Total of Deposits ... ..	8,27	3,02
Property Mortgaged ... ..	2,40	2,40

	1929	1930
<b>Assets :—</b>		
Cash ... ..	54	56
Giltedge Investments ... ..	55	55
Total of Liquid Assets ... ..	1,09	1,11
Loans ... ..	9,83	9,08
Properties, &c. ... ..	2,58	2,58
Percentage of Total Capital and Reserves to Total Deposits ... ..	183'5	198'7
Percentage of Total Liquid Assets to Total Deposits ... ..	33'3	36'8

	1929	1930
<b>Profit and Loss Items :—</b>		
Brought Forward ... ..	11	24
Profit ... ..	43	44
Dividend Distribution ... ..	30	30
Allocation to Funds ... ..	...	...
Carried Forward ... ..	24	33
Dividend Rate per cent. ... ..	6	6

**THE PUNJAB NATIONAL BANK, LTD.**

Balance Sheet as on 31st December, 1931.

(In thousands of Rs.)

<b>Liabilities—</b>	
Reserves ... ..	21,21
Total of Capital and Reserves ... ..	52,47
Fixed Deposits ... ..	3,04,11
Current and Other Deposits ... ..	98
Total Deposits ... ..	4,03,09
Due to Bankers ... ..	1,13,10
Acceptances and bills for collection ... ..	26,70
<b>Assets—</b>	
Cash ... ..	19,92
Giltedge Investments ... ..	2,02,32
Total Liquid Assets ... ..	2,22,24
Loans, Advances, Bills discounted ... ..	2,72,11
Properties ... ..	1,91
Acceptances and Bills Lodged ... ..	23,19
Percentage of Capital and Reserves to Total Deposits ... ..	13
Percentage of Total Liquid Assets to Total Deposits ... ..	55
<b>Profit and Loss Items—</b>	
Brought Forward ... ..	3
Profits ... ..	1,17
Dividend ... ..	Nil.
Writing of Bad debts ... ..	1,05
Carry forward ... ..	14
Capital ... ..	31,26

**THE UNION BANK OF INDIA, LTD.**

The Union Bank of India was started in 1919 ; and the capital in the earlier years was Rs. 60 lakhs paid up. Since its inauguration, business conditions in Bombay, to which centre the Bank's activity is confined, have been so consistently and persistently bad that with all the competition offered by the numerous banks in the City, the Union Bank could not make any headway. The Bank was also unfortunate in regard to some of its investments, and particularly in regard to the building which it purchased for its office. In 1922-23, however, the Central Bank of India secured a controlling interest in the Union Bank by purchasing a considerable number of the shares of the latter, as a result of which the Central Bank was appointed as the Managing Agents. The result is that the Union Bank is the unique instance of a bank being managed by another bank as managing agent. Soon after the transfer of the management to the Central Bank, a reconstruction of capital was effected, so that the present position is that the paid up capital is Rs. 40 lakhs. Bad investments were provided for in the writing down of capital as well as the difference between the purchase price and the intrinsic value of the building. The Union Bank has not set before itself any high-sounding or ambitious programme but carries on a simple, straight-forward business in a small but sure way. The Bank is in an eminently satisfactory position without any swollen assets or bad debts.

(In Rupees—000's omitted.)

	1930	1931	1932
<b>Liabilities—</b>			
Capital ... ..	89,90	39,90	39,90
Reserves ... ..	7,70	8,20	7,00
Total of Capital and Reserves ... ..	47,60	48,10	46,90
Total Deposits ... ..	27,37	27,56	28,42
<b>Assets—</b>			
Cash ... ..	7,34	6,57	5,16
Giltedge Investments ... ..	21,32	39,81	40,23
Bills discounted ... ..	8,75	67	52
Total of Liquid Assets ... ..	32,41	47,05	45,91
Loans and Advances ... ..	42,30	27,79	28,80
Properties, etc. ... ..	4,23	4,10	3,98
Percentage of Capital and Reserves to Total Deposits ... ..	174	175	165
Percentage of Total Liquid Assets to Total Deposits... ..	155	171	162
<b>Profit and Loss Items—</b>			
Brought forward ... ..	1,05	60	65
Profits ... ..	2,85	2,34	2,17
Dividend distribution ... ..	2,00	2,00	2,00
Allocation to Funds ... ..	80	90	25
Carried forward ... ..	60	65	57
Dividend Rate per cent. ... ..	5	5	5

Year ends March 31.

**Indian Co-operative Banks.**

**THE BIHAR AND ORISSA PROVINCIAL CO-OPERATIVE BANK.**

The Bihar and Orissa Provincial Co-operative Bank has a satisfactory position as to the present and sturdy features of growth as to the future. The paid up capital of the Bank is Rs. 5.77 lakhs. The various reserve funds amount to Rs. 4.20 lakhs, besides which there is a security of Rs. 3.80 lakhs afforded by the uncalled liability of the Guarantee Shares. Total deposits amount to Rs. 65.50 lakhs. Miscellaneous deposits like provident fund etc., come to nearly Rs. 2 lakhs. On the liabilities side, loans and advances, inclusive of interest due, amount to Rs. 45.54 lakhs. Deposits with other banks amount to Rs. 6.10 lakhs; giltedge securities are Rs. 27.71 lakhs. After making substantial provisions for doubtful debts, depreciation of government securities, reserve fund etc., the Bank was able to declare a dividend of 6 per cent and a bonus of 2 per cent. There has been a marked increase in the resources of the Bank. But the depreciation on the bank's holdings of giltedge securities has caused anxiety of the directors, who have, however, been able to provide for the difference between book value and market value from the current revenue save for a paltry sum of Rs. 12,000. The Bank is proposing to extend its activity in the direction of long-term loans to



agriculturists; towards this end, the local government have been approached with a view that they should guarantee interest on twenty-year debentures. Once this request is acceded to by the local government, there will be further expansion in the business of the Bank.

Balance Sheet as at 31st December, 1930.

(In thousand of Rs.)

Liabilities—			
Capital	...	...	5,77
Reserves	...	...	4,20
Total of Capital and Reserves	...	...	9,97
Fixed Deposits	...	...	48,09
Current and other Deposits	...	...	19,40
Total of Deposits	...	...	67,49
Due to Bankers	...	...	18
Interest payable	...	...	2,14

Assets—			
Cash	...	...	33
Giltedge investments	...	...	27,71
Total of Liquid Assets	...	...	28,04
Loans and Advances	...	...	43,71
Interest Receivable	...	...	1,83
Profits, etc.	...	...	75
Percentage of Capital and Reserves to Total Deposits	...	...	15
Percentage to Total Liquid Assets to Total Deposits	...	...	42

Profit and Loss Items—			
Brought Forward	...	...	1
Profits	...	...	98
Dividend Distribution	...	...	43
Allocation to Funds	...	...	25
Carried Forward	...	...	1
Dividend Rate per cent.	...	...	8

THE BOMBAY PROVINCIAL CO-OPERATIVE BANK, LIMITED.

Amongst the central provincial co-operative banks, the Bombay Provincial Co-operative Bank occupies an important place alike by the vastness of its resources, the wide sphere of its activity, and the genuine spirit of co-operation actuating those at the helm of affairs. The Bank has a fine network of branches, there being over thirty branches. The deposits of the Bank are roundabout Rs. 120 lakhs, against which it holds considerable volume of liquid securities. To the extent that liquid assets mean Government securities, the Bank has suffered from the common malady of shrinkage in giltedge values. It has tried, as far as possible, to provide for such depreciation by suitable allocation from current profits. However, it has not been always possible to make the full provision necessary by this means. In fact, it is becoming the common practise of Indian banks to show giltedge investments at cost price (and not market price) so long as such securities are terminable in the comparatively near future. That the Bombay Provincial Co-operative Bank has not been content with this procedure but endeavoured to make a substantial allocation from current profits towards depreciation in giltedge, shows the cautious policy pursued by the Directors. The Chairman of the Bank is Sir Chunilal Mehta; and the Managing Director is Mr. V. L. Mehta, than whom India has no keener enthusiast in co-operation. The Bank closes its accounts as on March 31.

(In Rupees—000's omitted.)

Liabilities—			
	1929	1930	1931
Capital	...	12,74	12,88
Reserves	...	2,25	98
Debentures	...	7,80	9,80
Total of Capital, Reserves and Debentures	...	22,79	23,66
Fixed Deposit	...	1,05,16	76,91
Current and other Deposits	...	42,53	43,61
Total Deposits	...	1,47,69	1,20,52
Due to Government	...	5,05	67
			1,20

(In Rupees—000's omitted)

Assets—			
	1929	1930	1931
Cash	...	5,05	4,06
Giltedge Investment	...	52,32	47,72
Total of Liquid Asset	...	57,37	51,78
Loans to Co-operative banks, &c.	...	65,98	77,22
Land Improvement loans	...	4,83	4,82
Other Loans and Investments	...	53,12	17,70
Properties, etc.	...	45	56
Percentage of Capital and Reserve to total Deposits	...	15.4	19.6
Percentage of liquid Assets to total Deposits	...	38.9	43.0

Profit and Loss Items—

Brought forward	...	34	26	24
Profits	...	1,29	89	92
Dividend distribution	...	1,02	77	73
Allocation to funds	...	35	...	...
Carried forward	...	26	24	19
Dividend Rate per cent.	...	8	6	6

G. I. P. RAILWAY EMPLOYEES, CO-OPERATIVE CREDIT SOCIETY, LTD.

(In Rupees—000's omitted)

Liabilities—			
	1929	1930	1931
Capital	...	7,90	8,76
Reserves	...	2,10	2,33
Total of Capital and Reserves	...	10,00	11,09
Fixed and Other Deposits	...	29,91	34,63

Assets—

Cash	...	40	2,13	1,13
Loans due from Members	...	37,80	42,78	48,83
Other Loans and Investments	...	3,89	2,26	3,03
Properties	...	8	8	8
Percentage of Capital and Reserves to Deposits	...	33.4	32.00	...

Profit and Loss Items—

Brought forward	...	...	...	2
Profits	...	94	96	73
Dividend Distribution	...	70	64	59
Allocation to Funds	...	24	30	21
Carried forward	...	...	2	...
Dividend Rate per cent.	...	10	8.25	6.25

Year ends 31st March

THE MADRAS PROVINCIAL CO-OPERATIVE BANK, LTD.

The Madras Provincial Co-operative Bank is, perhaps, the most puissant of the provincial central co-operative banks. Its deposits are nearly Rs. 160 lakhs. Against a paid up capital of Rs. 6.5 lakhs, the Bank has a Reserve Fund of Rs. 10.23 lakhs and a Depreciation Reserve Fund of Rs. 4.56 lakhs. The Madras Provincial Co-operative Bank has the unique good fortune of enjoying the goodwill of such clients as would normally place their deposits. It is, perforce, obliged to have considerable investment in Government securities, which amount to nearly Rs. 70 lakhs. Cash and fixed deposits with other banks amount to Rs. 17 lakhs. It will thus be seen that the liquid assets are fully Rs. 87 lakhs—an extraordinarily strong position for a co-operative bank. In spite of the difficult trading conditions, the Bank has maintained its level of profits and the usual basis of dividend. Its allocation to reserve and towards depreciation are substantial. It is, perhaps, the only instance of an Indian bank which has fully met the provision for the depreciation on Government securities entirely out of the net profits. The Chairman of the Bank is Mr. V. Ramdas Pantulu and the Secretary, Mr. V. C. Rangaswami, whose great popularity with the influential sections of Madras is largely responsible for the steady increase in the Bank's deposits.



(In Rupees 000's omitted.)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	6.14	6.20	6.53
Reserves ... ..	9.00	9.61	10.23
Total of Capital and Reserves ... ..	15.14	15.81	16.76
Total Deposits, Current, Fixed, etc. ... ..	1,29.73	1,59.94	1,58.56
Due to Bankers ... ..	...	7.86	...
<b>Assets—</b>			
Cash ... ..	2.71	1.29	12.05
Giltedge Investment ... ..	57.62	58.27	70.09
Total of Liquid Assets ... ..	60.33	59.56	82.14
Loans to Central Banks ... ..	78.33	1,15.00	86.97
Other Loans and Advances ... ..	4.69	4.20	10.64
Properties, &c. ... ..	76	77	24
Percentage of Capital and Reserves to Total Deposits ... ..	11.7	9.9	10.6
Percentage of Liquid Assets to Total Deposits ... ..	48.0	37.3	51.8
<b>Profit and Loss Items—</b>			
Brought forward ... ..	18	16	24
Profits ... ..	2.48	2.44	2.56
Dividend distribution ... ..	54	56	58
Allocation to Funds ... ..	1.87	1.81	2.05
Carried forward ... ..	16	24	17
Dividend Rate per cent. ... ..	9	9	9

Year ends 30th June

THE PUNJAB CO-OPERATIVE BANK LTD.

(In Rupees—000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	7.79	7.88	7.89
Reserves ... ..	3.40	4.25	5.25
Total of Capital and Reserves ... ..	11.19	12.13	13.14
Current Deposits ... ..	5.04	5.96	6.47
Fixed and other Deposits ... ..	77.41	92.10	89.05
Total of Deposits ... ..	82.45	98.06	95.52
<b>Assets—</b>			
Cash ... ..	3.78	7.15	3.81
Giltedge Investments ... ..	24.70	34.00	31.96
Total of Liquid Assets ... ..	28.48	41.15	35.77
Loans and Advances ... ..	67.59	71.88	75.98
Properties, &c. ... ..	1.35	1.34	1.33
Percentage of Capital and Reserves to Total Deposits ... ..	13.6	12.3	13.8
Percentage of Total Liquid Assets to Total Deposits ... ..	34.5	42.0	37.4
<b>Profit and Loss Items—</b>			
Brought forward ... ..	...	1	1
Profits ... ..	89	96	76
Dividend distribution ... ..	35	35	36
Allocation to Funds ... ..	53	59	41
Carried forward ... ..	1	1	...
Dividend Rate per cent. ... ..	9	9	9

# THE BANK OF BARODA, LIMITED.

(INCORPORATED IN BARODA)

*Under the patronage of, and largely supported by, the Government of H. H. the Maharaja Gaekwar. Registered under the Baroda Companies' Act III of 1897.*

Capital Subscribed	...	...	Rs. 60,00,000
Capital Paid up	...	...	„ 30,00,000
Reserve Fund	...	...	„ 20,00,000

Head Office :—BARODA

Branches :—AHMEDABAD, NAYSARI, MEHSANA, SURAT, BOMBAY, DABHOI, PATAN, PETLAD, AMRELI, SAIDHPUR, KADI, BHAYNAGAR, KARJAN, KALOL, DWARKA AND PORT OKHA.

London Agents :

THE EASTERN BANK LIMITED.

Directors :

- Sir Lallubhai Samaldas, Kt., C.I.E., Chairman.
- Raj Ratna Bhailal Dajibhai Amin, B.A., M.S., C.I., (Managing Agent, Alembic Chemical Works Co., Limited, Baroda).
- Sheth Durgaprasad Sambhuprasad Laskari, (Mill Agent, Ahmedabad).
- Bhaskarrao Vitaldas Mehta, Esq., M.A., LL.B., Bhaynagar.
- Maganlal H. Kantavalla, Esq., M.A., Agent, Maharaja Mills Co., Ltd., Baroda.
- R. B. Govindbhai H. Desai, B.A., LL.B., Baroda.
- N. M. Mazumdar, Esq., Bar-at-Law, (Tata Sons Ltd., Bombay).
- Sheth Pransukhlal Mefatlal (Shorrocks Mills Ltd., Ahmedabad).
- Ranilal Hiralal Desai, Esq., B.A., LL.B., Naib Dewan, Baroda.

**Current Deposit Accounts** :—Interest allowed on daily balance from Rs. 300 to Rs. 1,00,000 at the rate of 2½% from 1st January to 30th June and 2% from 1st July to 31st December and on sums over Rs. 1,00,000 by special arrangement. No interest, which does not come to Rs. 3 per half-year, will be allowed.

**Fixed, Short and Savings Bank** :—Deposits received on favourable terms. Rules on application.

**Loans, Overdrafts and Cash Credits** :—The Bank grants accommodation, on terms to be arranged, against approved securities.

**Savings Bank Deposit Accounts** :—Sums of Rs. 300 and over accepted at 4% by transfer from Savings Bank accounts subject to three months' notice of withdrawal. Rules on application.

C. E. RANDLE,  
General Manager.

# ALLAHABAD BANK, LIMITED.

ESTABLISHED 1865.

Affiliated to the P. & O. Banking Corporation, Limited.

AUTHORISED and Subscribed Capital	...	...	Rs.	40,00,000
CAPITAL called-up	...	...	„	35,50,000
RESERVE FUND	...	...	„	44,50,000

Head Office :—CALCUTTA.

## Branches and Sub-Agencies :

Agra.	Chandausi.	Lahore.	Muttra.
Allahabad.	Dehra Dun.	Lahore City Office.	Nagpur.
Allahabad City Office.	Delhi.	Lucknow	Naini Tal.
Amritsar.	Fyzabad.	Lucknow City Office.	Patna.
Bareilly.	Gorakhpur.	Aminabad (Lucknow)	Kai Bareli.
Benares.	Hapur.	Lyallpur.	Raipur.
Bombay.	Hathras.	Meerut.	Rangoon.
Cawnpore.	Jhansi.	Moradabad.	Shahjahanpur.
Cawnpore City Office.	Jubbulpore.	Mussoorie.	Sitapur.

## Pay Offices :

Auraiya.	Muzaffarnagar.	Ghaziabad.
Etawah.	Sikandarabad, U. P.	Hardoi.
Firozabad.	Ujhani.	Moradabad City.

## London Bankers :

**The P. & O. Banking Corporation, Ltd.**

**The National Provincial Bank, Ltd.**

*Correspondents in all the Principal towns in India.*

Banking business of every description transacted on terms which may be ascertained on application.

M. V. WILSON,  
General Manager.

British Banks :

(In Sterling—000's omitted)

**THE CHARTERED BANK OF INDIA, AUSTRALIA AND CHINA.**

Among the eastern exchange banks operating in India, the Chartered Bank of India, Australia and China is a premier institution, alike in the size of its capital and the extent of its banking resources. The bank was founded in 1853 and is one of the few banks which are at present operating under Royal charter. The bank has a wide-spread branch organisation in India, Dutch East Indies, China, Japan and Federated Malay States and has important offices in New York and Hamburg. It owns nearly 80 per cent. of the capital of the P. & O. Banking Corporation and through it controls the Allahabad Bank.

In recent years, the bank has had to operate under particularly difficult conditions in India and the Far East. The year 1931 was a particularly difficult year for this bank. The abandonment of the gold standard in Great Britain caught the bank with an oversold position in gold currencies and the liquidation of these commitments entailed an exceptionally heavy loss necessitating a transfer of £1 million from the Reserve Fund to meet it. The bank was also affected by the heavy decline in British and Indian Government securities but it was considered unnecessary to provide for this, in view of the subsequent recovery in prices. The total deposits had declined from £45 million in 1929 to about £39 million in 1931. Profits for the year 1931 at £382,000 showed a considerable decline over the preceding two years and was not sufficient to meet even the dividend payment of 14 per cent. The customary bonus of 6½ per cent. could not be paid and no allocations were made to reserve fund. The year was one of unparalleled difficulty but the bank is in an exceptionally strong position to weather the depression.

(In Sterling 000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	3,000	3,000	3,000
Reserves ... ..	4,000	4,000	3,000
Total of Capital and Reserves ...	7,000	7,000	6,000
Notes in Circulation ... ..	2,105	1,910	1,965
Deposits ... ..	44,917	40,834	38,616
Acceptances, Bills Payable, &c. ...	6,421	4,444	6,189
<b>Assets—</b>			
Cash ... ..	5,146	5,961	5,626
Investments ... ..	11,246	11,555	11,518
Bills of Exchange ... ..	14,620	11,087	8,349
Loans and Advances ... ..	24,182	21,027	22,602
Property, Acceptance Cover, &c. ...	3,612	2,989	2,742
Shares in Allied Banks, &c. ... ..	2,276	2,288	2,298
Percentage of total Capital and Reserves to Deposits ... ..	15·6	17·1	15·5
Percentage of Cash to Deposits ...	11·5	14·6	14·6
<b>Profit and Loss Items—</b>			
Brought forward ... ..	187	191	188
Profit ... ..	662	684	382
Dividend distribution ... ..	608	608	420
Allocation to Funds ... ..	50	80	...
Carried forward ... ..	191	188	149
Dividend Rate per cent. ... ..	20·25	20·25	14·0

**THE EASTERN BANK, LTD.**

The Eastern Bank was founded in 1909 and has established branches not only in India but in Mesopotamia, Singapore and Ceylon. Notwithstanding the severe competition in recent times, the bank has succeeded in maintaining a steady level of business. Contrary to the experience of other exchange banks, the deposits of the Eastern Bank at the end of 1931 show a slight increase over 1930 and the distribution of assets among the various heads is unchanged. There was a depreciation of £300,000 in the bank's holdings of giltedge securities but owing to the subsequent appreciation the Directors have not thought fit to make any special allocations either from reserves or from profits to cover this deficiency.

(In Sterling—000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	1,000	1,000	1,000
Reserves ... ..	450	480	480
Total of Capital and Reserves ...	1,450	1,480	1,480
Deposits ... ..	6,224	5,577	5,606
Acceptances, Bills Payable, &c. ...	3,437	3,393	2,502

**Assets—**

	1929	1930	1931
Cash ... ..	1,272	1,261	1,322
Investments ... ..	2,851	3,161	3,285
Bills Receivable ... ..	1,688	1,588	1,351
Loans and Advances ... ..	3,994	2,678	2,624
Property, Acceptance Cover, &c. ...	1,438	1,887	1,145
Percentage of Total Capital, and Reserves to Deposits ... ..	23·3	26·5	26·4
Percentage of Cash to Deposits ...	20·4	22·6	23·6

**Profit and Loss Items—**

	1929	1930	1931
Brought forward ... ..	44	48	50
Profits ... ..	124	117	120
Dividend distribution ... ..	90	90	60
Allocation to Funds ... ..	30	25	75
Carried forward ... ..	48	50	34
Dividend Rate per cent. ... ..	9	9	6

**LLOYDS BANK LIMITED.**

Lloyds Bank, Ltd., is the only Bank among the Big Five of London to operate in India through direct branches. Amongst British Banks, Lloyds Bank is the second largest in England (apart from the Bank of England). It has 1,900 offices in England and Wales. The strength, influence, resources, connections and branches which Lloyds Bank has in Britain are the result of a series of fusions or amalgamations of a number of banking institutions. While the activity at home was thus broadened and strengthened, Lloyds Bank, has, at the same time, taken steps to develop its business in overseas centres. Through its affiliates, it has many branches in France, in centres like Brussels, Antwerp and Geneva, in Italy, South America, West Africa, New Zealand, Egypt, India and Burma. The Indian business (which was acquired through the purchase of Cox & Co.,) is controlled by a special Eastern Department of the Bank in London. The balance sheet as at 31st December 1931 reveals a decline in deposits of £31 millions, a drop of 8.4 per cent. over the previous year. Deposits of all the clearing banks in London showed an aggregate decrease of £148 million or a fall of 7.8 per cent. On the assets side, cash and money at call have declined by £6 million each, Treasury Bills by £11 million, advances by £8 million. The Bank's holding of British Government securities has been written down by a sum of £2½ million transferred from the public reserves. Profits at £1,927,000 was £200,000 less than in the preceding year. The dividend has been reduced from 16½ per cent. to 13½ per cent. in 1931. It is reported that the "secret" reserves of the bank are maintained in "abundant strength."

(In Sterling—000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	15,810	15,810	15,810
Reserves ... ..	10,000	10,000	7,500
Total of Capital and Reserves ...	25,810	25,810	23,310
Deposits ... ..	351,645	364,655	333,785
Acceptances, Endorsements, Guarantees, etc. ... ..	52,232	42,518	36,141
<b>Assets—</b>			
Cash ... ..	88,153	86,280	73,323
Investments ... ..	37,134	52,651	51,327
Bills of Exchange ... ..	39,625	53,733	42,587
Loans and Advances ... ..	191,752	175,908	167,518
Property, Acceptance Cover, &c. ...	67,788	59,550	54,366
Shares in Allied Banks, &c. ... ..	6,784	6,139	5,332
Percentage of Total Capital and Reserves to Deposits ... ..	7·3	7·1	7·0
Percentage of Cash to Deposits ...	25·1	23·7	22·0
<b>Profit and Loss Items—</b>			
Brought forward ... ..	490	508	511
Profit ... ..	2,542	2,130	1,927
Dividend distribution ... ..	1,974	1,727	1,516
Allocation to Funds ... ..	550	400	400
Carried forward ... ..	503	511	522
Dividend Rate per cent. ... ..	a. 16·7	a. 15	a. 13·3

a = on "A" Shares  
b = on "B" Shares

**THE MERCANTILE BANK OF INDIA, LTD.**

The Mercantile Bank of India was registered in 1892; and it has had long and influential connections in India. In addition, the Bank has branches and agencies in Ceylon, Malaya, China, Dutch East Indies, Siam and Mauritius. As with other Eastern exchange banks, the loss on Government securities

necessitated special measures, for which the Bank transferred £450,000 from the Reserve Fund to inner reserves. Considering that during the half-year of 1932, giltedge securities both in India and London have shown remarkable recovery, the inner reserves are now in an exceptionally strong position owing to the release of the funds set apart for the 1931-end shrinkage in giltedge values. Even after the transfer of £450,000 from the Reserve Fund, the latter stands at a figure which is exactly equivalent to the paid up capital, namely, £1,050,000. As Sir Thomas Catto, the Dy. Chairman of the Bank, said at the last annual meeting, it is the cautious policy of the directors in better years "which made the financial timbers of the good ship 'Mercantile Bank' so strong that she was able to ride the tempest of last year in a manner worthy of her traditions and her place in Eastern banking."

(In Sterling—000's omitted.)

Liabilities—				
	1929	1930	1931	
Capital	1,050	1,050	1,050	
Reserves	1,480	1,500	1,050	
Total of Capital and Reserves	2,530	2,550	2,100	
Notes in circulation	247	275	175	
Deposits	12,678	13,979	11,220	
Acceptances, Bills payable, etc.	2,152	588	952	
Assets—				
Cash	2,152	2,667	1,458	
Investments	5,053	6,081	5,774	
Bills receivable	2,928	2,517	1,854	
Loans and Advances	6,818	5,508	5,825	
Property, Acceptance cover, etc.	911	921	757	
Percentage of total Capital and Reserve to Deposits...	20.0	18.2	18.7	
Percentage of Cash to Deposits	17.0	19.0	13.0	
Profit and Loss Items—				
Brought forward	162	167	167	
Profits	257	213	152	
Dividend distribution	168	168	126	
Allocation to Funds	85	45	25	
Carried forward	167	167	168	
Dividend Rate per cent	16	16	12	

## THE NATIONAL BANK OF INDIA, LTD

The National Bank of India Limited, was originally founded in Calcutta as a rupee company in 1863 but was soon after registered in England and converted into a sterling company. Its principal sphere of activity is in India but it has important business in East Africa, Kenya and Uganda. The accounts for the year ended 31st December, 1931, show a shrinkage of deposits of about 3 million which has been offset by loans payable against securities to the extent of 1,800,000 and by a decline in cash. Investments of the bank in giltedge securities have been written down to their market value by the transfer of 800,000 from the Reserve Fund. The balance sheet shows a very liquid position, the total cash securities in Bills of Exchange amounting to 22,400 against the deposit liability of 27,800. The dividend for the year 1931 is 20 per cent. less tax as compared with 20 per cent. free of tax in the preceding years.

(In Sterling—000's omitted)

Liabilities :—				
	1929	1930	1931	
Capital	2,000	2,000	2,000	
Reserves	3,000	3,000	2,200	
Total of Capital and Reserves	5,000	5,000	4,200	
Deposits	31,467	30,860	27,804	
Acceptances, Bills payable, etc.	1,468	1,255	2,711	
Assets—				
Cash	4,915	4,556	3,819	
Investment	11,875	13,965	12,956	
Bills of Exchange	7,450	5,784	5,632	
Loans and Advances	13,084	12,312	12,018	
Property, Acceptance cover, etc....	1,196	1,058	848	
Percentage of Total Capital and Reserves to deposits	15.9	16.2	15.1	
Percentage of Cash to Deposits	15.6	14.8	13.7	
Profit & Loss Items—				
Brought forward	277	278	279	
Profits	511	480	470	
Dividend Distribution	400	400	400	
Allocation to Fund	110	80	70	
Carried forward	278	279	279	
Dividend Rate per cent	20.0	20.0	20.0 (1)	

(1) Subject to tax

## NATIONAL PROVINCIAL BANK, LTD.

(Represented in India by Messrs. Grindlay & Co., Ltd.)  
Year ended 31st December, 1931.

(In million £)

Liabilities—				
				£
Capital and Reserves	...	...	...	17
Undivided Profits	...	...	...	1
Acceptances	...	...	...	9
Deposit and Current Accounts	...	...	...	262
Total	...	...	...	289
Assets—				
Cash in hand and at Bank, etc.	...	...	...	39
Investments	...	...	...	36
Cash at call and short notice	...	...	...	19
Discounts and Advances	...	...	...	179
Buildings and sundries including cover for acceptances	...	...	...	16
Total	...	...	...	289

## THE P. &amp; O. BANKING CORPORATION, LTD.

The P. & O. Banking Corporation was founded in 1920 and among the original allottees of shares in this Bank were the Westminster Bank, Lloyds Bank, the National Provincial Bank and the P. & O. Steam Navigation Co. The bank's progress has not been as spectacular as was anticipated at the time of inception, owing largely to the severe post-War slump and unsettled conditions in the East. In spite of these difficulties, the Bank has been able to secure for itself an important position among the eastern exchange banks. Towards the end of 1920, the Bank acquired practically all the ordinary capital of the Allahabad Bank, Limited, and through it controls a prosperous inland banking business. In 1927, however, the P. & O. Bank, in its turn, was affiliated to the Chartered Bank of India, Australia and China. The deposits of the bank during the last three years have remained steady at about £8 million. The bank has also been in the habit of raising all its resources through loans against securities and this item during the last two years has shown a considerable expansion. The accounts for the latest year reveals a rise in the bank's holding of Indian government securities from £939,000 to £2,844,000. This considerable expansion appears to be due to the increased portfolio of rupee Treasury Bills. Owing to the comparatively small percentage of government securities among its assets, the Bank did not suffer very much from having to write down investments; and profits have been maintained at the same level as in the previous two years. The dividend is 5 per cent., leaving £26,000 to be carried forward.

(In Sterling—000's omitted.)

Liabilities—				
	1929	1930	1931	
Capital	2,594	2,594	2,594	
Reserves	180	180	160	
Total of Capital and Reserves	2,774	2,774	2,774	
Deposits	7,238	8,095	7,713	
Acceptances, Bills payable, etc.	4,839	7,799	8,065	
Assets—				
Cash	1,479	1,532	727	
Investments	1,002	1,971	4,444	
Bills receivable	3,036	5,958	8,405	
Loans and Advances	7,349	7,441	8,883	
Property, Acceptance Cover etc.,	1,524	1,309	638	
Shares in allied banks, etc.,	590	590	590	
Percentage of total Capital and Reserves to Deposits	38.3	34.3	36.0	
Percentage of Cash to Deposits	20.4	18.9	9.4	
Profit and Loss Items—				
Brought Forward	20	20	26	
Profits	107	107	103	
Dividend distribution	107	102	103	
Allocation to funds	...	...	...	
Carried forward	20	26	32	
Dividend Rate per cent	5	5	5	

Note :—Year ends 31st March.

THOS. COOK & SONS (BANKERS), LTD.

Balance Sheet as at 31st October, 1931.

(In £, 000's omitted)

<b>Liabilities—</b>		
Capital	...	125
Reserve Fund	...	125
Current Deposit and other accounts	...	2,624
Liability to customers on account of engagements etc., as per contra	...	14
	<b>Total</b>	<b>2,887</b>
<b>Assets—</b>		
		Rs.
Cash in hand and balances with bankers	...	398
Currencies in hand	...	22
Remittances in transit	...	345
Money at call and short notice	...	120
Bills discounted	...	1,078
Investments (at below market value, depreciation having been provided out of the year's profits)	...	620
Advances to customers and other accounts	...	225
Bank premises and furniture, at cost less amounts written off	...	65
Liability of customers for engagements, etc., as per contra	...	14
	<b>Total</b>	<b>2,887</b>

CHASE NATIONAL BANK.

The American Express Company is an affiliate of the Chase National Bank of the City of New York. This is no small distinction as the Chase Bank has, today, the pride of place amongst world banks for the size of its capital, reserves and deposits. The capital of the Chase Bank is \$148 million, surplus \$124 million and undivided profits \$19.07 million. Deposits amount to \$1,459 million while the total resources come to \$1,989 million. To the extent that the Chase National Bank occupies a front rank amongst the world's financial institutions, it has both its penalties and its privileges. The penalties in the case of a bank of such a position are that during a period of world-wide economic depression and trade stagnation, making of profits is a difficult matter and accrual of losses is easy as easy. A Bank like the Chase National Bank must have gone through many complete revolutions of the business cycle and experienced good times and bad times. The Chairman of the Bank, the well-known Mr. A. H. Wiggin, was able to claim, in his annual speech, that "through each successive period of economic depression and financial adversity, the Bank has striven to be helpful to the full measure of its power"; and that "it has invariably emerged from such trying periods with many new friends, enhanced reputation and enlarged opportunity for usefulness."

Foreign Banks:

(In Sterling—000's omitted)

THE AMERICAN EXPRESS COMPANY, INC.

AFFILIATED WITH THE CHASE NATIONAL BANK.

(In Dollars—000's omitted.)

	1929	1930	1931
<b>Liabilities—</b>			
Capital	6,000	6,000	6,000
Reserves and Undivided Profits	2,869	2,470	3,290
Deposits	17,876	20,117	15,437
Due to banks	3,587	...	...
Acceptances	5,019	4,233	1,472
Other liabilities	5,218	5,386	3,174
<b>Assets—</b>			
Cash	10,300	16,305	16,459
Giltedge Investments	3,693	3,191	1,706
Loans and Advances	16,629	10,533	6,688
Acceptances	5,019	4,233	1,472
Property and other assets	3,928	3,953	3,048

1929 1930 1931

Balance Sheet—March 31, 1931.

	\$
<b>Liabilities—</b>	
Capital	148,000,000
Surplus	124,000,000
Undivided profits	20,789,412
Reserve for taxes, interest, contingencies, etc.	28,649,854
Dividend payable April 1, 1932	5,550,000
Deposits	1,328,736,789
Circulating notes	16,132,150
Acceptances \$149,987,023; less amount in portfolio \$3,375,280	146,611,742
Liability as endorser on acceptances and foreign bills	35,027,928
Other liabilities	13,190,319
<b>Total</b>	<b>1,866,688,194</b>

BANK OF TAIWAN, LTD.

(In yens—000's omitted)

	1929	1930	1931
<b>Liabilities—</b>			
Capital	15,000	15,000	15,000
Reserves	...	414	1,214
Notes in Circulation	49,247	39,908	44,420
Deposits	245,686	239,848	236,426
Bills rediscounted	165,102	133,368	140,190
Acceptances	13,952	9,271	6,636
Other Liabilities	2,341	2,062	1,940
<b>Assets—</b>			
Cash	28,061	24,139	26,980
Investments	113,543	86,231	87,230
Loans and Bills discounted	321,727	308,357	313,293
Acceptances	13,952	9,271	6,636
Other Assets	14,045	11,372	11,687

	\$
Cash and due from banks	327,674,097
United States Government securities	176,552,988
Short term municipal securities maturing within two years	11,906,733
Other State and Municipal securities	7,011,194
Other short-term securities maturing within two years	39,174,487
Federal Reserve Bank stock	8,160,000
Other bonds and securities	86,183,905
Loans and discounts	1,025,865,725
Real estate	33,754,507
Redemption Fund—United States Treasurer	809,632
Customers' acceptance liability, \$141,157,157; less amount in portfolio \$3,375,280	137,781,877
Other assets	11,813,049
<b>Total</b>	<b>1,866,688,194</b>

Established 1911.

# The Bombay Provincial Co-operative Bank, Ltd.

(Registered under Co-operative Societies Act)

HEAD OFFICE:

APOLLO STREET, FORT, BOMBAY.

## Branches:

Barmali	District	Poona.	Virangam	District	Ahmedabad
Islampur	"	Satara.	Dhulia	"	West Khandesh
Karad	"	"	Dondaicha	"	"
Tasgaon	"	"	Shirpur	"	"
Satara	"	"	Shahada	"	"
Kirloskarwadi	"	"	Nandurbar	"	"
Koregaon	"	"	Sakri	"	"
Shirale	"	"	Sindkheda	"	"
Kopargaon	District	Ahmednagar	Malegaon	District	Nasik
Shevgaon	"	"	Satana	"	"
Ahmednagar	"	"	Kalvan	"	"
Bhivandi	District	Thana	Dohad	District	Panch Mahals
Palghar	"	"	Kalol	"	"
Kalyan	"	"			
Akluj	District	Sholapur			

*Apex Bank of the Co-operative Movement in Bombay Presidency.*

**WORKING CAPITAL EXCEEDS RS. 1,70,00,000**  
**FIXED, CURRENT AND SAVINGS DEPOSITS ACCEPTED.**

*Terms on Application*

ADVANCES made only to registered Co-operative Societies.

COLLECTION WORK undertaken on almost all important towns in the Bombay Presidency

Money deposited with this Bank directly benefits the Agriculturists and persons of small means.

*For further particulars write to Managing Director.*

# The Madras Provincial Co-operative Bank Ltd.

*(Formerly the Madras Central Urban Bank Ltd.)*

Head Office:

Luz, Mylapore, Madras.

Branch Office:

117, Armenian Street, George Town, Madras.

President:—V. Ramdas Pantulu.

Secretary:—V. C. Rangaswami.

Share Capital	-	-	Rs. 6,53,150
Reserve Fund	-	-	" 10,88,000
Deposits exceed	-	-	" 1,80,00,000

Investments in this Bank help Agriculture. Its support ought to be considered a patriotic duty by every one who has savings to invest.

The Bank offers facilities for the investment of large as well as small sums. Particular attention of investors is invited to the rules relating to Prudential and Provident deposits—schemes intended to encourage thrift and habits of banking.

COMPTOIR NATIONAL D'ESCOMPTE DE PARIS.

Balance Sheet as at 31st March, 1931.

(In million Frs.).

Liabilities—		Frs.
Current and deposit accounts ... ..	9,020	
Fixed Deposits ... ..	134	
Acceptances ... ..	247	
Sundry Accounts ... ..	138	
Shareholders' Account ... ..	23	
Reserves ... ..	434	
Capital ... ..	400	
<b>Total</b> ... ..	<b>10,396</b>	

Assets—		Frs.
Cash in hand and at Bank ... ..	901	
Bills of exchange discounted and French Treasury Bills ... ..	5,131	
Credit balances with banking correspondents ... ..	2,171	
Advances against collateral ... ..	385	
Investments ... ..	8	
Branches abroad ... ..	17	
Current Accounts ... ..	1,445	
Liability of customers on acceptances ... ..	247	
Sundry Accounts ... ..	75	
Bank premises ... ..	15	
<b>Total</b> ... ..	<b>10,396</b>	

THE HONGKONG AND SHANGHAI BANKING CORPORATION.

The Hongkong and Shanghai Banking Corporation owes its existence to a special ordinance of the Legislative Council of Hongkong in 1867. The Bank has a particularly strong reserve position, there being a sterling reserve of £6.5 million. In these calculations, sterling exchange has been taken at 1/5¼. Adopting the same exchange rate, deposits amount to the substantial figure of £55.6 million. The notes in circulation are £9.23 million. Against these the Bank has, in cash and bullion, £15.4 million. Giltedge securities amount to £17.55 million. It will thus be seen that the Bank has not only a tremendous reserve position but a substantial liquid position. That a bank of this size and with these resources should have felt the effects of the economic blizzard is somewhat surprising—but not so surprising if it is remembered that a large part of the operations of the Bank are done in China which has had its political troubles and currency fluctuations. The Chairman of the Bank summed up the difficulties with which banks were confronted, in the following words: "The causes of the losses are not far to seek—some are due to the heavy drop in commodity prices in the middle of the year, others to the sudden rise in China exchange *vis-a-vis* sterling caused by Great Britain going off the gold standard. Speculation and over-trading brought many larger operators to grief with the result that quite a number of these disappeared and left the Bank to shoulder the losses". In spite of these, the Chairman was glad to report that "we have been able to meet these exceptional losses from current profits, which shows that the earning power of the Bank is in no way impaired."

(In Sterling—000's omitted.)

Liabilities—	1929	1930	1931
	Sterling Exchange taken at		
	1/7½d	1/1½d	1/5½d
Capital ... ..	1,625	1,094	1,438
Sterling Reserve ... ..	6,500	6,500	6,500
Silver Reserve ... ..	781	519	719
<b>Total of Capital and Reserves</b> ... ..	<b>8,856</b>	<b>8,113</b>	<b>8,657</b>
Notes in Circulation ... ..	5,269	5,917	9,289
Deposits ... ..	53,200	50,605	55,594
Acceptances and Bills Payable ... ..	951	883	1,161

(In Sterling—000's omitted)

Assets—	1929	1930	1931
	Cash ... ..	10,243	13,162
British Government, Indian, Colonial and other Securities ... ..	10,515	15,529	17,554
Bills discounted, loans, credits, acceptances, etc. ... ..	43,956	36,660	41,089
Bank Premises ... ..	1,579	1,077	1,409

(In Dollars—000's omitted.)

Profit and Loss Items—			
Brought forward ... ..	8,893	8,887	8,429
Profits ... ..	14,148	20,727	16,649
Dividend distributed ... ..	12,859	19,185	15,894
Allocation to funds ... ..	1,250	1,500	500
Carried forward ... ..	8,387	8,429	8,422
Dividend Rate per share ..	£7	£7	£6

THE MITSUI BANK, LIMITED.

Balance Sheet—December 31, 1931.

Liabilities—		Yen.
Deposits (current, fixed, etc.) ... ..	637,443,079	
Foreign bills sold ... ..	1,983,007	
Due to foreign banks (including discounts) ... ..	15,941,401	
Due to inland correspondents ... ..	470,469	
Outstanding cheques ... ..	200,108	
Liabilities under L/C. etc. ... ..	3,547,241	
Interest accrued on deposits not due ... ..	6,871,747	
Rebate on bills not due ... ..	2,103,537	
Provisional receipts, etc. ... ..	288,941	
Capital ... ..	100,000,000	
Reserve funds ... ..	50,800,000	
Pension fund ... ..	4,028,170	
Profit for the half-year including—balance from last account, Yen 1,667,457; transferred from reserve funds, Yen 14,900,000; transferred from pension fund, Yen 323,311	4,593,743	
<b>Total</b> ... ..	<b>828,291,443</b>	

Assets—		Yen.
Cash in hand and at the Bank of Japan, etc. ... ..	58,310,094	
Money at call and short notice ... ..	17,150,000	
Japanese and Foreign government bonds ... ..	85,240,056	
Municipal and other bonds ... ..	104,085,778	
Stocks ... ..	769,804	
Loans and discounts ... ..	434,993,809	
Foreign bills purchased ... ..	33,825,035	
Due from foreign banks ... ..	33,501,285	
Due from inland correspondents ... ..	368,678	
Customers' liabilities under L/C., etc., per contra ... ..	3,547,241	
Provisional payments ... ..	25,911	
Bank premises and real estates ... ..	16,473,750	
Capital uncalled ... ..	40,000,000	
<b>Total</b> ... ..	<b>828,291,443</b>	

Appropriation of Profit.

Dr.	Yen.	Cr.	Yen.
Pension fund ... ..	548,000	Profit for the half-year ... ..	4,593,743
Dividend to shareholders ... ..	2,400,000		
Balance carried forward to next account ... ..	1,645,743		
	<b>4,593,743</b>		<b>4,593,743</b>

THE NATIONAL CITY BANK OF NEW YORK.

Till two years ago, the National City Bank of New York had the distinction of being the largest Bank in the world alike in regard to capital, reserves and deposits. The first place has now, however, being secured by the Chase National Bank, which, as a result of the latest amalgamation, has now the world record figure for capital, reserves and deposits. It may be said that the National City Bank of New York is, to-day, the second largest Bank in the world. Its paid up capital is \$124 million, surplus \$90 million and undivided profits \$11.35 million. Deposits aggregate to \$1,490 million. Total resources amount to \$1,858 million. Though these figures are lower than the record years of 1929 and 1930, these figures exceed those presented at the close of the

year 1928 and all prior years. The Bank has maintained the largest liquidity. The net earnings of the Bank in so difficult a year as 1931 (after providing for reserves, taxes, pensions and debt benefits) were \$22.74 million, which is nearly \$1½ million higher than the earnings for 1930. Mr. C. E. Mitchell, Chairman of the Bank, was proud to claim that "the National City Bank of New York, the National City Company and the City Bank Farmers' Trust Company, all forming a single 'National City' organisation, entered the new year equipped more completely and efficiently than ever to render a complete commercial and investment and trust service."

Balance Sheet as at 31st March, 1932.

		(In million dollars)	
<b>Liabilities—</b>			
			\$
Capital	...	...	124
Surplus	...	...	90
Undivided profits	...	...	12
Reserves	...	...	47
Liability as acceptor, endorser or maker on acceptances and bills	...	...	137
Deposits	...	...	1,261
		<b>Total</b>	<b>1,671</b>
<b>Assets—</b>			
			\$
Cash in vault and in Federal Reserve Bank	...	...	179
Due from banks and bankers	...	...	144
Loans, discounts and bankers' acceptances	...	...	792
United States Government Bonds and certificates	...	...	208
State and Municipal Bonds	...	...	19
Stock in Federal Reserve Bank	...	...	7
Other Bonds and Securities	...	...	105
Ownership of International Banking Corporation	...	...	8
Bank Buildings	...	...	61
Items in transit with branches Customers' liability account of acceptances	...	...	23
Other assets	...	...	119
		<b>Total</b>	<b>1,671</b>

#### NEDERLANDSCHE HANDEL-MAATSCHAPPIJ.

(In Sterling—000's omitted)

		1929	1930
<b>Liabilities—</b>			
Capital	...	6,669	6,669
Reserves	...	3,918	3,335
<b>Total of Capital and Reserves</b>		<b>10,587</b>	<b>10,004</b>
Deposits	...	33,897	36,822
Bills Payable	...	3,565	3,192
Sundry Creditors	...	5,800	4,843
<b>Assets:—</b>			
Cash	...	3,649	9,481
Investments	...	4,247	6,993
Bills Receivable	...	11,367	12,614
Loans and Advances	...	19,913	21,999
Properties	...	1,889	1,935
Sundry Debtors	...	18,334	2,157
Percentage of Total Capital and Reserves to Deposits	...	31.7	27.5
Percentage of Cash to Deposits	...	10.9	26.1
<b>Profit and Loss Items—</b>			
Profits	...	721	450
Dividend Rate per cent.	...	10.0	6.5

#### THE SUMITOMO BANK, LIMITED.

Balance Sheet—December 31, 1931.

		Yen.
<b>Liabilities:</b>		
Deposits	...	667,131,547
Exchange sold	...	10,868,164
Due to other banks	...	4,187,625
Foreign credits, acceptances and guarantees	...	5,051,194
Accrued interest, unearned discount, etc.	...	10,281,848
Capital subscribed	...	70,000,000
Reserve fund	...	24,000,000
Pension reserve	...	1,880,837
Balance of profit brought forward from previous half-year	...	1,833,789
Net profit for this half-year	...	2,616,768
	<b>Total</b>	<b>797,851,772</b>

		Yen.
<b>Assets:</b>		
Cash in hand	...	49,793,511
Money at call and short notice	...	11,900,000
Bonds, debentures and other securities	...	247,840,677
Bills discounted	...	49,170,111
Loans	...	365,322,879
Securities lent	...	1,333,751
Exchange purchased	...	17,740,653
Due from other banks	...	9,958,524
Customers' liabilities on foreign credits, acceptances and guarantees	...	5,051,194
Bank premises	...	19,740,472
Capital unpaid	...	20,000,000
	<b>Total</b>	<b>797,851,772</b>

#### Profit and Loss Items—

Dr.	Yen	Cr.	Yen
Reserve fund	5,00,000	Balance of profit	
Dividend	1,750,000	brought forward	
Pension reserve	800,000	from previous half-year	1,833,789
Bonus	80,000	Net profit for this half-year	2,616,768
Balance carried forward to next half-year	1,820,557		
	<b>Total</b>		<b>Total</b>
	4,450,557		4,450,557

#### THE YOKOHAMA SPECIE BANK, LIMITED.

Below are given details of the Balance Sheet and the profit and loss account of the Yokohama Specie Bank for the half year ended December 31, 1931. After making due provisions for all bad and doubtful debts, rebate on bills etc., the net profit for the period under review was Yen 10,977,876 inclusive of Yen 5, 637, 930 being the carry forward from the last account. From the above profits, Yen 1,100,300 was added to the reserve fund, a dividend at the rate of 10 per cent. per annum was paid, the total amount required for the purpose being Yen 5,000,000. The carry forward to the next account is Yen 4,877,876.

Balance Sheet—December 1931.

		Yen.
<b>Liabilities:</b>		
Capital issued and fully paid	...	100,000,000
Reserve Fund	...	116,200,000
Reserve for doubtful debts	...	3,739,500
Notes in circulation	...	11,329,974
Deposits (current, fixed etc.)	...	570,589,377
Bills payable, bills rediscounted, acceptances and other sums due by the bank	...	484,018,520
Dividends unclaimed	...	4,223
Balance of profit and loss brought forward from last account	...	5,637,930
Net profit for the last half-year	...	5,339,946
	<b>Total</b>	<b>1,296,859,470</b>
<b>Assets:</b>		
<b>Cash account—</b>		
In hand	...	21,831,563
At bankers	...	93,506,469
Investments in public securities and debentures at current market price	...	344,548,685
Bills discounted, loans, advances etc.	...	400,985,580
Bills receivable and other sums due to the bank	...	412,613,317
Rullion and foreign money	...	405,646
Bank's premises, properties, furniture etc., estimated at cost price, less allowance for depreciation	...	22,968,210
	<b>Total</b>	<b>1,296,859,470</b>

#### Profit and Loss Account.

		Yen.
Reserve fund	...	1,100,000
Dividend—		
Yen 5.00 per share for 1,000,000 shares	...	5,000,000
Balance carried forward to next account	...	4,877,877
	<b>Total</b>	<b>10,977,877</b>
Balance brought forward June 30, 1931	...	5,637,931
Net profit for the half-year ending December 31st 1931 (after making provision for bad and doubtful debts, rebate on bills etc.)	...	5,339,94
	<b>Total</b>	<b>10,977,877</b>



## INSURANCE SECTION I :

# LIFE INSURANCE

The growth of Indian insurance business has been rather uneven. While the importance of life insurance has been recognised since the middle of the 19th Century it is not until after the War that Indian companies were organised to transact fire, marine and other general insurance.

The earliest life office namely, the Madras Equitable, was founded in 1829 but this company ceased operation soon after the War. The oldest joint-stock company is the Oriental of Bombay which was organised in 1874 and which has had a uniformly successful career since. Several other companies have been subsequently established and have achieved a large measure of success; but it was only after the year 1920 that the Indian companies entered upon an era of spectacular progress. The usual test of the progress of life insurance companies is the total volume of business transacted every year and the following table shows the extent of new business secured by Indian companies and the volume of business outstanding at the end of each year:

Year	New Business written during the year	Total Business remaining in force at year-end
1920	5,17 lakhs	81 crores
1921	5,47 "	84 "
1922	5,84 "	87 "
1923	5,85 "	89 "
1924	6,80 "	42 "
1925	8,15 "	47 "
1926	10,85 "	53 "
1927	12,77 "	60 "
1928	15,41 "	71 "
1929	17,29 "	82 "

Non-Indian companies also transact life insurance business in India and many of them have been well established in India long before any Indian companies were organised. In recent years, however, the ratio of business secured by them has shown a progressive tendency to decline.

In addition to the insurance companies which are subject to the provisions of the Indian Life Insurance Act of 1912 and the Amending Act of 1928, the Post Office carries on life assurance business for the benefit of the Government servants. Statistics of the Postal Insurance Fund are given here under:

Year ending 31st March	No. of policies	Total sums assured	No. of policies	Total sums assured and business	Total Income	Life Assurance Fund at year-end
(In thousands of Rs.)						
1929	7,582	1,43,41	64,474	18,02,47	68,17	8,64,44
1930	8,894	1,49,56	71,479	14,17,81	69,86	4,02,80

According to a statement published by the United States Commerce Department, the amount of life assurance in force per capita in various countries was as under, at the end of 1929:

Country	Per Capita (In \$)	Per Capita (In Rs.) at par of exchange
U. S. A.	843	2,318.2
Canada	640	1,760.0
New Zealand	358	984.5
Australia	273	750.7
United Kingdom	266	781.5
Sweden	205	568.7
Italy	152	418.0
Norway	187	876.7
Netherlands	128	388.2
India	2	5.5

The total assets of Indian companies in 1929 amounted to Rs. 25 crores and these were invested to the extent of 75 per cent. in Government of India rupee securities. Loans on the surrender value of policies and mortgages absorbed about 10 per cent. of the funds. During the last two years, for which however no collective statistics are available, there has been a growing tendency to invest a larger percentage of life funds in the sterling securities of the Government of India. Our own estimate is that £6½ million is invested in Sterling securities and the equivalent of Rs. 50 lakhs in dollar securities.

The total assets in India of non-Indian companies amount to Rs. 31½ crores the bulk of which amount—nearly Rs. 28 crores—represents the Indian assets of companies incorporated in the United Kingdom.

A close study of the balance-sheets of Indian life offices reveals that hardly any one of them has adopted an active and scientific investment policy. The general tendency is to purchase giltedge securities as and when funds accumulate and lock them away. Seldom is advantage taken of the disparity in yields of securities of different maturities with a view to increase the average rate of interest on investments and bring down the book value of securities. An active policy of the character indicated would not altogether relieve life insurance companies of the necessity of having to provide against depreciation of securities in abnormal times. But it would certainly mitigate the severity of this influence. The leading British offices are known to adopt this policy with beneficial results on the yield of their invested funds.



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## EMPIRE OF INDIA

### Life Assurance Co., Ltd.

ESTD. 1897

Its premium rates being very moderate one gets advantage of maximum cover by payment of minimum premium.

#### TABLE OF PROGRESS

	Total business in force	Annual business	Valuation Surplus
1902	43,56,000	2,13,000	—
1912	3,02,35,000	18,28,000	3,75,071
1922	5,82,44,000	37,02,000	9,67,893
1927	7,92,34,000	52,84,000	37,66,689
1932	10,34,72,000	65,49,000	Valuation is being made.

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## INSURANCE SECTION II :

# FIRE AND MARINE INSURANCE

The Indian fire and marine insurance market, till the close of the war, was dominated by companies registered outside India. It is true that the Triton Insurance Company was founded in Calcutta with a rupee capital as long ago as 1850 and the Indian Mercantile Insurance Co. was started in Bombay in 1907 and that both have been quite successful in their respective cities. But it was not till 1919 that Indian companies were organised with a view to develop a distinctly national insurance market outside the sphere of life assurance.

The following table gives the names of the Indian general insurance offices with their paid up capital, date and place of registration.

Name of Companies	Date of registration	Place of registration	Paid up Capital
New India Assurance ...	1919	Bombay	71,21,000
Jupiter General Insurance	1919	Bombay	28,75,000
Vulcan Insurance ...	1919	Bombay	15,99,000
Triton Insurance ...	1850	Calcutta	5,75,000
Universal Fire and General Insurance ...	1919	Bombay	6,85,000
British India General ...	1910	Bombay	10,00,000
Indian Mercantile Insurance ...	1907	Bombay	4,28,000
Hukumchand Insurance ...	1929	Calcutta	10,00,000
Crescent Insurance ...	1919	Bombay	1,47,000
Burma Fire and Marine Insurance ...	1919	Rangoon	15,00,000
<b>TOTAL</b> ...			<b>1,68,75,000</b>

With the exception of the Burma Fire and Marine Insurance Company, Limited, which was floated in Rangoon in 1919 and the Hukumchand Insurance Company, which was incorporated as late as 1929 in Calcutta, all the other newly established offices have their head-quarters in Bombay. The Burma Fire and Marine Insurance Company, after a successful career of 12 years, was wound up voluntarily in the year 1931. The Crescent Insurance Company, although originally incorporated with the object of transacting all classes of business, has latterly confined itself more or less to life assurance business. The total paid up capital of the 8 remaining companies in the above list amounts to Rs. 1,47,00,000. There are a few other companies with comparatively small paid up capital transacting miscellaneous business, such as motor car and employers' liability insurance.

The aggregate net premium income of all these companies from business under-written in India in 1929 amounted to only Rs. 51.74 lakhs against a net total premium income of both Indian and non-Indian companies of Rs. 299 lakhs. The New India, the Jupiter, The Vulcan, The Triton and the Universal have also important business connections outside India and derived a net premium income of Rs. 83 lakhs in 1929 from their operations in the foreign field. The total premium income, inclusive of foreign revenue, was Rs. 135.20 lakhs which is less than the total paid up capital of the leading companies. It is, therefore, clear that the extent of business done by Indian companies is small in proportion to their capitalisation and that these companies are equipped with sufficient capital to handle a very much larger volume of business.

The distribution of premium income among the non-Indian companies during 1929 is shown by the following table:

Country of Incorporation	Fire	Marine	Miscellaneous	Total
Great Britain ...	97	21	54	172
Dominions & Colonies ...	18	29	4	51
U. S. A. ...	9	5	...	14
Continent of Europe ...	5	1	...	6
Others ...	8	1	...	4
<b>TOTAL</b> ...	<b>132</b>	<b>57</b>	<b>58</b>	<b>247</b>

Statistics are not available in respect of the gross premium income derived from all classes of insurance business and the figures given in the Official Insurance Year Book are net figures after deduction of reinsurance premia. The total premium income of Rs. 299 lakhs for the year 1929 is composed of Rs. 155 lakhs from fire, Rs. 68 lakhs from marine, and Rs. 76 lakhs from miscellaneous insurance. An expert in close touch with the insurance world estimates the total marine premium income earned by the companies on foreign and coastal trade of India in the year 1929 at approximately Rs. 175 lakhs and the gross fire premium at approximately Rs. 200 lakhs.

Under the Indian Insurance Companies Act of 1928, companies transacting business in India are obliged to furnish the Government with statistics of only the net premium income derived from India for which credit is taken in the accounts and the time has come when the Government should consider the desirability of amending the said Act, making it obligatory on insurance companies to disclose their gross premium and net income on their Indian business.

The results of the Indian business of the companies for the year 1931 will not be available for some considerable time to come. But from the balance sheets, already to hand, of the principal offices, it is possible to form some idea of the trend of business in 1931. In the fire branch, owing to shrinkage of values and lower stocks carried by industries, a general contraction of premium income was bound to have been felt. But as a result of the special forces which have been operative during the last two years, it is likely that the British offices would have to bear the brunt of the fall. Indian offices transacting business abroad report a substantial decline in premiums, especially from the United States, but the fall has been compensated by the accretion of a larger proportion of home business. The fire loss experience shows a slight improvement and underwriting reserves have in certain cases been further strengthened.

In the marine insurance branch, conditions in the Indian market have been chaotic. Competition has been most severe and tariffs have been honoured more in the breach than the observance thereof. Scales of brokerage and commissions fixed by the marine associations have been flagrantly violated and business has been done at rates which leave no margin of profit to the companies.

The abandonment of the gold standard, however, has benefited the companies in a totally un-

expected manner in that the heavy export of gold from Bombay created a steady demand for insurance cover. The amounts offered for insurance were at times so large as to tax the full capacity of the market. It would appear, however, that the bulk of this desirable business was handled by the British offices and Lloyd's underwriters.

The severe fall in commodity prices affected marine insurance to a much greater extent than the fire branch and although there has been a slight rise in prices after the abandonment of the gold standard, it cannot be denied that the cargo insurance accounts suffered most severely from the slump in trade. Consequently, the temptation to accept business at very low rates has been great and the companies do not appear to be taking any

concerted action to put an end to this unhealthy rate war.

Conditions in the British marine insurance market showed no improvement notwithstanding attempts to improve hull rates. Shipping has been laid up to a greater extent than in the previous years and a substantial amount of premiums have to be disbursed in settling laid up returns. The abandonment of the gold standard raised several difficult issues in the London market and underwriters were faced with the disagreeable necessity of having to settle several claims in gold currencies with disastrous results on underwriting profits. The tendency latterly has been to set apart gold and sterling reserves against corresponding underwriting accounts rather than mix up sterling premiums with gold policies and *vice versa*.

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*General Secretary.*

Eastern India Division Branch,  
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or

**F. S. D'SOUZA,**

*Manager,*

*Head Office.*

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The Jupiter General is one of the leading Indian Insurance Companies transacting the following classes of business :—

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*Secretary.*

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*Managing Agents.*

**LALJI NARANJI & CO.**

**HEAD OFFICE:—EWART HOUSE, FORT, BOMBAY.**

**INSURANCE SECTION III :**

**NEW LIFE BUSINESS FIGURES**

**Indian Insurance Companies.**

(In Thousands of Rs.)

Name of Company	Year ending	1931-32	1930-31	1929-30
Oriental ...	81st Dec.	5,85,61	5,44,09	6,50,05
Hindusthan Co-operative ...	80th Apr.	1,42,89	1,15,81	1,12,02
National ...	81st Dec.	1,32,31	1,13,55	1,17,30
Empire ...	29th Feb.	1,05,27	1,10,12	1,40,02
New India ...	81st Mar.	88,87	71,00	38,25
Bharat ...	81st Dec.	79,09	1,00,00	1,21,22
Lakshmi ...	80th Apr.	70,82	70,45	66,21
Bombay Mutual ...	81st Dec.	69,57	56,95	36,37
Bombay Life ...	81st Dec.	59,66	59,98	51,28
Industrial and Prudential ...	81st Dec.	50,41	45,35	42,72
United India ...	81st Dec.	46,26	31,32	28,31
Asian ...	81st Dec.	40,17	32,09	31,17
Metropolitan ...	81st Dec.	39,85	Nil	Nil
General Assurance ...	81st Dec.	31,67	39,05	63,25
Western India ...	81st Dec.	31,58	...	...
Zenith ...	81st Dec.	21,50	19,50	22,68
East and West ...	81st Dec.	18,56	13,59	10,37
Great India ...	81st Dec.	17,18	10,61	Nil
Jupiter General ...	30th June	15,08	13,62	Nil
Unique ...	81st May	14,06	9,59	8,60

**Foreign Insurance Companies.\***

(In Thousands of £)

Name of Company	1931	1930	Net Increase (+) or Decrease (-)
Sun Life of Canada ...	108,629	142,078	-33,444
Prudential ...	18,006	17,729	+ 277
Legal and General ...	9,692	11,539	-1,841
Australian Mutual Prov. ...	8,820	10,651	-1,832
Norwich Union Life ...	8,250	8,034	+ 216
Pearl ...	8,022	10,377	-2,356
Refuge ...	6,524	6,482	+ 43
National Mutual of Australasia ...	6,114	9,201	-3,088
Commercial Union ...	4,034	4,386	- 352
Scottish Widows ...	3,532	3,492	+ 40
U. K. Provident ...	3,508	3,080	+ 423
Alliance ...	3,223	3,211	+ 12
Phoenix ...	3,090	2,935	+ 155
Atlas ...	3,000	4,244	-1,244
Standard ...	2,764	3,141	- 377
London Life ...	2,731	3,127	- 396
Scottish Provident ...	2,619	2,891	- 272
Brittanic ...	2,557	2,518	+ 39
Scottish Union and National	2,435	2,224	+ 211
Royal Exchange ...	2,418	2,501	- 83
General Life ...	2,099	2,024	+ 74
Law Union and Rock ...	2,048	1,646	+ 402
London Assurance ...	1,796	2,056	- 260
Guardian ...	1,333	1,323	+ 10
Caledonian ...	1,197	1,567	- 369

\*Ordinary Life.

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BYRAMJEE HORMUSJEE. *General Manager.*

**INDIAN INSURANCE DEVELOPMENT.**

The existing Indian Insurance Companies, for their Capital and reserve strength, are in a position to take care of all insurance business that is available in this country in all branches—whether Life, Fire, Marine or Accident. ∴ ∴ ∴ ∴ ∴ ∴ ∴

Much has been done by the companies themselves to educate the people of this country in the direction of looking to Indian Companies for insurance; and the general public—be it said to their credit—are now rallying round Indian Companies. ∴ ∴

More, however, remains to be done and it behoves every Industrialist and businessman of this country, in particular, and the public in general to do everything in their power to stand behind Indian Institutions. ∴ ∴ ∴ ∴ ∴ ∴ ∴ ∴

The salvation, strength and stability of every nation consist in the continuance and growth of large financial institutions. It therefore behoves the Insuring public of India to continue their support in a whole-hearted manner and the day will not be far off when Indian Insurance Companies will be the real power in the economic fabric of the country. ∴ ∴ ∴ ∴ ∴

*Issued by*

**THE INDIAN INSURANCE COMPANIES ASSOCIATION,**  
67-68, NEW STOCK EXCHANGE BUILDING,  
HUMMUM STREET ∴ ∴ ∴ FORT, BOMBAY.

INSURANCE SECTION IV :

**REVIEWS OF BALANCE SHEETS**  
**INDIAN INSURANCE COMPANIES**

**THE ASIAN ASSURANCE COMPANY, LTD.**

Since the Asian Assurance Company came to receive the co-operation as Chairman of Mr. Jamnadas Mehta and since Mr. Fozdar has been its Manager, this Company has made remarkable progress as will be shown by the following table:

	1927	1929	1931
Number of proposals ...	1,468	2,748	3,402
Number of policies issued ...	1,103	2,078	2,574
Face value of proposals	26,07,500	48,80,000	55,01,550
Amount assured ...	20,53,000	31,70,500	40,17,100
Total premium income	4,01,176	5,85,970	7,43,570
Total business in force	79,87,084	1,15,65,970	1,88,99,028
Life Fund ...	10,58,318	15,10,594	20,80,069

In 1931, the Company underwrote new business of Rs. 40 lakhs; and at the end of the year the life fund stood at Rs. 20.08 lakhs. Against total assets of Rs. 29.92 lakhs, the Asian has invested Rs. 15 lakhs in giltedge and bonds; Rs. 1.23 lakhs in mortgages on property; Rs. 3.76 lakhs in Loans on policies; Rs. 1.29 lakhs in secured loans and Rs. 6.18 lakhs in building. The Company has borrowed Rs. 4.01 lakhs from banks in order to buy sterling securities; and as a large appreciation has taken place in these securities, the Asian should be able to make a considerable profit. On the whole the investments of the Company are well distributed and carefully selected. The building, on which they have spent a considerable sum and which is situated in Ballard Bier, Bombay, is a somewhat unfortunate investment as the land rent payable to the Port Trust is very high and as, owing to trade depression, letting out offices is extremely difficult in Bombay. The Directors have, therefore, wisely started a sinking fund for the company's building; the sinking fund stands now at Rs. 60,169. It is expected that this sum accumulating at 6 per cent. compound interest will, in the course of 48 years, amount to the full cost of the building. There are still 87 years to run in respect of the lease from the Port Trust.

(In Thousands of Rupees)

**Life Account.**

	1929	1930	1931
<b>New Business—</b>			
Number ...	2,078	2,100	2,574
Amount ...	31,71	32,09	40,17
Premiums on New Business ...	1,70	1,72	2,18
Total Premiums ...	5,86	6,49	7,44
Claims ...	1,56	1,53	1,72
Expenses ...	2,27	2,51	3,02
Life fund at the beginning of the year ...	12,50	15,11	18,11
Life fund at the end of the year ...	15,11	18,11	20,80
Ratio of expenses to premium ...	39%	39%	41%

**Balance Sheet.**

	1929	1930	1931
<b>Liabilities—</b>			
Capital ...	2,04	2,04	2,04
Life fund ...	15,11	18,11	20,80
Reserve funds ...	23	29	60
Other items ...	2,45	1,99	6,48
Total ...	19,83	22,43	29,92
<b>Assets—</b>			
Giltedge securities ...	6,61	7,61	10,75
Bonds and Preference shares ...	1,39	1,82	4,35
Loans on life policies	2,22	2,97	3,75
Other loans and Mortgages ...	1,57	1,82	2,67
House Property ...	6,08	6,14	6,18
Other items ...	1,96	2,07	2,22
Total ...	19,83	22,43	29,92

**THE BHARAT LIFE INSURANCE COMPANY, LTD.**

The Bharat has been losing ground in the last two years; and this should be attributed to the general concern in the minds of the public as to the ultimate fate of the large-scale investments on personal security or in the interests with which the Chairman of the company is connected.

(In Thousands of Rs.)

	1929	1930
<b>New Business :</b>		
Number ...	6,391	5,891
Amount ...	1,21,22	99,78
Total Premiums ...	26,91	28,50
Claims ...	6,53	7,88
Expenses and Commission ...	7,85	7,74
Life Fund at the beginning of the year	87,38	1,02,02
Life Fund at the end of the year ...	1,02,02	1,12,71
Net Increase ...	14,64	10,69
Ratio of Expenses to Premiums ...	27.8%	27.2%

**Balance Sheet.**

	1929	1930
<b>Liabilities</b>		
Capital ...	1,90	2,43
Life Fund ...	1,02,02	1,12,71
Investment Reserve Fund ...	3,39	6,86
Outstanding claims ...	3,28	3,60
Other Liabilities ...	13,02	8,44
Total ...	1,23,61	1,33,54
<b>Assets :</b>		
Giltedge Investment ...	20,32	22,73
Debentures ...	3,60	3,33
Loans on Life Policies ...	5,07	6,39
Advances or investments in regard to Mr. Harkishenal or other director, or concerns with which Mr. Harkishenal or other Director is directly or indirectly concerned as per list below ...	67,58	71,31
House Property ...	19,21	20,91
Outstanding Premiums ...	1,54	1,67
Cash ...	1,33	1,45
Other assets ...	4,96	5,75
Total ...	1,23,61	1,33,54

Advances or investments in regard to Mr. Harkishenlal (or other director) or concerns with which Mr. H. or other director is directly or indirectly connected.

	1929.	1930.
	Rs.	Rs.
On Personal Security ... ..	33,06	15,82
Century Flower Mills ... ..	1,15	1,15
Lahore Electric Supply ... ..	72	1,26
Punjab Cotton Press ... ..	12,14	12,26
Cawnpore Flour Mills ... ..	6,70	6,70
Lahore Electric Supply ... ..	9,22	9,08
Peoples Bank of N. India ... ..	80	91
Due from Mr. H. on arrears of int. ...	3,06	3,77
Loans on Stocks (this also appears to be to Mr. H.) ... ..	73	20,36
<b>TOTAL Rs.</b> ... ..	<b>67,58</b>	<b>71,31</b>
Ratio of above to Life Fund ... ..	66%	68%

### THE BOMBAY LIFE ASSURANCE CO., LTD.

The Bombay Life Assurance Company belongs, so to say, to the middle class amongst Indian life offices. There are, on the one hand, companies with tall and high-sounding figures like the Oriental, Empire of India, National and the Hindusthan Co-operative; there are, on the other, pigmy institutions of which we have had quite a large crop in the last few years. There is a "betwixt and between"—a class of companies which underwrite new business roundabout Rs. 50 lakhs, have a life fund roundabout Rs. 30 lakhs, and a safe and sound investment and management policy. To this class belongs the Bombay life. In regard to new business, the Company has been making steady progress, the policies booked in 1930 being Rs. 60 lakhs against Rs. 42½ lakhs in 1928. The life fund at the end of 1930 was Rs. 28 lakhs, showing an increase of Rs. 6½ lakhs over 1928. In regard to investments, the Bombay Life has preferred a policy of "Safety First" and put most of its funds in giltedge. It is not the Bombay Life Assurance Company alone which has found that giltedge is not necessarily safety first. All the same, the investment of the Company is, to a preponderating extent, in terminable securities and the fluctuations in giltedge need not and should not be of any serious concern to an insurance company which can have no occasion for selling securities. The Chairman of the Company is Sir Lalubhai Samaldas, Kt., C.I.E.; the active management is in the hands of Mr. J. L. Mehta.

(In Thousands of Rs.)

	1928	1929	1930
<b>Life Account.</b>			
<b>New Business—</b>			
Number of Policies ... ..	2,450	3,025	3,508
Amount assured ... ..	42,62	51,23	59,98
Premium on New Business ... ..	2,18	2,65	3,00
Total Premium ... ..	7,39	8,64	9,83
Claims ... ..	1,71	2,47	3,15
Expenses ... ..	2,75	3,42	3,77
Life Fund at beginning of year ...	17,77	21,52	24,62
Life Fund at year-end ... ..	21,52	24,62	28,01
Ratio of Expenses to premium ... ..	37%	40%	38%

#### Balance Sheet.

<b>Liabilities:—</b>			
Capital ... ..	72	72	72
Life Fund ... ..	21,52	24,62	28,01
Other funds ... ..	2,74	83	83
Outstanding claims ... ..	1,22	1,54	2,01
Other items ... ..	90	1,16	1,36
<b>Total</b> ... ..	<b>27,10</b>	<b>28,87</b>	<b>32,93</b>
<b>Assets:—</b>			
Giltedge securities ... ..	18,56	19,91	23,25
Loans on life policies ... ..	2,11	2,57	3,02
Other Loans and mortgages ... ..	1,72	1,52	1,42
House property ... ..	2,50	2,50	2,53
Other items ... ..	2,21	2,37	2,71
<b>Total</b> ... ..	<b>27,10</b>	<b>28,87</b>	<b>32,93</b>

### THE BOMBAY MUTUAL LIFE ASSURANCE COMPANY, LIMITED.

The Bombay Mutual is the soundest and most virile of Indian Mutual Life Offices. Its progress has been notable, especially within the last three years. In the matter of new business, the company has made rapid strides; and in 1931 the business written in the company's books came to no less than Rs. 68.74 lakhs. The valuation which has just been announced shows that bonuses of Rs. 28 and

Rs. 21 have been announced on Wholelife and Endowment policies respectively.

(In Thousands of Rupees)

	1929	1930	1931
<b>New Business:—</b>			
Number ... ..	2,629	3,487	4,173
Amount ... ..	5,637	56,95	68,75
New Premiums ... ..	2,03	3,12	3,67
Total ... ..	4,51	6,33	8,09
Claims ... ..	79	1,43	1,58
Expenses and Commission ... ..	2,57	3,03	3,90
Life fund at the beginning of the year ... ..	10,54	11,54	12,96
Life fund at the end of the year ... ..	11,54	12,96	15,99
Net increase ... ..	1,00	1,42	3,03
Ratio of Expenses to Premiums ... ..	52.6%	47.8%	42.9%

#### Balance Sheet.

<b>Liabilities:—</b>			
Life Fund ... ..	11,54	12,96	15,99
Reserve Fund ... ..	1,20	2,14	...
Outstanding claims ... ..	73	95	1,14
Other items ... ..	46	61	63
<b>TOTAL Rs.</b> ... ..	<b>13,93</b>	<b>16,66</b>	<b>17,82</b>
<b>Assets:—</b>			
Giltedge securities ... ..	11,26	13,55	14,00
Loans on life policies ... ..	1,11	1,58	1,86
Cash ... ..	32	31	43
Other items ... ..	1,24	1,22	1,53
<b>Total Rs.</b> ... ..	<b>13,93</b>	<b>16,66</b>	<b>17,82</b>

### THE BRITISH INDIA GENERAL INSURANCE COMPANY, LIMITED.

#### Fire Account:

(In thousands of Rs.)

Premiums ... ..	...	...	1930
Claims ... ..	...	...	8,04
Expenses ... ..	...	...	4,75
40 per cent. Reserve for unexpired Risks. ...	...	...	3,00
Additional Reserve ... ..	...	...	3,22
Total Reserve ... ..	...	...	1,00
Ratio of Claims to Premiums ... ..	...	...	4,22
Ratio of Expenses to Premiums ... ..	...	...	56%
Ratio of Reserves to Premiums ... ..	...	...	37%
Ratio of Reserves to Premiums ... ..	...	...	53%

#### Marine Account:

Premiums ... ..	...	...	7,17
Claims ... ..	...	...	8,28
Expenses ... ..	...	...	84
Marine Funds ... ..	...	...	4,49
Ratio of Claims to Premiums ... ..	...	...	115%
Ratio of Expenses to Premiums ... ..	...	...	10%
Ratio of Reserves to Premiums ... ..	...	...	56%

#### Accident and General Account:

Premiums ... ..	...	...	14,54
Claims ... ..	...	...	7,69
Expenses ... ..	...	...	5,62
40 per cent. Reserve for unexpired Risks ...	...	...	3,22
Additional Reserves ... ..	...	...	1,00
Total Reserves ... ..	...	...	4,22
Ratio of Claims to Expenses ... ..	...	...	53%
Ratio of Expenses to Premiums ... ..	...	...	39%
Ratio of Reserves to Premiums ... ..	...	...	29%

#### Balance Sheet:

<b>Liabilities:—</b>			
Capital ... ..	...	...	10,00
<b>Funds:—</b>			
Fire ... ..	...	...	4,22
Marine ... ..	...	...	4,49
Accident & General ... ..	...	...	6,82
Reserve Funds ... ..	...	...	60
Total Funds ... ..	...	...	16,13
Other items ... ..	...	...	4,56
<b>Total</b> ... ..	<b>...</b>	<b>...</b>	<b>30,69</b>

#### Assets:—

Giltedge Securities ... ..	...	...	14,97
Debentures ... ..	...	...	1,25
Outstanding balances due by Agents etc. ...	...	...	2,42
Deposits held by Re-insurance Companies ...	...	...	11,52
Other Assets ... ..	...	...	53
<b>Total</b> ... ..	<b>...</b>	<b>...</b>	<b>30,69</b>



**EAST AND WEST LIFE INSURANCE CO., LD.**

The East and West Life Insurance Company has been in existence for nearly 20 years; and during all this period, it has had an up-hill task in securing business against the competition of rival business concerns and in securing such business at an economical rate. The total business during 1930 came to Rs. 13.49 lakhs. The total premium income was Rs. 2.15 lakhs. The life fund increased by Rs. 79,000 from Rs. 3.47 lakhs to Rs. 4.26 lakhs. During 1930, the Company was able to show improvement in all directions as compared with 1929. But till the life fund reaches at least Rs. 10 lakhs, the management will have to take strenuous steps to develop their organisation and interest the right class of agents.

(In Thousands of Rupees)

New Business.—		1929	1930
No. of Policies	...	609	981
Sum Assured	...	10.16	13.49
Premiums on new business	...	57	73
Assurances in force	...	32,63	39,73
Total Premiums	...	1,88	2,15
Claims by death	...	22	26
" " maturity	...	22	10
Commissions and Expenses	...	94	1,15
Life Fund at beginning of year	...	2,96	3,47
" " " year end	...	3,47	4,26
Increase	...	51	79
Ratio of Expenses to Premiums	...	50 0%	53 4%

Balance Sheet.

Liabilities.—		1929	1930
Capital	...	99	99
Life Fund	...	3,47	4,26
Other Reserves	...	11	18
Claims outstanding and other liabilities	...	26	31
Other items	...	2	3
<b>TOTAL Rs.</b>	...	<b>4,85</b>	<b>5,77</b>

Assets.—		1929	1930
Giltedge	...	2,28	1,90
Debentures	...	52	52
Other shares	...	4	4
Loans on policies and otherwise	...	1,27	2,08
Cash	...	32	61
Other items	...	42	62
<b>TOTAL Rs.</b>	...	<b>4,85</b>	<b>5,77</b>

**EMPIRE OF INDIA LIFE ASSURANCE CO., LD.**

The Empire of India Life Assurance Company has the second place amongst Indian life offices in regard to size of its life fund. As regards new business, however, it may come fourth in the list. That this company does not underwrite more business than it actually does in a year is because of the extreme rigour in the selection of lives and the conservative policy to which the Directors have remained loyal all through. Thus, in the year ending February 29, 1929, the proposals received amounted to Rs. 1,39.78 lakhs whereas policies issued were only Rs. 1,05.027 lakhs. Throughout its career, the Empire of India has been less keen about the size of new business than about the quality of business and the price at which it is secured. For this reason, the mortality experience of the Company is most favourable; and the expenses of management are markedly low, the ratio of expenses to premium income in 1929 being 21.2 per cent. Likewise, the Company has always pursued a conservative policy in regard to investments. Its investments are more or less confined to giltedge securities and first-grade bonds. As these securities have suffered the biggest depreciation in values in the past few years, the Empire of India has had to set apart Rs. 25.98 lakhs to a special Investment Reserve Fund. But 80 per cent. of such securities and bonds are in the shape of terminable loans, so that the depreciation now provided for will be in the nature of a strengthening of inner reserves as and when the securities mature. It may be taken for granted that in the case of a company like the Empire of India, all the securities in its portfolio will be kept on right to the date of redemption and that, in the meantime, there could be no occasion whatsoever for the sale of such securities. It follows that the loss is not a real loss. The Directors are, therefore, justified in claiming that "as the difference between the present book value and the par values at which these loans will be repaid is greatly in excess of the amount now placed in reserve, it shows the financial stability of the Company and a degree of strength which augurs well for the future". Nor has the Empire of India been a victim to the prevalent mania to declare high bonuses. In this regard also, the Empire of India has preferred to err on the side of

safety. The Empire of India is content to make its appeal to the public on the basis of its extremely low premium rates, honest and safe investment policy, most economical management and strict observance of sound principles of finance and insurance. It is not by hectic canvassing for large business but by consistent and persistent adherence to these principles that the Empire of India has built up its position as the second largest Indian life office, its life fund standing at Rs. 3½ crores, Investment reserve fund at Rs. 26 lakhs and the total resources at Rs. 4.20 crores. The Chairman of the Company is Mr. Rustam K. R. Gama and the Managers Messrs. Allum, Bharucha & Co. The Chief Agents for Bengal, Bihar and Orissa and Assam are Messrs. D. M. Das and Sons, who account for a big slice of the total business.

**Life Account.**  
(In Thousand Rupees).

New Business—		1931-32
Number	...	6,001
Amount	...	1,05,27
Premium on New Business	...	5,47
Total Premiums	...	48,83
Claims by Death	...	10,36
Claims by Maturity	...	21,00
Life Fund at the beginning of year	...	3,43,75
Life Fund at the end of the year	...	3,49,90
Ratio of Expenses to Premium	...	21%

**Balance Sheet.**

Liabilities—		1931-32
Capital	...	1,29
Life Fund	...	3,49,90
Other Reserve Funds	...	30,61
Outstanding claims	...	9,58
Other items	...	6,10
<b>Total</b>	...	<b>3,97,48</b>

Assets—		1931-32
Giltedge Securities	...	1,65,56
Debentures	...	1,48,36
Loans on Life Policies	...	58,23
House Property	...	9,00
Other Assets	...	16,33
<b>Total</b>	...	<b>3,97,48</b>

**THE GENERAL ASSURANCE SOCIETY, LTD.**

The General Assurance Society of Ajmer has a clean and comfortable position. The business booked in 1931 is 31.67 lakhs. The increase to the life fund in the year was Rs. 5½ lakhs. The life fund at the end of the year was Rs. 34 1/3 lakhs. The total resources of the company came to Rs. 42.08 lakhs, of which giltedge accounted for Rs. 33.15 lakhs and loans on life policies were Rs. 2.93 lakhs. The Company owes much to the single-minded devotion of the General Manager, Mr. Bhargava. The Company has shown remarkable progress especially in regard to reduction in expenditure which went down by 4.6 per cent. to 28.2 per cent.

**Life Account:**

(In thousands of rupees)

New Business:—		1931
Number of Policies	...	2,004
Amount Assured	...	31,67
Premiums on New Business	...	1,65
Total Premiums	...	10,63
Expenses	...	2,80
Life Fund at the beginning of year	...	28,95
Life Fund at year end	...	34,37
Ratio of expenses to Premium	...	28.2%

**Balance Sheet:**

Liabilities:—		Total
Capital	...	1,33
Life Fund	...	34,37
Outstanding Liabilities of Life Fund	...	4,71
Other items	...	1,67
<b>Total</b>	...	<b>42,08</b>

Assets:—		Total
Giltedge Securities	...	33,15
Other Securities & Debentures	...	1,23
Fixed Deposits	...	86
Loans on Life Policies	...	2,93
Lands & Buildings	...	93
Other items	...	2,98
<b>Total</b>	...	<b>42,08</b>

**HINDUSTHAN CO-OPERATIVE INSURANCE  
SOCIETY, LIMITED.**

The Hindusthan Co-operative Insurance Society has made a bold bid for the second place in the ranks of Indian insurance companies so far as the underwriting of new business is concerned. This ambition the Company has fulfilled in 1930-31, when it wrote on its books new business of the value of Rs. 1,15.81 lakhs. The full accounts for 1931-32 are not available at the time of writing; but we are informed that the policies issued in this period amount to Rs. 142.4 lakhs. An increase of Rs. 27 lakhs in one year is a conspicuous achievement; by virtue of such a large inflow of new business, the Society is in the current year, as it was in the last year, the second amongst Indian life offices, the easy first being the Oriental. It is to be hoped that when the full accounts are available, it will be found that the Company has not incurred any increase in its ratio of expenses. Looking over the past three years, it is noteworthy that the expense ratio is roundabout 35 per cent; and that in 1930-31 that is, in a year in which the Company wrote quite a satisfactory volume of business considering the general political unsettlement in the country, the expense ratio actually came down from 35.1 per cent. in the previous year to 34.2 per cent. We are not sure whether the Company would be able to show a like expense ratio of 34.2 per cent. for 1931-32. The extension of business has been on such a large scale that a slight increase in expenses is not unlikely. However, a company like the Hindusthan Co-operative need not at all be anxious to buy its business except on its own terms. By all tokens, its expansion policy will mark its activities in the coming years; and while the management are certainly justified in aiming high, they should be equally particular about the other aim, namely, not allowing the expense ratio to grow higher. The Company may also be congratulated on the substantial addition to the life fund which it was able to make in 1930-31. The increase in the life fund during the year was Rs. 12.39 lakhs as compared with Rs. 9.00 lakhs and Rs. 5.46 lakhs in the previous two years. So satisfactory an improvement in the amount added to the Life fund may certainly be taken as testimony to a favourable claims experience and strict control of expenditure. The life fund at the end of April, 1931 stood at Rs. 1,04.22 lakhs. It is probable that the life fund as on April 30, 1932 might be roundabout Rs. 1,17 lakhs. The investment policy of the Hindusthan Co-operative calls for special remarks. The Directors have avoided, on the one hand, the rigorous adherence only to giltedge investments (which is the policy of a company like the Oriental) and, on the other, injudicious investments and advances (which is the case with, for instance, the Bharat). A scrutiny of the investments of the Hindusthan co-operative shows that giltedge and bonds and cash are about 12 per cent. of the life fund; loans on policies absorb 9 per cent.; the balance is invested either in house and landed properties or loans on mortgages of properties. The companies which have invested in giltedge securities have had the painful experience of making large-scale allocations to depreciation. From this point of view, the Hindusthan Co-operative has a comparatively comfortable position. At the same time, it should not be forgotten that properties have also gone down considerably in value. When a company has nearly Rs. 73 lakhs either in the shape of properties or loans against properties, there would have to be constant attention to the fluctuation in property values and to the way these fluctuations affect the securities of the company. The Hindusthan Co-operative is able to devote some attention of this kind, as it has specialised, to a certain extent, in the functions of a house building society. While we have no doubt that great vigilance is being exercised in this regard,

we cannot but think that the Company has too small a portfolio of liquid securities; that it should take steps to add to this class of investments; and that, in addition, the property holdings or loans against properties should, for some time to come, be avoided. While making this suggestion, we should point out that from the point of view of return on investments, the Company's present policy has been to its benefit. In its campaign of capturing more and more business, the Hindusthan Co-operative has placed before the public interesting and attractive schemes like the Deshbandhu policies. The management of the Company is in the able hands of Mr. S. N. Tagore, Secretary, who has been associated with the Company from the beginning and Mr. N. R. Sarkar who has played an important part in the expansion policy.

**Life Account.**

(In thousands of Rs.)

	1928-29	1929-30	1930-31
<b>New Business—</b>			
Number ...	5,284	6,485	6,786
Amount ...	1,01.31	1,12.02	1,15.81
Total Premiums ...	17.56	21.20	23.54
Claims by death ...	3.58	4.02	4.51
Claims by Maturity ...	5.53	3.49	2.88
Expenses ...	6.16	7.38	8.05
Life fund at the beginning of year ...	76.87	82.83	91.83
Life fund at the end of year ...	82.33	91.83	1,04.22
Net increase in the life fund ...	5.46	9.00	12.39
Ratio of expenses of Premium ...	35.1%	35.1%	34.2%

**Balance Sheet.**

	1929	1930	1931
<b>Liabilities—</b>			
Capital ...	5.21	4.53	4.41
Life fund ...	82.33	91.83	1,04.22
Outstanding claims ...	5.52	5.24	4.79
Reserve funds ...	3.17	3.70	4.28
Other items ...	3.15	3.21	5.47
<b>Total ...</b>	<b>99.38</b>	<b>1,08.51</b>	<b>1,23.17</b>
<b>Assets—</b>			
Giltedge securities ...	8.05	9.98	9.98
Debentures ...	2.37	2.37	2.37
Ordinary shares ...	2.72	2.72	2.72
Loans on life policies ...	8.19	9.26	11.46
Loans on mortgages of real properties ...	36.13	40.06	47.39
House and landed properties ...	25.01	24.44	25.54
Cash ...	2.28	2.17	2.33
Other items ...	14.62	17.51	21.38
<b>Total ...</b>	<b>99.37</b>	<b>1,08.51</b>	<b>1,23.17</b>

**JUPITER GENERAL INSURANCE COMPANY, LTD.**

The Jupiter General Insurance Company shares, with the New India, the honour of having led the company boom in Bombay in 1919. By the same token, the Jupiter and the New India are the first Indian-managed concerns started in this country for doing general insurance business. In fact, the inauguration of these two companies was the signal for the starting of a number of other companies with aims and objects to do all kinds of insurance business. The Jupiter was a victim to the general craze prevalent early in the last decade that an Indian general insurance company could make any appreciable progress only if it starts underwriting business in America. Most of the companies started contemporaneously with the Jupiter had a like partiality for American business. Subsequent events have proved that this experience was anything but favourable. The result is that all the companies that entered the American field are now gradually reducing their business in America, with a view to ultimate retirement from that area. It is for this reason that the premium income of the Jupiter as on 30th June 1931 shows a fall as compared with the previous year. While the American business has been, in pursuance of a deliberate policy, considerably curtailed, the Jupiter has been fortunate in securing larger business at home in spite of the prevalent trade depression. Only three or four years ago, the Company started life business and in this department, the Directors are intent on building a careful and safe business. The total new business in 1930-31 was Rs. 15 lakhs. At the end of the year, the life fund stood at Rs. 1.19 lakhs. The capital of the Company amounts to

Rs. 23.75 lakhs; and the various funds aggregate to Rs. 12 lakhs. In the Fire department, the ratio of reserve to premium is 47 per cent. The Directors should lose no opportunity of making further additions to the reserve far and above the customary 40 per cent so that the ratio of reserve to premium comes to 70 per cent in due course. In the marine account, however, the reserve position is very strong, the ratio of reserve to premium being 101 per cent. In the accident department, the reserve requires strengthening. The funds of the Company are invested in giltedge securities or in American securities. Owing to the appreciation of the dollar in terms of the rupee, there is considerable profit on the American investments. A valuation was made of the assets and liabilities of the life department and a surplus of Rs. 28,689 was disclosed. Regarding this surplus the Actuary says, "that no other Indian company has been able to show such a result at the end of 3 years from the commencement on life insurance business." A reversionary bonus to participating policies at the rate of 15 per thousand sum assured per annum in whole-life policies and at the rate of 12 per cent. per thousand per annum in the case of other classes of policies has been declared. The Chairman of the Company is Mr. Lalji Narainji. The Managing Agents are Messrs. Lalji Narainji & Co., who have influential connections and are, therefore, in a position to help the Company with large business. The Secretary is Mr. K. S. Ramachandra Iyer, who is well-known in connection with his activities for the consolidation of the Indian insurance companies.

**Life Account.**

(In thousands of Rs.)

New Business—		1931.
Number	...	747
Amount	...	15,08
Premiums on New Business	...	83
Total Premiums	...	1,70
Claims	...	32
Expenses	...	91
Life fund at the beginning of the year	...	70
Life fund at the end of year	...	1,19
Ratio of expenses to premium	...	54%

**Fire Account.**

Premiums	...	10,19
Claims	...	4,42
Expenses	...	5,00
Total Reserves	...	4,80
Ratio of claims to premium	...	43%
Ratio of expenses to premium	...	49%
Ratio of reserves to premium	...	47%

**Marine Account.**

Premiums	...	2,13
Claims	...	1,57
Expenses	...	71
Total reserves	...	2,15
Ratio of claims to premium	...	74%
Ratio of expenses to premium	...	33%
Ratio of reserves to premium	...	101%

**Accident Account.**

Premiums	...	2,34
Claims	...	82
Expenses	...	97
Total reserves	...	1,00
Ratio of claims to premiums	...	35%
Ratio of expenses to premiums	...	41%
Ratio of reserves to premiums	...	43%

**Balance Sheet.**

<b>Liabilities—</b>		
Capital	...	23,75
<b>Funds—</b>		
Fire	...	4,80
Marine	...	2,15
Accident	...	1,00
Life fund	...	1,19
Other funds	...	2,73
Total funds	...	11,87
Other items	...	7,13
Total	...	42,75
<b>Assets—</b>		
Giltedge securities	...	29,78
Branch, agent's and other balances	...	8,19
Other items	...	2,68
Cash	...	2,10
Total	...	42,75

**Profit & Loss Account.**

		1931.
<b>Receipts—</b>		
Brought in	...	21
<b>Transferred from—</b>		
Marine Account	...	57
Accident Account	...	41
Interest	...	103
Other items	...	21
	<b>Total</b>	243
<b>Disbursements—</b>		
Dividend : Rate %	...	3½
Amount	...	95
Allocations	...	1,08
Other items	...	18
Carry forward	...	22
Total	...	2,43

**THE LAKSHMI INSURANCE CO., LD.**

The progress of the Lakshmi in its brief existence of 8 years is, truly, a romance in the annals of Indian insurance. So far as we are aware, no other life office in India (or perhaps, in any other country) has under-written, from the beginning, so large a volume of business, conducted its affairs on so economical a basis, and pursued so scientific a financial policy as to be able to build up a life fund of Rs. 30 lakhs at the end of 8 years. There are companies which have been in existence for 20 years and hich have not yet obtained a life fund of even half this size. In the following table detailed figures only for 1929-30 and 1930-31 are furnished; but we have learnt authoritatively that the new business in the year ended April 30, 1932, is Rs. 70.80 lakhs and that the life fund is expected to be round about Rs. 30 lakhs. 1930-31 recorded a setback in the progress of the Company, mostly because of a good many of the officers and agents of the Lakshmi were rendered out of action by being imprisoned in connection with the civil disobedience campaign. 1931-32 resumes the old sturdy growth. The ratio of expenses in 1930-31 was 32 per cent. ; and for a company of 8 years standing, this is a remarkable achievement. The management is in the hands of Pandit K. Santanam, to whom a great part of the credit for the sturdy growth is due.

(In thousands of Rs.)

New Business :		1929-1930	1930-1931
Number of policies	...	3,608	2,687
Amount assured	...	70,45	55,19
New Premiums	...	3,13	2,76
Total Premiums	...	10,04	11,08
Claims	...	1,14	1,07
Expenses	...	3,77	3,57
Life fund at the beginning of the year	...	9,33	15,01
Life fund at the end of the year	...	15,01	21,76
Net increase	...	5,68	6,75
Ratio Expenses to Pre-Premiums	...	38%	32%

**Balance Sheet.**

Liabilities—		1929-1930	1930-1931
Capital	...	1,01	1,01
Life fund	...	15,01	21,76
Outstanding claims	...	47	67
Other items	...	33	1,02
	<b>Total</b>	16,82	24,46
<b>Assets—</b>			
Giltedge securities	...	7,48	14,49
Loans on life policies	...	20	44
Other loans and Motgages	...	5,00	5,19
House Property	...	50	1,65
Other Assets	...	1,87	2,38
Cash	...	1,77	31
	<b>Total</b>	16,82	24,46

**THE METROPOLITAN INSURANCE CO., LD.**

The Metropolitan Insurance Company is barely two years old. The accounts for the first year, which are now available, show that the company has done extremely well in regard to under-writing of the new business, and the comparatively low cost at which business has been secured.

Proposals received amounted to Rs. 55 lakhs, of which policies issued came to Rs. 40 lakhs. The expense ratio is 75.9 per cent. Lapses were low at 14 per cent. As a result of the first year's working, a surplus of 37,000 was shown, which has been credited to the Life Fund. The paid up capital of the Company is Re. 1 lakh. There is thus, Re. 1.37 lakhs as the total paid up capital and life fund. Against this, however, the amount invested in giltedge and the cash balance come to only 18,000. Nearly Rs. 60,000 is kept with the Managing Agent; and a large amount is outstanding as advances to Agents. We should certainly prefer to see less of such deposits and advances and more of investments in giltedge. Even if there is some justification for the view that giltedge securities have been fluctuating rather violently, there is no reason why the Directors have not placed their surplus funds in Treasury Bills. In the case of an insurance company, investment of funds on personal security, be it called deposits or loans, should be, as far as possible, avoided. It is to be hoped that the management will take these remarks in the spirit in which they are made. Otherwise, we have every reason to feel satisfied with the plan of work and progress of the company in its infant stages.

#### NATIONAL INSURANCE COMPANY, LTD.

The National Insurance Company was started in 1906 and owes its existence to the resurgent national feeling manifest throughout Bengal round-about that year. The Company had made steady progress, making its appeal to the public by virtue of its low premium and safe investment policy. It occupies the third place amongst Indian life offices both in regard to volume of new business and in regard to the size of the life fund. The new business secured in 1931 came to Rs. 1.32 crores. The life fund at the beginning of the year was Rs. 1.46 crores and at the end of the year Rs. 1.50 crores. The total assets of the Company are Rs. 1.57 crores, of which loans on company's policies amount to Rs. 23.47 lakhs; first mortgages on properties in India to Rs. 21.17 lakhs; giltedge and bonds to Rs. 1,01.21 lakhs; house property to Rs. 17.39 lakhs; cash, interest due, etc. being Rs. 4½ lakhs. It will, thus, be seen that the company's investment policy shows prudence as well as careful and scientific distribution of risks. But for the depreciation which had to be provided for in respect of Government securities, the increase of the life fund during 1931 should have been much more than what it actually was. As there has been a recovery in giltedge prices in the first half of 1932, there should be anything like Rs. 5 lakhs released as surplus on giltedge investments. It would, therefore, not be surprising if at the end of 1932 the life fund of the National reaches Rs. 1½ crores. The National has started a subsidiary company, the National Fire & General Insurance Company for the purpose of transacting fire and accident business. All the capital of the subsidiary company is held by the National. The management of the Company is in the hands of Messrs. R. G. Das & Co., who have considerable business experience at Calcutta and Bombay.

(In thousands of Rs.)

#### Life Account.

New business—		1931
Number	...	6,899
Amount	...	1,32,31
Premiums on New Business	...	6,17
Total premiums	...	33,27
Interest and dividends	...	7,51
Claims by death	...	6,21
" by maturity	...	5,52
Expenses	...	9,21
Life fund at the beginning of the year	...	1,45,88
Life fund at the end of year	...	1,49,68
Net increase in life fund	...	3,80
Ratio of expenses to premium	...	28%

#### Profit & Loss Account.

Receipts—		1931
Brought in	...	33
Transferred from life account	...	76
Other items	...	23
Total	...	1,32

#### Disbursements—

		1931
Dividend rate %	...	8
" amount	...	8
Allocations	...	10
Transferred to Balance Sheet	...	1,14
Total	...	1,32

#### Balance Sheet.

Liabilities—		1931
Capital	...	1,00
Life fund	...	1,49,68
Other funds	...	25,49
Total funds	...	1,75,17
Other items	...	4,78
Total	...	1,79,95

#### Assets—

		1931
Giltedge securities	...	39,09
Bonds	...	57,73
Ordinary shares	...	4,40
Loans on life policies	...	23,48
Other loans and mortgages	...	21,17
House property	...	17,39
Cash	...	86
Other items	...	15,83
Total	...	1,79,95

#### NATIONAL INDIAN LIFE INSURANCE CO., LTD.

The National Indian Life Insurance Company has a strong Board of influential Directors and is under the Managing Agency of a reputable firm like Messrs. Martin & Co. It is, therefore, surprising that the Company has not made a more rapid and a more substantial progress than has been the case. Many of the companies, started contemporaneously with the National Indian, have a far larger life fund, underwrite a far greater amount of new business and earn a more substantial income in the year both from the premium and interest on investments. That a life office, in its 25th year, could have written new business of only Rs. 20.22 lakhs shows either that the premium tables compare unfavourably with those of other companies or that the organisation for securing of new business is not what it should be. To all these criticisms, the answer may be given that Sir R. N. Mookerjee always prefers to pursue a conservative policy and build his business on a slow and sure basis; and that even if the National Indian has no sensational figures of one kind or another, its development has been on scientific lines and its present position is intrinsically sound. We readily agree that, judged by every canon of insurance, the growth of the National has been on healthy lines and the Company has an impregnable position financially. But the real point of criticism is that the National Indian is eminently the kind of company in which a headier pace of progress could be achieved without anything like an appreciably extra effort. The life fund of the Company stands at Rs. 40.33 lakhs. The business on the books of the Company has been selected with the utmost care. The mortality experience of the Company is most favourable. Every attempt is being made to keep expenses under con-

trol. With all these in its favour, business conservatism seems to be a virtue less needed than business enterprise. The investments of the Company are well spread. Mortgages on property in India account for Rs. 1.99 lakhs; loans on policies for Rs. 5.09 lakhs; giltedge and stock exchange securities for Rs. 23.67 lakhs. The total assets of the Company amount to Rs. 43.87 lakhs. The annual premium income in 1931 was Rs. 7.67 lakhs and the total income from all sources Rs. 9.89 lakhs. The increase to the life fund was Rs. 3.33 lakhs.

**Life Account.**

(In thousands of Rs.)

	1929	1930	1931
<b>New Business:</b>			
No. of Policies ...	1,577	1,271	1,249
Net am Assured ...	23,61	18,75	20,22
Net new Premiums ...	1,33	1,03	1,11
Total net Premiums ...	7,62	7,55	7,67
Interest ...	2,17	2,11	2,22
Claims by death ...	1,46	1,29	1,31
“ “ maturities ...	1,56	1,89	1,93
Commission & Expenses ...	2,46	2,62	2,72
Life Fund at beginning of year ...	29,87	33,95	37,00
“ “ “ year end ...	33,95	37,00	40,33
Increase in Fund ...	4,08	3,15	3,33
Ratio of expenses to Premium ...	32.2%	34.7%	35%

**Balance Sheet.**

	1929	1930	1931
<b>Liabilities—</b>			
Capital ...	1,00	1,00	1,00
Life Fund ...	38,95	37,00	40,33
Outstanding Claims ...	2,09	2,22	1,83
Other Items ...	43	65	71
<b>Total</b> ...	<b>37,47</b>	<b>40,87</b>	<b>43,87</b>

**Assets—**

	1929	1930	1931
Giltedge ...	12,38	13,92	19,77
Debentures ...	4,26	5,47	1,77
Mortgages and Loans ...	14,56	16,52	17,36
Other Shares and investments ...	8,00	8,83	2,53
Cash ...	1,42	47	61
Outstanding Premium and Interests ...	1,85	1,66	1,78
<b>Total</b> ...	<b>37,47</b>	<b>40,87</b>	<b>43,87</b>

**Profit & Loss Account.**

	1929	1930	1931
<b>Receipts—</b>			
Brought in ...	12	12	38
Interest ...	8	8	8
Shareholders' share of valuation Surplus ...	...	26	...
<b>TOTAL Rs.</b> ...	<b>20</b>	<b>46</b>	<b>46</b>
<b>Disbursements—</b>			
Dividends to Shareholders ...	8	8	12
Carried forward ...	12	38	34
<b>TOTAL Rs.</b> ...	<b>20</b>	<b>46</b>	<b>46</b>

**NEW INDIA ASSURANCE COMPANY, LD.**

HEAD OFFICE: Esplanade Road, Bombay.

CALCUTTA OFFICE: 100, Clive Street.

The New India Assurance Company was incorporated in Bombay in 1919. It is the biggest in point of size, volume of general business, and paid up capital amongst all the Indian insurance companies. The Company was started in close association with the well-known firm of Tata Sons; in fact, it was the latter that conceived the entire scheme and executed it in the most spectacular manner in the boom days of 1919. On the first directorate were associated, with representatives of Tatas, almost every prominent businessman of Bombay. The Company had thus the unique fortune of starting business under most impressive auspices and with most influential connections. The capital of the Company, at the start, was nearly Rs. 1.20 lakhs; but, at a later stage, it was felt that so large a capital was unnecessary and that two-fifths of the amount paid-up on each share should be refunded. The present capital of the New India is, therefore, Rs. 71.21 lakhs; even at this reduced figure, it has the largest paid-up capital of any Indian Insurance Company. Till 1930, the Company was doing every manner of general insurance business but it did not transact life

business. A Life Department has since been opened and the Company has been successful in attracting a substantial life insurance business, which shows every sign of rapid progress. In the early years, the premium income of the general departments was derived predominantly from the foreign field. But in recent years, the percentage on Indian business to its total business has risen. In the year ending March 31, 1931, the fire premium income amounted to Rs. 48 lakhs and the Directors' report states that the American business showed a heavy decrease which was, however, offset by a very substantial increase in the Indian business. The Fire fund stood at Rs. 33 lakhs or 69 per cent. of the premium income. The under-writing profit in the Fire Department was Rs. 3 lakhs, of which Rs. 1½ lakhs was transferred to profit and loss account and an equal amount to the additional reserve for un-expired fire risks. In the Marine account, premium income totalled Rs. 23 lakhs and the Fund stood at Rs. 22 lakhs. The ratio of reserve to premium in the Marine section is thus as high as 95 per cent. and compares with 88 per cent. in the previous year. In the Accident Department, there was a premium income of Rs. 5.65 lakhs which shows a substantial improvement over the previous years. A sum of Rs. 57,000 was transferred from the Accident account to General Profit and Loss Account. The reserve in this department stands at the satisfactory figure of 70 per cent. of premium income. In regard to life business, the Company was able to under-write policies for Rs. 71 lakhs in 1930-31. The accounts for the year ended March 31, 1932, are not yet available; but we understand that despite the general economic depression, the Life Department's results in the year would make a satisfactory showing. There has been a steady increase in the rate of dividend which was 7½ per cent. for 1930-31 as against 6 2/3 per cent. in 1929-30. The shareholders of the Company, who had a pleasant surprise three years ago of getting a refund of Rs. 10 per share, can now have the satisfaction of having their funds invested in a company whose dividend earning capacity is progressively increasing. The Chairman of the Company is Mr. N. B. Saklatvala, C.I.E., of the firm of Tata Sons. The General Manager is Mr. R. J. Duff, an insurance man of great experience and organising ability.

(In thousands of Rs.)

**Fire Account.**

	1929	1930	1931
Premiums ...	...	1929	1930
Claims ...	50,16	47,15	47,99
Expenses ...	27,22	30,48	26,93
Reserve at 40% of premium ...	18,76	18,75	18,54
Additional reserve ...	20,06	18,86	19,19
Total reserves ...	12,50	12,50	14,00
Ratio of claims to premium ...	32,56	31,36	33,19
“ “ expense to “ ...	54%	65%	56%
“ “ reserve to “ ...	87%	40%	39%
	65%	66%	69%

**Marine Account.**

	1929	1930	1931
Premium... ..	22,30	23,73	23,20
Claims ...	14,15	20,64	19,56
Expenses ...	4,05	4,80	3,14
Total reserves ...	21,34	21,00	22,00
Ratio of claims to premium ...	63%	87%	84%
Ratio of expenses to Premiums ...	18%	18%	14%
Ratio of reserves to premiums ...	96%	88%	95%

**Accident Account.**

	1929	1930	1931
Premiums ...	4,14	4,65	5,65
Claims ...	1,62	1,69	2,31
Expenses ...	1,30	1,55	2,06
Reserves at 40% of premium ...	1,66	1,86	2,26
Additional reserves ...	1,25	1,25	1,70
Total reserve ...	2,91	3,11	3,96
Ratio of claims to premiums ...	39%	36%	41%
Ratio of expenses to Premiums ...	31%	33%	36%
Ratio of reserves to premiums ...	70%	67%	70%

**Life Account.**

	1929	1930	1931
<b>New Business:—</b>			
Number of policies ...	...	12,29	24,79
Amount assured ...	...	34,68	71,04
Premium on new business... ..	...	1,58	2,30
Total premiums ...	...	1,58	4,07
Claims by death ...	...	6	49
Expenses ...	...	1,34	2,74
Life Fund at beginning of year ...	...	...	31
Life Fund at year-end ...	...	31	1,28
Net increase in funds ...	...	...	97
Ratio of expenses to premiums ...	...	85%	67%

Balance Sheet.				
(In thousands of Rs.)				
Liabilities—				
Capital ... ..	71,21	71,21	71,21	
Fire Fund ... ..	32,56	31,36	33,19	
Marine Fund ... ..	21,34	21,00	22,00	
Accident Fund ... ..	2,91	3,11	3,96	
Life ... ..	nil	2,47	1,28	
Reserve ... ..	6,53	5,84	5,98	
Amounts due to other Companies ... ..	4,77	4,41	3,74	
Outstanding claims ... ..	5,10	5,17	3,33	
Other Liabilities ... ..	16,07	14,76	14,92	
<b>TOTAL ... ..</b>	<b>1,60,49</b>	<b>1,59,33</b>	<b>1,59,61</b>	
Assets—				
Giltedge Securities ... ..	81,28	79,44	83,39	
Debentures and Preference Shares ... ..	7,03	7,30	7,77	
U. S. A. Investments ... ..	23,02	22,32	19,08	
Agency and Branch Balances ... ..	14,36	13,16	10,70	
Cash ... ..	18,61	15,35	14,57	
Other Assets ... ..	16,19	21,76	19,10	
<b>TOTAL ... ..</b>	<b>1,60,49</b>	<b>1,59,33</b>	<b>1,59,61</b>	

Profit & Loss Account.				
Receipts—				
	1929	1930	1931	
Brought in ... ..	1,24	1,70	1,72	
Transferred from—				
Fire account ... ..	65	22	1,51	
Accident account ... ..	27	1,38	57	
Marine account ... ..	nil	8	21	
Interest, etc. ... ..	5,86	4,34	4,19	
Other receipts ... ..	7	5	5	
<b>TOTAL ... ..</b>	<b>7,59</b>	<b>7,72</b>	<b>8,25</b>	
Disbursements—				
Dividend rate% ... ..	6 2/8	7	7 1/2	
" amount ... ..	4,75	5,04	5,34	
Allocations ... ..	56	30	49	
Other items ... ..	58	59	66	
Carried forward ... ..	1,70	1,79	1,76	
<b>TOTAL ... ..</b>	<b>7,59</b>	<b>7,72</b>	<b>8,25</b>	

#### ORIENTAL GOVERNMENT SECURITY LIFE ASSURANCE CO., LTD.

The Oriental is, far and out, the largest Indian life insurance company. Judged by any criterion, it is head and shoulders over any other life office. The Oriental is very much like a snow-ball which goes on increasing as it marches. Its progress is inevitable; and its progress is hydra-headed. It is true that there has been a slight shrinkage in regard to new business. Even so, the policies issued in 1931 were Rs. 5.35 crores. The premium on the new business came to Rs. 29.72 lakhs while the total premium reached Rs. 1,86.76 lakhs. Interest on Investment were Rs. 56.61 lakhs. The life fund at the beginning of the year was Rs. 10.01 crores and at the year-end Rs. 10.93 crores, there being an increase of Rs. 92.47 lakhs. That is, the Company has reached a stage in which an increase in life fund of Re. 1 crore is assured. The investment policy of the Oriental is of the most conservative kind—so conservative, indeed, that the Directors and management have come to feel that this policy is exercising considerable restriction in their choice of investments and that some liberalising is urgent and imperative. For the present, whatever is not invested in buildings, and loans on policies, is invested in giltedge securities. The Oriental has naturally suffered from the setback in giltedge prices but has a substantial reserve there against. The ratio of expenses to premium is 22.4 per cent. The Company has always maintained a satisfactory record in regard to low expenses. The management of the Oriental is in the capable hands of Mr. H. E. Jones.

Balance Sheet.				
(In thousands of Rs.)				
Liabilities—				
1. New Business—				
Number ... ..	81,128	26,481	26,488	
Amount ... ..	6,50,04	5,44,09	5,34,61	
2. Premium on New Business ... ..	36,29	29,89	29,27	
3. Total Premium ... ..	1,60,92	1,78,95	1,86,76	
4. Interest ... ..	47,03	51,95	56,61	
5. Claims—				
By Death ... ..	35,33	41,96	41,34	
By Maturity ... ..	36,71	39,34	44,86	
Total ... ..	72,54	81,80	86,20	
6. Commission and expenses ... ..	38,49	40,22	41,84	
7. Life Fund—				
(a) At beginning of the year ... ..	8,63,20	9,24,57	10,00,96	
(b) At the end of the year ... ..	9,24,57	10,00,96	10,93,43	
8. Increase in Funds ... ..	61,37	76,39	92,47	
9. Ratio of expenses to premiums ... ..	23.8%	22.4%	22.4%	

Balance Sheet.				
(In thousands of Rs.)				
Liabilities—				
Capital ... ..	4,50	4,50	6,00	
Life Assurance Fund	9,24,56	10,00,96	10,93,43	
Investment Reserve Fund ... ..	25,00	25,00	25,00	
Contingencies Reserve Fund ... ..	4,24	4,69	5,51	
Building Fund ... ..	1,45	1,59	1,75	
Total Funds ... ..	9,59,75	10,36,75	11,31,09	
Other Items ... ..	30,78	44,12	42,93	
<b>Total ... ..</b>	<b>10,00,53</b>	<b>10,80,87</b>	<b>11,74,62</b>	
Assets:—				
Giltedge ... ..	7,18,01	7,77,93	8,49,46	
Bonds ... ..	1,00,84	99,78	95,84	
Mortgage and Loans ... ..	93,84	1,07,00	1,31,33	
Other Investments ... ..	87,02	40,46	41,61	
Other items ... ..	42,31	44,80	44,64	
Cash ... ..	8,51	10,00	9,76	
<b>Total ... ..</b>	<b>10,00,53</b>	<b>10,80,87</b>	<b>11,74,62</b>	

#### THE TRITON INSURANCE CO., LTD.

The Triton insurance Company, which is the oldest general insurance company registered in India, has by a policy of selecting the cleanest business and building the company on the cleanest financial foundations, reached a position to-day in which it is able to claim the enviable record of having as high a ratio of reserves to premiums as 510 per cent. It is no exaggeration to say that in all our studies of the balance sheets of world insurance companies, we have not come across a reserve position of this magnitude and strength. The capital of the Company stands at the modest figure of Rs. 5.75 lakhs. Its premium income is also at the unpretentious figure of Rs. 6.91 lakhs; but the reserve fund amounts to the colossal sum of Rs. 35.25 lakhs. The total resources of the Company are Rs. 50.51 lakhs, of which giltedge and cash amount to over Rs. 47 lakhs. The ratio of claims to premium is only 47 per cent; and it was as low as 25 per cent. in 1930. The ratio of expenses to premium is 50 per cent. Owing to a favourable claims experience and owing to the large income from investments the surplus on 1931 account was Rs. 3 lakhs of which Rs. 2.3 lakhs was paid as dividends at the rate of 40 per cent., the carry forward being Rs. 76,000. If the Oriental is the best, oldest and strongest Indian life office, the Triton is the oldest, best and strongest general insurance company of India.

#### Revenue Account.

Revenue Account.				
(In Thousands of Rs.)				
	1929	1930	1931	
Premiums ... ..	9,61	8,69	6,91	
Claims ... ..	3,47	2,17	3,23	
Expenses ... ..	4,32	4,35	3,46	
Reserve Funds ... ..	38,69	35,25	35,25	
Ratio of Claims to Premiums ... ..	36%	25%	47%	
Ratio of Expenses to Premiums ... ..	45%	50%	50%	
Ratio of Reserves to Premiums ... ..	350%	406%	510%	

Balance Sheet.			
	1928	1929	1930
<b>Liabilities :</b>			
Capital ... ..	5,75	5,75	5,75
General Reserve Fund for exceptional losses ... ..	26,75	26,75	26,75
Other Reserve Fund ... ..	6,94	8,50	8,50
Underwriting Suspense Account ... ..	4,77	4,85	3,54
Debts due by the Company ... ..	4,30	2,58	2,91
Other Items ... ..	8,09	8,10	8,06
<b>Total</b> ... ..	<b>51,60</b>	<b>51,08</b>	<b>50,51</b>
<b>Assets :</b>			
Giltedge ... ..	44,06	46,50	46,45
Debts due to the Company ... ..	4,40	2,80	2,67
Cash ... ..	2,58	1,68	71
Other assets ... ..	56	60	68
<b>Total</b> ... ..	<b>51,60</b>	<b>51,03</b>	<b>50,51</b>
<b>Profit &amp; Loss Account.</b>			
<b>Receipts—</b>			
Brought forward ... ..	75	79	81
Interests etc. ... ..	2,10	2,18	2,03
Transferred from underwriting a/c ... ..	1,88	170	22
<b>Total</b> ... ..	<b>428</b>	<b>4,67</b>	<b>3,06</b>
<b>Disbursements—</b>			
Dividend ... ..	2,80	2,80	2,80
Dividend Rate % ... ..	40	40	40
Allocation ... ..	1,14	1,56	Nil
Carry forward ... ..	79	81	76
<b>Total</b> ... ..	<b>4,28</b>	<b>4,67</b>	<b>3,06</b>

**THE UNITED INDIA LIFE INSURANCE CO., LTD.**

While Northern India and the Western Presidency have any number of indigenous life insurance offices, South India, till a few years ago, had only one life office of its own; but it had the satisfaction in that the institution was a model and pattern of what a life insurance company should be. Those who have been in charge of the United India have, from the beginning, been guided by most wholesome insurance principles. They built the institution, brick by brick, with extreme care and with the thought that in each little part, the edifice should be sound and strong. For a long time, the United India held the record in India for the lowest ratio of expenses to income. Its investment policy has been most scientific; and there are no dud assets of any kind. There was a change in the plan of management of the Company a few years ago. And the new management coincided with the redrafting of the constitution of the Company on a basis which may well serve as the model for the Indian life offices. We believe that the Articles of Association of the United India are as near perfection as human ingenuity could make up. The policyholders have a good voice in the directorate; and their interests are completely secured and guaranteed by the creation of the policyholders' Trust Fund. Owing to some internecine quarrel, there was a slight setback three years ago; but we are happy that the quarrel has been made up and the management is in the capable hands of Mr. M. K. Srinivasan. The life fund at the end of 1930 amounted to 35.57 lakhs; there was an investment reserve fund of Rs. 1.90 lakhs; the general fund amounted to Rs. 40,767. The new business of the Company is round about Rs. 30 lakhs; and great vigilance is exercised in the selection of risks. The ratio of expenses has come down from 37 per cent. in 1928 to 30 per cent. in 1929 and 26 per cent. in 1930.

	(In thousands of Rs.)		
	1928	1929	1930
<b>New business—</b>			
Number ... ..	1,881	1,858	2,125
Amount ... ..	29,39	28,31	31,32
New Premiums ... ..	1,53	1,45	1,60
Total Premiums ... ..	5,86	6,58	7,75
Claims ... ..	1,56	1,58	1,61
Commission and Expenses ... ..	2,16	1,97	1,99
Life Fund at the beginning of the year ... ..	24,49	27,91	31,53
Life Fund at the end of the year ... ..	27,91	31,53	35,57
Net increase in the Fund ... ..	3,42	3,62	4,04
Ratio of Expenses to Premium ... ..	37%	30%	26%

Balance Sheet.			
	1928	1929	1930
<b>Liabilities—</b>			
Capital ... ..	75	77	77
Life Fund ... ..	27,91	31,53	35,57
Investment Reserve Fund ... ..	73	1,29	1,90
Outstanding Claims ... ..	78	1,11	1,21
General Fund ... ..	5	14	41
Other items ... ..	78	1,39	1,38
<b>Total</b> ... ..	<b>31,01</b>	<b>36,23</b>	<b>41,24</b>
<b>Assets—</b>			
Giltedge Securities ... ..	19,08	24,30	30,24
Debentures and Preference Shares ... ..	1,21	1,21	1,21
Equity Shares ... ..	41	41	41
Fixed Deposits ... ..	3,00	1,90	1,15
Loans on Life Policies ... ..	2,02	2,60	3,28
Other Loans and Mortgages ... ..	2,46	2,20	1,10
Other Assets ... ..	2,26	2,66	2,96
Cash ... ..	57	95	89
<b>Total</b> ... ..	<b>31,01</b>	<b>36,23</b>	<b>41,24</b>

**THE VULCAN INSURANCE COMPANY, LTD.**

Of the general insurance companies started in India in 1919-20, the Vulcan is the only office which continues to confine itself to general business. So far as the general business is concerned, the Company has maintained its steady record of progress and growth. The net premium income has increased from Rs. 11.87 lakhs in 1929 to Rs. 13.12 lakhs in 1930. During 1930, the Company cancelled all its American business. In spite of this, that is, in spite of the disappearance of premium income from American business, the net premium in 1930 is higher than that in 1929 by Rs. 1½ lakhs. In this respect, the record of the Vulcan is unique, in that the loss of American business has not caused any shrinkage in premium income. The increase in the premium income is evidently due to the larger patronage which Indian companies have been getting as a result of the *Swadeshi* spirit. At the same time, there has been considerable extension of the company's business through the appointment of competent agents. Against the premium income of Rs. 13.12 lakhs, the reserve for unexpired risks at 40 per cent. is Rs. 5.25 lakhs besides which there is an additional reserve of Rs. 4.16 lakhs. The total reserve for unexpired risks thus comes to Rs. 9.41 lakhs, which equals 72 per cent. of the premium. As compared with 1929, this is a somewhat lower percentage; but as the Company has Rs. 1.15 lakhs in investment and other reserves; and as from the American investments, it will be making a profit owing to the appreciation of the dollar in terms of the rupee, it may be said that the general reserve position of the Company is quite satisfactory. The total resources of the Company are Rs. 34 lakhs, of which Rs. 25½ lakhs is in the form of giltedge securities and cash. The Company has got a powerful directorate, the Managing Agents being Messrs. J. C. Setalvad & Co., the senior partner of which is Mr. Jeevanlal Setalvad, who occupies a good position in, and has large connections with, the Indian business community.

**Revenue Account.**

	(In thousands of Rs.)	
	1929	1930
Premium ... ..	11,87	13,12
Claims ... ..	6,00	6,53
Expenses ... ..	5,00	5,76
40% Reserve for unexpired risks ... ..	4,75	5,25
Additional reserve ... ..	4,28	4,16
Total reserves ... ..	9,03	9,41
Ratio of claims to premium ... ..	51%	50%
Ratio of expenses to premium ... ..	42%	44%
Ratio of reserves to premium ... ..	77%	72%



Profit & Loss Account.			
<b>Receipts—</b>			
Brought in	...	35	34
Transferred from revenue account	...	1,33	1,40
Other items	...	...	9
<b>Total</b>	...	<b>1,68</b>	<b>1,83</b>
<b>Disbursements:—</b>			
Dividend rate %	...	5	5
Dividend amount	...	77	77
Allocations	...	53	64
Carried forward	...	34	37
Other items	...	4	5
<b>Total</b>	...	<b>1,68</b>	<b>1,83</b>
<b>Balance Sheet.</b>			
<b>Liabilities—</b>			
Capital	...	15,99	15,99
Insurance funds	...	9,03	9,41
Other reserve funds	...	3,91	3,61
Total funds	...	12,94	13,02
Other items	...	4,90	5,00
<b>Total</b>	...	<b>33,83</b>	<b>34,01</b>
<b>Assets—</b>			
Giltedge securities	...	23,72	22,50
Debentures and preference shares	...	28	28
Mortgages	...	1,50	...
Book debts	...	4,01	4,17
Cash	...	59	73
Other items	...	3,73	6,33
<b>Total</b>	...	<b>33,83</b>	<b>34,01</b>

#### THE WESTERN INDIA LIFE INSURANCE CO., LD.

The Western India Life Insurance Company is a clean and compact life office with a steady volume of clean business and with a satisfactory growth of life fund year by year. At 1931-end, the life fund stood at 28.47 lakhs, the increase over the previous year being Rs. 5½ lakhs. In addition to the life fund, the company has a reserve fund which now stands at Rs. 6 lakhs. The expense ratio is low at 24.8 per cent. Because of economical management and favourable mortality experience, the company's valuation has always shown a most gratifying surplus.

(In Thousands of Rupees.)			
	1930	1931	
<b>New Business:—</b>			
Number	2,260	2,532	
Amount	29,37	31,58	
New Premiums	1,53	1,67	
Total Premiums	7,16	8,26	
Claims	1,21	1,02	
Expenses and Commission	1,82	2,05	
Life fund at the beginning of the year	20,90	23,18	
Life fund at the end of the year	23,18	28,47	
Net increase in fund	2,28	5,29	
Ratio of Expenses to Premiums	25.4%	24.8½%	

<b>Balance Sheet.</b>			
	1930	1931	
<b>Liabilities:—</b>			
Capital	68	68	
Life fund	23,18	28,47	
Reserve funds	4,95	5,97	
Outstanding claims	72	68	
Other liabilities	1,91	1,68	
<b>Total</b>	<b>31,44</b>	<b>37,43</b>	
<b>Assets:—</b>			
Investment	26,53	31,54	
Loans on policies	2,41	3,16	
Other loans and Mortgages	86	43	
House Property	24	29	
Other assets	1,90	2,01	
<b>Total</b>	<b>31,44</b>	<b>37,43</b>	

#### THE ZENITH LIFE ASSURANCE COMPANY, LIMITED.

The Zenith Life Assurance Company has had to contend against the first great handicap of young companies, namely, the prejudice of the general insuring public in favour of companies with tall figures. The Zenith has not yet reached a stage when it could appeal to the public by virtue of the large amount of new business secured or the big size of the life fund built up. It has had to depend upon the resourcefulness of the management to devise novel and attractive plans of business calculated to compel the attention and suit the special requirements of the prospective Indian insurers. Mr. Byramjee Hormusjee, the General Manager of the Company, has proved equal to the occasion and devised policies of great merit and value of the insurers. The Peerless Policy, the Everyman Policy and the Swaraj Policy bear eloquent testimony to the ingenuity of Mr. Hormusjee in this direction. In 1930, new business underwritten by the Company came to Rs. 19.45 lakhs the premium income to Rs. 3.77 lakhs and the total income to 4.18 lakhs. After meeting all the outgo, a net sum of Rs. 1.46 lakhs was available towards increase in the life fund. The following table gives, at a glance, the progress of the company in the last four years.

<b>Life Funds. Increase in the year.</b>			
Year	Rs.	Rs.	Rs.
1927	3,63,021	51,933	
1928	4,38,615	75,594	
1929	5,45,710	1,07,095	
1930	6,91,592	1,45,881	

The Company has confined its investments more or less entirely to giltedge. And it is asked to pay a heavy penalty for this very puritanism in investment policy. Companies that have invested their funds in personal loans are not asked to provide for depreciation even if the loans are made to persons whose capacity to pay is doubtful. Companies which have put out considerable sums on properties, can, however, find ways of escaping this irksome obligation. What an anomaly!

<b>(In thousands of Rs.)</b>			
	1929	1930	
<b>New Business—</b>			
No. of Policies	1,270	1,000	
Sum Assured	22,63	19,45	
Premium on new business	1,21	1,08	
Total Premium	3,45	3,77	
Claims by death	47	44	
Claims by maturities	4	28	
Commission and Expenses	1,96	1,86	
Life Fund at beginning of year	4,39	5,46	
Life Fund at year-end	5,46	6,92	
Increase	1,07	1,46	
Ratio of Expenses to Premi.	56.8	49.3	

<b>BALANCE SHEET.</b>			
	1929	1930	
<b>Liabilities—</b>			
Capital	50	50	
Life Fund	5,46	6,92	
Reserve Fund	8	8	
Outstanding Liabilities and Claims	72	60	
Premium Deposits	11	11	
<b>Total</b>	<b>6,87</b>	<b>8,21</b>	
<b>Assets—</b>			
Giltedge	5,82	6,93	
Loans on Policies	33	64	
Cash	19	20	
Other items	53	44	
<b>Total</b>	<b>6,87</b>	<b>8,21</b>	



**INSURANCE SECTION V :**

**REVIEWS OF BALANCE SHEETS**

**BRITISH INSURANCE COMPANIES**

**CALEDONIAN INSURANCE COMPANY.**

HEAD OFFICE: Edinburgh.  
INDIA OFFICE: B3, Clive Buildings.

Founded in 1805, the Caledonian is the oldest Scottish insurance office. Though the trade depression has affected the new business of the company, resulting in almost double the number of surrenders of life policies compared to 1929, the company's strength and security remains impregnable. Besides a General Reserve Fund of £500,000, strong departmental reserves are maintained. In the Marine Department, the Fund is as much as 159 per cent. of the premiums, 180 per cent. in Employers' Liability account, 100 per cent. each in Fire and Accident Departments. The profits earned on the total funds work out to £5-0-11d. per cent. compared to £5-4-7 in 1929.

After the quinquennial valuation in 1925, it was decided to have triennial valuation instead. Thus in December 1930, the triennial valuation was made which disclosed a surplus of £402,208 of which, after interim bonuses and reversionary bonus of £2-10s. per cent. per annum on whole life policies and £2-8s. per cent. on endowment policies, there remained a balance of £100,898 to be carried forward compared to £80,176 brought in from previous valuation.

The balance at credit of profit and loss account at the end of 1931 is £248,689 as against £278,881 at the end of 1930. A dividend of 17s. 6d. per share less tax was declared which is the same as in 1930. The balance remaining after all allocations is £141,920 compared to £158,222 in 1930 and £120,902 in 1929.

A deviation was made in the last report in presenting the motor account separate from the General Insurance Account to which it was combined before. In the Life balance sheet, the market values of securities and investments as at December 31, 1931, showed a depreciation of 10 per cent. of the book values, whereas in the General Balance Sheet, book values are below the market values.

**Life Account.**

(In thousands of £)

	1929.	1930.	1931.
<b>New business—</b>			
Number of Policies ...	1,918	2,247	1,877
Sum assured ...	1,881	1,567	1,275
Premiums on new business ...	177	98	...
Total Premium Income ...	622	547	538
Interest ...	328	380	305
Claims by death ...	287	261	278
Claims by maturity ...	...	219	231
Commission and Expenses ...	85	87	87
<b>Life, Annuity and Contingency Fund at beginning of year ...</b>	<b>6,170</b>	<b>6,684</b>	<b>6,884</b>
<b>Life, Annuity and Contingency Fund at year-end ...</b>	<b>6,684</b>	<b>6,884</b>	<b>7,028</b>
Increase in Fund ...	514	220	144
Ratio of expenses to Premium ...	13.7%	15.9%	16.1%

**Fire Account.**

	1929.	1930.	1931.
Premiums ...	872	868	884
Claims ...	506	447	...
Expenses ...	383*	409	...
Reserve at 40% of Premium ...	849	847	834
Additional reserve ...	500	500	500
Total reserve ...	849	847	834
Ratio of claims to Premium ...	58.0%	51.5%	54.3%
Ratio of expenses to Premium ...	44.0%	47.1%	46.2%
Ratio of reserve to Premium ...	97%	98%	100%

\*Less contributions to Fire Brigade.

**Accident Account.**

	1929.	1930.	1931.
Premiums ...	6	7	9
Claims ...	8	8	...
Expenses ...	8	8	...
Reserve at 40% of Premium ...	8	8	4
Additional reserve ...	4	5	5
Total reserve ...	7	8	9
Ratio of claims to Premium ...	41.0%	36.0%	37.7%
Ratio of expenses to Premium ...	41.6%	42.5%	42.2%
Ratio of reserve to Premium ..	109%	109%	100%

**EMPLOYERS' LIABILITY ACCOUNT.**

	1929.	1930.	1931.
Premiums ...	41	48	41
Claims ...	25	22	23
Expenses ...	15	16	15
Reserve at 4% of premium ...	...	17	...
Additional reserve ...	...	59	...
Total reserve ...	70	76	74
Ratio of claims to Premium ...	60.9%	51.1%	56.1%
Ratio of expenses to Premium ...	36.3%	37.4%	37.7%
Ratio of reserve to Premium ...	170%	176%	180%

**Marine Account.**

	1929.	1930.	1931.
Premiums ...	117	128	124
Claims ...	98	96	100
Expenses ...	7	8	7
Reserve ...	182	198	197
Ratio of claims to Premium ...	84.0%	75.4%	80.6%
Ratio of reserve to Premium ...	156%	155%	159%

**GENERAL INSURANCE ACCOUNT.**

	1929.	1930.	1931.
Premiums ...	871	869	896
Claims ...	182	196	229
Expenses ...	157	160	170
Reserve at 40% of premium ...	...	148	158
Additional reserve ...	...	164	165
Total reserve ...	812	812	828
Ratio of claims to Premium ...	49.2%	53.0%	57.8%
Ratio of expenses to Premium ...	42.5%	43.2%	42.9%
Ratio of reserve to Premium ...	84%	84%	81.5%

**BALANCE SHEET INCLUDING LIFE DEPARTMENT AS AT DECEMBER 31, 1930.**

Liabilities—	1930.
Capital ...	155
Life Insurance, Annuity and Contingency Fund	6,884
Fire Insurance Fund ...	847
Accident Insurance Fund ...	8
Employers' Liability Insurance Fund ...	76
Annuities certain and leasehold Redemption Fund ...	77
General Insurance Fund ...	812
Marine Insurance Fund ...	198
General Reserve Fund ...	500
Staff Insurance and Pension Fund ...	90
Total funds ...	8,992
Other items ...	871
<b>Total</b>	<b>10,018</b>

Assets—	1930.
Giltedge ...	3,159
Debenture and preference shares ...	2,899
Equity shares ...	818
Mortgages and loans ...	1,712
Other investments and other items ...	1,184
Cash ...	151
<b>Total</b>	<b>10,018</b>

**Profit & Loss Account.**

Receipts—	1929.	1930.
Brought in ...	252	217
Transferred from—		
Life account ...	...	89
Fire account ...	...	58
Accident ...	...	1
Marine ...	56	15
Employers' Liability Account ...	...	1
General Insurance Account ...	...	27
Other items ...	33	80
<b>Total</b>	<b>341</b>	<b>388</b>

Disbursements—			
Dividend amount	...	90	96
Allocations	...	5	...
Other items	...	24	19
Carried forward	...	222	278
<b>Total</b>	...	<b>341</b>	<b>388</b>

### THE COMMERCIAL UNION ASSURANCE CO., LD.

HEAD OFFICE : London.

BOMBAY OFFICE : 9, Wallace St., Fort.

CALCUTTA OFFICE : B1, Clive Bldgs.

Established in 1861. The Commercial Union occupies a very prominent position among companies transacting insurance business on a world-wide scale. The financial strength of the Company can be gauged from the fact that the paid up capital is £3,540,000 and the General Reserve is £4,100,000. A peculiar feature of the capitalisation of this Company is the existence of debentures originally issued in connection with the purchase of several subsidiary companies. The total resources of the Company exceeds £60 million. The major part of the huge premium income of this company is derived from fire, and accident business. The turnover in the marine insurance section is relatively small but the underwriting results have throughout been very satisfactory notwithstanding the adverse experience of other companies. In fact, in the year 1930, the Commercial Union had the distinction of transferring to its Revenue account the largest amount of profit among all British companies.

The Commercial Union does a large volume of life insurance business in the United Kingdom but its business in India is insignificant. The life fund at the end of 1930 amounted to £18,000,000.

The dividend paid was 20s. 6d. per share.

Valuation is made quinquennially. In the 1927 valuation, reversionary bonuses were paid ranging from £2-15 to £6-10s. per annum.

The net rate of interest earned in 1930 was £4-10-9d. per cent as compared with the rate of a per cent assumed in the valuation. The ratio of working expenses in the life department is very low at 10.9 per cent. During the last few years the total sums assured have fluctuated roundabout £4 million, the new business in 1931 being £4,033,702.

The reserves in the general departments are in the strongest position, being well above the premium income.

#### Life Account.

(In Thousands of £)

New Business.	1929	1930	1931
Number of policies in Life Department	7,440	8,030	6,997
Number of policies in British General Fund	1,101	1,067	1,070
Amount assured in Life Department	3,976	4,386	4,034
Amount assured in British General Fund	482	508	484
New premiums in Life Department	323	228	239
New premium in British General Fund	28	21	18
Total premiums in Life Department	1,603	1,564	1,637
Total premiums in all other funds	391	367	350
Interest from Life Department	767	785	805
Interest from all other funds	441	403	383
Claims from Life Department	904	923	993
Claims from all other funds	917	896	907
Commission and expenses of Life Department	198	202	200
Commission and expenses from all other Funds	33	31	30
Fund of Life Department at beginning of year	16,094	17,202	18,201
Fund of Life Department at year-end	17,202	18,201	19,267
Increase in fund	1,108	999	1,066
All other funds at year-end	9,510	9,224	8,760
Ratio of expense to premium in Life Department	12.2%	12.9%	12.2%

Fire Account.			
Premiums	7,641	6,774	6,316
Claims	3,862	3,712	3,448
Expenses	3,421	3,212	3,010
Reserve at 40% for unexpired risks	3,056	2,710	2,526
Additional reserve	4,775	4,786	4,572
Total reserves	7,831	7,496	7,099
Ratio of claims to Premium	49%	54%	55%
Ratio of expense to Premium	45%	47%	48%
Ratio of reserve to Premium	102%	111%	112%

#### Marine Account.

	1929	1930	1931
Premiums	685	699	734
Claims	405	320	329
Expenses	129	140	151
Reserve	1,155	1,194	1,247
Ratio of claims to Premium	42%	46%	45%
Ratio of expenses to Premium	19%	20%	21%
Ratio of reserve to Premium	188%	171%	170%

#### Accident Account.

	1929	1930	1931
Premiums	8,786	8,658	7,846
Claims	5,082	5,178	4,980
Expenses	3,538	3,535	3,301
Reserve	5,951	5,825	5,578
Ratio of claims to Premium	58%	60%	63%
Ratio of expenses to Premium	40%	41%	43%
Ratio of reserve to Premium	68%	66%	71%

#### Consolidated Balance Sheet.

Liabilities—	1929	1930	1931
Capital	3,540	3,540	3,540
Debentures	2,983	2,279	2,279
General reserve fund	4,100	4,100	4,261
Funds :—			
Fire	7,832	7,495	7,099
Marine	1,155	1,194	1,247
Accident	5,951	5,825	5,578
Life	26,712	27,425	28,027
Total funds	46,464	46,418	46,528
Other items	8,461	8,359	8,605
Total	61,448	60,596	60,952
Assets—	1929	1930	1931
Giltedge securities	25,161	24,871	24,838
Debentures and preference shares	13,847	14,470	14,457
Equity shares	634	581	621
Mortgages and Loans	6,034	6,656	5,974
Loans on life policies	2,346	2,365	3,392
Other investments and other items	9,588	4,424	8,598
Cash	3,838	7,229	3,072
Total	61,448	60,596	60,952

#### Profit & Loss Account.

(In Thousands of £)

Receipts—	1929	1930	1931
Brought forward	1,545	590	574
Transferred from—			
Fire account	275	185	250
Marine account	200	200	200
Accident account	200	70	...
Life account	33	33	33
Interests, dividends and rents	1,117	1,044	1,030
Other items	83	53	153
Total	3,453	2,175	2,240
Disbursements—	1929	1930	1931
Dividend rate per cent.	41	41	41
Dividend amount	1,174	1,140	1,118
Allocations	1,353	196	257
Other items	325	224	307
Carried forward	560	574	558
Total	3,453	2,175	2,240

**THE GENERAL ACCIDENT, FIRE AND LIFE ASSURANCE CORPORATION, LD.**

For a company that started business barely half a century ago, the progress achieved by the General Accident, Fire and Life Assurance Corporation must be considered truly remarkable. The total resources now amount to £13.32 million, with total funds standing at £10.69 million. The main strength of the Company is in the accident and the general department as well as in the life department. During 1931, the premiums in the accident department came to the substantial amount of £6.69 million. The total reserves in this section stood at £5.33 million, which is nearly 80 per cent. of the premium income. In the Life section, the net new business amounted to £2.10 million. Due to depreciation in investments, the life fund at the end of the year, at £3.37 million, was slightly less than the life fund at the end of the previous year. But as the first half of 1932, records a sensational rise in giltedge securities in the London market, the increase of the life fund as at the end of the current year should be, so to say, double of the normal increase. The subsidiary companies of the Corporation are: (1) The General Life Assurance Company; (2) Road Transport and General Insurance Company; (3) English Insurance Company; (4) General Accident Assurance Company of Canada; (5) The Potomac Insurance Company of the District of Columbia; (6) Scottish Canadian Assurance Corporation and two other companies, one in South America and the other in India.

**Accident Account.**

(£000's omitted)

Premiums	6,688
Claims	4,042
Commission and Expenses	2,375
40% Reserve	2,316
Additional Reserve	3,017
Total Reserve	5,233
Ratio of Claims to Premiums	60.4%
Ratio of Expenses to Premiums	35.5%
Ratio of Reserves to Premiums	79.7%

**Life Account.**

**New Business—**

Amount	2,099
Total Premiums	406
Claims	289
Expenses and Commission	98
Life Fund at the beginning of the year	3,489
Life Fund at the end of the year	3,368
Decrease in the Life Fund	121

**Fire Account.**

Premiums	602
Claims	287
Expenses and Commission	245
40% for unexpired risks	241
Additional Reserves	278
Percentage of Claims to Premiums	48
Percentage of Expenses to Premiums	41
Percentage of Reserves to Premiums	86

**Marine Account.**

Premiums	86
Claims	69
Expenses	8
Reserves	90
Percentage of Claims to Premiums	80
Percentage of Expenses to Premiums	9
Percentage of Reserves to Premiums	101

**Balance Sheet.**

**Liabilities—**

Capital	688
Life and Annuity Fund	3,368
Fire Fund	519
Accident and General Insurance Fund	5,333
Marine Fund	90
Investment Reserve Fund	775
General Reserve Fund	600
Total Funds	10,685
Other Liabilities	1,946
<b>Total</b>	<b>13,319</b>

**Assets—**

Giltedge	3,215
Debentures and Preference Stocks	4,117
Equity Shares	855
Mortgages and Loans	1,234
Free-hold and Lease-hold Properties	1,380
Outstanding Premiums and Agency Balances	1,284
Other Assets	1,234
<b>Total</b>	<b>13,319</b>

**Profit & Loss Account.**

**Receipts—**

Brought Forward	387
Interest, Dividends and Rents	247
Transferred from Fire Account	74
Transferred from Accident and General Account	174
Other Items	8
<b>Total</b>	<b>890</b>

**Disbursements—**

Dividend	
Rate %	56
Amount	293
Allocations	43
Carried Forward	474
Other Items	80
<b>Total</b>	<b>890</b>

**GUARDIAN ASSURANCE COMPANY, LTD.**

HEAD OFFICE: London.

INDIA OFFICE: 8, Clive Row, Calcutta.

Established in 1821. Transacts all kinds of insurance business. Associated with the Guardian are: (1) Guardian Insurance Company of Canada; (2) Reliance Marine Insurance Company, Ltd.; (3) Guardian Eastern Insurance Company, Ltd.; (4) Scottish Plate Glass Insurance Company, Ltd.; and (5) Hibernian Fire and General Insurance Company, Ltd.

The profits of the Company show an around increase over those of 1929. In addition to the departmental funds there is an investment reserve and contingency fund amounting to £382,071. Dividend for 1930 was on the basis of 10s. per ordinary share (10s. paid-up) and 10s. on each staff share, both subject to income tax.

In the 1929 valuation, policyholders received reversionary bonuses in accordance with the Company's special contributory method and shareholders were allotted £180,000 on the basis of one-fifth of the divisible profits.

Total funds amount to £9.8 million and total resources to 12.9 million.

**Life Account.**

(In thousands of £)

**New Business—**

No. of Policies	1,989	1,790
Sum assured	1,338	1,323
Premium on new business	65	64
Total Premium	537	550
Claims and annuities	540	412
Expenses and commission	71	75
Life Fund at beginning of year	6,243	6,330
„ „ „ year-epd	6,330	6,467
Net increase in Life Fund	87	137
Ratio of expenses to premium	23.8%	18.5%

**Fire Account.**

Premiums	1,009	1,081
Claims	585	504
Expenses	493	488
Reserve for unexpired risks		541
Additional reserves		1,000
Total Reserve	1,512	1,541
Ratio of claims to premium	52.8%	46.3%
„ „ Expenses to premium	44.5%	44.7%
„ „ reserve	136%	143%

**Accident, Burglary and General Account.**

Premiums	798	775
Claims	369	396
Expenses	346	352
Reserve for unexpired risks		349
Additional reserve		361
Total reserve	705	710
Ratio of Claims to premiums	46%	51%
„ „ expense	43%	45%
„ „ reserves	88%	92%

Marine Account.

Premiums ...	199	205
Claims ...	148	158
Expenses ...	86	89
Reserve ...	458	410
Ratio of claims to premiums ...	71.7%	74.6%
"    "    expense    "    ...	18.1%	10.0%
"    "    reserve    "    ...	230%	200%

Balance Sheet as at 31st December, 1930.

<b>Liabilities—</b>			
Capital ...	...	1,025	
<b>FUNDS:—</b>			
Life ...	...	6,467	
Fire ...	...	1,541	
Accident, Burglary and General ...	...	710	
Marine ...	...	410	
Redemption Assurance Fund ...	...	800	
General reserve ...	...	882	
Total funds ...	...	9,810	
Other ...	...	2,064	
<b>Total</b> ...		<b>12,899</b>	
<b>ASSETS—</b>			
Giltedge securities ...	...	4,359	
Debentures and Preference shares ...	...	2,236	
Equity shares ...	...	280	
Loans on life policies ...	...	335	
Other loans and mortgages ...	...	3,154	
Other items ...	...	2,170	
Cash ...	...	365	
<b>Total</b> ...		<b>12,899</b>	

Profit & Loss Account.

<b>Receipts—</b>			
Brought in ...	...	194	195
Transferred from—			
Fire account ...	...	...	120
Life account ...	...	202	36
General and Accident account ...	...	...	51
Marine account ...	...	...	19
Other items ...	...	64	75
<b>Total</b> ...		<b>460</b>	<b>496</b>
<b>Disbursements —</b>			
Dividend amount ...	...	172	221
Allocations ...	...	20	52
other items ...	...	78	84
Carry forward ...	...	195	189
<b>Total</b> ...		<b>460</b>	<b>496</b>

THE LIVERPOOL & LONDON & GLOBE INSURANCE CO., LTD.

Established in 1836. Transacts extensive business in all parts of the Globe. Is associated with the Royal Insurance Company, Limited and also controls a number of subsidiary Companies.

The profit earnings of the Company continue to be satisfactory. In spite of the difficult conditions of 1930, new life business registered an increase of £187,558 which is a record for the Company. The Fire Insurance Account shewed a net premium income of £4,699,243 and a net profit of £256,339 which was carried to Profit and Loss Account. The Reserve Fund in this Department is equivalent to 102% of the premium income. The Miscellaneous Insurance Account showed a loss of £64,968 in 1930 against a surplus of £146,652 in the previous year, and maintains a reserve equivalent to 128 per cent. of the premiums which shows an increase of 10 per cent. over 1929. The Marine Account showed a profit of £29,078 and a reserve in respect of unexpired risks equivalent to 124% of the premiums. The Interest Earnings, less income tax and interest on Life Funds, amounted to £528,069. Omitting the carry-forward of £895,878 from the previous year the balance of profit available for distribution after all allocations during 1930 was £547,535 compared to £615,832 in 1929. A dividend of 27s. per share was paid in 1930 compared to 26s. per share in 1929. The 1930 dividend is maintained in 1931.

The Company's position continues strong with total funds amounting to £25 millions out of the total assets of £29 millions. During its tenure of 95 years the Company has paid claims to the amount

of £161 millions which works out to over £3 a minute.

The principal classes of business transacted in India are Fire, Motor Vehicle and other classes of Miscellaneous Accident business including Workmen's Compensation, also Life and Marine business.

Life Account.

		(In thousands of £.)		
		1929	1930	1931
<b>New Business—</b>				
Number of policies ...	...	3,364	3,836	3,815
Amount ...	...	1,716	1,903	1,950
New premiums ...	...	165	93	107
Total premiums ...	...	810	752	782
Claims by death ...	...	292	256	238
Claims by maturity ...	...	213	199	193
Interest ...	...	364	370	380
Commission and expenses ...	...	85	79	82
Funds at beginning of the year ...	...	8,023	8,433	8,921
Funds at year-end ...	...	8,433	8,921	9,472
Increase ...	...	410	488	551
Ratio of expenses to Premium ...	...	10.4%	10.5%	10.5%
Annuity fund ...	...	581	579	591

Fire Account.

Premiums ...	4,846	4,699	4,481
Claims ...	2,306	2,325	2,168
Expenses ...	2,209	2,165	2,161
Reserve at 40% of premium ...	1,939	1,880	1,792
Additional reserve ...	2,925	2,925	1,775
Total reserve ...	4,864	4,805	3,567
Ratio of claims to premium ...	47.6%	49.5%	48.4%
Ratio of expenses to premium ...	45.6%	46.1%	48.2%
Ratio of reserve to premium ...	100%	102%	80%

Accident Account.

		1929	1930	1931*
Premiums ...	...	269	248	...
Claims ...	...	141	140	...
Expenses ...	...	124	117	...
Reserve at 40% of Premium ...	...	107	99	...
Additional reserve, including liability in respect of outstanding claims ...	...	104	101	...
Total reserve ...	...	211	200	...
Ratio of claims to Premium ...	...	52.6%	56.4%	...
Ratio of expense to Premium ...	...	46.0%	47.3%	...
Ratio of reserve to Premium ...	...	79%	81%	...

\*Figures of Accident Account for the year 1931 are included in the Miscellaneous Section.

Employers' Liability Account.

		1929	1930	*1931
Premium ...	...	174	166	...
Claims ...	...	88	90	...
Expenses ...	...	63	60	...
Reserve at 40% of Premium ...	...	70	66	...
Estimated liability in respect of outstanding claims ...	...	115	109	...
Total reserve ...	...	185	175	...
Ratio of claims to Premium ...	...	50.4%	54.3%	...
Ratio of expense to Premium ...	...	36.2%	36.0%	...
Ratio of reserve to Premium ...	...	108%	105%	...

\*Figures are included in Miscellaneous section.

Marine Account.

		1929	1930	1931
Premiums ...	...	402	356	323
Claims ...	...	330	307	259
Expenses ...	...	42	38	35
Reserve at 40% of premium ...	...	161	142	129
Additional reserve ...	...	300	300	300
Total reserve ...	...	461	442	429
Ratio of claims to premium ...	...	82.2%	86.3%	80.2%
Ratio of expense to premium ...	...	10.4%	10.7%	10.8%
Ratio of reserve to premium ...	...	115%	124%	133%

Miscellaneous Account.

		1929	1930	1931
Premiums ...	...	5,428	5,282	5,399
Claims ...	...	3,137	3,152	3,449
Expenses ...	...	1,985	1,966	2,061
Reserve at 40% of premium ...	...	2,171	2,113	2,278
Additional reserve including liability in respect of outstanding claims ...	...	4,258	4,644	3,454
Total reserve ...	...	6,429	6,757	5,732
Ratio of claims to premium ...	...	57.8%	59.7%	63.9%
Ratio of expense to premium ...	...	36.6%	37.2%	38.2%
Ratio of reserve to premium ...	...	118%	128%	106%

Balance Sheet.

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	1,062	1,062	1,062
4% Perpetual Debenture Stock ... ..	571	563	550
4% "Thames and Mersey" Debenture Stock ... ..	380	376	372
Funds, fire ... ..	4,864	4,805	3,567
Funds, life ... ..	8,433	8,921	9,472
Annuity fund ... ..	581	579	591
Leasehold Redemption Fund ... ..	87	98	148
Marine Reserve Fund ... ..	461	442	429
Personal Accident Reserve Fund ... ..	211	200	...
Employers' Liability Reserve Fund ... ..	185	175	...
Miscellaneous Insurance Reserve Fund ... ..	6,429	6,757	6,246
General contingencies fund ... ..	540	446	2,684
Members Life Profits Account ... ..	65	44	22
Other funds ... ..	807	858	692
Total funds ... ..	22,663	23,325	23,851
Other items ... ..	3,553	3,446	3,097
<b>Total</b> ... ..	<b>28,229</b>	<b>28,792</b>	<b>28,932</b>
<b>Assets—</b>			
Giltedge ... ..	8,425	9,512	10,141
Debenture and Preference shares ... ..	10,463	10,950	10,037
Equity shares ... ..	1,316	1,396	1,465
Mortgages and loans ... ..	2,397	1,780	1,834
Other investments and other items ... ..	4,395	4,029	3,915
Cash ... ..	1,233	1,119	1,540
<b>Total</b> ... ..	<b>28,229</b>	<b>28,792</b>	<b>28,932</b>

Profit & Loss Account.

<b>Receipts—</b>			
Brought in ... ..	878	896	574
Transferred from fire account ... ..	260	256	229
Transferred from members Life profits account ... ..	23	23	23
Transferred from Marine account ... ..	33	29	42
Transferred from personal Accident account ... ..	1	2	Nil.
Transferred from employers' liability account ... ..	20	26	Nil.
Interest ... ..	539	528	520
Miscellaneous insurance account ... ..	147	-65	-75
Other items ... ..	1	1	Nil.
<b>Total</b> ... ..	<b>1,902</b>	<b>1,696</b>	<b>1,313</b>
<b>Disbursements—</b>			
Dividend amount ... ..	535	560	542
Allocations ... ..	355	170	70
Other items ... ..	116	112	129
Carry forward ... ..	896	854	572
<b>Total</b> ... ..	<b>1,902</b>	<b>1,696</b>	<b>1,313</b>

THE LONDON ASSURANCE CORPORATION.

HEAD OFFICE: London.  
CALCUTTA OFFICE: Clive Buildings.

Founded in the year 1720. The Corporation has acquired the Guildhall Insurance Company Ltd., and has a controlling interest in the British Law Insurance Company Ltd., the Vulcan Boiler and General Insurance Company, Ltd., the London Associated Reinsurance Corporation Ltd., and the Manhattan Fire and Marine Insurance Co.

The Company transacts all forms of insurance business and has its branches spread over a large part of the globe.

The valuation as at December 31, 1930, was made on the usual stringent basis. Value of securities at the time of valuation exceeded the book figures. A surplus of £781,663 was shown of which (1) £578,042 was allocated to policy-holders in payment of bonus on the basis of 55 per cent. of Premiums to those on the old series and £2-5-0 per cent. to those on the new series; (2) £96,350 was allotted to shareholders and (3) the balance £106,911 carried forward. A dividend of 11s. 3d., less tax was paid on ordinary shares which works out to a percentage of 45.

The last quinquennium was marked by favourable mortality experience and progressive advancement of busi-

ness. The Life Assurance Fund during the period was raised by an addition of £2 million to the figure of £6.4 million and new assurances effected were about £9 millions. The latest bonus declaration was a record in the annals of the Corporation and still higher rates in the future are expected by a persistence in the general policy of maintaining strong reserves. Additional care is taken in the Annuity section to enhance the reserves to provide against the low mortality of annuitants experienced recently.

Life Account.

	(In thousands of £)		
	1929	1930	1931
<b>New Business—</b>			
Number of policies ... ..	2,258	2,609	2,299
Amount ... ..	1,979	2,056	1,796
Premiums on New Business ... ..	188	118	83
Total Premiums ... ..	658	678	626
Interest ... ..	265	278	285
Claims and annuities ... ..	398	310	390
Commission and expenses ... ..	89	91	100
Life fund at beginning of the year ... ..	5,507	5,962	6,401
Life fund at year-end ... ..	5,902	6,401	6,677
Increase in fund ... ..	395	499	275
Ratio of expenses to Premium ... ..	13.5%	15.0%	16.0%

Fire Account.

Premiums ... ..	1,381	1,274	1,988
Claims ... ..	714	675	1,083
Expenses ... ..	609	581	918
Reserve at 40% ... ..	...	510	795
Additional reserve ... ..	...	740	900
Total reserve ... ..	1,300	1,250	1,695
Ratio of claims to Premium ... ..	51.7%	53.0%	54.5%
" " expenses to " ... ..	44.1%	45.6%	46.2%
" " reserve to " ... ..	94%	98%	85%

Marine Account.

Premiums ... ..	915	947	879
Claims ... ..	822	780	743
Expenses ... ..	98	100	109
Reserve ... ..	839	895	902
Ratio of claims to Premium ... ..	89.8%	84.5%	84.5%
" " expenses to " ... ..	10.7%	10.5%	12.4%
" " reserve to " ... ..	92%	95%	102%

Accident Account.

Premiums ... ..	...	17	...
Claims ... ..	8	12	...
Expenses ... ..	9	8	...
Reserve for unexpired risks ... ..	...	7	...
Additional reserve ... ..	...	6	...
Total Reserve ... ..	13	13	...
Ratio of claims to Premium ... ..	59.6%	68.2%	...
" " expenses to " ... ..	43.5%	48.9%	...
" " reserve to " ... ..	88%	77%	...

Employers' Liability Account.

	1929	1930	1931
Premium ... ..	49	47	...
Claims ... ..	27	22	...
Expenses ... ..	17	18	...
Reserve for unexpired risks ... ..	...	19	...
Additional reserve ... ..	...	19	...
Total reserve ... ..	38	38	...
Ratio of claims to Premium ... ..	55.2%	47.7%	...
" " expenses to " ... ..	35.4%	39.2%	...
" " reserve to " ... ..	78%	81%	...

General Accident Account.

Premiums ... ..	362	330	1,191
Claims ... ..	211	223	877
Expenses ... ..	164	159	337
Reserve ... ..	260	249	600
Ratio of claims to Premium ... ..	58.2%	67.4%	73.6%
Ratio of expenses to " ... ..	45.3%	48.1%	28.2%
Ratio of reserve to " ... ..	72%	75%	50%

Balance Sheet.

<b>Liabilities—</b>			
Capital ... ..	...	873	912
<b>FUNDS:—</b>			
" Life ... ..	...	6,401	6,677
" Fire ... ..	...	1,250	1,695
" Marine ... ..	...	895	902
" Accident ... ..	...	13	600
" Employers' liability ... ..	...	38	...
" General accident ... ..	...	249	...
" Capital and leasehold re- demption fund ... ..	...	159	410
General reserve fund ... ..	...	1,300	1,460
Total funds ... ..	...	10,305	11,744
Other items ... ..	...	992	1,734
<b>Total</b> ... ..	...	<b>12,170</b>	<b>14,390</b>

## Assets—

Giltedge ... ..	3,576	4,666
Debentures and Preference shares ... ..	2,114	2,793
Equity shares ... ..	195	514
Mortgages and loans ... ..	2,129	2,300
Other investments and other items ... ..	3,565	3,869
Cash ... ..	591	248
<b>Total ... ..</b>	<b>12,170</b>	<b>14,390</b>

## Profit and Loss Account.

## Receipts—

Brought in ... ..	239	239	318
Transferred from life account ... ..	...	13	20
"    "    fire account ... ..	...	95	80
"    "    marine ... ..	161	36	159
"    "    employers' liability account ... ..	...	11	...
Other items ... ..	131	13	186
<b>Total ... ..</b>	<b>531</b>	<b>543</b>	<b>772</b>

## Disbursements—

Dividend amount ... ..	238	233	236
Allocation to accident and general accident accounts ... ..	26	31	135
Other items ... ..	28	36	43
Carry forward ... ..	239	240	358
<b>Total ... ..</b>	<b>531</b>	<b>542</b>	<b>772</b>

## THE LONDON AND LANCASHIRE INSURANCE CO., LTD.

HEAD OFFICE:—Liverpool and London.

BOMBAY OFFICE:—15-15A, Elphinstone Circle.

CALCUTTA OFFICE:—2, Fairlie Place.

Established in 1892. This Company is now one of the largest of the composite British Insurance Companies and has absorbed a large number of subsidiary Companies not only in the United Kingdom but also abroad. There are as many as five in the United Kingdom, three in the United States of America, five in Canada, six in Australia and one each in Holland, South Africa and South America. It transacts in its own name all classes of business with the exception of Life and Leasehold business which are carried on in the name of the "Law Union and Rock," a company acquired in 1919.

The Premium Income of the Company in common with other Companies showed a slight shrinkage in the years 1930 and 1931. The underwriting profit in 1931, however, was approximately £25,000 in excess of that of 1930. The reserves also have been increased from year to year and the Company now stands in an extremely strong position.

The new Life business in 1931 at £2,049,119 is in advance of 1930 business by £402,690. There was a net premium income of £698,697 against £695,110 in 1930. The Life Fund at the end of 1930 was smaller by £52,000 than at the beginning, and in 1931 it was again lowered by £164,000. The quinquennial valuation of the "Law Union and Rock" as at December 31, 1929, showed a surplus of £1,477,900 out of which £160,920 went to shareholders and £32,184 to Profit and Loss Account. In 1930, a net rate of interest, after declaration of income-tax of £4-10-9, was earned on the life funds against £4-15-6 in 1929 whereas in 1931 the rate was £4-9-2. The "London and Lancashire" paid a dividend of 20s. per share, less income-tax during 1930 and 1931 which was equal to 50 per cent. During 1930 a sum of £727,862 out of the profits of the Company was capitalised and the paid up value of each share was raised from £1 to £2.

(In Thousands of £)

## Life Account.

	1929	1930	1931
<b>New business—</b>			
Number of policies ... ..	3,198	2,800	...
Amount assured ... ..	2,161	1,646	2,449
Premiums on new business ... ..	227	57	63
Total premium income... ..	845	695	699
Interest ... ..	406	484	471
Claims by death ... ..	527	567	457
Claims by maturity ... ..	278	314	287
Commission and expenses... ..	125	111	113
Life Fund at beginning of the year ... ..	10,765	10,932	10,880
Life Fund at year-end ... ..	10,932	10,880	10,716
Increase ... ..	167	—52	—164
Ratio of expenses to premium ... ..	14·8%	16·0%	16·4%

## Fire Account.

Premium ... ..	3,410	3,224	3,010
Claims ... ..	1,602	1,548	1,417
Expenses ... ..	1,821	1,344	1,287
Reserve for unexpired risks ... ..	1,365	1,290	1,216
Additional reserve ... ..	2,400	2,400	2,400
Total reserve ... ..	3,765	3,690	3,616
Ratio of claims to premium ... ..	47·0%	48·0%	46·6%
Ratio of expense to premium ... ..	38·7%	41·7%	42·3%
Ratio of reserve to premium ... ..	110%	114%	118·9%

## Accident and General Account.

Premium ... ..	2,456	2,353	2,197
Claims ... ..	1,374	1,353	1,269
Expenses ... ..	931	938	891
Reserve for unexpired risks ... ..	983	944	879
Additional reserve ... ..	800	800	800
Total reserve ... ..	1,783	1,744	1,679
Ratio of claims to premium ... ..	56·0%	57·4%	57·7%
Ratio of expenses to premium ... ..	37·9%	39·6%	40·5%
Ratio of reserve to premium ... ..	73%	74%	76·4%

## Marine Account.

Premium ... ..	1,489	1,269	1,296
Claims ... ..	1,053	995	884
Expenses ... ..	153	145	150
Reserve for unexpired risks ... ..	596	508	519
Additional reserve ... ..	900	900	900
Total reserve ... ..	1,496	1,408	1,419
Ratio of claims to premium ... ..	70·7%	78·4%	68·2%
Ratio of expenses to premium ... ..	10·3%	11·4%	11·5%
Ratio of reserve to premium ... ..	100%	111%	109·4%

## Balance Sheet.

## Liabilities—

Capital ... ..	728	1,456	1,456
5% Debenture Stock ... ..	626	628	618
Reserve Fund ... ..	1,000	1,500	1,500
Fire Fund ... ..	3,765	3,690	3,616
Marine Fund ... ..	1,496	1,408	1,419
Accident Fund ... ..	1,783	1,744	1,679
Staff Pension Fund ... ..	292	294	300
Life Assurance Fund ... ..	10,932	10,880	10,716
Total funds ... ..	19,258	19,516	19,239
Balance of Profit and Loss account ... ..	2,194	1,854	1,511
Claims and balances outstanding ... ..	3,443	3,586	4,071
Other items ... ..	1,152	1,185	463
<b>Total ... ..</b>	<b>27,401</b>	<b>27,670</b>	<b>27,858</b>

## Assets—

Buildings ... ..	1,628	1,669	1,678
Giltedge ... ..	11,931	11,861	9,911
Debentures and Preference shares ... ..	3,480	3,812	4,503
Mortgages and loans ... ..	4,140	4,313	4,311
Other Investments ... ..	2,145	2,247	2,864
Cash ... ..	4,112	4,268	4,589
<b>Total ... ..</b>	<b>27,401</b>	<b>27,670</b>	<b>27,853</b>

## Profit &amp; Loss Account.

	1929	1930	1931
<b>Receipts—</b>			
Brought in ... ..	1,655	2,194	1,854
Underwriting profit from Fire Account ... ..	898	824	845
Underwriting profit from Marine Account ... ..	238	187	201
Underwriting profit from Accident and General Account ... ..	121	85	78
Underwriting profit from Fixed Term Assurance Account ... ..	1	3	2
Life profits ... ..	82	82	82
Interest ... ..	564	550	502
<b>Total ... ..</b>	<b>3,000</b>	<b>3,376</b>	<b>2,514</b>
<b>Disbursements—</b>			
Dividend amount ... ..	562	569	560
Allocations ... ..	217	1,429	443
Other items ... ..	86	28	...
Carried forward ... ..	2,194	1,854	1,511
<b>Total ... ..</b>	<b>3,000</b>	<b>3,375</b>	<b>2,514</b>

**NORTH BRITISH & MERCANTILE INSURANCE COMPANY, LD.**

Chief Offices ... London and Edinburgh.  
Bombay Office ... 276, Hornby Road.  
Calcutta Office ... 101/1, Clive Street.

Established in 1809, this is one of the most powerful of the British Companies, with wide ramifications and enormous reserves. Subsidiary Companies acquired are the Ocean Marine Insurance Co., Ltd., the Railway Passengers Assurance Co., and the Fine Art & General Insurance Co., Ltd. Marine business is done by the "Ocean Marine," Accident business by the "Railway Passengers" while the "Fine Art" transact all classes except Life. Fire and Life business is transacted in the name of the "North British."

The policies in the Life Assurance Branch were valued by the *Om* Table at 3 per cent. interest at the quinquennial valuation made as at December 31, 1930. There was a surplus of £2,927,917. A compound reversionary bonus of £.2 per cent. per annum was declared leaving £123,642 to be carried forward. Similarly the Annuity Branch was valued at 3 per cent. interest. A surplus of £70,091 was disclosed, out of which £70,000 was taken to the Profit and Loss Account leaving £91 to be carried forward. The Sinking Fund Branch had a surplus of £13,781, out of which £1,781 was carried forward after the transfer of £12,000 to Profit and Loss Account.

A sum of £3,468,141 remained at the credit of Profit and Loss Account on 31st December, 1930 against £3,206,551 in 1929. A dividend of 23s. per share, less tax, was declared on the ordinary shares against a dividend of 22s. per share in 1929.

**Life Account.**

(In thousands of £)

	1929	1930	1931
New Business			
Number ... ..	8,830	8,582	8,024
Amount ... ..	4,020	4,103	3,817
Premium on New Business ... ..	200	308	195
Total Premium ... ..	2,099	2,192	2,136
Interest ... ..	1,116	1,163	1,158
Claims by Death ... ..	1,043	886	948
" " Maturity ... ..	588	575	614
Commission and Expenses ... ..	340	366	366
Life fund at beginning of year ... ..	23,953	25,071	26,066
Life fund at year-end ... ..	25,071	26,066	26,604
Increase in fund ... ..	1,118	995	588
Ratio of Expenses to Premium ... ..	16.2%	16.7%	17.1%
Annuity fund ... ..	3,432	3,546	3,768

**Fire Account.**

Premiums ... ..	4,463	3,901	3,628
Claims ... ..	2,109	2,132	1,828
Expenses ... ..	1,944	1,731	1,662
Reserve at 40% for unexpired risks ... ..	1,785	1,560	1,451
Additional reserve ... ..	1,750	2,000	2,000
Total reserve ... ..	3,535	3,560	3,451
Ratio of Claims to Premium ... ..	47.8%	54.6%	50.4%
Ratio of Expenses to Premium ... ..	43.6%	44.4%	45.8%
Ratio of Reserve to Premium ... ..	79%	91%	95.1%

**"Ocean Marine" Account.**

Premiums ... ..	335	322	290
Claims ... ..	280	244	222
Expenses ... ..	85	83	88
Reserve ... ..	321	318	273
Ratio of Claims to Premium ... ..	83.6%	75.7%	76.6%
Ratio of Expenses to Premium ... ..	10.5%	10.2%	11.4%
Ratio of Reserve to Premium ... ..	96%	99%	91%

**Fine Art and General Account.**

Premiums ... ..	379	368	340
Claims ... ..	204	178	163
Expenses ... ..	152	151	142
40% Reserve ... ..	152	145	136
Additional Reserve ... ..	200	200	200
Total Reserve ... ..	352	345	336
Ratio of Claims to Premium ... ..	53.9%	49.1%	45%
Ratio of Expenses to Premium ... ..	40.2%	41.7%	41.8%
Ratio of Reserve to Premium ... ..	93%	93%	99%

**"Railway Passengers" Account.**

Premiums ... ..	1,205	1,198	1,155
Claims ... ..	605	571	532
Expenses ... ..	471	488	472
Reserve at 40% ... ..	482	479	462
Additional Reserve ... ..	419	449	493
Total Reserve ... ..	901	928	955
Ratio of Claims to Premium ... ..	50.2%	47.6%	46.0%
Ratio of Expenses to Premium ... ..	39.1%	40.7%	40.8%
Ratio of Reserve to Premium ... ..	75%	77%	82.7%

**Balance Sheet.**

Liabilities—				
Capital ... ..	2,438	2,438	2,438	
Funds of Life ... ..	25,071	26,066	26,604	
" " Fire ... ..	3,535	3,560	3,451	
Sinking fund ... ..	261	251	264	
Other funds ... ..	1,399	1,412	1,435	
Total funds ... ..	30,206	31,280	31,754	
Other items ... ..	9,290	12,452	9,792	
<b>Total ... ..</b>	<b>41,934</b>	<b>43,741</b>	<b>43,984</b>	

**Assets—**

Life and Annuity branches... ..	29,022	30,420	31,117
Giltedge ... ..	4,247	4,762	4,714
Debentures and Preference Shares ... ..	2,552	2,935	2,865
Equity Shares ... ..	2,545	2,768	2,727
Mortgages and loans ... ..	56	3	3
Other investments and other items ... ..	2,970	2,335	1,946
Cash ... ..	542	518	612
<b>Total ... ..</b>	<b>41,934</b>	<b>43,741</b>	<b>43,984</b>

**Profit & Loss Account.**

	1929	1930	1931
Receipts—			
Brought in ... ..	2,874	3,207	3,468
Transfers from Fire account ... ..	444	262	246
" " Annuity " ... ..	35	36	...
" " Life Annuity and Sinking Fund ... ..	...	386	...
Other items ... ..	510	514	...
<b>Total ... ..</b>	<b>3,863</b>	<b>4,405</b>	<b>4,223</b>

**Disbursements—**

Dividend rate % ... ..	88%	92%	92%
" Amount ... ..	527	528	539
Allocations ... ..	50	350	50
Other items ... ..	79	59	461
Carry forward ... ..	3,207	3,468	3,173
<b>Total ... ..</b>	<b>3,863</b>	<b>4,405</b>	<b>4,223</b>

**NORWICH UNION LIFE INSURANCE SOCIETY.**

HEAD OFFICE: Norwich.

Founded as a mutual concern in 1808 for the transaction of life business. In 1925, the Society purchased from Phoenix the Norwich Union Fire, whose assets are shown in the balance sheet at the cost price of £6,088,000.

The Society's financial position and business results are extremely encouraging. The number of policies with the amount assured and the new premiums secured during 1931 are all larger than 1930. In spite of a 50 per cent. increase in surrenders of policies and a mortality experience of 70 per cent. against 61 per cent. in 1930, total premium income shows an increase of over £275,000. The expense ratio at 11.7 compares very favourably with 14.3 and 14.16 per cent. for 1930 and 1929 respectively. Total funds stand at the high figure of £34½ million. Interest earnings on the funds are on the basis of £4.19 per cent. for 1931 compared to £4.19-7 and £5 for the previous two years.

The Society's investment policy is worth special notice. A very large proportion of the investment is in foreign mortgages which are not subject to depreciation like Stock Exchange securities. It has been the traditional policy of the Society to have its investments more and more in mortgages so as to earn a higher rate of interest. Out of the total assets of £34½ million, Stock Exchange securities amount to about £10 million on which depreciation has been provided for to the extent of £1,098,746 against £353,537 in 1930.

In the last quinquennial valuation made as at December 31, 1930, a surplus of £4,442,389 was shown which is "a figure unprecedented in the Society's existence over a period of 122 years." After paying off £3,991,370 for bonuses, there remains to be carried forward a sum of £451,019. Bonuses declared, in the case of whole-life policies was 10 to 15 per cent. in excess of those in 1925. Under ordinary whole-life policies with full profits, the reversionary bonuses range from £2-14

per cent. to 4-15 per cent. and in the case of endowment assurances they are from 1-18 to 13 per cent.

(In Thousands of £)

#### Life Account.

New Business—	1929	1930	1931
Number of policies ...	12,896	11,954	12,593
Amount Assured ...	7,892	8,034	8,250
Premiums on new business ...	469	451	507
Total premiums ...	3,216	3,804	3,492
Interest ...	1,401	1,482	1,582
Claims by death ...	788	776	936
"    " maturity ...	1,005	1,082	1,149
Commission and expenses ...	468	475	411
Life fund at beginning of year ...	27,244	29,221	30,996
Life Fund at year-end ...	29,221	30,996	31,628
Increase in fund ...	1,977	1,775	682
Ratio of expenses to premium ...	14.5%	14.3%	11.7%
Annuity fund ...	1,268	1,801	1,388

#### Balance Sheet.

Liabilities—	1929	1930	1931
Assurance fund ...	29,221	30,996	31,628
Annuity " ...	1,268	1,801	1,388
Capital Redemption fund ...	1,447	1,480	1,577
Total funds ...	31,936	38,727	34,543
Other items ...	192	190	280
<b>Total</b> ...	<b>32,128</b>	<b>38,917</b>	<b>34,773</b>
<b>Assets—</b>			
Giltedge ...	5,980	5,908	5,747
Debentures and preference shares ...	3,707	4,217	4,282
Equity shares ..	6,212	6,218	6,212
Mortgages and loans ...	18,868	15,075	15,928
Other investments and other items ...	1,991	2,153	2,207
Cash ...	285	356	447
<b>Total</b> ...	<b>32,128</b>	<b>38,917</b>	<b>34,773</b>

#### PEARL ASSURANCE COMPANY, LIMITED.

(In thousands of £)

#### Life Account (Ordinary).

New Business:—	1929	1930	1931
Number of Policies ...	40,308	40,062	32,283
Amount Assured ...	11,653	10,377	8,022
New Premiums ...	694	625	503
Total Premiums ...	5,325	4,653	4,745
Net Interest Income ...	1,221	1,302	1,340
Claims by Death ...	531	512	569
Claims by Maturities ...	2,465	1,535	1,408
Commission and Expenses ...	526	503	486
Life Fund at the beginning of the year ...	24,237	26,314	29,824
Life Fund at year-end ...	26,314	29,824	30,272
Ratio of Expenses to Premiums ...	9.8%	10.1%	10.0%

#### Industrial Life Assurance Account.

New Business—	1929	1930	1931
Number of Policies ...	1,212,207	1,214,276	1,218,512
Amount Assured ...	20,603	19,980	19,800
Total Premium Income ...	6,656	6,930	7,132
Interest Income ...	1,203	1,302	1,414
Claims by Death ...	2,261	2,055	2,353
Claims by Maturities ...	529	544	550
Commission and Expenses ...	2,276	2,277	2,284
Life fund at the beginning of the year ...	24,237	26,314	28,806
Life fund at the end of the year ...	26,314	28,806	28,952
Expense Ratio ...	34.2%	32.8%	32.0%

#### Fire Account.

Premiums ...	498	473	493
Claims ...	264	269	254
Commission and Expenses ...	223	230	216
Reserves ...	547	541	568
Ratio of Claims to Premium ...	53.0%	56.8%	56.7%
Ratio of Expenses to Premiums ...	44.8%	48.6%	43.8%
Ratio of Reserves to Premiums ...	109.8%	114.3%	115.2%

#### Accident Account.

	1929	1930	1931
Premiums ...	64	70	72
Claims ...	29	30	37
Expenses ...	15	14	15
Reserves ...	109	130	142
Ratio of Claims to Premiums ...	45.1%	42.1%	51.2%
Ratio of Expenses to Premiums ...	23.3%	19.8%	20.9%
Ratio of Reserves to Premiums ...	170%	186%	197%

#### Employers' Liabilities Insurance Account.

Premiums ...	17	20	20
Claims ...	7	12	12
Expenses ...	6	7	8
Reserves ...	25	29	33
Ratio of Claims to Premiums ...	41.8%	60.6%	57.4%
Ratio of Expenses to Premiums ...	36.2%	37.4%	38.1%
Ratio of Reserves to Premiums ...	147%	145%	165%

#### General Insurance Account.

	*1929	*1930	1931
Premiums ...	70	101	31
Claims ...	33	51	25
Expenses ...	28	39	12
Reserves ...	37	14	19
Ratio of claims to Premiums ...	46.6%	50.4%	81.4%
Ratio of expenses to Premiums ...	39.7%	38.1%	37.3%
Ratio of Reserves to Premiums ...	52.9%	13.9%	61.3%

\* Includes Motor business.

#### Balance Sheet as on the 31st December, 1931.

Liabilities—	1931
Capital ...	1,360
Life Fund (ordinary branch) ...	30,272
Life Fund (Industrial branch) ...	28,952
Fire insurance fund ...	568
Accident insurance fund ...	142
General insurance fund ...	19
Employer's Liability insurance fund ...	33
Motor insurance fund ...	46
Other Reserve funds ...	6,716
Total funds ...	66,748
Other liabilities ...	1,121
<b>Total</b> ...	<b>69,229</b>
<b>Assets—</b>	
Giltedge Securities ...	45,703
Debentures and Preference Stocks ...	10,689
Equity Shares ...	2,737
Loans on life policies ...	5,323
Other loans and mortgages ...	2,570
House Property ...	1,316
Cash ...	340
Other assets ...	2,551
<b>Total</b> ...	<b>69,229</b>

#### THE PRUDENTIAL ASSURANCE COMPANY LIMITED.

The Company was founded in Great Britain in 1848 and has steadily grown since that date. Until now it has accumulated funds of over Rs. 341 crores whilst its total income from all sources for 1931 amounted to over Rs. 62 crores. It now has the distinction of being the largest Insurance Institution in the British Empire.

The growth of the Company during the present century is shown in the following schedule of assets and income:

Year.	Total Assets. Rs.	Total Income. Rs.
1901	57,72,26,999	13,84,12,423
1911	108,31,95,746	20,64,78,115
1921	179,76,96,475	41,48,37,696
1931	341,05,84,715	62,04,18,851

All classes of business are transacted through its three Branches, the Ordinary Branch, Industrial Branch and General Branch, and the Company has Agencies and Branches throughout the world.

The total sums assured in force together with the accrued bonuses in the Ordinary Branch amount to over Rs. 283 crores. The new sum assured in



respect of Policies effected during 1931 amounted to over Rs. 27 crores, showing an increase of nearly 2 crores over the corresponding amount for 1930. At the end of 1929 new and better terms were offered by the Company for Life Annuities and since that date there has been a marked expansion in the amount of annuity purchase money received, the amount received during 1931 being nearly eight times the corresponding amount received in 1929.

The Company has been established only a few years in India, yet it is already transacting a very substantial Indian business. In 1929 the Company ranked second highest amongst Non-Indian Companies in respect of the number of Policies issued during that year in India. Policies were effected in 1931 in India for a total sum assured of Rs. 1,30,00,000. The total assets of the Company invested in India amount to over 10 crores.

Continued expansion has been achieved over a long period and the profits of the Company have correspondingly increased, to the benefit of the participating policyholders to whom 90 per cent. of the Ordinary Branch profits are allocated.

The surplus for 1931 was greater than that for 1930, but in view of the uncertain financial outlook, it was considered prudent to reduce temporarily the rates of bonus declared. The rates declared were Rs. 15 per Rs. 1,000 sum assured for Endowment Assurances and Rs. 18 per Rs. 1,000 sum assured for Whole Life Assurances, comparing with Rs. 23 and Rs. 26 respectively declared for 1930. An additional amount equivalent to the reduction will however be paid on those Policies which were in force at 31st December, 1931 and which become claims by death or maturity during 1932.

Further an amount sufficient to cover the reduction has been placed to reserve and will be released to make good the reduction if and when in the opinion of the Directors, economic conditions have sufficiently improved.

The figures given below indicate the progressive nature of the Company :

Ordinary Branch.			
	1929.	1930	1931.
Number of new Policies issued	80,532	77,581	76,719
	Rs.	Rs.	Rs.
New sums assured	23,47,59,314	25,08,62,847	27,02,55,167
Premiums on new business	2,85,44,773	2,10,04,853	2,12,36,466
Total sums assured and bonuses	250,06,32,591	261,07,89,841	283,84,76,262
Total premium income	15,61,82,449	15,41,57,783	16,22,70,516
Claims by death	3,00,55,026	3,07,32,626	3,23,03,906
Claims by maturity	9,94,04,771	8,70,28,491	7,73,47,025
Life fund at end of year excluding investments reserve	120,14,05,103	125,23,67,075	132,02,40,954
Total assets of the Company	304,75,93,764	321,26,71,480	341,05,84,715

All conversions from Sterling to Rupees have been made at the rate of exchange Re. 1 = sh. 1/6d.

#### ROYAL INSURANCE COMPANY.

The Royal Insurance Company occupies an important place amongst the insurance offices which operate on a world-wide scale. The total assets of the company amount to £50.86 million; and this is inclusive of investments to the amount of £9.57 million in allied or subsidiary companies. Taken in conjunction with the Liverpool and London and Globe with which the Royal is associated, the group has a premium income of £26 million, with total amounts equalling £64 million. The reserves are on a strong basis, fire fund being 114 per cent. of the premium income, the marine fund being 162 per cent. and accident fund 95 per cent. 1931 accounted for a slight shrinkage in business but the under-writing profit has been more satisfactory. The investments of the company have been drastically written down to market value; and in view of the sensational rise which has taken place in securities since the commencement of 1932, the Royal should be making a very substantial profit on this account.

(In Thousands of £.)

Life Account:—	
New Business	1931
Number	5,299
Amount	8,509
New Premiums	228
Total Premiums	1,822
Claims	1,200
Expenses and commission	226
Life fund at the beginning of year	20,456
Life fund at the end of year	21,862
Net increase in the fund	+896
Ratio of Expenses to Premiums	12.4%

Fire Account.	
Premiums	6,068
Claims	8,088
Expenses and Commission	2,750
40% Reserve for unexpired risks	2,425
Additional Reserve	4,500
Total Reserves	6,925
Ratio of claims to Premium	51%
Ratio of Expenses to Premium	46%
Ratio of Reserves to Premium	114%

Marine Account.	
Premiums	1,029
Claims	521
Expenses	223
Reserves	1,670
Ratio of claims to Premiums	51%
Ratio of Expenses to Premiums	22%
Ratio of Reserves to Premiums	162%

Accident & General Account.	
Premiums	5,444
Claims	3,188
Expenses and Commission	2,219
40% Reserve for unexpired risks	2,177
Additional Reserve	3,002
Total Reserves	5,179
Ratio of claims to Premiums	59%
Ratio of expenses to Premiums	41%
Ratio of Reserves to Premiums	95%

#### Balance Sheet as on 31st December, 1931.

Liabilities—	
Capital	2,800
Life Fund	21,362
Annuity Fund	1,855
Accident & General Insurance Fund	5,180
Marine Fund	1,670
Fire Fund	6,925
Other Funds	1,118
Total Funds	38,110
Outstanding claims of all Depts.	4,496
Other Liabilities	5,452
<b>TOTAL</b>	<b>50,858</b>
Assets—	
Giltedge Securities	17,365
Debentures & Preference shares	15,417
Equity Shares	4,684
Loans and Policies	1,717
Other Loans & Mortgages	3,706
House Property	2,325
Agents' Balances	2,738
Cash	2,092
Other Assets	904
<b>TOTAL</b>	<b>50,858</b>

Profit & Loss Account.	
Receipts—	
Brought Forward	1,564
Interest & Dividends	1,350
Transferred—	
Fire account	402
Marine account	126
Accident & General Account	117
Other Items	40
<b>TOTAL</b>	<b>3,599</b>
Disbursements—	
Dividend	1,375
Allocations	595
Other Items	230
Carried Forward	1,399
<b>TOTAL</b>	<b>3,599</b>

## ROYAL EXCHANGE ASSURANCE.

Head Office:	...
Royal Exchange, London.	
Calcutta Office:	
Norton Building, Lal Bazar.	
Bombay Office:	
Jehangir Wadia Building, Esplanade Rd.	

The Corporation was established as early as 1720 and transacts all classes of business. To it is affiliated more than half a dozen subsidiary companies whose shares appear in the balance sheet at the figure of £2,109,916.

The reserves of the Corporation are on strong bases. Besides a Life Assurance Fund of £9,358,000 which is larger by £762,000 than in the previous year there is a Marine Fund of £859,000 which is 185 per cent. of the premium, a Fire Fund of £1,249,000 which is 99 per cent. of Premium and General Accident Fund of £1,094,000 which is 98 per cent. of premium. The balance of the Profit and Loss Account is kept as a General Reserve Fund which now amounts to £853,309. During 1931, an amount of £275,000 was set aside as an Exchange Reserve account. The paid up capital of the Corporation is £946,978 against an authorised capital of £2 million. Dividend was on the basis of 27 per cent. for the past three years.

1930 quinquennial valuation showed a surplus of £1,346,199. A reversionary bonus of 40s. per annum was paid to policyholders. After payment of interim bonuses, reversionary bonuses on the above basis, and allocations, £250,000 was placed to a special bonus equalisation fund.

(In Thousands of £)

## Life Account.

	1929	1930	1931
<b>New Business—</b>			
No. of Policies ...	3,984	4,181	4,295
Sum Assured ...	2,274	2,501	2,417
Premium on new business ...	140	182	109
Total Premium ...	895	926	975
Interest ...	384	408	429
Claims and Annuities ...	440	503	537
Commissions and Expenses ...	187	152	164
Life Fund at beginning of year ...	7,514	8,188	8,596
" " " year-end ...	8,138	8,596	9,358
Increase ...	624	458	762
Ratio of expenses to premium ...	15.8%	16.4%	16.8%
Annuity Fund ...	1,058	1,076	1,164

## Fire Account.

Premiums ...	1,756	1,685	1,624
Claims ...	900	845	858
Expenses ...	721	698	675
Reserve ...	1,302	1,274	1,249
Ratio of claims to premium ...	51.2%	50.1%	52.8%
" " expenses, " " ...	41.0%	41.1%	41.5%
" " reserve " " ...	74%	76%	77%

## Marine Account.

Premiums ...	744	653	462
Claims ...	611	602	523
Expenses ...	89	91	79
Reserve ...	1,002	981	859
Ratio of claims to premium ...	82.1%	92.3%	118.2%
" " expenses, " " ...	12.0%	14.0%	17.0%
" " reserve " " ...	185%	150%	185%

## General Accident Account.

Premiums ...	1,276	1,262	1,117
Claims ...	627	659	688
Expenses ...	495	505	461
Reserve ...	1,071	1,180	1,094
Ratio of claims to premium ...	49.2%	52.2%	56.6%
" " expenses, " " ...	38.8%	40.0%	41.2%
" " reserve " " ...	84%	90%	98%

## Balance Sheet as at December 31, 1931.

<b>Liabilities—</b>	
Capital ...	947
<b>Funds—</b>	
Life Assurance ...	9,358
Annuity ...	1,164
Capital redemption ...	850
Fire Insurance ...	1,249
Marine Insurance ...	859
General Accident Insurance ...	1,094
Staff pension Fund ...	512
General Reserve Fund ...	858
Exchange and reserve account ...	275
Total Funds ...	15,714
Other funds and other items ...	1,252
<b>Total ...</b>	<b>17,918</b>

## Assets—

Giltedge ...	5,500
Mortgages and Loan ...	1,883
Debentures and Preference shares ...	4,586
Equity shares ...	284
Other Investments ...	3,486
Cash ...	488
Other items ...	1,787
<b>Total ...</b>	<b>17,918</b>

## Profit and Loss Account.

<b>Receipts—</b>			
Brought in ...	1,171	1,002	1,060
Transferred from other accounts ...	326	297	206
Interest and other receipts ...	187	102	142
<b>Total ...</b>	<b>1,634</b>	<b>1,401</b>	<b>1,408</b>
<b>Disbursements—</b>			
Dividend amount ...	206	198	196
Allocations ...	350	50	300
Other Items ...	76	98	59
Carry forward ...	1,002	1,060	853
<b>Total ...</b>	<b>1,634</b>	<b>1,401</b>	<b>1,408</b>

## SCOTTISH INSURANCE CORPORATION, LD.

HEAD OFFICE: 115, George St., Edinburgh.

Established in 1877. Transacts a wide range of insurance business in and outside the United Kingdom. The Corporation is controlled by the Scottish Amicable Life Assurance Society which acquired the Corporation in 1919.

The Corporation continued to show satisfactory progress in 1931. The total revenue of £392,252 compares favourably with £396,558 in 1930. For the past two years the dividend is maintained at 14 per cent., which is 1 per cent. above 1929 dividend. The assets of the Corporation, at the end of 1930, amounted to nearly £1½ millions and total funds £1½ millions including £110,000 as a General Reserve Fund to which £15,000 was added from the 1931 accounts.

The 1929 triennial valuation showed a surplus of £96,730; policyholders received bonuses on the basis of 42s. per cent. per annum in the general section and 50s. per cent. per annum in the abstainers section. Shareholders received an allotment of £5,380.

## Life Account.

	1929	1930	1931
<b>New Business—</b>			
Number of policies ...	105	101	115
Amount assured ...	98	80	88
Premium on new business ...	16	4	7
Total Premium ...	82	67	66
Interest ...	42	42	42
Claims and Annuities ...	67	66	66
Commission and Expenses ...	18	18	12
Life Fund at beginning of year ...	919	946	960
" " " year-end ...	946	960	969
Increase in Life Fund ...	27	14	9
Ratio of Expenses to premium ...	16	19	18

## Fire Account.

	1929	1930	1931
Premiums ...	73	81	83
Claims ...	47	89	41
Expenses ...	81	96	37
Reserve at 40% of premium ...	32	83	
Additional Reserve ...	10	10	10
Total Reserve ...	84	42	43
Ratio of Claims to premiums ...	65	48	50
" " Expenses to premiums ...	48	44	45
" " Reserve " " ...	47	52	52

## Accident and General Insurance Account.

Premiums ...	186	140	145
Claims ...	72	68	64
Expenses ...	61	68	64
Reserve at 40% of premium ...	56	58	
Additional Reserve ...	81	44	
Total Reserve ...	87	87	102
Ratio of Claims to premium ...	53	45	42
" " Expense " " ...	45	45	44
" " Reserve " " ...	64	62	70

Premium ... ..	40	89	85
Claims ... ..	24	20	25
Expenses ... ..	18	16	14
Reserve at 40% of premium ... ..	16	14	
Additional Reserve ... ..	28	25	
Total Reserve ... ..	42	44	39
Ratio of Claims to premium ... ..	59%	51%	61%
" " Expense " " ... ..	45%	41%	40%
" " Reserve " " ... ..	104%	114%	111%

<b>Liabilities—</b>			
Capital ... ..		1930	1931
Fire Fund ... ..		150	150
Life " ... ..		42	43
Accident and General Fund ... ..		960	969
Employers' Liability " ... ..		87	102
General Reserve Funds ... ..		44	39
Other Funds ... ..		100	110
Total Funds ... ..		19	21
Other Items ... ..		1,252	1,284
		150	300
<b>TOTAL</b> ... ..		<b>1,552</b>	<b>1,584</b>
<b>Assets—</b>			
Giltedge Investments ... ..		548	544
Debentures and Preference Shares ... ..		606	626
Equity Shares ... ..		150	152
Loans and Mortgages ... ..		60	66
Other Investments and Items ... ..		138	150
Cash ... ..		46	46
<b>TOTAL</b> ... ..		<b>1,552</b>	<b>1,584</b>

<b>Receipts—</b>			
Brought in ... ..	76	41	36
Transferred from Fire account ... ..		5	6
Transferred from Accident and General account ... ..	19	18	22
Transferred from Employers' Liability account ... ..		8	8
Transferred from Life account ... ..		5	...
Other Items ... ..	12	12	12
<b>TOTAL</b> ... ..	<b>107</b>	<b>84</b>	<b>79</b>
<b>Disbursements—</b>			
Dividend amount ... ..	14	15	16
Allocations ... ..	48	5	...
Other Items ... ..	4	8	9
Carry forward ... ..	41	61	54
<b>TOTAL</b> ... ..	<b>107</b>	<b>84</b>	<b>79</b>

		In Thousands of £		
		1929	1930	1931
<b>New Business—</b>				
Number of policies ... ..		3,165	3,256	3,093
Amount ... ..		2,085	2,224	2,485
Premium on new business ... ..		158	86	84
Total Premium ... ..		786	720	741
Claims and annuities Commission and expenses ... ..		867	798	770
Life fund at beginning of year ... ..		118	118	128
Life fund at year-end ... ..		10,854	10,587	10,798
Increase in fund ... ..		10,587	10,798	11,085
Ratio of expenses to Premium ... ..		238	211	237
		15.4%	16.4%	17.2%

		1929	1930	1931
Premium ... ..		1,326	1,811	1,155
Claims ... ..		688	685	705
Expenses ... ..		551	569	510
Reserve at 50% of Premiums ... ..		668	656	578
Special reserve ... ..		750	800	800
Total reserve ... ..		1,418	1,456	1,378
Ratio of claims to Premium ... ..		48.1%	52.2%	61.0%
Ratio of expenses to Premium ... ..		41.5%	48.4%	44.1%
Ratio of reserve to Premium ... ..		107%	111%	119.8%

		1929	1930	1931
Premium ... ..		26	27	26
Claims ... ..		18	18	13
Expenses ... ..		10	11	11
Reserve at 50% of Premium ... ..		18	13	13
Additional reserve ... ..		4	5	5
Total reserve ... ..		17	18	18
Ratio of claims to Premium ... ..		50.7%	49.0%	50.0%
Ratio of expenses to Premium ... ..		39.0%	41.2%	42.8%
Ratio of reserve to Premium ... ..		65%	66%	69.2%

		1929	1930	1931
Premium ... ..		54	54	52
Claims ... ..		24	28	27
Expenses ... ..		22	22	21
Reserve at 50% of Premium ... ..		24	24	22
Additional reserve ... ..		32	32	33
Total reserve ... ..		56	56	55
Ratio of claims to Premium ... ..		44.1%	51.0%	51.9%
Ratio of expenses to Premium ... ..		40.0%	40.0%	40.8%
Ratio of reserve to Premium ... ..		103%	104%	105.7%

		1929	1930	1931
Premium ... ..		358	327	331
Claims ... ..		290	251	224
Expenses ... ..		59	68	64
Reserve at 50% of Premium ... ..		...	163	165
Additional reserve ... ..		...	258	270
Total reserve ... ..		429	421	435
Ratio of claims to Premium ... ..		82.1%	76.8%	67.6%
Ratio of expenses to Premium ... ..		16.7%	19.3%	19.3%
Ratio of reserve to Premium ... ..		122%	129%	131%

**SCOTTISH UNION AND NATIONAL INSURANCE COMPANY.**

HEAD OFFICE : Edinburgh.  
 Calcutta OFFICE : 6, Lyons Range.  
 BOMBAY OFFICE : 16, Bank St.

The Scottish Union and National Insurance Company was formed in 1878 by an amalgamation of two companies, the Scottish Union (founded in 1824) and Scottish National (founded in 1841). It took over the old City of Glasgow Life Assurance Company in 1913.

The Company controls the Maritime Insurance Company Ltd., American Union Insurance Company of New York and the Central Union Insurance Company. It transacts the varied forms of insurance business, and has a network of branches throughout the world.

The Quinquennial Valuation as at December 31, 1927, was made assuming the rate of interest at 3 per cent. Bonuses of 43s. per cent. and upward were declared in the case of Scottish Union policies and 43s. per cent. in other classes. There was a balance of £171,409 available to be carried to Profit and Loss account. Dividends at the rate of 13s. less tax on "A" shares (£1 paid) and 48s. less tax on "B" shares (£3-15s. paid) were paid. The total Assets of the Company on December 31, 1930, amounted to £16 million.

The reserves in the Fire, Employers' Liability and Marine accounts are kept at a very high figure. The ratio of reserve to premium in the Fire Department was 119.3 per cent. in 1931 compared with 111 per cent. in 1930 and 107 per cent. in 1929; that in the Employers' Liability section is 105 per cent. against 104 per cent. and 103 per cent.; and that in the Marine section was 131 per cent. against 129 per cent. and 122 per cent. The reserve position is thus on the soundest basis possible. Total funds of the Company amount to £14 million and the total resources to £15.68 million.

## Miscellaneous Account.

	1929	1930	1931
Premium ... ..	166	170	177
Claims ... ..	80	76	79
Expenses ... ..	65	70	76
Reserve at 50% ... ..	...	85	89
Additional reserve ... ..	...	33	35
Total reserve ... ..	116	118	124
Ratio of claims to Premium ... ..	48.2%	44.5%	44.6%
Ratio of expenses to Premium ... ..	39.5%	41.3%	42.9%
Ratio of reserve to Premium ... ..	70%	69%	70%

## Balance Sheet as at December 31st.

	1930	1931
<b>Liabilities—</b>		
Capital ... ..	800	800
Funds: Life and annuity ... ..	10,798	11,035
" Fire ... ..	1,456	1,878
" Accident ... ..	18	18
" Employers' Liability ... ..	56	55
" Marine ... ..	421	435
General reserve fund ... ..	500	500
Other funds ... ..	320	387
Total funds ... ..	13,569	14,108
Other items ... ..	1,776	1,274
<b>Total ... ..</b>	<b>15,645</b>	<b>15,682</b>
<b>Assets—</b>		
Giltedge ... ..	4,277	4,415
Debentures and Preference shares ... ..	6,247	6,476
Equity shares ... ..	215	255
Mortgages and loans ... ..	3,137	2,886
Other investments and other items ... ..	1,473	1,333
Cash ... ..	296	267
<b>Total ... ..</b>	<b>15,645</b>	<b>15,682</b>

## Profit and Loss Account.

	1929	1930	1931
<b>Receipts—</b>			
Brought in ... ..	544	541	523
Transferred from fire account ... ..	...	113	68
Transferred from accident account ... ..	...	2	2
Transferred from employers' liability account ... ..	216	6	7
Transferred from miscellaneous account ... ..	...	27	21
Transferred from marine account ... ..	...	20	30
Other items ... ..	85	90	82
<b>Total ... ..</b>	<b>845</b>	<b>799</b>	<b>733</b>
<b>Disbursements—</b>			
Dividend amount ... ..	156	151	149
Allocation to special reserve in fire account ... ..	60	50	50
Other items ... ..	88	75	79
Carry forward ... ..	541	523	455
<b>Total ... ..</b>	<b>845</b>	<b>798</b>	<b>733</b>

## STANDARD LIFE ASSURANCE CO.

Head Office: Edinburgh.  
Chief Branch: Calcutta.  
Sub-Branch: Bombay.

Founded as a proprietary company in 1825 but converted into a mutual concern in 1925. The Company commenced business in India in 1846.

Transacts life annuity and capital redemption business, both in the United Kingdom and outside.

The company has created certain records in its transactions during the past year. Total new business of the company at £4.7 million exceeds all previous figures. The new premium income at £566,000 and the addition to total reserve by more than £1½ million are new records. The accumulated funds amount to the large figure of £21.6 million.

Valuation is made annually and the Company's reserves are calculated on a 2½ per cent. basis, with an additional margin that makes it approximately equivalent to one at 2½ per cent. interest—a stronger basis of valuation than that adopted by any other Assurance Company in the world. A

compound reversionary bonus of 42s. was declared during each of the past three years. The carry over as at November 15, 1931, is £30,000 compared to £28,000 in 1930 and £25,000 in 1929. Two special types of policies—the Cash Bonus Minimum Premium Scheme and Group Life Assurance and Staff Pension Scheme—have been specially recommended by the Chairman. The former is intended to meet the demand for a policy which would give large initial cover and at the same time provide for a share in the profits at a rate of premium which is only very little in excess of the usual type of without-profit policy. The Group Life Assurance and Staff Pension Scheme is intended to help many industrial firms who realise the desirability of covering their staff against risk of death and for pensionary liabilities, an object which could not easily be achieved by commercial firms on their own initiative.

## Life Account.

	1929.	1930.	1931.
<b>NEW BUSINESS</b>			
Number of Policies ... ..	4,548	4,478	3,833
Amount Net ... ..	2,800	3,141	2,764
Net Premium on new business ... ..	170	245	139
Total Premium ... ..	1,108	1,232	1,188
Interest ... ..	846	885	934
Claims by death ... ..	648	607	614
" maturity ... ..	469	259	295
Commission & Expenses ... ..	199	205	196
Life Fund at beginning of year ... ..	16,925	17,316	18,326
Life Fund at year-end ... ..	17,316	18,326	19,452
Increase in Fund ... ..	391	1,010	1,126
Ratio of expenses to premium ... ..	17.9%	16.6%	16.5%

## Balance Sheet.

	1929.	1930.	1931.
<b>Liabilities—</b>			
Life Assurance and Annuity Fund ... ..	17,316	18,326	19,452
Capital Redemption Assurance and Annuity Certain Fund ... ..	112	135	559
General Reserve ... ..	700	800	800
Perpetual Stock ... ..	850	850	850
Total Funds ... ..	18,978	20,111	21,661
Current Liabilities ... ..	255	268	300
<b>Total ... ..</b>	<b>19,233</b>	<b>20,379</b>	<b>21,961</b>
<b>Assets—</b>			
Giltedge ... ..	5,872	6,174	6,828
Debenture and Preference Stocks ... ..	7,210	7,822	7,710
Ordinary Stocks ... ..	1,687	1,871	2,730
Mortgages and Loans on Life Interests and Reversions ... ..	2,210	2,020	2,119
Loans on Policies ... ..	1,302	1,409	1,528
Other Investments ... ..	580	557	557
Agents Balances, etc. ... ..	173	189	195
Cash ... ..	199	337	294
<b>Total ... ..</b>	<b>19,233</b>	<b>20,379</b>	<b>21,961</b>

## SUN INSURANCE OFFICE LIMITED.

CALCUTTA OFFICE: 2, Hare Street.  
BOMBAY OFFICE: 24, Bruce Road.  
HEAD OFFICE: London.

Started in 1710, the Sun is the oldest insurance office in the world.

The Company transacts fire, marine, motor car, workmen's compensation and all other classes of accident insurance. It is connected with Sun Life Assurance Society. The Sun confines its activities to general insurance business, and the Sun Life to life business.

The Sun has built up substantial additional reserves in all departments, over and above the customary 40 per cent. provision against unexpired risks. The Reserves amount to 105 per cent. of the premium income in Fire Department, 86 per cent. in Accident, 115 per cent. in Employers' Liability, 108 per cent. in Marine and 73 per cent. in Miscellaneous account. In addition to so strong a position, there is a general reserve fund of £1 million. The carry-forward stands at the high figure of £1.08 million.

Policyholders and shareholders alike should feel gratified at so impregnable a position.

## Fire Account.

(In Thousands of £)

	1299	1930	1931
Premiums ... ..	2,572	2,479	2,455
Claims ... ..	1,218	1,222	1,140
Expenses ... ..	1,157	1,133	1,110
Reserve at 40% for unexpired risk ... ..	1,029	992	982
Additional reserve ... ..	1,600	1,600	1,600
Total reserve ... ..	2,629	2,592	2,582
Ratio of Claims to Premium ... ..	47.3%	49.3%	46.5%
Ratio of Expenses to Premium ... ..	44.9%	45.7%	45.2%
Ratio of Reserve to Premium ... ..	102%	105%	105%

**Marine Account.**

Premiums ... ..	406	598	557
Claims ... ..	299	365	456
Expenses ... ..	34	40	41
Reserve ... ..	325	519	539
Additional reserve ... ..	130	130	130
Total reserve ... ..	455	649	669
Ratio of Claims to Premium ... ..	73.8%	61.0%	80.4%
Ratio of Expenses to Premium ... ..	8.4%	6.7%	7.2%
Ratio of Reserve to Premium ... ..	112%	108%	118%

**Personal Accident.**

	1929	1930	1931*
Premiums ... ..	49	53	...
Claims ... ..	17	22	...
Expenses ... ..	20	21	...
Reserve for unexpired Risks ... ..	20	21	...
Additional reserve ... ..	22	25	...
Total reserve ... ..	42	46	...
Ratio of Claims to Premium ... ..	34.6%	40.8%	...
Ratio of Expenses to Premium ... ..	40.2%	40.0%	...
Ratio of Reserve to Premium ... ..	84.0%	86%	...

\* Combined with Burglary and General Accident figures

**Employers' Liability Account.**

	1929	1930	1931*
Premiums ... ..	147	148	...
Claims ... ..	82	85	...
Expenses ... ..	52	52	...
Reserve for unexpired Risks ... ..	59	59	...
Additional reserve ... ..	119	111	...
Total reserve ... ..	178	170	...
Ratio of Claims to Premium ... ..	55.7%	57.7%	...
Ratio of Expenses to Premium ... ..	35.6%	34.9%	...
Ratio of Reserve to Premium ... ..	121%	115%	...

\*Not given separately

**Burglary & General Account.**

	1929	1930	1931
Premiums ... ..	1,117	1,195	1,474
Claims ... ..	618	652	835
Expenses ... ..	409	448	556
Reserve for unexpired Risks ... ..	447	478	590
Additional reserve ... ..	400	400	465
Total reserve ... ..	847	878	1,055
Ratio of Claims to Premium ... ..	55.3%	54.6%	56.6%
Ratio of Expenses to Premium ... ..	36.6%	37.5%	37.7%
Ratio of Reserve to Premium ... ..	76%	73%	72%

**Balance Sheet.**

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	480	600	600
<b>Funds—</b>			
Fire ... ..	2,629	2,592	2,582
Personal Accident ... ..	42	46	...
Employers' Liability ... ..	178	170	...
Burglary and General ... ..	847	878	1,055
Marine ... ..	455	649	669
General Reserve Fund ... ..	1,600	1,000	1,000
Pension Fund ... ..	259	275	283
Total Funds ... ..	5,410	5,610	5,594
Other Items ... ..	2,466	2,733	2,545
Total ... ..	8,356	8,943	9,139
<b>Assets—</b>			
Giltedge ... ..	2,655	2,335	2,811
Debentures and Preference shares ... ..	2,261	2,402	2,360
Equity shares ... ..	79	196	227
Mortgages and loans ... ..	233	273	345
Other Investments and other Items ... ..	2,409	8,080	2,612
Cash ... ..	710	657	724
Total ... ..	8,356	8,943	9,139

**Profit and Loss Account.**

	1929	1930	1931
<b>Receipts—</b>			
Brought in ... ..	864	963(a)	1,081
Transferred from Fire account ... ..	297	235	297
Marine ... ..	34	18	71
Personal Accident ... ..	11	7	...
Employers' Liability ... ..	11	24	...
Burglary and General ... ..	110	91	90
Other Items ... ..	122	117	168
Total ... ..	1,449	1,455	1,707
<b>Disbursements—</b>			
Dividend Rate % ... ..	30	30	30
Amount ... ..	243	249	251
Allocations ... ..	54	54	300
Other Items ... ..	69	71	45
Carry forward ... ..	1,083	1,081	1,081
Total ... ..	1,449	1,455	1,707

**YORKSHIRE INSURANCE COMPANY LTD.**

HEAD OFFICE: St. Helen's Square, York.

Established in 1824. It has acquired a number of subsidiary companies, which do their business separately but whose accounts are included in the Yorkshire.

Valuation of the Life business is made quinquennially on the basis of 2½ per cent. for with-profit policies and 3 per cent. for non-profit policies. The 1928 valuation provided the policyholders with bonuses averaging 48s. per cent. per annum.

1930 dividends were 9s. 6d. on the fully paid £1 shares, 4s. 9d. on £2-10 (10s. paid) shares and 1s. 6d. per share on the fully paid 5s. shares, all free of income tax. In addition to the uncalled capital of £697,472, the total resources amount to £12,459,542 including the General Reserve Fund of £1,093,432. The total income in 1930 was £4,153,022.

**Life Account.**

(In thousands of £)

	1929	1930	1931
<b>New business—</b>			
Number ... ..	2,737	2,825	2,449
Amount ... ..	1,570	1,653	1,711
Premium on new business ... ..	67	97	74
Total premiums ... ..	551	604	610
Interest ... ..	297	299	315
Claims and annuities ... ..	438	395	438
Commission and expenses ... ..	72	78	79
Life fund at beginning of year ... ..	6,192	6,476	6,854
Life fund at year-end ... ..	6,476	6,854	7,145
Net increase in life fund ... ..	284	378	291
Ratio of expense to premium ... ..	18.0%	12.9%	12.9%

**Fire Account.**

Premiums ... ..	1,068	1,027	1,080
Claims ... ..	565	528	529
Expenses ... ..	415	407	409
Total reserve ... ..	777	760	762
Ratio of claims to premium ... ..	58%	51%	51%
Ratio of expenses to premium ... ..	39%	40%	40%
Ratio of reserve to premium ... ..	78%	74%	74%

**Marine Account.**

	1929	1930	1931
Premiums ... ..	517	543	503
Claims ... ..	409	428	377
Expenses ... ..	83	87	89
Reserve ... ..	581	609	623
Ratio of claims to premium ... ..	79%	79%	75%
Ratio of expenses to premium ... ..	16%	16%	18%
Ratio of reserve to premium ... ..	112%	112%	124%

**Accident and General Account.**

Premiums ... ..	1,338	1,348	1,305
Claims ... ..	747	761	725
Expenses ... ..	550	548	582
Total reserve ... ..	811	799	761
Ratio of claims to premium ... ..	54%	57%	56%
Ratio of expenses to premium ... ..	40%	41%	41%
Ratio of reserve to premium ... ..	59%	59%	58%

**Balance Sheet.**

	1929	1930	1931
<b>Liabilities—</b>			
Capital ... ..	287	288	288
<b>FUNDS—</b>			
Life ... ..	6,854	7,145	7,145
Fire ... ..	760	782	782
Accident and general ... ..	798	761	761
Marine ... ..	609	623	623
Sinking and capital redemption fund ... ..	313	344	344
General reserve fund ... ..	1,098	1,011	1,011
Total funds ... ..	10,427	10,616	10,616
Other items ... ..	1,746	2,042	2,042
<b>Total ... ..</b>	<b>12,460</b>	<b>12,946</b>	<b>12,946</b>
<b>Assets—</b>			
Giltedge investments ... ..	3,389	3,454	3,454
Debentures and Preference shares ... ..	1,737	1,796	1,796
Equity shares ... ..	97	88	88
Loans on life policies ... ..	375	428	428
Other loans and mortgages ... ..	2,652	2,708	2,708
Other investments and other items ... ..	3,878	4,086	4,086
Cash ... ..	332	376	376
<b>Total ... ..</b>	<b>12,460</b>	<b>12,946</b>	<b>12,946</b>

# ORIENTAL GOVERNMENT SECURITY LIFE ASSURANCE CO., LTD.

*Incorporated in India, 1874.*

Head Office :—BOMBAY.

### 1931 RESULTS.

NEW BUSINESS	26,486 Policies assuring	Rs. 535 Lakhs
NET INTEREST INCOME		Rs. 57 Lakhs
TOTAL PREMIUM INCOME		Rs. 187 Lakhs
CLAIMS PAID	3,877 for	Rs. 86 Lakhs
LOANS TO POLICYHOLDERS	11,190 for	Rs. 44 Lakhs
FUNDS INCREASED TO	Nearly	Rs. 11½ Crores
POLICIES IN FORCE	1,90,713 assuring with Bonuses	Rs. 41 Crores

ALL THE OPERATIONS INVOLVED IN THE ABOVE CONDUCTED AT THE LOW EXPENSE  
RATIO OF 21.4% OF THE PREMIUM INCOME.

### VALUATION RESULTS

*For the three years ended 31st December, 1930.*

PROFITS DECLARED (on 8th July, 1931,) Rs. 1,16,28,548

BONUSES TO POLICYHOLDERS :—

{	Rs. 25% per thousand P. A. under Whole Life Policies
	Rs. 25% per thousand P. A. „ Endwt. Asscc. „

THE MAGNITUDE OF THIS GREAT INDIAN COMPANY'S OPERATIONS CAN BE JUDGED  
BY THESE FIGURES ; AS CAN ALSO ITS

### ECONOMICAL AND EFFICIENT MANAGEMENT.

ON ITS PAST RECORD AND ITS FUTURE PROSPECTS ALIKE THE "ORIENTAL" CLAIMS  
THE INCREASING SUPPORT OF ALL PATRIOTIC INDIANS WHO DESIRE TO SEE AN  
INDIAN LIFE ASSURANCE COMPANY NUMBERED AMONG  
THE GREAT INSURANCE INSTITUTIONS OF THE WORLD.

*Applications for further information should be addressed to :—*

THE MANAGER,  
ORIENTAL BUILDINGS, BOMBAY,

*Or to any of the Company's other Offices as under noted :—*

Agra	Calcutta	Kuala Lumpur	Mombasa	Rangoon
Ahmedabad	Colombo	Lahore	Nagpur	Rawalpindi
Ajmer	Dacca	Lucknow	Patna	Singapore
Allahabad	Delhi	Madras	Poona	Sukkur
Bangalore	Gauhati	Mandalay	Raipur	Trichinopoly
Bareilly	Jalgaon	Merccara	Ranchi	Trivandrum
Bhopal	Karachi			Vizagapatam

## Hukumchand Insurance Company, Limited.

Authorised Capital ... Rs. 50,00,000

Paid up Capital ... Rs. 10,00,000

### Board of Directors :

1. Sir Sarupchand Hukumchand, Kt. (Chairman), Banker, Merchant & Mill owner.
2. Rai Bahadur Hiralal Kalyanmal, Banker, Indore.
3. Mr. Rajkumar Sing Hukumchand, Banker, Indore.
4. Mr. Pannalal Bhattar, Banker, Calcutta.
5. Mr. R. C. Jall, M.A., LLB., Advocate, Indore.
6. Mr. Sheokissen Bhattar, Merchant, Calcutta.
7. Mr. Deokissen Bhattar, Merchant, Calcutta.

### Managing Agents :

Sir SARUPCHAND HUKUMCHAND & CO.,  
30, Clive Street, CALCUTTA.

The Company transacts all classes of Fire Insurance business.

*For full Particulars apply to :—*

**THE VULCAN INSURANCE CO., LTD.**

*Non-Accepting Branch Managers,*

Jehangir Wadia Building.      Esplanade Road, Fort, BOMBAY.

**INSURANCE SECTION VI:**

**REVIEWS OF BALANCE SHEETS**

**FOREIGN INSURANCE COMPANIES**

**ALLIANZ UND STUTTGARTER LIFE INSURANCE BANK, LTD.**

HEAD OFFICE: Berlin.  
INDIA HEAD OFFICE: Qutab Road, Delhi.

The title indicates both insurance and banking business, life insurance business being carried on the name of Allianz Und Stuttgarter Verein Insurance Company, Limited. The Company is the largest insurance office on the Continent and has such large surplus funds that it found it convenient or necessary to conduct banking business side by side with insurance. The total assets of the Company amount to £30 million and Security Funds to nearly £23 million. The Company has paid claims which will work out to £20,000 every day. Recently the Allianz Und Stuttgarter has extended its business widely and during the year has acquired shares of other life offices, both within Germany and without. The growth of the Company, particularly in the last five years, has been striking. In 1926, the total Assurance in force was £26 million, and this has been increased nearly 6 times to 156 million by 1930 and premium receipts from £1 million to £7 million. The Company had a favourable mortality experience. During the year, a total surplus of £1,520,890 was disclosed, 99 per cent. of which goes to undivided policyholders' profit. The dividend rate for India is raised from 25 per cent. to 28 per cent. A large part of the Company's investment is in mortgages on real property. The Company claims to offer the greatest attraction from the point of view of service and security to policyholders.

the Company's growth has been outstanding, and more particularly during the last five years. The total insurance in force at £111 million at the end of 1931 has risen from £74 million at 1926-end. The Assets of the Company have grown, during the five years, from £13½ million to £23½ million. Similarly, the total income and dividends paid to policyholders show satisfactory progress.

For the year ended 31st December, 1931, though the new sum assured at £15,739,278 shows a fall, compared to the previous year, of £1,121,937, the total insurance in force is in advance of 1930 figure by over £2½ million. The Assets and Reserves at £23,738,469 and £20,400,941 stand on stronger bases than the previous year by £1,335,565 and £1,507,001 respectively. The year's total income at £6 million stands out as a record. Besides the Policy and Annuity Reserves, which stand as above mentioned, there is a Reserve for Dividends to Policyholders amounting to £1,236,949 and a Contingency Reserve of £102,740. A rate of interest of 6.2 per cent. was earned on the funds in 1931. Total Assets in India at the end of last calendar year amounted to Rs. 65 lakhs. A chief feature during the year was the increase in loans on Policyholders. The total surplus of the Company exceeded the 1930 figure by £12,345 and after making liberal provision for depreciation on securities, and other allocations, there remained an unassigned surplus of £571,013.

**Cash Account, 1931.**

Allianz Life Account.		(In thousands of £).	
		1930.	
<b>New Business—</b>			
Number	...	...	130,967
Amount	...	...	22,601
Total business	...	...	156,022
Total premiums	...	...	7,402
Interest and rents	...	...	1,376
Claims by death	...	...	920
Claims by maturity	...	...	645
Expenses	...	...	1,622
Life fund at beginning of year	...	...	16,777
Life fund at year-end	...	...	18,532
Net increase in life fund	...	...	2,505
Ratio of expense to premium	...	...	22%
<b>Balance Sheet.</b>			
<b>Liabilities—</b>			
Capital	...	...	980
Reserves	...	...	98
Life fund	...	...	18,532
Other reserve funds	...	...	1,782
Revalorisation stock	...	...	6,977
Other items	...	...	1,947
		<b>Total</b>	<b>30,316</b>
<b>Assets—</b>			
Giltedge securities	...	...	3,246
Debentures and Preference shares	...	...	1,920
Mortgages	...	...	11,597
Real property	...	...	1,022
Loans on life policies	...	...	1,338
Other items	...	...	11,130
Cash	...	...	63
		<b>Total</b>	<b>30,316</b>

Receipts—		(In thousands of £)	
Assets at 1930 end	...	...	21,069
Total Net Premium	...	...	4,532
Interest and dividends	...	...	1,198
Other items	...	...	273
		<b>Total</b>	<b>27,072</b>
<b>Disbursements—</b>			
Claims by death	...	...	857
Claims by maturity, annuities, etc.	...	...	1,382
Dividends to policyholders	...	...	709
Dividends to shareholders	...	...	31
Commission and expenses	...	...	1,032
Ledger Assets at 1931 end	...	...	22,247
Provision for depreciation	...	...	569
Other items	...	...	245
		<b>Total</b>	<b>27,072</b>

**Balance Sheet as at 31st December, 1931.**

Liabilities—			
Capital	...	...	308
Policy and Annuity Reserves	...	...	20,401
Liabilities to policyholders	...	...	798
Staff Pension Fund	...	...	102
Shareholders Fund	...	...	120
Contingency Reserve	...	...	103
Reserve for Dividends to policyholders	...	...	1,237
Surplus	...	...	571
Other items	...	...	93
		<b>Total</b>	<b>23,738</b>
<b>Assets—</b>			
Giltedge	...	...	5,708
Public Utility Bonds and Preferred and common stocks	...	...	4,142
Mortgages and Loans	...	...	11,681
Cash	...	...	186
Other investments and other items	...	...	1,991
		<b>Total</b>	<b>23,738</b>

**THE MANUFACTURERS LIFE INSURANCE CO.**

HEAD OFFICE: TORONTO.  
CALCUTTA OFFICE: Royal Insurance Building.

The Company was established in 1871 and transacts life and leasehold business. During the period of 45 years,

Sun Life Assurance Company of Canada,  
Life Account.

	(In Thousands of £)		
	1929	1930	1931
<b>NEW BUSINESS :</b>			
Number of Policies ... ..	162,881	173,297	147,246
Amount Assured ... ..	134,879	142,073	108,629
Premiums on New Business ... ..	6,446	5,993	3,871
Total premiums ... ..	21,243	24,097	26,850
Interests, dividends & rents ... ..	6,296	6,568	5,923
Total assurances in force ... ..	498,405	588,432	627,000
Claims by death ... ..	4,244	4,726	5,044
"    "    maturities ... ..	2,171	2,338	2,392
"    "    annuities ... ..	1,170	1,645	1,586
Expenses and commission ... ..	6,627	6,888	6,189
Life fund at the beginning of the year	96,068	110,167	114,064
Life fund at the end of the year ... ..	110,167	114,064	106,900
Net increase or decrease ... ..	+14,099	+3,897	-7,164
Ratio of expenses to premium ... ..	27%	24%	...

Balance Sheet.

Liabilities—			
Capital ... ..	411	411	411
Life and annuity fund ... ..	110,167	114,064	106,900
Other funds ... ..	904	1,101	...
Claims, surrenders etc., due and unpaid ... ..	1,529	1,736	5,934
Other liabilities ... ..	3,742	3,661	15,155
Total ... ..	116,753	120,973	128,400
Assets—			
Giltedged securities ... ..	7,615	7,251	*24,500
Debentures and preference shares ... ..	15,837	9,088	6,655
Equity Shares less deductions for fluctuation ... ..	65,003	62,581	60,500
Loans on life policies ... ..	12,970	14,782	17,940
Other Loans and mortgages ... ..	7,650	6,589	6,340
Other assets ... ..	7,013	17,985	11,577
Cash ... ..	700	2,687	1,088
Total ... ..	116,753	120,973	128,400

\* includes railway, gas, electric and other funds.

THE  
Metropolitan Insurance Co., Ltd.,  
CALCUTTA.

*Broken all Previous Records of  
First Year's Business*

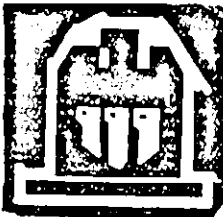
- (1) By Completing Rs. 40 Laacs of Business ;
- (2) At 75'9% Expense Ratio ;
- (3) And 14% only of Lapses ; and
- (4) Creating Rs. 37,116 of Life Fund  
Even in the first year.

OFFERS BEST TERMS  
to Agents and Policyholders

Please write to—

Managing Agents:

**BHATTACHARJEE CHAUDHURI & CO.,**  
28, POLLOCK STREET,  
CALCUTTA.



**RECORD SERVICE TO  
POLICY-HOLDERS**

**Allianz und Stuttgarter Companies**

Applications from influential  
parties for Agencies in  
**LIFE & FIRE**  
invited.

**Pay out £20,000 in Claims every day**

Every minute, day & night a claim is  
paid by us

In only one out of every 6200 claims  
there was a recourse to Law

The Companies have already paid no  
less than 71 Lakh Claims

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## TRANSPORT SECTION I :

# RAILWAYS AND RAILWAY FINANCE

### I. HISTORICAL.

Indian Railways have been constructed either by the State or by private Companies. On completion of construction, they have been worked either by the State or by the Company which originally built them, or have been handed over to another Company to work. Several of the railways originally owned by Companies have been purchased by the State. Some of these purchased railways are now worked by the State; for example, the Sind, Punjab and Delhi Section of the North Western Railway. Some of them, as in the case of the Bombay, Baroda and Central India Railway, have been handed back to be worked by the Company which originally constructed them. Some on purchase have been handed over to other railways to work under contract; thus, parts of the old Madras Railway were handed over to the Madras and Southern Mahratta and South Indian Railways to work. The Nagda-Muttra Railway was built by the State, but has since been incorporated in the Bombay, Baroda and Central India Railway and is worked by that Company as a part of its system. The Delhi-Umbala-Kalka Railway, which was built by a Company of that name, has since been purchased by the State and is worked by the North Western Railway. Similarly, the Southern Punjab Railway Company which had entrusted the working of its undertakings to the North Western Railway, has been purchased by Government.

2. The East Coast Railway was originally constructed and worked by Government as a famine-protective line, but its northern and southern sections were subsequently made over to the Bengal-Nagpur and Madras Railway Companies, respectively, to work as part of their systems. The Hyderabad-Jodhpur Frontier Section of the Jodhpur Railway was constructed by Government and handed over for working to the Jodhpur Railway which belongs entirely to an Indian State. The Bezwada Extension is in the same way worked by the Nizam's Guaranteed State Railway Company. The terms on which one railway works another are in all cases, except where a purchased railway has been absorbed entirely in a State Railway system, incorporated in a contract. Hardly two of these contracts are alike in every respect. It is impossible to set out the differences arising out of the varying terms of the contracts, or to take account in every case of the histories of the railways since construction.

3. Railways fall under two main categories:—  
(a) those in which Government has a capital interest,

(b) those in which it has not.

4. The second class comprises for the most part the branch line companies formed before the introduction of the present policy of financing branch lines enunciated in paragraph 6 *infra*. Generally, the main financial conditions of the contracts with such Companies are:—

- (1) the provision of land by Government free of cost to the Companies;
- (2) financial assistance in the shape of a firm guarantee of  $3\frac{1}{2}$  per cent. on the capital, or

a rebate out of the net receipts of the parent system accruing from "interchanged traffic", sufficient to make up, with the net earnings of the branch, an amount equivalent to 5 per cent. on the capital; and

- (3) equal division between Government and the branch line company of surplus profits over and above 5 per cent.

5. A number of small railways in India has been constructed by Companies on these terms. The financing of such railways falls outside the Government programme of railway construction, the capital transactions appearing in the accounts representing merely the receipt and payment of deposits. The value of land is charged to Government as Railway Revenue expenditure outside the accounts of the Company. Similarly the Government share of the Surplus Profits of the railway in excess of 5 per cent. is credited as a Revenue receipt. In each case in which Government gives a direct guarantee, there is a liability in respect of interest, and if Government were to make a payment under this liability it would figure in the accounts as Government expenditure on the railway.

6. A new policy was introduced in 1924-25 for the construction and financing of branch lines. Under this policy endeavours are to be made to reduce by purchase the number of existing branch line companies and Government is to find the capital required for the construction of extensions of branches to existing main systems. The construction of any branch or feeder lines not expected to be remunerative, which a Local Government might desire to have constructed for purely local reasons or administrative advantages, will be considered, provided the Local Government is prepared to guarantee the Government of India against the loss involved in the working of such lines.

7. The State has much greater immediate interest in those railways the capital expenditure on which has been provided wholly or mainly by Government. The main divisions of these railways are:—

- A. —State Railways worked by the State.
- B. —State Railways worked by Companies or by Indian States.

The second class comprises Railways towards the cost of which the working agents have contributed a small amount of share capital on which a definite rate of interest is guaranteed by Government and in respect of which they receive a share of the surplus profits after meeting all charges for interest on capital.

Both classes have been financed in the same way, through the Government programme, the funds for which are usually provided either from surplus revenues, or from loans forming part of the Public Debt of India, or from Debentures and Debenture Stock raised by the Working Companies.

The accounts of State-owned railways are therefore part and parcel of the Indian Government accounts, and railway finances are part of the general finances of India. But a convention was entered into in September 1924 by which it was agreed to

separate railway finances from the general finances as a temporary measure.

## II. THE SEPARATION CONVENTION.

It is nearly eight years since the resolution was adopted by the Assembly regarding the separation of Railway from General Finances. The resolution which is dated 20th September 1924 ran as follows:—

"This Assembly recommends to the Governor General in Council that in order to relieve the general budget from the violent fluctuations caused by the incorporation therein of the railway estimates and to enable railways to carry out a continuous railway policy based on the necessity of making a definite return to general revenues on the money expended by the State on Railways,

- (1) The railway finances shall be separated from the general finances of the country and the general revenues shall receive a definite annual contribution from railways which shall be the first charge on the net receipts of railways.
- (2) The contribution shall be based on the capital at charge and working results of commercial lines, and shall be a sum equal to one per cent. on the capital at charge of commercial lines (excluding capital contributed by Companies and Indian States) at the end of the penultimate financial year plus one-fifth of any surplus profits remaining after payment of this fixed return, subject to the condition that, if in any year railway revenues are insufficient to provide the percentage of one per cent. on the capital at charge, surplus profits in the next or subsequent years will not be deemed to have accrued for purposes of division until such deficiency has been made good.  
The interest on the capital at charge of, and the loss in working, strategic lines shall be borne by general revenues and shall consequently be deducted from the contribution so calculated in order to arrive at the net amount payable from railway to general revenues each year.
- (3) Any surplus remaining after this payment to general revenues shall be transferred to a railway reserve; provided that if the amount available for transfer to the railway reserve exceeds in any year three crores of rupees only two-thirds of the excess over three crores shall be transferred to the railway reserve and the remaining one-third shall accrue to general revenues.
- (4) The railway reserve shall be used to secure the payment of the annual contribution to general revenues; to provide, if necessary, for arrears of depreciation and for writing down and writing off capital; and to strengthen the financial position of railways in order that the services rendered to the public may be improved and rates may be reduced.
- (5) The railway administration shall be entitled, subject to such conditions as may be prescribed by the Government of India, to borrow temporarily from the capital or from the reserves for the purpose of meeting expenditure for which there is no provision or insufficient provision in the revenue budget subject to the obligation to make repayment of such borrowings out of the revenue budgets of subsequent years.
- (6) A Standing Finance Committee for Railways shall be constituted consisting of one nominated official member of the Legislative Assembly who should be chairman and eleven members elected by the Legislative Assembly from their body. The members of the Standing Finance Committee for Railways shall be

*ex-officio* members of the Central Advisory Council, which shall consist, in addition, of not more than one further nominated official member, six non-official members selected from a panel of eight selected by the Council of State from their body and six non-official members selected from a panel of eight elected by the Legislative Assembly from their body.

The Railway Department shall place the estimate of railway expenditure before the Standing Finance Committee for Railways on some date prior to the date for the discussion of the demand for grants for railways and shall, as far as possible, instead of the expenditure programme revenue show the expenditure under a depreciation fund created as per the new rules for charge to capital and revenue.

- (7) The railway budget shall be presented to the Legislative Assembly if possible in advance of the general budget and separate days shall be allotted for its discussion, and the Member in charge of railways shall then make a general statement on railway accounts and working. The expenditure proposed in the railway budget, including expenditure from the depreciation fund and the railway reserve, shall be placed before the Legislative Assembly in the form of demands for grants. The form the budget shall take after separation, the details it shall give and the number of demands for grants into which the total vote shall be divided shall be considered by the Railway Board in consultation with the proposed Standing Finance Committee for Railways with a view to the introduction of improvements in time for the next budget, if possible.
- (8) These arrangements shall be subject to periodic revision but shall be provisionally tried for at least three years.
- (9) In view of the fact that the Assembly adheres to the resolution passed in February 1923, in favour of State management of Indian Railways, these arrangements shall hold good only so long as the East Indian Railway and the Great Indian Peninsula Railway and existing State-managed railways remain under State management. But if in spite of the Assembly's resolution above referred to Government should enter on any negotiations for the transfer of any of the above railways to Company management such negotiations shall not be concluded until facilities have been given for a discussion of the whole matter in the Assembly. If any contract for the transfer of any of the above railways to Company management is concluded against the advice of the Assembly, the Assembly will be at liberty to terminate the arrangements in this Resolution.

Apart from the above convention this Assembly further recommends—

- (i) that the railway services should be rapidly Indianised, and further that Indians should be appointed as Members of the Railway Board as early as possible, and
- (ii) that the purchases of stores for the State Railways should be undertaken through the organization of the Stores Purchase Department of the Government of India."

The above convention appears to have been in the nature of a compromise between the Government and the Opposition at the time; the Government gave the undertaking contained in sub-para (9) of the first para of the Resolution and the assurances contained in the second para in return for the arrangements as set out in the first 8 paras that were considered

necessary for railways to carry out a continuous railway policy untrammelled by the political exigencies of finance to which general revenues could be regarded as subject.

Sufficient time has elapsed since the convention was entered into to allow of a retrospect being made in order to get a fairly correct grasp of the general tendencies that State railways have shown under the new arrangements.

### III. THE CONTRIBUTION TO GENERAL REVENUES.

From 1859 to 1898 (for forty consecutive years), the operation of Indian railways had not been a source of profit to the tax payer. The deficits mounted up to 235 lakhs in 1894, 236 lakhs in 1872 and 266 lakhs in 1896. The total losses up to 1898 aggregated to the enormous sum of 57.80 crores and have had to be met by taxation. The tide turned however in 1899, and year after year there have been net gains (except in 1908 & 1921) which achieved a record of 15.85 crores in 1918.

The following statement shows the direct gain (+) or loss (-) from the operation of railways yearly from 1858 up-to-date.

Year.	(In Lakhs of Rs.)
1858	-65
1859	-110
1860	-120
1861	-151
1862	-167
1863	-184
1864	-193
1865	-24
1866	-94
1867	-165
1868	-193
1869	-162
1870	-193
1871	-182
1872	-236
1873	-179
1874	-161
1875	-156
1876	-115
1877	-15
1878	-207
1879	-157
1880	104
1881	-29
1882	-131
1883	-30
1884	-105
1885	-73
1886	-119
1887	-212
1888	-223
1889	-185
1890	-69
1891	-32
1892	-185
1893	-154
1894	-235
1895	-162
1896	-266
1897	-143
1898	-94
1899	11
1900	49
1901	127
1902	34
1903	129
1904	316
1905	300
1906	347
1907	236
1908	-186
1909	124
1910	303

1911	568
1912	721
1913	718
1914	324
1915	611
1916	1,122
1917	1,487
1918	1,585
1919	935
1920	564
1921	-910
1922	117
1923	121
1924	652
1925	1,301
1926	883
1927	736
1928	1,004
1929	643
1930	245
1930-1931	-624

The steady and substantial surpluses that the railways have been yielding during the last 30 years have made people forget that till about 1910, *i.e.*, for over 50 years, the railways had been considered as more or less a commitment of Government in the interests of the administration of a large country and had been numbered amongst the benefits of British rule in India. Indian railways have been regarded as commercial undertakings of Government only during the last 2 or 3 decades, and the contribution to general revenues appears to be based on the idea that as the losses of the earlier years had been borne by the tax-payer, the gains of later years should reimburse him *pro tanto*. Otherwise, there is no reason why the total net gains should not have been applied entirely towards decreasing the charges for service and increasing its scope and efficiency.

It is a moot point whether the railways of a country are to be run in the national interests regardless of the cost of the service rendered and the return on the outlay, or whether a fair return should be guaranteed or worked up to by maintaining a suitable level of rates and fares. The trend of recent opinion has been in favour of the regulation of charges in such a way as to yield, in the aggregate, either a 'fair return' on the capital invested or a 'standard revenue' based on the conception of such a fair return. Where the railways are State-owned and the fair return or standard revenue yields a 'profit' or 'gain', should such profit or gain be earmarked for railway development, or go to reduce the rate of fair return or amount of standard revenue, or should it be appropriated by the State and go to decrease the scale of taxation? The convention entered into in 1924 was in the nature of a compromise which divided up the net gain, and allowed of a moiety being utilised in the reduction of taxation and another in building up railway reserves.

We might now see how the convention has worked in practice—The contributions made to General Revenues during these years have been as follows:

	Crores, Rs.
1924-25	6.78
1925-26	5.49
1926-27	6.01
1927-28	6.28
1928-29	5.23
1929-30	6.12
1930-31	5.74

During the seven years 1924-31, the railways have contributed to General Revenues the magnificent sum of 41.65 crores of rupees or an average of nearly 6 crores of rupees per annum. They have accumulated in a Reserve Fund a sum of 5.81 crores as shown

below after paying from it 13 crores of rupees in the two lean years 1929-30 and 1930-31.

	Crores, Rs.	
1924-25	...	6.38
1925-26	...	3.79
1926-27	...	1.49
1927-28	...	4.57
1928-29	...	2.58
1929-30	...	-2.08
1930-31	...	-10.92
Total	...	5.81

They have a balance in a Depreciation Fund of about 14 crores of rupees got together as shown below:—

	Crores, Rs.	
	Credit to Fund.	Debit to Fund.
1924-25	10.35	7.39
1925-26	10.67	7.98
1926-27	10.89	8.05
1927-28	11.38	10.95
1928-29	12.00	9.60
1929-30	12.59	11.76
1930-31	13.07	11.40
Total	80.95	67.13

Taking the balances of the Reserve and Depreciation Funds together the Railways had on the 31st March 1931 a reserve to their credit of nearly 20 crores of rupees, after paying a contribution of nearly 42 crores of rupees to general revenues during the seven years following the convention—an achievement of no mean order.

#### IV. HOW THE CONTRIBUTION WAS MADE.

A study of the manner in which State railways managed their affairs during these seven years and after contributing nearly 42 crores of rupees to General Revenues had still in hand handsome balances aggregating 20 crores will not doubt be very interesting. In the figures given below, the actual receipts and expenses for the seven years have been shown; the accounts are on the basis of actual realisations and expenditure, in cash.

The magnitude of the receipts from Indian railways depends to a very large extent on a good monsoon. All the best laid plans of railway administrators' gang 'gang aft alee' when the rains do not make their friendly visitations in time and bumper crops are not moved about the country. Subject to this limitation, the effect on railway receipts of political contentment and general economic prosperity is no doubt marked. A good balance of trade in favour of India is something

#### IN CRORES OF RUPEES ONLY

	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
i. (a) Gross Traffic Receipts	101.05	99.70	99.04	104.24	104.84	102.70	95.10
(b) Surplus profits from subsidised Companies.	0.21	0.85	0.40	0.85	0.89	0.59	0.20
(c) Interest on Depreciation and Reserve Funds	0.80	0.54	0.64	0.81	1.06	1.28	1.82
(d) Other Misc. Railway receipts	...	0.01	0.05	0.08	0.12	0.21	0.21
Total Receipts	101.56	100.60	100.12	105.49	105.90	104.78	96.88
ii. (a) Working Expenses excluding Depreciation	52.56	58.75	58.51	58.87	54.88	55.59	54.89
(b) Depreciation	10.85	10.67	10.89	11.88	12.00	12.59	18.07
(c) Surplus profits paid to Cos.	1.42	1.77	1.66	1.57	1.59	1.52	1.16
(d) Land and Subsidy to Cos.	0.08	0.04	0.05	0.05	0.02	0.04	0.06
(e) Interest	28.90	24.81	25.87	27.27	29.88	30.46	32.72
(f) Miscellaneous Ry. Expenses	0.18	0.26	0.66	0.30	0.82	0.54	0.68
Total	88.40	91.81	92.68	94.64	98.09	100.74	102.02
iii. Net—Gain	18.16	9.28	7.50	10.85	7.81	4.04	...
Loss	...	...	...	...	...	...	5.19
iv. (a) Contribution from Ry. to General Revenues	6.78	5.49	6.01	6.28	5.28	6.12	5.74
(b) Amount transferred to Ry. Reserve Fund	6.88	8.79	1.49	4.57	2.58	...	...
(c) Amount transferred from Ry. Reserve Fund	...	...	...	...	...	2.08	10.92

of a guarantee of a good balance in railway coffers.

Considered from this point of view, the variations in gross receipts during these seven years cannot be considered to be extraordinary, being 5 to 6 crores from the average mean despite the effect of changes in accounting which have resulted in items of receipts being recorded as minus expenditure and *vice versa*. To increase the gross receipts, by other than purely book-keeping methods, is never an easy proposition; when trade is at a

standstill and poverty and unemployment stalk the land, it might be the last straw on the camel's back to increase the scale of rates and fares. Perhaps, the contrary move is indicated, as nothing is so welcome from the psychological point of view as the cheerful rendering of essential services regardless of cost, at times of trouble and difficulty.

A comparison was made some time ago of the levels of rates on Indian railways for different classes of commodities with those prevailing on

English railways by a student of railway economic. The figures he has published, which are extracted below are of interest in that they go to show that the scale of rates in India is intrinsically higher than that in England. Considering the difference in the capacity to pay of the two countries, there does not appear to be much room for an increase in the tariff rates.

All the figures in the tables below are in terms of pies per maund per mile.

**New English Classification**

Class	First 20 miles or any part of such distance	Next 80 miles or any part of such distance	Next 50 miles or any part of such distance	Remainder distance
1	.74	.87	.21	.20
2	.84	.41	.27	.25
3	.83	.43	.81	.27
4	.90	.47	.85	.30
5	1.01	.49	.87	.30
6	1.03	.53	.41	.81
7	1.13	.62	.47	.87
8	1.19	.68	.53	.89
9	1.25	.74	.59	.41
10	1.87	.90	.68	.43
11	1.47	.99	.82	.57
12	1.52	1.05	.88	.62
13	1.66	1.13	.98	.68
14	1.77	1.25	1.08	.82
15	1.87	1.35	1.15	.90
16	1.97	1.44	2.25	1.08
17	2.14	1.62	1.81	1.18
18	2.28	1.76	1.44	1.25
19	2.65	2.07	1.72	1.50
20	3.12	2.44	2.24	1.72
21	4.68	3.65	3.87	2.53

**Present Indian Classification.**

Class	Class rate (Maximum)
1	.38
2	.42
3	.58
4	.62
5	.77
6	.88
7	.96
8	1.04
9	1.25
10	1.87

The average miles a ton of goods is carried on any one of the railways in India is about 200 miles, and if we take it roughly that on the average, the bulk of the traffic passes over more than one railway, we might put down the average haul as 300 miles. Now, the rate per maund per mile in England for goods falling in the 10th class for a distance of 300 miles is 0.58 of a pie which is less than the class rates in India for goods falling in the 4th class and above and equal to that for goods falling in the 3rd class. It would appear that the 4th class of the Indian classification corresponds roughly to the 10th class of the English classification.

Turning from rates for goods to fares for passengers, it is known that the lowest rates for passenger traffic are to be found in India. This does not appear to have harmed the railways in any way; and Sir William Acworth, a shrewd observer of railway matters, is credited with the remark that Indian railways are probably the only railways in the world which are making a small profit on the carriage of passengers.

There seems to be a general consensus of opinion that there is little room for an increase in the scale of rates and fares. The indications are that, to battle successfully with road competition, there should be a general reduction in short distance rates

both for passenger and goods traffic with a simultaneous abolition of differences in class, both for passengers and goods, as in the case of motor bus and railway luggage rates. Other possible improvements are the abolition or reduction of terminals, and short distance charges now being levied on short distance traffic, the introduction of a general scheme of mileage gradation on the continuous mileage on all railways intended to increase the average length of haul, and the extension of the 'free' time for wharfage and demurrage on the advance payment of a reduced scale of charges.

Turning to the consideration of the working expenses, it will be noticed that while the receipts have not shown an increase commensurate with the growth in the capital outlay, the working expenses have done so and have risen to the figure of about Rs. 102 crores. It is true that there is room for economies on all sides; but these economies cannot alter the 'fixed charges' for interest and depreciation, unless some book-keeping devices are resorted to, for purely administrative or political reasons. The following figures bring out the fact that the scope for economy and retrenchment is restricted to about a half of the total expenditure.

	Increase of 1930-31 over 1924-25		1928-29		1927-28		1926-27		1925-26		1924-25		Proportion of interest charges to receipts	Proportion of fixed charges to gross receipts	Total Working Expenses	Proportion of fixed charges to working expenses
	1930-31	1924-25	1928-29	1927-28	1926-27	1925-26	1924-25	1923-24	1922-23	1921-22	1920-21	1919-20				
1. Capital : State worked Lines	498	209	470	485	416	400	289	..	..	..	..	..	..	..	..	..
2. Capital : Company worked Lines	282	- 82	266	295	282	272	364	..	..	..	..	..	..	..	..	..
3. Capital : All State Railways	733	128	733	733	701	673	633	..	..	..	..	..	..	..	..	..
4. Gross Revenue receipts	93	- 6	104	104	93	100	101	..	..	..	..	..	..	..	..	..
5. Depreciation	18.07	2.72	12.00	11.38	10.89	10.67	10.85	..	..	..	..	..	..	..	..	..
6. Surplus profits	1.16	- .26	1.59	1.57	1.66	1.77	1.42	..	..	..	..	..	..	..	..	..
7. Interest charges	32.72	8.77	29.84	28.76	27.52	24.82	23.95	..	..	..	..	..	..	..	..	..
8. Total fixed charges	46.95	11.23	42.98	41.71	40.07	37.26	35.72	..	..	..	..	..	..	..	..	..
9. Proportion of interest charges to receipts	84%	10%	28%	28%	28%	25%	24%	..	..	..	..	..	..	..	..	..
10. Proportion of fixed charges to gross receipts	49%	14%	41%	40%	40%	37%	35%	..	..	..	..	..	..	..	..	..
11. Total Working Expenses	102.02	..	98.09	94.64	92.68	91.81	88.40	..	..	..	..	..	..	..	..	..
12. Proportion of fixed charges to working expenses	46%	..	44%	44%	43%	40%	40%	..	..	..	..	..	..	..	..	..

The percentage of the fixed charges on the total gross receipts has increased steadily from year to year from 35 per cent., in 1924-25 to 49 per cent. in 1930-31. Even if the gross receipts of 1930-31 had reached

the top figure of 104 crores, the percentage would have been about 45 per cent., the highest percentage on record. If the ratio of these charges to the gross receipts have to revert to the 35 per cent. in 1924-25 the yearly gross receipts should be increased to the enormous figure of 134 crores, a remote possibility. If the ratio is to be maintained at the mean figure of 40 per cent., it would still be necessary to earn a sum of Rs. 117 crores as gross receipts, a figure that has never been reached before.

It might be supposed that the provision that is being made for depreciation each year is more generous than is warranted by the actual deterioration or obsolescence of the assets, and that a safer index to the trend of things will be the ratio of the interest charges to the gross receipts which has increased from about 24 per cent. in 1924-25 to about 34 per cent. in 1930-31. To get back to the 1924-25 ratio, it would be necessary to earn about 136 crores as gross receipts, while to achieve the ratio of the steady years 1926-29 the receipts will have to be about 117 crores, the figure that was arrived at, taking the depreciation also into consideration.

The proportion which the 'fixed charges' bear to the total charges has varied in these years from 40 per cent. to 46 per cent., and as retrenchment can affect only the varying charges, the percentage is likely to increase in the next few years.

#### V. THE PROVISION FOR DEPRECIATION.

Previous to 1924, Indian railways did not set apart any sum annually to provide for the depreciation of assets that had not been corrected by the expenditure incurred in the year on renewals and replacements. During the War, the expenditure on renewals and replacements was greatly restricted and railway property had deteriorated very considerably in value. The postponement of the expenditure on renewals and replacements led to the companies working State railways earning large surplus profits in accordance with the provisions of their respective contracts, but their extra earnings were at the cost of the State and of the tax-payer. In the post-War years, larger funds had to be provided annually for expenditure on renewals and replacements to overtake and correct the deterioration of assets during the War.

For these reasons, a Depreciation Fund was started, as provided for in the Convention of September, 1924. The original intention was, no doubt to make it applicable to Company-managed railways also, as that the surplus profits of the Companies might not be enormously increased by purely adventitious circumstances. The Companies would not accept the arrangement, and there was no alternative but to keep such an account for the Company railways *outside* their accounts and set apart an annual sum from the net earnings accruing to Government after the companies had been given their surplus profits in accordance with the old practice. This has been done, and a Depreciation Fund account is being maintained by Government for Company-managed railways, outside the regular accounts.

Before the Depreciation Fund was instituted, the rules of allocation of expenditure between Capital and Revenue had been very strict. Nothing was chargeable to capital unless there was, not only an increase in the cost, but also a definite and substantial improvement in service. The variations in price levels of different times were not allowed to lead to over-capitalisation, and the original costs were converted into the probable costs of replacement (at the time of replacement) to determine whether the cost of the new asset provided in replacement was more or less than those of the old. Renewals of permanent-way carried a charge to capital only on the basis of the extra *weights* of rails and sleepers put in; reconstruction of bridges was similarly allocated only on the basis of the increase in the weight of girders; and no charge lay to capital when rolling

stock was renewed unless there was an increase in the tractive effort of locomotives, the floor area of carriages, and the carrying capacity of wagons.

These well-tried rules of conservative finance were altered for State-managed railways with the creation of the Depreciation Fund, and charges were admitted to capital on the simple basis of cost. The immediate effect of the new rules of allocation was to lead to the over-capitalisation of railways, and the understatement of the charge to revenue. As the works *under construction* in 1924 were also allocated on this basis, the effect of these rules was to some extent retrospective. The Fund was started with a 'nil' balance, and the annual provision for depreciation was made on the straight line method of accounting for this, on the basis of the lines of certain of the more important assets. The immediate benefit of this arrangement was that it admitted of expenditure being incurred freely from capital funds without the connected charges, (allocatable to revenue under the old arrangements and now met from the Depreciation Fund) affecting the working expenses of the year. This had always been in the nature of a stranglehold on the spending capacity of railways, under the old systems, and it had become a rather common occurrence for capital funds to be provided only to be returned largely unspent.

One effect of the distinction in the rules of allocation between Company and State-managed railways is that the expenditure incurred on these railways on the replacement of assets is no longer comparable. To replace the same assets, the expenditure incurred from revenue by a Company-managed railway would be more than that incurred by a State-managed railway from the Depreciation Fund. Till recently, there was another complication due to the Company-worked railways crediting the present cost of materials removed from the line in reduction of their expenditure on renewals and replacements, while the State-worked railways credited these adventitious receipts to the working expenses of the year.

The following figures indicate the annual provision for depreciation charged to working expenses and the annual expenditure incurred from the Depreciation Fund; the figures in the Government accounts worked out for Company-managed railways have been shown separately. The balances left over in the Fund each year are given also.

#### Depreciation Fund :

In Crores of Rupees.

	State-worked railways.			Company-worked railways		
	Cr. to Fund.	Dr. to Fund.	Balance	Cr. to Fund.	Dr. to Fund.	Balance
1924-25	4.86	3.60	1.26	5.49	3.79	1.70
1925-26	6.38	4.38	2.00	4.29	3.61	0.68
1926-27	6.39	5.14	1.25	4.50	2.91	1.59
1927-28	6.73	6.42	0.31	4.65	4.53	0.12
1928-29	7.11	5.52	1.59	4.88	4.08	0.80
1929-30	7.97	6.08	1.89	4.62	5.68	-1.06
1930-31	8.30	6.32	1.98	4.76	5.08	-0.32
Total	...	...	11.28	...	...	3.51

The figures in the above table are interesting from another point of view. While the annual balances on the State Railways have *increased* steadily from 1.25 crores in 1926 to 1.98 crores in 1930-31, they have decreased steadily on the Company-managed railways. This is due mostly to the fact, that on the latter, the rules of allocation force a larger debit to depreciation. Had the State-run railways followed the same rules of allocation as the Company-worked lines, the balances in the Depreciation Fund would necessarily have been very much smaller. That is to say, the present balances in the Fund are artificial and due, in a large measure, to the 'over capitalisation' resulting from the cost basis of allocation; a temporary relief in the annual expen-

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diture has been obtained, but through an increase in the recurring charges for interest which have grown from 23.90 crores in 1924-25 to 32.72 crores in 1930-31, *i.e.* by nearly 8.82 crores of rupees.

The view has been held that, while it is essential for a commercial undertaking to run a depreciation fund, it is not so very important for a public utility service of a permanent nature, so long as a stringent programme of renewals and replacements is consistently followed and the rules of allocation of expenditure to capital are on the conservative basis of improvement. There is something to be said in favour of this view, according to which the accounts of most of the English railways are still being kept.

The principal argument against a Fund is that expenditure from the Fund is not automatically controlled by a cast-iron link to the year's resources, and that there is room for a certain amount of extravagance. If there are no funds in the Capital budget or the Revenue budget, expenditure can still be incurred from the Fund or allocated thereto. The cost basis of allocation requires the original cost of the replaced asset to be known; and as this is not readily available in most cases, it is merely estimated. The charge to capital depends unfortunately on the accuracy of these estimates, while under the old system, the charge was a small percentage of the new cost in most of the more important types of renewals. The room for consequent mis-classification of expenditure is rather great under the new system of allocation.

The theory is advanced that it would be a step in the right direction to revert to the old principles of allocation of charges between capital and revenue on the improvement basis, and simultaneously abandon the Fund, the accounting for the transactions of which has enormously increased accounting and clerical work in all directions. The experience of the past 8 or 9 years has been valuable in indicating that the average annual depreciation of the wasting assets is in the neighbourhood of 12 crores of rupees and this figure could be used as an index by which the scale of renewals and replacements of each year can be judged and controlled. If for extraordinary reasons the actual expenditure on replacements and renewals were very much less than this figure, a suitable lump sum could be set apart from the revenues of the year for utilisation in later years, without the complicated accounting for a Depreciation Fund.

## VI. INTEREST CHARGES.

The steady growth of the interest charges, as an important factor in the diminution of the net return from Indian railways has been commented upon elsewhere. Of the 32.72 crores of interest charges met in 1930-31, 20.74 crores were in respect of Stateworked lines and 11.95 crores in respect of Company-worked lines, roughly a third of the total. The total interest charges on English debt of various kinds, such as Sterling debt, Company's share capital, debentures and debenture stock aggregated about 5½ million pounds sterling, which converted at the average rate of exchange, is equal to about 7.40 crores of rupees or roughly a fourth of the total interest charges. Of the rest of the 25.32 crores, the lion's share is interest on capital outlay provided by Government.

The method of calculating interest on railway capital outlay is somewhat peculiar. It is calculated at the fixed rate of 3.3252 per cent. on the total outlay as on the 31st March, 1917, and at an *average rate of interest* on all capital outlay after that date. This average rate of interest has varied slightly in recent years owing to the higher interest charges on recent borrowings. The figures for the last few years are as follow:—

Year.		per cent.
1919-20	...	5.9328
1920-21	...	5.1979
1921-22	...	6.1038
1922-23	...	5.48
1923-24	...	5.69
1924-25	...	5.54
1925-26	...	5.66
1926-27	...	5.43
1927-28	...	5.38
1928-29	...	5.63
1929-30	...	5.31

It had been the practice hitherto to obtain the average rate of interest applicable in any year by dividing the total interest charges for all railways, actually payable on all loans floated by the Government of India after 1916-17 by the *nominal* amount of the debt outstanding. This method did not allow for loans floated at a premium or discount. Most of these loans having been floated at a *discount*, the actual rate of interest applied has been naturally less than the actual cost of borrowing. It was wisely decided to apply the correct rate obtained by dividing the total interest charges, *not* by the nominal amount of the outstanding amount but by the actual amount realised for the nominal amounts. This has resulted in an increase of approximately one-third of one per cent. in the rate and about a crore in the interest charges borne by railway revenues.

It might not be out of place to observe here that, on the separation of Railway from General Finances in 1924-25, the Railway capital account was permanently debited with the balance on 31st March, 1924 of the capital liability involved in the purchase of railways under redemption by Annuities and Sinking Funds. As a consequence of this arrangement, the Railway Revenue Account is charged with the full interest in respect of the liability outstanding on 31st March, 1924 (included under the head Interest on Sterling Debt) and the balance required to make up the total annuity payment and the Sinking Fund charges is borne by General Revenues, thus giving a legitimate relief to the railway budget. As an exception to this arrangement, the charges for the Discount Sinking Fund for the old Oudh & Rohilkhand Railway, created for the redemption of debt incurred in excess of money raised for the purchase of the Railway, are still debitable to the Railway Revenue Account.

These Sinking Funds were established in connection with the Eastern Bengal, North Western and East Indian Railways to redeem India 3½ and 3 per cent. stock issued in lieu of Annuity or Debenture Stock. They have been applied to the purchase of Indian stock of the denomination offering the best yield.

One of the most vigorous criticisms made by the Acworth Committee was that the economic development of India had suffered enormously owing to the utter failure of Government to lay out sufficient borrowed money in railways at a time when the rates of interest were comparatively low. Lord Inchape said that it would have paid Government in the earlier years to borrow funds at 1 or 1½ per cent. higher than the market rate at that time. He stated, in giving evidence before the Acworth Committee, "If I had a railway and wanted the money, and saw the trade there, I should raise the money, even if I had to pay 7½ or 8 per cent."—an opinion which should, no doubt, have been remembered at the time of deciding upon the postponement of the acquisition of the Bengal and North Western and Rohilkhand and Kumaon Railways.

The Acworth Committee said :

"Had the Government thought fit to borrow money even at a rate considerably higher than the rate of net return that the railways could earn on it, we believe its action would have been abundantly justified. But in fact the Indian Government never



needed for many years previous to 1914 to face this position. A reference to the curve of net revenue given in the Administration Report on Railways in India will show that, though in the earlier years the interest on railway capital had to be met partly out of taxation, for the last 45 years the net earnings of the capital invested in Indian Railways has never sunk below 4 per cent. For the last 20 years it has only three times sunk below 5 per cent., and this result was attained though a substantial sum had been charged against revenue for repayment of capital and in spite of the fact that a not inconsiderable part of the total mileage had been built not on commercial grounds but for strategic purposes. Now the average rate payable by the Government of India on this borrowed money is about 3¼ per cent. We are unable with these figures before us to find any justification for the policy which has been persistently pursued of starving the development of Indian Railways."

It is likely that the Acworth Committee had in mind the construction of lines in suitable areas and the building of stock to keep abreast of the traffic that was actually offering, and not the provision of

increased facilities or luxuries, such as a faster service, or better appointed carriages, or more expensive wagons or station buildings of architectural beauty. A good portion of the capital spent on railways during the last 14 or 15 years has apparently been invested in the latter directions and so failed to yield a commensurate return.

### VII. STATE VERSUS COMPANY-MANAGEMENT.

The capital at charge on the 31st March, 1931, of State owned railways was 783.32 crores of rupees. Of this 497.91 crores appertain to lines worked by the State and 281.97 crores to lines worked by Companies, the balance being made up of miscellaneous items. While the return on the capital of State-worked railways was 2.85 per cent. and resulted in a loss of over 6.5 crores of rupees after meeting interest and other charges, the Company-managed railways showed a return of 4.76 per cent. and registered a small gain of 31.64 lakhs of rupees. The corresponding figures of rate of return and net financial result for the last few years are shown below and are full of interest.

	1928-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Percentage of Net Revenue Receipt								
1. On Capital at charge: State Rys. ...	8.64%	5.38%	4.54%	4.49%	4.81%	4.59%	3.81%	2.85%
2. On Capital at charge: Company Rys. ...	5.92%	6.29%	6.29%	5.70%	6.07%	5.98%	5.07%	4.76%
	<i>In Lakhs of Rupees</i>							
Net gain or loss to Govt.: State Rys. ...	-87	459	367	363	497	260	-80	-653
" " Coy. Rys. ...	690	842	516	373	508	383	325	32
Total gain or loss (including Misc.) ...	641	1,287	869	721	1,015	659	254	-624

Note :—These figures take account of actual realisations of earnings only.

The figures in the above table show how very consistently the Company-managed State railways have yielded a better return than the State-managed railways. This is somewhat remarkable considering that, while the State railways meet from Capital all the extra cost of replacing an asset the Company railways meet such expenditure from Revenue. The State-worked lines include the strategic lines of the Frontier, but even after making an allowance for the loss on these lines, the Company lines show a better result. The record of 1924-25 of a net gain of over 13 crores is accounted for partially by the

State railways changing their rules of allocation in that year and charging very large amounts to Capital, that would have otherwise been charged to revenue in the same way as on the Company lines. This record can never be reached again, as the adventitious paper credits to working expenses will not recur.

The following figures for individual State and Company railways would appear to go far in justifying the impression that Company railways are generally more economically run.

STATE RAILWAYS State-managed	Percentage of net earnings on total capital at charge							
	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	
Eastern Bengal ... ..	4.25	3.89	5.25	5.28	4.98	4.19	2.29	
East Indian ... ..	6.99	6.07	5.65	6.18	5.79	5.08	4.22	
Great Indian ... ..	7.73	6.18	5.57	5.49	4.66	4.09	3.23	
North Western ... ..	7.42	8.86	3.99	4.78	4.79	3.78	2.63	
<b>Company-managed</b>								
Assam-Bengal ... ..	3.02	3.94	4.11	4.67	4.49	3.18	3.05	
Bombay-Baroda ... ..	3.03	7.09	6.12	6.16	7.21	6.36	5.19	
M. & S. M. ... ..	6.36	6.57	6.67	6.37	8.22	7.23	6.00	
South Indian ... ..	8.72	7.93	8.18	6.79	6.87	6.68	5.43	
<b>COMPANY-MANAGED</b>								
<b>Private owned</b>								
Bengal & N. Western ... ..	9.35	10.25	11.12	11.43	10.35	9.32	7.96	
Rohilkand & Kumaon ... ..	7.95	9.85	7.38	8.51	8.03	7.24	7.09	
Nizam's State (B. Gauge) ... ..	9.71	9.60	9.11	8.37	9.46	9.87	8.00	
" " (M. Gauge) ... ..	9.39	7.89	8.94	9.31	9.41	7.88	...	

Individual figures in the above table for each railway are not strictly comparable, as the State-managed lines generally set aside more for depreciation than the expenditure incurred on replacements and renewals; but the general tendency for economical management shown by Company-managed railways is unmistakable. The results of operation of State-managed railways have tapered off much more quickly during these than those of Company-managed railways, whether owned by the State or not.

State-Managed		1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
East Indian	...	51'34	51'15	51'29	52'70	50'06	52'02	54'12
Eastern Bengal	...	58'94	60'82	54'28	58'01	55'88	56'71	64'88
North Western	...	54'13	55'30	57'92	60'04	60'59	63'22	66'59
Great Indian	...	54'11	62'52	60'62	46'87	55'14	58'07	68'41
Company Managed.								
Assam-Bengal	...	55'07	51'40	50'20	47'12	49'48	55'20	56'81
Bombay-Baroda	...	49'65	52'34	54'58	52'32	52'07	53'22	56'73
M. & S. M.	...	46'68	47'87	49'00	45'50	43'57	43'29	49'69
South Indian	...	50'24	50'01	47'57	44'44	46'76	45'48	49'77

The rates of return on the capital at charge of all State-owned railways taken together for several years are given below. The signs of deterioration are rather pronounced.

1913-14	...	5'01	per cent
1921-22	...	2'64	„
1922-23	...	4'88	„
1923-24	...	5'24	„
1924-25	...	5'85	„
1925-26	...	5'81	„
1926-27	...	5'05	„
1927-28	...	5'41	„
1928-29	...	5'22	„
1929-30	...	4'65	„
1930-31	...	3'70	„

Thanks to the funds for railway construction having been borrowed in the earlier years at rates of interest varying from 3 to 4 per cent., a return of only 4.32 per cent. on the 783 crores of capital at charge on 30-3-31 would have been sufficient to stave off a loss. Taking State-managed railways separately we find that a return of 4.16 per cent. would have been sufficient to balance the accounts, while the corresponding figure for Company-managed railways would be somewhat higher (approximately 4.65 per cent.) due to the surplus profits and higher rates of interest on the Company's capital having to be met in the case of the latter.

The above figures of "rates of return on capital outlay do not correspond to the rates of dividend earned by commercial concerns. The latter generally represent the yield on the *ordinary capital* of the undertaking, after the payment of interest on loans and debentures, and depend upon the proportion of such loans to the total capital and the terms thereof. The Bengal & North Western Railway has, for several years, been declaring huge dividends to its shareholders, although the actual "rates of return" have been only between 8 & 12 per cent.

The scale of railway financial operations is so large that a small difference in the percentage of return accounts for a large difference in the surplus or deficit, as evidenced by the following figures.

Year	Percentage of Net Earnings on Capital	Net gain or loss to Government (In Lakhs of Rupees)
1923-24	5'24	6,41
1924-25	5'84	12,87
1925-26	5'23	8,69
1926-27	4'95	7,21
1927-28	5'30	10,15
1928-29	5'08	6,59
1929-30	4'49	2,54
1930-31	3'58	-6,24

It is possible to use a statistical figure for the comparison of the results of working of the different classes of railways which avoid the difficulty mentioned above of the difference between State and Company lines about the provision for depreciation. This is the percentage that ordinary working expenses exclusive of the expenditure on replacements and renewals bear to the gross earnings. The following are the comparative figures for several years:

The convention of September 1924 appears to envisage a tacit undertaking by Government to transfer to State-management the railways which were operated by Companies as and when the contracts with these latter expired. Since the convention was agreed to, the East Indian, Great Indian Peninsula and Burma Railways have come under State management and certain privately-owned lines such as the Southern-Punjab Railway (7 crores) have been purchased. But the policy of Government's assuming the management of these railways has received a check in recent years and the contracts with the Companies managing the Bengal and North Western, the Rohilkand and Kumaon and the Assam Bengal Railways have had to be renewed for different periods. The two former are privately-owned railways which have for several years, been yielding a return on the outlay of much over 6½ per cent., as the following table will show:

	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31
B. & N. W.	9'03	9'85	10'25	11'12	11'43	10'35	9'82	7'96
R. & K.	8'45	7'95	9'85	7'88	8'51	8'03	7'24	7'09

Under normal circumstances it would have apparently been in the interests of the tax-payer to have arranged to acquire these lines with the help of borrowed funds on the 31st December 1932, but due, perhaps almost entirely to the difficulty of raising loans, these contracts with the railways have been extended for another five years, the terms and conditions being altered slightly in favour of the State.

The contract with the Assam Bengal Railway which is a State-owned railway could have been terminated on the 31st December, 1931, but it was considered that it would not be financially profitable to purchase the Company's interest in the railway and the contract continues automatically for another 10 years; *i.e.*, upto the 31st December, 1941. Amongst the reasons advanced against the immediate assumption of State control of this railway were the following:

- (i) The loss of Indian income-tax on the Company's earnings.
- (ii) The high interest charges that would be payable on the sum required to meet the purchase price.
- (iii) The possible postponement of the beginning of important projects such as the Bombay Sind connection and the Decca Aricha Railway, were funds diverted to the transfer of the Assam Bengal Railway.
- (iv) The probability of the assumption of the State management of the railway leading to an increase in the cost of staff

and the consequent reduction of the net earnings. It will be noticed that all these reasons could be advanced with almost equal strength against the transfer to the State of any Company-managed railway.

**VIII. PURCHASE OF RAILWAY STORES.**

According to the convention of 1924, Government was committed to the undertaking that the purchase of stores for the State Railways should be

undertaken through the organization of the Stores Purchase Department of the Government. The significance of this undertaking lies in the belief that the latter department owes its genesis to the policy of Government to encourage Indian industries and make its purchases of stores, wherever possible, in India itself. The following figures give some indication of the scale of purchases of State Railways in one year and the vital influences this must necessarily have on the industrial and commercial life of the country.

**Value of Raiiway materials purchased.**

( In Crores of Rs. )

	VALUE OF IMPORTED MATERIALS			Value of indigenous materials	Total Purchases 1930-31	Total Purchases 1929-30
	Purchased direct	Purchased through Agents in India	Total Imported materials			
Rolling Stock	4.29	1.18	5.47	0.97	6.44	8.91
Tools and Stores	0.37	2.67	3.04	2.64	5.68	7.14
Permanent-way	0.10	0.09	0.19	3.86	4.05	5.55
Electric Plant	0.60	0.78	1.38	0.02	1.40	2.16
Building and Station materials and fencing	0.16	0.24	0.40	0.17	0.57	0.57
Bridge Work	0.15	0.06	0.21	0.11	0.32	0.53
Workshop Machinery	0.14	0.32	0.46	...	0.46	0.66
Engineer's Plant	0.09	0.12	0.21	0.02	0.23	0.44
Other materials*	...	0.21	0.21	4.89	4.60	4.10
<b>Total</b>	<b>5.90</b>	<b>5.67</b>	<b>11.57</b>	<b>12.18</b>	<b>23.75</b>	<b>30.06</b>

\*Other materials consist of coal and coke, stone, bricks, lime and ballast, etc.

The value of the annual purchases of stores in a normal year might be taken to be approximately 30 crores of rupees, of which more than half is the cost of imported materials, if the purchase of stone, bricks, lime, ballast, coal & coke included under the head "other materials" are excluded. The bulk of these purchases appears to have been made through the machinery of the Railway Stores Departments instead of through the Stores Purchase Department of the Government of India, as the following official figures will show :

(In Thousands of Rupees)

	1928-29	1929-30	1930-31
1. Textiles	20,45	41,17	38,24
2. Cement	5,78	16,58	89,74
3. Creosote	25	...	
4. Lubricating and other oils and greases	46,27	57,44	
5. Paints and Varnishes	11,80	17,35	
6. Electric fans, lamps and other electrical stores	6,08	8,69	
7. Plant and Machinery	6,18	1	
8. Water supply materials	2,63	2,11	
9. Structural steel work including bridge girders	96	48	
10. Soaps	56	53	
11. Hardware	1,39	2,31	
12. Miscellaneous	2,71	3,33	
<b>Total</b>	<b>1,08,96</b>	<b>1,50,45</b>	

The above figures show in a general way that increasing use is being made of the central machinery of purchase, such purchases having increased from 104 lakhs in 1928-29 to 150½ lakhs in 1929-30 and dropped to only 126 lakhs in 1930-31. Nevertheless, the proportion of these purchases to the total average of about 30 crores is only about 5 per cent., a rather disappointing ratio to those who believe in the efficiency of centralised purchases.

To those who are interested in the study of the gradual change in the policy of railway stores purchase, the table of figures in the next page will be informative. Mark how the purchases of stores, (exclusive of brick, lime, ballast, etc.), have increased from 9½ crores in 1915-16 to 38½ crores in 1921-22, and how the value of stores purchased in India has generously increased from year to year.

The new stores purchase rules promulgated with the Government of India, in the Industries Department, Resolution No. S.217 of the 12th December 1929 came into force from the 1st January and provide that all articles required to be purchased for the public service, except those of special and unusual character, must be purchased on the condition that delivery shall be made in India for payment in India. They also permit of a limited degree of price preference being accorded to articles produced or manufactured either wholly or partly in India. Departmental regulations have been issued by the Railway Board for the guidance of railway officers in the observance of these rules. The assertion of a more definite preference for stores produced or manufactured wholly or partly in India which was the feature of the rules made by the Secretary of State more than a decade ago has thus been followed up by a fairly strict rule requiring purchase in India and in Indian coin.

These rules for stores purchase apply in their entirety only to the State-worked railways. They

## Value of Stores purchased by the Principal Railways (which reported).

(In Lakhs of Rupees.)

A.—Value of Stores imported direct.

B.—Value of Imported Stores purchased in India.

C.—Value of Stores of Indian Manufacture or of Indigenous Origin.

N.B.—Materials invariably purchased in India such as bricks, lime and mortar, timber ballast &amp;c. are not included

Classes	1915-16			1916-17			1917-18			1918-19			1919-20			1920-21			1921-22		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
Bridge-work ... ..	3	1	2	3	...	1	1	...	...	...	...	6	...	...	33	1	2	92	3	1	
Engineer's Plant excluding petty tools ... ..	4	2	...	1	2	...	...	1	...	1	2	1	1	4	1	4	8	1	13	10	1
Workshop Machinery and heavy tools ... ..	9	2	...	8	3	...	3	4	...	8	5	...	15	8	...	80	24	...	54	12	1
<b>Permanent Way.</b>																					
1. Rails ... ..	18	1	14	27	9	27	...	2	4	...	...	50	1,13	...	82	51	...	62	88	20	1,00
2. Steel and cast-iron Sleepers and Chairs and fastenings ... ..	31	2	14	18	...	38	2	...	13	2	...	14	57	2	34	1,04	4	38	1,23	9	60
3. Wooden Sleepers ... ..	...	...	...	...	...	...	...	...	...	...	...	1,23	...	...	1,30	16	15	1,56	2	29	2,35
<b>Rolling Stock.</b>																					
1. Locomotive and spare parts ... ..	1,35	1	5	31	3	3	56	5	4	91	4	5	1,44	4	6	6,54	24	6	5,98	10	6
2. Coaching and Goods Stock including spare parts ... ..	1,43	5	21	70	11	11	37	14	32	89	32	62	6,44	44	69	5,43	85	1,05	7,03	50	1,47
Buildings and Station materials and fencing ... ..	5	5	8	3	12	10	1	11	9	1	11	6	7	15	9	12	26	13	27	23	12
<b>Tools and Stores.</b>																					
1. Tools and Cutlery ... ..	3	3	1	3	7	1	3	11	1	5	13	1	12	11	2	13	13	2	14	14	2
2. Iron, Steel and other metals (excluding Public Way materials) ... ..	30	16	15	15	45	21	11	79	33	35	55	57	68	60	78	61	88	68	63	73	59
3. Portland Cement ... ..	5	1	...	...	3	3	...	2	3	...	...	4	...	1	3	3	5	5	5	3	4
4. All other stores ... ..	38	60	3,35	23	1,18	4,80	14	1,33	5,06	13	1,79	3,76	60	2,15	4,15	63	2,22	4,41	1,30	5,25	4,43
Electrical Plant and materials ... ..	12	7	...	8	11	1	7	11	1	7	17	2	21	28	1	31	36	2	53	35	2
Total ... ..	4,31	1,06	4,17	2,10	2,24	5,96	1,35	2,78	6,06	2,48	3,18	7,06	11,43	3,92	8,30	16,23	5,01	9,01	19,72	3,16	10,73
Grand Total for the year ... ..	9,54			10,30			10,19			12,72			23,70			30,25			38,61		

cannot be made to apply, as a matter of course, to Company-managed State railways as they might be considered to infringe upon the powers of the Companies' Home Boards in these matters. But the Company-managed railway were asked to follow these rules as far as might be practicable. The following percentages of the English grant to the total grant for stores purchases for the last three years bring out the difference between State-managed and Company-managed railways in the matter of observance of the new policy of Government.

	1929-30	1930-31	1931-32
State-managed Railways.	24%	16%	7%
Company-managed Railways	44%	31%	30%

While there has been practically no change in the percentage of purchases made by the Company-worked State railways after the "Rupee Tender System" of purchase came into force, that of the State-worked railways has been more than halved.

Another interesting statistics in connection with railway stores is the percentage of the balances of stores on hand to the total issues of stores on railways.

(Amounts in Lakhs of Rupees)

Year	Receipts	Issues	Closing balance	Percentage of closing balance on issues
1925-26	40,44	42,41	14,87	35
1926-27	41,24	42,13	14,26	34
1927-28	49,55	47,03	16,79	36
1928-29	45,97	46,04	16,78	36
1929-30	41,51	41,70	16,54	40
1930-31	32,74	34,40	14,83	43

Technical opinion is not in favour of laying down definitely a method by which the normal maximum balances of stores of each railway should be calculated but is of the view that the closing balances of stores should not ordinarily exceed 40 per cent. of the issues. Judged by this criterion, there has been an accretion of stores balances during the last year perhaps inevitable in view of the economic position.

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AGENTS

## TRANSPORT SECTION II :

# ROADS AND MOTOR TRANSPORT.

### THEIR PLACE IN THE COUNTRY'S SYSTEM OF COMMUNICATIONS.

There are few countries to which an efficient and adequate transportation system is of more importance than to India. This sub-continent with an area of nearly two million square miles, and its wealth of natural resources and the fact that its people are producers of a large volume of primary products, most of which must find export markets—all combine to make transportation one of the most vital of the country's problems. And by the same token, it is these same considerations, coupled with a business depression of unexampled severity, which have brought us our present acute transportation difficulties. India's most important agency of transportation has been the railway, and, on account of the geographical and economic factors above referred to, the railways will doubtless continue to be the backbone of our transportation system. But none of our railways have been able to make both ends meet. Apart from the prevailing world-wide depression, this state of affairs has been brought about by duplication of services, and a certain degree of extravagance on the part of the present railway managements, and to a small extent by the emergence of new and competing agencies of transportation whose efficiency the railway managements have been slow to appraise and whose methods and instruments of transportation they seem loath to adopt. These newer agencies have proved themselves in certain well-defined spheres to be more efficient than the railways; and if India is to have the best and cheapest transportation system possible, it is only a question of time until the railways will, by the inexorable operation of economic law, be compelled to recognise these new forms of transportation and to co-ordinate their present services with them. It is with one of the most important of these new instruments of transportation, the motor vehicle—one that has demonstrated its superiority in short-haul transportation—that this article deals, the object of which is to urge that the motor vehicle be recognised as an important integral part of our transportation system and be allowed, under fair and just regulation as required in the public interest, to serve the people of India in those fields of transportation in which it has already, to a certain extent, demonstrated its efficiency, convenience and cheapness.

As a guide in the solution of our transportation difficulties, it is of the first importance that the right general principles be laid down and kept constantly in view. It may be stated without fear of challenge that the proper guiding principles to follow are:—

- (1) That the public interest must always be considered paramount, and
- (2) That the most efficient instruments of transportation must, in the public interest, prevail in these fields where they have demonstrated their efficiency.

Not what is best for the railways, nor what is best for water transport, nor what is best for the motor vehicle or the aeroplane, must guide our

thoughts and shape our efforts, but what is best for the public as a whole.

And it follows as a natural corollary that whenever in any sphere of transportation some new agency has clearly shown that it can perform the services of transportation better and cheaper than the old agency, it must be adopted and the old gradually discarded, notwithstanding a large investment in the latter. To do otherwise would be to push back the hands of the clock of progress and handicap our commerce in the markets of the world.

It is not a question whether any particular form of transportation shall prevail or be given advantage. Ruthless economic laws will eventually determine that, no matter what artificial impediments may be interposed to interfere with natural progress temporarily, the public interest lies in determining the most economic and most efficient transportation service by whatever facilities are best adapted for that purpose. The readjustment of transportation facilities should be made with the least possible economic waste.

Motor transportation has been a development of the last 20 to 25 years but only in the past 5 or 6 years has it become a factor in the Indian system of transportation. The motor vehicle and motor transportation owe their existence to the invention of the internal combustion engine, and to the building of hard surfaced roads, without which motor transport would be greatly handicapped and restricted.

The development of motor transport in this country may be judged from the following comparative figures of imports:—

1913/14	2,880 Cars	75 Lorries	146 Cycles
1928/29	19,567 „	12,790 „	1,802 „

Since which later date, however, due to increased duties and the reduced purchasing power of the public, there has been a considerable falling off.

There is no doubt though from the above figures that the motor vehicle as a means of transport has demonstrated its efficiency and that industries built upon it and giving employment to thousands of people have to be reckoned with both as an economic as well as a political force of no small magnitude.

In consequence of the lack of good roads outside the large centres, it is true more than 50 per cent. of the total motor vehicles in the country are concentrated in the large towns in which the roads are more highly developed, and of these, private passenger cars exceed by far all other types of motor vehicles.

The advent of the motor vehicle has given a tremendous stimulus to the petrol, oil, rubber, glass, iron and steel industries, as well as garages and repair shops.

In fact the advantages conferred on the community by motor transportation are manifold and are felt by all strata of society. In general terms they may be summed up as the saving of time, lowered cost of transportation, convenience and flexibility of service. Congested centres of population have, by means of motor transportation, been relieved of pressure and the area of suburban residence extended, the delivery of goods from the

stores, merchandise depots and factories has been speeded up, bus service has been given, developing communities not sufficiently populous to afford other means of organised transport, professional and business men whose business requires constant travel between different parts of the city are enabled to cover many times the territory possible before the advent of the motor car. Social intercourse has been facilitated.

But no section of the public will benefit more from motor transport development in the future than the ryot. The motor vehicle tends to banish the isolation to which he has been condemned through lack of transport and communications and brings him in closer touch with the larger centres where the speedier, cheaper and more convenient transport will place him within economic range of many markets and so enable him to take advantage of better prices. However, these benefits cannot be fully enjoyed without the development of the country's road system which has been so sadly neglected up to the present.

As an example of the economy in cost of transport over a metalled road as compared with unmetalled road, it may be of interest to quote the following particulars from a report on the Punjab, included in the final report of the Indian Road Development Committee of 1927-28, which reads as follows:—

“ We understand that in the Lahore District it costs Rs. 3 to cart 100 c.ft. of road metal for the first mile on a metalled road and Rs. 4 on an unmetalled road and for the succeeding miles the rates are Re. 1-8 and Rs. 2, respectively. 100 c.ft. of metal requires about four carts. It might therefore be argued that a metalled road probably saves the cultivator two annas a mile on every trip his cart makes. If account were taken of the enormous mileage covered by cultivators' carts in carrying crops to market, the financial saving to the country by a developed system of roads might perhaps be dimly guessed at.”

Motor transport excels through its efficiency in respect of both passengers and freight in the following two fields:

- (a) In hauling less than complete carloads of freight,
- (b) In the transport of freight and passengers over short distances.

Although, given good roads, it is possible to travel reasonably long distances, the particular field in which the motor bus has proved itself is in the transportation of passengers over comparatively short distances.

The comparatively small fixed investment for buses as compared with railways enables bus services to be given to growing districts or areas with small population where a service could not be economically justified by a railway. In the frequency of service it gives and the convenience it affords in picking up passengers anywhere along its route the motor bus has a decided advantage in short-haul traffic over the railways. Not only does it render a better service to the public in these respects but on account of the smaller amount of the money tied up in each unit and the saving on labour, cost of operation, it renders a cheaper service. In many instances, however, the bus service is so much more convenient to the public that it can and does obtain higher fares over the same route than the railways. The motor truck other than in industrial areas has not been so generally used as the motor bus, but it offers definite advantages in delivery from village and farm to market centre and the elimination of several handlings, all of which are costly in both time and labour.

While charges have been made that the motor vehicle is responsible for many of the ills from which our railways are suffering, an examination of the facts indicates that this responsibility has been greatly exaggerated and that the railways benefit as much from the increased freight incidental to the motor industry as they have suffered from its competition.

For, from rough estimates, it would appear the railways benefit to the extent of approximately four to six crores per annum in freight on road material and materials appertaining to motor transport whilst in the report by the Railway Board for 1930-31 they show a drop in earnings on passenger traffic of about four crores, which, however cannot entirely be the result of motor vehicle competition but due greatly to the reduced purchasing power and travelling possibilities of the public. The future progress of the railways to a very large extent will depend on the co-ordination with road, waterway and airway transport, so that in the extension of our communication system the public may have the possibility of utilising the most economical and convenient transport serving the field where it has proved its efficiency.

Government should, therefore, work towards this ideal in the formation of a Board of Communications, which would embody all these forms of transport and be responsible for ensuring that their development would be carried out in the common interests of the country, and not by the protection of one form of transport or the introduction of regulations detrimental to or likely to discourage another.

In countries where motor transport is more highly developed than in India, it has been alleged that road transport is unfairly subsidised inasmuch as the Government provides the right of way, but on examination of the facts they have revealed unmistakably that the motor vehicle has been subsidised to a less extent than any other means of transportation. Although this has not been claimed in India, it may be of interest to examine the question in so far as it concerns this industry.

For centuries it has been the settled policy of all governments to encourage transportation. The carriage of goods and persons from place to place is an essential factor in the production and disposal of goods. The cost of transport enters so largely into the cost of everything people eat, wear, use and export that money has always been considered well spent when it assists and encourages the provision of cheap transportation. For many years past there has been no exception to this rule in India and many millions have been spent on railways, waterways, etc., as well as building roads and bridges.

Of the 200,000 miles of roads in British India, only approximately 60,000 miles are metalled, the remainder being earth roads many of which have never been graded.

Since the invasion of motor transport there has been an increase in the mileage of metalled roads of about 15%, but it is difficult to establish what has been the increase in expenditure under this heading. There has, however, been a steady yearly increase in expenditure under the heading of construction in so far as it concerns the conversion of the existing metalled roads to a higher standard to accommodate the increasing motor transport and the strengthening and rebuilding of bridges to take the heavier traffic loads, also the maintenance of the existing roads.

The following table from the July 1931 issue of *Indian Roads* gives some idea of the expenditure on roads in each province since 1913-14.



Expenditure in recent years from Provincial and Local Revenues on the Construction (O.W.) and Maintenance (Reprs.) of Roads.

(Rs. Lakhs.)

Provinces	1918-14			1926-27			1927-28			1928-29			1929-30		
	O.W.	Rprs.	Total	O.W.	Rprs.	Total	O.W.	Rprs.	Total	O.W.	Rprs.	Total	O.W.	Rprs.	Total
Madras ...	19'9	48'8	69'7	22'9	83'8	1,06'7	46'8	95'9	1,42'2	45'8	1,04'9	1,50'7	53'7	1,11'8	1,65'0
Bombay ...	19'6	19'8	89'4	22'7	56'0	78'7	20'8	58'6	78'9	19'4	56'3	75'7	15'8	55'8	71'6
Bengal ...	17'7	28'8	46'5	18'4	47'8	66'2	16'5	51'6	68'1	18'8	50'3	64'1	9'5	49'8	58'8
United Provinces ...	12'9	30'4	43'5	14'1	59'0	73'1	7'7	59'5	67'2	6'6	58'8	65'4	11'9	58'9	65'8
Punjab ...	12'5	23'5	86'0	85'9	60'2	96'1	70'4	64'2	1,84'6	65'5	66'6	1,82'1	39'9	69'7	1,09'6
Burma ...	14'8	41'4	56'2	61'6	67'3	1,28'9	94'0	65'5	1,59'5	99'6	72'4	1,72'0	80'7	73'3	1,54'0
Bihar & Orissa ...	21'5	19'2	40'7	16'2	36'9	58'1	18'3	33'9	52'2	14'9	34'0	48'9	18'9	32'8	51'7
Central Province ...	13'4	18'7	32'1	21'9	37'3	59'2	29'7	39'8	69'5	25'3	34'7	60'0	15'6	34'7	50'8
Assam ...	42'1	15'1	57'2	6'8	28'3	30'1	9'8	25'5	35'3	11'2	23'2	34'4	9'5	27'2	36'7
<b>TOTAL</b>	<b>1,74'4</b>	<b>2,46'7</b>	<b>4,21'1</b>	<b>2,20'5</b>	<b>4,71'8</b>	<b>6,02'3</b>	<b>3,18'0</b>	<b>4,94'5</b>	<b>8,07'5</b>	<b>8,02'1</b>	<b>5,01'2</b>	<b>8,03'3</b>	<b>2,55'5</b>	<b>5,08'0</b>	<b>7,63'5</b>
Index figure 1918/14-	100	100	100	126	191	164	180	201	192	173	203	191	146	206	181

NOTE.—The figures for Bombay exclude revenue expenditure on loan service.

The following comments of the Road Engineer with the Government of India on the above expenditure appearing in the same issue of *Indian Roads* is also of interest :

"Particular interest attaches to the expenditure on maintenance, which, after a somewhat sharp rise in 1925-6, rose more slowly in the following two years and between 1927-28 and 1929-30 rose still more slowly from a total of Rs. 494.5 lakhs to 508.2 lakhs, an increase of Rs. 14 lakhs or, say, Rs. 7 lakhs, which is only about 1.4 per cent., per annum. How much of this increase is due to an increase in the metalled mileage, which is being added to year by year, cannot definitely be said, but, as far as it is safe to strike an average on the figures of three years only, it may be inferred that the expenditure on the basis of fixed mileage is probably increasing at the rate of about Rs. 5 lakhs or 1 per cent., per annum. If the rate at which motor transport and the consumption of petrol are increasing is considered, together with the fact that, while improvements and reconstruction have been carried out over a small mileage of roads carrying the heavier traffic, the bulk of motor traffic is still carried on water bound macadam, the small increase in the cost of maintenance appears to be remarkable. This is partly accounted for no doubt, by the fact that it has not recently been possible to provide adequate funds and some deterioration is possibly taking place which will have to be made good in future at considerable expense. Nevertheless, even making allowance for this fact, the check which it has been possible to place upon the increase of maintenance expenditure represents, it is fair to say, very strenuous efforts on the part of those responsible and is a matter for congratulation.

"At the same time it is generally conceded that the present cost of maintaining roads constitutes a heavy burden, and, owing to the fact that water bound macadam requires constant attention and suffers severely from temporary starvation, the existence of so large a mileage of this surface subject to heavy motor traffic must, with the fluctuating revenues of India dependent *inter alia* upon the vagaries of the monsoon, always be a source of weakness ; and the sooner roads carrying the heaviest traffic can be reconstructed or surface treated in the interests of economy and durability, the better. It is worthy of note in passing that it has definitely been proved in Great Britain that improved methods of road construction lead to ultimate economy. The report of the Ministry of Transport on the administration of the road fund during 1929-30 shows that, whereas in 1924-25 the average annual cost of maintaining roads of Class I and II was £626 and £341 respectively, the corresponding figures in 1929-30 were £562 and £356, a reduction of about 10 per cent. in the cost of Class I roads on which there is the greatest traffic and the greatest development in modern reconstruction."

As the funds for road development derived from the two anna Petrol Road Tax were not available for distribution until 1930, they are not included in the above table, but it is estimated that approximately Rs. 4 to 5 crores will be available from this fund for road development over the period of five years ending March, 1934.

In attempting to form an idea of the proportion of the cost of our highway system that may properly be assigned to the motor vehicle and its use of highway facilities, it should be kept in mind that our system of highways, so far as mileage is concerned, was in existence substantially the same as to-day, long before the motor vehicle came into

general use. It would be in existence now even if there were no automobiles; although it is conceded that improvements to the existing roads in the way of hardsurfacing have been made largely as the result of the coming of the motor vehicle. For this reason and also because of the large proportion of our total highway mileage consisting of unimproved country roads, which are little used by motor traffic only a portion of the cost of our highway system can logically be debited to motor traffic.

Although it is difficult to arrive at any exact figures regarding the amount paid in taxes by motor transport, the following will give a rough idea of the position from which it will be seen that motor transport in the country has been in recent years paying more than its share in taxation—in relation to the roads used and the expenditure on same.

### Relation of Revenue from Motor Transport and Expenditure on Roads.

	In Lakhs of Rs.				
	Excise on Petrol.	Imports.	Prov. Taxation.	Total	Exp. on Roads.
1913-14	...	...	9	9	421
1926-27	... 100	271	70	441	692
1927-28	... 125	271	100	496	807
1929-30	... 400	200	100	700	763

To-day, however, motor transport is paying in taxes a sum greatly in excess of the amount expended on roads, due to a further increase in duties on petrol and import duties on cars, tyres, accessories etc., not to mention the enormous increase in provincial taxation on motor transport, which constitutes unfair discrimination against road transport and is economically unsound.

While it is admitted that a great percentage of the revenues derived from motor vehicle taxation is not spent on roads but goes to the general revenues of the Government of India, thereby throwing the responsibility and cost of their maintenance on the respective provincial governments, it can be justly claimed that motor transport as a road user could not, with any equity, be called upon to pay any more towards the road system.

If an equitable basis of taxation were established the bullock cart owners, cyclists and other users would bear their share in addition to those other groups of society benefiting from a road system.

In a country like England, where they have possibly the best roads in the world and a most highly developed system of motor transport, the Royal Commission on Transport in Great Britain declared that road users should pay two-thirds of all the charges of roads and that one-third should be contributed from general taxation.

This is perhaps, a fair allocation of cost for a country with a highly developed road system like England, but it would hardly be fair in India where her road system is so lamentably inadequate and the roads that exist are so unsuited for the economical operation of motor transport.

Furthermore, motor transport is already overburdened with taxation and as funds, far in excess of the revenues that could be derived from the annual taxation of motor transport and other road users, are required for the economical development of our road system, it is clear India must have recourse to other methods such as those usually adopted in other countries, namely, by the borrowing of money for purposes of construction, providing annually in addition to interest, a sinking fund calculated to retire the bonds during the life of the roadway.

In using the word "borrowing" it may, in view of the burden of taxation under which the public are at present groaning, convey the impression of

further financial burdens and taxation being imposed upon them. This, however, would not be necessary for the Government could borrow several crores of rupees for road development in the following manner without fear of any further imposition upon the public.

At the present time approximately one crore of rupees per annum is collected from the two anna Petrol Road Tax and distributed to the Provincial Governments and the Indian States for the purpose of road development. This sum is, however, entirely inadequate and as a result, public money is being wasted by the patching up of roads and their maintenance in a condition quite unsuited to the traffic they have to carry, while if funds were available, they could be brought up to a higher standard, and the public money now being wasted would be saved. But if by legislation this revenue from the Petrol Road Tax was secured for a period of 20 years and utilised for the payment of interest and Sinking Fund on a Bond Issue repayable over the same period, a sum of approximately 12½ crores could be made available immediately for a programme of road development which could be completed in a comparatively short period instead of the work being carried out over an extended period of twenty years.

This method would not impose any additional burden of taxation on the public but would bring them definite advantages which would not otherwise be possible, such as:—

- (a) Economy of public money in maintenance of the roads used,
- (b) Economy in operation of motor transport by having good roads to run over instead of bad,
- (c) Economy of transport for the ryot as

indicated in the Report on the Punjab included in the final Report of the Indian Roads Committee 1927/28,

- (d) The encouragement, such as is given by good roads to the use of motor transport from which Government will receive increased revenues from the increase in consumption of petrol and import duties on motor vehicles and allied sources,
- (e) Finally, the more equitable distribution of the costs of road development between its present and future beneficiaries.

In conclusion, if you take into consideration the inadequate road communications available in India, the percentage of two-thirds recommended by the Royal Commission on Transport in England as the financial responsibility of road users in road costs appears to be disproportionately high; and, if any definite percentage of responsibility is established, it also seems clear that steps need to be taken to compound all provincial taxes on road transport and some assurance be given that the revenues raised by both the Central and Provincial Governments will be utilised for road purposes, otherwise, if left as at present a prey to the various authorities who look upon road transport as an admirable source of revenue, this means of transport will run the risk of being eventually taxed out of existence.

Finally, if India's Communication system is to be developed in the economic interests of the country and to the fullest benefit of her people under the guidance of a well constituted Board of Communications, "Roads and Motor Transport" through the many advantages they offer, will assuredly hold an important place.

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## TRANSPORT SECTION III:

# MOTOR TRANSPORT

BY MR. J. W. ROSS

The motor trade and the operators of motor transport throughout India have at all times been subject to very serious handicaps. The expansion of the trade, evidences of which meet the eye of the ordinary man, is by no means an index of the business experiences of those who engage in it. The trade was never very profitable; and it would be true to suggest that during this year the large majority of those engaged in it are on the verge of bankruptcy. The present economic depression has no doubt, its share of the blame for such a position; but the larger share must belong to the crushing taxes which have been heaped on this trade in a most indiscriminate and unscientific manner. Not only is this taxation so severe as to handicap the transport operator and the motor retail trade alike, but with the exception of a small portion of two annas on every gallon of petrol this taxation is a revenue tax of no direct benefit to motor transport operators.

It is understandable that the Government should seek to make motor transport one of the sources of taxation and revenue. But a little scrutiny will show that the taxation of motor transport lacks all intelligible plan. It has already been mentioned that the trade gets back little benefit from the taxes which it is forced to pay. Nor are the Government any more careful to husband this source of revenue. Dwindling trade returns, import figures and protests from all over the country make it only too apparent that taxation has come to a point where it has defeated its own end. Not only does it yield no actual revenue but it also ruins the trade as a potential source of it.

There is a strong and wide-spread impression in the trade that the protection of the railways is the motive behind this apparently senseless policy. Plausible as this may seem, it may still be doubted whether there is any thought behind this policy beyond a natural anxiety to grab at revenue which seems to be so near at hand. But whatever the real motive, or the lack of it, the results of this reckless taxation are to-day only too apparent, and it is to be hoped that the Government will see before it is too late the futility of taxing an industry beyond its limit and the folly of causing a heavy loss of revenue to themselves and distress and unemployment amongst those concerned with the motor industry in India.

As one instance of the stimulating effect of lower import duties it is interesting to note that in 1926 when the import duty was 30%, and subsequently as a result of protests from all motor interests reduced to 20% in 1927, the total imports of motor vehicles into India rose from 21,343 in the year 1926-27 to 25,950 in the succeeding year when the import duty was dropped to 20%. The following year when the import duty was still at 20% saw an improvement in import figures up to 34,059 after which came a steady drop when the import duty was raised in 1930 to 25%, 1931 to 30% and later in the same year raised to the ridiculous figure of 37½ per cent.

The total imports of all motor vehicles into India in the year 1931-32 amounted to 12,448 and a comparison of these figures with those for the year 1929 read in conjunction with simultaneous increases in duty will show what a simple process it has been to cripple a key industry by excessive and ruinous taxation.

The Government excise tax on petrol is amongst the heaviest in the whole world; and in addition to this provincial Governments have been allowed to frame their own taxation bills dealing a further blow, if any such were needed, to motor transport. In Madras, the annual Provincial Government tax on a 20 seater bus works out to Rs. 800; with the result that the systems of bus transport so essential in that province have broken down entirely and the Government of Madras are now, when it is too late, considering a reduction in the taxation rates.

In other provinces the position is no better; the bullock, the buffalo cart, the hand cart, the trams and water transport not subject to the depredations of Government, are everywhere taking the place of the motor lorry and the motor bus, with the result that sales of new vehicles are practically at a standstill, bus and lorry operators virtually bankrupt, and the field of transport, both passenger and goods, left open to the untaxed and out-of-date types of transport mentioned above.

It is only fair to mention that besides the ruinous policy of the State and the local authorities, the conditions within the trade have also a great deal to do with the serious setback which is noticeable in bus transport. Indiscriminate competition, in the sense that competitors in a large number of instances have little or no idea of the costs or the limits to which they can cut their rates, has played havoc in the trade. Under such conditions the service to the public is bound to undergo a steady and rapid deterioration; for efficient units are thrown out of the field which is held in large part by those who do not know what they are about. The writer's experience of the trade in Bengal, and especially in Calcutta, shows the dangers of the lack of regulation by Government of a trade like this.

It should be clear from the foregoing that for the revival of this trade and its development on healthy lines, a considered state policy is absolutely essential. Not only should the taxation of the country conform to certain well-defined principles, but the State should also recognise it as its duty to preserve healthy conditions within the trade. In the first place, it is essential that the motor trade should no longer be regarded as the handy milch cow of every impecunious authority, be it central, provincial or local. There should be a clear understanding as to the place which the motor trade is to occupy in the transport system of the country, the methods by which it is to be encouraged, the help which the State can, and should, render to it and the extent to which it can bear the burden of taxation, taking into consideration all manner of levies that may be imposed upon it. In this view, it is a matter of no small significance that railway development must remain arrested for a long time

to come for want of the necessary capital. Even if capital were available, it would still be a debatable point whether further development or feeder communications offered the more fruitful field for the investment of money and effort. So far as feeder communications are concerned, motor transport is pre-eminently the most suitable. Its mobility, low initial cost, its suitability to the capacity and resources of the small capitalist give it a decisive advantage over the rigidity, heavy initial expenditure and the vast administrative requirements of the railway. Motor transport is therefore deserving of the fullest encouragement. This is not to suggest that the trade should have no tax burdens of any kind; but it would make all the difference between allowing an enterprise to be set afoot and taxing it as it is making its profit, and cutting it at the root with heavy and crushing charges even at the start. The heavy import duties are a bar sinister against the development of the trade. As the import duty is only a fifth of the total imports paid by the vehicle during its life time, it is quite reasonable to suggest that if the import duties are done away with and new enterprise allowed a good start, the State might gain more revenue from the other taxes on the trade than it would lose by fore-

going the import duties. An attempt should also be made to institute some relation between taxes paid by the trade and the benefits which it derives from the State. There is no reason why the motor user, both private and public, should pay taxes which should, strictly speaking, go to the whole of the population and not this particular section of it. While the Supplementary Budget has heaped blessings on a number of other industries, why should it single out the motor trade for further privations? And is it not a matter for particular grievance and heart-burning that in spite of all these taxes, the roads on which the motorist has to drive his vehicle are in most cases a disgrace to any civilised country? Even if other questions involve some public expenditure for which the present time is not inopportune, should it not be possible for the authorities to regulate the conditions of the trade, eliminate suicidal competition and ensure healthy competition as amongst those who hold the field? It is these questions which the Government must before long be compelled to settle both in the interests of their own revenue and in the large commercial interests of the country at large.

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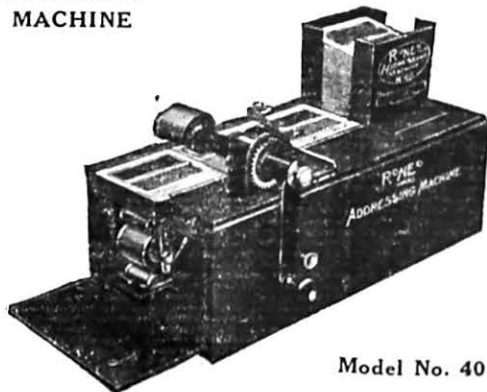
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## TRANSPORT SECTION IV :

# INLAND WATERWAYS

BY MR. G. L. MEHTA.

Inland Waterways, apart from performing the function of irrigation and drainage, play an important part in the transport system of India and particularly in the Province of Bengal.

The total capital outlay, direct and indirect, on irrigation and navigation works including works under construction amounted, at the end of the year 1929-30, to Rs. 130,27 lakhs in the whole of India. The gross revenue in the year was Rs. 12,94 lakhs, and the working expenses Rs. 5,86 lakhs, the net return on the capital being 5.44 per cent. The capital invested includes considerable expenditure upon three projects of the first magnitude namely, Sarda canals, the Lloyd (Sukkur) Barrage Project and the Cauvery-Metur Project which were under construction and contributed little or nothing in the way of revenue. Of the several provinces, the return on the capital invested in productive works was highest in the Punjab, where the canals yielded 13.61 per cent. in 1929-30. In Madras the return for the same year was 7.70 per cent. while in the United Provinces, it was 5.90 per cent.

There are six important navigable canals in Bengal namely, Midnapur Canal, Hijli Canal, Calcutta and Eastern Canals, Sunderbans Steamer Route, Madaripur Bil Canal and Orissa Coast Canal.

The length of the navigable canals in Bengal is 1,396 miles. Receipts from navigable canals by the Irrigation Department of the Government of Bengal amounted to Rs. 9,28,363 in 1929-30. The total registered tonnage of boats plying on these canals in the same year was 21,81,071 tons, the estimated weight of cargo being 19,22,224 tons and the estimated value of goods carried on these canals Rs. 22,42,10,196.

The Calcutta Port Commissioners have been earning a revenue of about Rs. 8 lakhs from the Inland Vessels Wharves and the income amounted in 1930-31 to Rs. 7,94,737-1-0.

The Grand Trunk Canal project has been kept in abeyance pending further consideration of the scheme.

Dredging of shoals was done in the Lower Kumar and Attarabanka rivers by the suction dredgers "Foyers" and "Alexandra." On the Madaripur Bil route, certain training works have been constructed to prevent silting in the Lower Kumar river.

Conservancy operations in the river Ganges from Rajmahal to Goalundo were carried out through the agency of the steamer companies who receive an annual subsidy of Rs. 21,000 from the Government of Bengal partly for conservancy and partly for carriage of postal mails. The Joint Steamer Companies also receive Rs. 23,000 for the same purpose from the Government of Bihar and Orissa.

The question of the development of waterways has been engaging the attention of the Government of Bengal since the last few years and a Committee was appointed in November, 1929, to examine the work of the Irrigation Department of Bengal in respect of irrigation, the maintenance of waterways, resuscitation of rivers, the control of floods and the

drainage of water-logged areas, and to advise Government on the desirability of creating a separate Department for waterways or a Provincial Waterways Board for the conservancy of navigable rivers in the Province. The Committee submitted its report in March, 1930. The principal recommendation of the Committee was the constitution of a Waterways Trust for the administration of inland waterways of Bengal. The recommendations of the Committee are under the consideration of the Government.

The Federation of Indian Chambers of Commerce had addressed a representation to the Government of India in May, 1929, urging the examination of the problem of development of Waterways by a suitable central agency with a view to the formulation of national policy in the matter. The Government of India replied to this communication in April, 1931, expressing their inability to institute an enquiry into the question of Waterways development or constitute any central body for the purpose.

The passage of the Inland Steam Vessels Amendment (Act 13 of 1930) sponsored by Mr. K. C. Neogy has led to two tangible results. As provided in section 54-B, the Joint Steamer Companies formed a local Advisory Committee at Dacca in July, 1931, with the Agent of the Joint Steamer Companies as President, the President of the Narayanganj Chamber of Commerce, the Chairman of the Dacca District Board and the Secretary of the Dacca Peoples' Association as members. The first meeting of the Committee was held in September, 1931.

In March 1931, the Government of India constituted a Rates Enquiry Committee as provided for in section 54-A of the Inland Steam Vessels Act of 1917 as amended by Act 13 of 1930, on a representation by the Pioneer Motor Boat Co. to determine whether a rate war exists between the India General Navigation and River Navigation Co. on the one hand and the Pioneer Motor Boat Co. on the other in regard to the run between Dacca and Serajdikhan. It consisted of Sir B. N. Sarma as President and Mr. A. W. Parsons and Mr. A. Cassels, Commissioner of Dacca Division. The Committee found that on the run in question, the rates of passenger fares charged on the Inland Steam Vessels belonging to the I. G. N. and R. S. N. Companies have been reduced to such an extent as to disclose an intention to force the Pioneer Motor Boat Co to cease from carrying passengers. The Committee further recommended that the fare should be on the basis of 3½ pies per mile and in the interest of travelling public, the minimum rate should remain in force for one year only or until on a complaint, a new minimum rate could be fixed. The report was forwarded to the Government; but it is not known what action has been taken in the matter.

So far as the technique of the maintenance of waterways in an efficient condition, much remains to be done. In the September Session of the Council of State, the Hon'ble Mr. J. C. Banerjee gave notice of a resolution asking the Government to open a



department of experts for the training of rivers. But the differences of opinion among experts even in regard to questions of fundamental importance are many and serious; and they show no sign of reduction.

Mr. A. N. Mitra, M.A., M.I.E. (Ind.), member of the Indian Service of Engineers and of the Institution of Engineers, who is connected with the Bengal Irrigation Department and is specially studying the problems of malaria and water-hyacinth, gave an interesting lecture at the Indian Institution of Engineers at Calcutta on the rivers in Western Bengal and Orissa wherein he dealt at length with the advantages and drawbacks of embankment system and discussed the question of recurrent floods. Dr. H. A. Sen, Professor in-charge of the Department of Applied Chemistry to the University College of Science has prepared a scheme for the industrial utilisation of water-hyacinth, which is the most serious menace to waterways in Bengal and the question of whose eradication has baffled numerous experts of the Irrigation Department. The past few years have been usefully sterile in any improvement of knowledge or invention; and it is to be hoped that in the future Bengal will be enabled to formulate a well-thought-out and adequate policy in regard to her waterways.

Among the principal river steam navigation companies plying in the waterways of Bengal and Assam might be mentioned the following:—

(1) **The Indian General Navigation and Railway Co., Ltd.**, registered in 1899; Authorised Capital 1 million pounds in 66,667 ordinary shares and 33,333 five per cent. cumulative preference shares of £10 each; Capital issued and subscribed £655,580, in 65,558 ordinary shares of £10 fully paid up and £244,030 in 24,403 five per cent. cumulative preference shares of £10 each carrying preferential claim to repayment of capital. The Debenture Capital is 30 lakhs in debentures of Rs. 500 each issued in 1915 bearing interest at 5% per annum redeemable in 1st July, 1945. For the Balance Sheet of the Company on 31st December, 1930, see page 397, *Investor's India Year Book 1931-32*.

This Company has a working agreement with River Steam Navigation and the Bengal Assam Steam Navigation Companies. The I. G. N., and

the R. S. N., are working jointly and are designated as Joint Steamer Companies. Managing Agents of I. G. N. are Messrs. Kilburn & Co. and that of R. S. N. are Messrs. Macneill & Co.

(2) **The Bengal and Assam Steamship Co., Ltd.**, registered in 1895; Capital Authorised and issued Rs. 25 lakhs in 5,000 seven per cent. preference shares and 20,000 ordinary shares of Rs. 100 each. Capital subscribed Rs. 23 lakhs in 20,000 ordinary shares of Rs. 100 each fully paid and 5,000 seven per cent. preference shares of Rs. 100 each, Rs. 60 has been called up. The Company was formed to establish a service of steamers and flats for the transport of produce, principally jute, on the rivers of Bengal and the Eastern districts. For the Balance Sheet of the Company as on 31st October, 1931, see page 355 of *Investor's India Year Book 1931-32*. Managing Agents are Messrs. Andrew Yule & Co., Ltd.

(3) **The Calcutta Steam Navigation Co.**, Capital authorised, issued and subscribed Rs. 8,40,000 in 8,400 shares of Rs. 100 each fully paid up. Balance Sheet of the Company shows: *Ref. Ibid* page 377. The Managing Agents are Messrs. Hoare Miller & Co.

(4) **The East Bengal River Steam Service Ltd.**, Managing Agents are Raja Srinath Roy & Bros. The authorised capital is Rs. 20 lakhs in 20,000 shares of Rs. 100 each; issued and subscribed capital is Rs. 9,17,300 in 9,173 shares of Rs. 100 each and Rs. 38,760 in 3,876 shares of Rs. 100 each, Rs. 10 paid up. The Balance Sheet as on 13th April, 1931, shows: *Ref. Annual Report* for 1931.

(5) **The Bangiya Inland Steam Navigation and Trading Co., Ltd.** The Authorised and issued Capital is Rs. 5 lakhs in 1 lakh shares of Rs. 5 each; the subscribed and called up capital is Rs. 70,800 in 14,160 shares of Rs. 5 each. The Directors in the Annual Report and Audited Accounts of the Company stated that the earnings of the steamers decreased to a certain extent owing to the competition of road traffic on the river side as well as the motor launches in the river.

Apart from these, there are several small companies such as the Pioneer Motor Boat Co., the Ghatal Steam Navigation Co., etc.

In September, 1931, a new Indian Company called National Steam Service was opened for carrying passengers between Goalundo and Rajabari in the district of Dacca.





## TRANSPORT SECTION V :

# S H I P P I N G

*Shipping and Maritime Trade.*—In the year 1929-30, the movement of shipping in foreign trade did not show a marked change either for better or worse from the previous year. 3,141 steamers with an aggregate tonnage of 9,571,052 entered with cargoes or in ballast and 3,136 steamers with an aggregate tonnage of 9,652,875 cleared with cargoes or in ballast at Ports in British India.

So far as the Maritime Trade of Bengal is concerned, the year 1930-31 registered a considerable decline in the total number and tonnage of vessels entered and cleared from and to foreign ports. As compared to 1,040 steamers and sailing vessels (both with cargo and in ballast) making a total tonnage of 3,677,808 in 1929-30, there were 841 steamers and sailing vessels with an aggregate tonnage of 3,009,950 in 1930-31. During the year 45 vessels cleared with full cargoes of coal and 102 with jute as against 88 and 105 respectively in the previous year. The total number of vessels plying in the coasting trade also declined from 2,024 to 1,913 and the tonnage from 6,284,278 tons to 5,785,071 tons.

As regards the value of foreign trade of Calcutta, it declined from Rs. 2,08,33.69 lakhs in 1929-30 to Rs. 1,31,01.16 lakhs in 1930-31. The maritime trade of Calcutta, both import and export, with other Indian Coast ports also declined markedly during the same period as will be evident from the fact that the total coasting trade fell from Rs. 31,89.18 lakhs in 1929-30, to Rs. 26,59.02 lakhs in 1930-31. This decline was mainly due to a heavy shrinkage in the trade with Burma.

The total coasting trade of India in 1929-30 amounted to Rs. 2,03,25.39 thousands, the total imports coming to Rs. 1,05,21.95 thousands while the total exports coming to Rs. 98,03.44 thousands.

*Nationality of Vessels.*—The following is a statement distinguishing the principal Nationalities of steam and sailing vessels which entered or cleared with cargo or in ballast at Ports in British India.

Nationality	No.	Tons
British	4,556	1,29,86,725
Japanese	397	13,00,838
German	314	13,80,680
Italian	275	11,54,651
Dutch	252	8,46,291
American	189	4,97,418
Norwegian	185	4,03,557
French	64	3,16,433
British Indian	490	1,76,928
Swedish	35	1,06,847

So far as the foreign trade of Calcutta is concerned, of the 841 vessels which entered and cleared in 1930-31, 635 were British, 60 Japanese, 44 American, 28 Dutch, 21 Norwegian, 13 Italian and 15 other European countries.

*Shipping at Principal Ports.*—The total shipping of the eight principal Ports of British India in 1929-30 was as follows:—

Port	No.	Tons (Thousands)
Bombay	62,567	11,627
Calcutta	3,064	9,962
Rangoon	3,609	8,995
Karachi	5,301	5,095
Madras	1,690	5,981
Tuticorin	1,754	2,464
Cochin	2,136	2,453
Chittagong	2,205	1,288

*Ships Registered in India.*—The total number and tonnage of vessels of 100 tons and upwards belonging to or registered in India as it stood on the 31st March, 1930, are as under:—

Quality of ships	Steamers and Motor vessels		Sailing		Total	
	Vessels	Tons	Vessels	Tons	Vessels	Tons
Iron	9	34,062	1	161	10	34,223
Steel	145	178,435	3	1,081	148	179,566
Wood and Composite	4	1,116	242	46,305	246	47,421
<b>Total</b>	<b>158</b>	<b>213,663</b>	<b>246</b>	<b>47,547</b>	<b>404</b>	<b>261,210</b>

*Ships Built in India.*—The total number of ships built in India during the year 1929-30 were 29 with an aggregate tonnage of 1,017 tons.

One of the noteworthy examples of ships built in India during the year is a steel passenger launch constructed in Calcutta and supplied with power plant by Ailsa Craig Motor Co., Ltd. Having an overall length of 50 ft. with a moulded breadth and depth of 10 ft. and 4 ft. 7 in., the launch is primarily intended for river service. She has a total seating capacity for 80 passengers. Another instance is the Indo-Burma Petroleum Company's Dredger "Margaret" built at the Dalla Dockyard of the Irrawaddy Flotilla Company and is intended for the reclamation of their oil-field. She is 100 ft. by 34 ft. by 8 ft. The dredging machinery was specially built by the Bucyrus Eric Company and is of the 16 inch hydraulic type. The power is 670 b.h. for the main engine and 150 b.h.p. for the generating engine. The Dredger is capable of moving 225 cubic yards of solid material an hour and will cost about 4½ lakhs. She is the second to be employed by the Company for their oil-field.

While on this question of ship-building it is of interest to note that s.s. *Sarvistan* (ex. s.s. *Frankfurt*) 7,714 gross tons which was owned by H. M. H. Nemazee was sold last year to Japanese ship-breakers for about £12,000/- delivery Osaka.

There was an exhibition of Indian Boats at the Science Museum, South Kensington, London, where Indian Boats of many kinds were well represented. The models exhibited ranged from a double dug-out peculiar to East Bengal to a double house-boat from Ceylon.

*Ship Wrecks and Casualties in Indian Waters.*—The official returns of wrecks and casualties in Indian waters for 1930 issued by the Commerce Department of the Government of India show a

total of 130 consisting of 80 wrecks and 50 casualties. The figures are classified as follows:—

	Wrecks	Casualties.
British vessels ...	1	25
„ Indian vessels ...	64	21
Foreign vessels ...	...	4
Native craft ...	15	...

The Causes of Wrecks and Casualties:—

Collisions ...	2	9
Foundering ...	82	8
Strandings ...	89	31
Miscellaneous cases ...	7	7

They occurred in the following localities:—

Sind Coast ...	62
Kathiawar Coast and the Gulf of Cambay ...	7
Bombay Coast ...	38
Malabar Coast ...	42
Hooghly River ...	9
Burma Coast ...	9

The remainder in small numbers occurred in other localities in Indian waters.

*Freights during the year.*—Rates of freight from Burma to United Kingdom, the Continent and the Mediterranean on rice, etc., varied from sh. 26/9 to 20 shillings per ton of 20 cwts.

General freight from Bombay to the United Kingdom, the Continent and the Mediterranean ranged from sh. 22/6 to 18/- shilling and from Marmagoa on ore to the Continent or Mediterranean sh. 18/3 to 17/- shillings per ton of 20 cwts.

Rate of freight from Calcutta to the United Kingdom on a jute basis was sh. 33/9 between April and July, 1930 and sh. 31/3 between August, 1930 and March, 1931, while the rate to the Continent was 30 shillings for the former period and went down to 27/- shillings 6 pence for the latter period.

Freight on tea to the United Kingdom and the Continent was fixed and maintained throughout the year at the flat rate of 45/- shillings per ton of 50 cft.

The rates to America and South African ports were at 50/- and 45/- shillings respectively and did not vary.

Coal freights for the twelve months for Rangoon and Madras ranged from Rs. 4/8/- to Rs. 3/4/- and for Bombay and Karachi from Rs. 6/12/- to Rs. 5/-.

*Shipping Costs.*—Not enough attention is paid by all shipping companies or their conference on securing reductions in charges on shipping in Indian waters such as dock and harbour dues, pilotage, light dues, etc. While in England various bodies such as the Traders' Co-ordinating Committee on Dock charges of the Chamber of Shipping are endeavouring to have dock and harbour dues reduced and in some instances succeeding in such attempts as in pilotage charges a few years ago, in India such bodies as Port Trusts instead of giving relief to shipping and trade during the severe trade depression are increasing the charges and levying surcharges.

*Port Charges and Pilotage fees.*—The Calcutta Port Commissioners increased various charges from 1st April, 1931 and these charges have been retained during the current year. The principal among such increases were a surcharge of 50 per cent. on the wharfage charge and one of 25 per cent. on the river due on petrol and its products, a surcharge of 12½ per cent. on river due on all imports and exports other than petrol and manganese ore and an increase in river due on jute.

The Bombay Port Trust have not increased any charges except for reimposing the sur-tax of 50 per cent. which was reduced 33½ per cent. in April, 1929 as an experimental measure and have curtailed their capital expenditure.

The Pilotage Fees in the Port of Calcutta have been increased since April, 1932 through levying a temporary surcharge of 10 per cent. on the existing scale fees. These fees were increased by a surcharge

of 15 per cent. in 1928. The Indian Chamber of Commerce, Calcutta has protested strongly both against the increase of port charges and the surcharge on pilotage fees.

A Pilotage Dues Committee was constituted in 1928 and again in 1930 to suggest revision of the scale of pilotage dues levied in Calcutta. The Committee have proposed a scale based both on draft and tonnage instead of merely on draft as hitherto. The Report of the Committee is under consideration of the Government.

*Light Dues and Lighthouses.*—The only important charge on shipping in Indian waters which has been reduced is the light due. The Indian Coast light due which was Re. 0-1-6 per ton till April, 1931, was reduced to Re. 0-1-4 per ton and has been further reduced to Re. 0-1-3 per ton with effect from 7th April, 1932. Light dues levied in respect of Great and Little Basses Lighthouses were also reduced from 3/32d. per ton to 3/64d. per ton from April, 1931 and the Minicoy light dues from 1/32d. per ton to 1/64d. per ton from the same date (Exchange at 1s. 6d. in all cases at present).

The Kennery Island Beacon at the entrance of the Port of Bombay is the first of its kind to be installed in Indian waters.

A Wireless Beacon station which enables ships' pilots to take their bearings with a stop-watch is to be erected by the Marconi Company as a special aid to navigation in the shipping channel of Rangoon. This type of wireless beacon has a vertical loop aerial which revolves at a steady speed making one complete revolution in sixty seconds omitting a well defined beam of wireless waves in its own plane as it turns. Stations with this novel system of wireless direction finding have been erected by the Air Ministry in England but this is stated to be the first of its type to be built abroad and the first to be ordered for general use.

As a part of the comprehensive scheme for the reorganisation of lighting and navigational aids for approaching vessels to the Port of Rangoon three automatic lightships of 120 tons each were ordered by the Rangoon Port Commissioners from the Gas Accumulator Company of Great Britain. The lights on all the new lightships as well as the automatic fog bells are controlled by automatic sun valves and are entirely unattended, the intensity of day-light alone actuating the mechanism. Each lightship contains sufficient gas for twelve months' continuous working without any attention. The cost of the three lightships is £34,285.

*India and the International Load Line Convention.*

The main point in which India is interested so far as the International Convention regarding Load Lines is concerned is the question of "Indian Summer Period." The present period of "Indian Summer" is from 15th December to 30th April. Under the Convention this period will be further restricted from 16th December to 15th April. Shipping interests who are in Indian maritime trade both Indian and non-Indian have protested against this curtailment and while some commercial bodies have suggested that the Government of India should not ratify the Convention, others have approved of ratification provided the Government collected the requisite meteorological data to have the period revised at an early date. As regards the distinction between "national" and "international" voyages, it has been argued that there should be such a distinction but that foreign and Indian States Ports on the Indian Coast should be included in national voyages as they are not outside the country.

*Mail Subsidies.*—The Government of India pay mail subventions to various shipping companies. Nearly Rs. 6 to 7 lakhs are annually paid from the Indian Treasury to the Peninsular and Oriental Steam Navigation Company for the carriage of mails from Marseilles to Bombay, Shanghai and Adelaide.

The British Indian Steam Navigation Company which is an allied concern and is the largest shipping company plying on the coast of India receives an annual subsidy of Rs. 15,18,000 for the carriage of mail by water.

River Steam Navigation companies such as the R. S. N. Co., and the I. G. S. N. Co., also receive subsidies which amount roughly to Rs. 67,320 per annum and the Irrawaddy Flotilla Company receives an annual subsidy of Rs. 2 lakhs.

*Training Facilities.*—The only action taken by the Government on the recommendations of the Indian Mercantile Marine Committee's Report is the establishment of a training ship, the *Dufferin* in Bombay. From all accounts, the ship has been a great success and has turned out capable and efficient Indian cadets as mercantile marine officers. Some of the cadets are undergoing training as apprentices on foreign-going steamers of various shipping companies to qualify for Mate's and Master's certificates and two of them have been appointed to the River Surveyors Department of the Calcutta Port Commissioners. In the last report for 1931, the Captain Superintendent of the *Dufferin* states that 219 candidates sat for the qualifying examination of the ship as against 137 candidates in the preceding year. "The forecast of the position in 1932" says the Report "will be 48 cadets at sea in the Mercantile Marine as apprentices, 3 under training in England for the commissioned ranks in the Royal Indian Marine, 3 serving under the Port Commissioners of Calcutta in the River Survey Department and 3 training as engineers, of whom one is at Fairfields in Scotland."

Since 1931, the Government also give every year three State technical scholarships of the value of £240 per annum each tenable in England for the training of Indians in Marine Engineering.

*Shipping Companies.*—The largest shipping company plying on the Indian Coast is the British India Steam Navigation Company, Ltd., which has paid-up capital of £3,657,200, Reserves of £1,400,000, Fleet and Investments of £7,080,374. The company made a net profit of £222,091 last year and distributed £221,576 in dividend, the rate being 6.06 per cent. The Company has 128 ships with a total gross tonnage of 757,210 tons and dead weight tonnage of 989,122 tons with an average of 13½ years.

Another important shipping company is the Asiatic Steam Navigation Company. It was registered in 1878 but last year it has undergone re-organization. It was registered last September with a nominal capital of £1,000,000 in £10 shares. The objects were to acquire the business of shipowners carried on by Turners' Steam Navigation Company, Ltd. The purchase consideration is £990,630 pay-

able in shares. The Company owns 16 steamers, totalling 78,659 tons gross and averaging 11 years of age.

The largest Indian shipping company on the coast is the Scindia Steam Navigation Company, with an issued and subscribed share capital of Rs. 89,83,575. During 1930-31 the Company made a net profit of Rs. 2,16,599-10-10 after providing Rs. 4 lakhs for depreciation and paid total dividend amounting to Rs. 1,45,985-12-0. The fleet of the Company stands in the books at Rs. 59,12,477-14-11. The Company has 10 steamers of its own with a total gross tonnage of 43,076 tons and total dead weight tonnage of 71,591 with an average age of 10 years. This Company's steamers ply on the coast of India, Burma and Ceylon.

Among other shipping companies carrying on maritime trade in India might be mentioned the Bombay Steam Navigation Co. (Managing Agents: Messrs. Killick Nixon & Co.) between Bombay, Karachi and Kathiawar Ports; the Bombay and Persia Steam Navigation Co. and the Persian Gulf Steam Navigation Co. plying between Bombay and Persian Gulf Ports; the Bengal Burma Steam Navigation Company between Chittagong, Akyab and Rangoon; The Indian Co-operative Navigation Company between Bombay and Konkan Ports; the Eastern Steam Navigation Co. between Karachi, Malabar and other Indian coast ports; the Malabar Steamship Co.; R. Assaria & Co; Eastern Peninsular Navigation Co.; the Bombay Steamships, Ltd.; Cowsajee Dinshaw Bros.

*General.*—At the conclusion of the Shipping Conference held under the presidentship of Lord Irwin, the then Viceroy at Delhi in January, 1930, the Government of India issued a communique on the 6th January, 1930, that "the Government will take into consideration, at an early date, the issues raised in the discussions which took place at the Conference" and that "as soon as it has been possible fully to consider these issues, the responsibility will rest with the Government of India of deciding what action should be taken and whether any useful purpose would be served by inviting the interests to meet again". In reply to question in the Legislative Assembly on the 2nd February, 1931, put by the late Mr. S. C. Sahnî, as to what action had been taken and was proposed to be taken on that communique, Sir George Rainy, the Commerce Member stated "that the political atmosphere had become wholly unfavourable to a settlement by agreement." It is understood that the question of assisting the development of Indian shipping is under the consideration of the Government who have not yet taken any action in pursuance of the assurance conveyed in their communique of January, 1930, on the subject.



**PUBLIC UTILITIES I :**

**LIGHT RAILWAYS**

BY MR. D. Y. ANDERSON, M. A.

In any discussion of Light Railways, whether in India or elsewhere, we are faced with a difficulty at the very outset—what exactly is meant by a Light Railway? Writing more than thirty years ago, W. H. Cole said—“The subject of light railways may be compared to a country which has no fixed frontiers, or to those Arctic lands whose Northern limits are still unmapped. The reader’s first and natural demand for a definition of the term light railways must be frankly met with the disappointing reply that a hard and fast definition, at once concise, exact, and comprehensive, is not forthcoming.” To the man in the street, however, a light railway is synonymous with a narrow gauge railway, although the two expressions do not necessarily mean the same thing; and it will no doubt be sufficient for our present purpose if we avoid academic discussion on the point, and confine ourselves to the consideration of narrow gauge systems.

The Railways of India are constructed on four different gauges—the broad or standard gauge of 5 ft. 6 ins., the metre gauge of 3 ft 3 3/8 ins. and the two narrow gauges of 2 ft. 6 ins. and 2 ft. When the construction of Railways in India was first considered, nearly a hundred years ago, it was suggested that the British standard gauge of 4 ft. 8½ ins. should be adopted, as this would facilitate the supply of locomotives and rolling stock from England. Lord Dalhousie, however, was advised by Mr. Simms (who had come from England in 1845 as Consulting Engineer) to recommend a gauge of 6 ft., which would have greater advantages than were furnished by the British Standard, and would be practically as good as the old 7 ft. track. The 5 ft. 6 ins. gauge was the eventual compromise, and has led to the Indian “break of gauge” as between standard and metre, to which have been attributed so many of our misfortunes.

The broad and metre gauges have always been looked upon as the main line gauges, the narrow gauge lines being considered as cheap feeders to their more important brethren; and a study of the Indian Railway map shows that these narrow lines are in almost all cases small systems connecting the main lines with agricultural or suburban areas in which broader gauge constructions would have been uneconomic. So the map to-day consists of the long main routes on the broad and metre gauges, and in the interstices a pepper-pot pattern of narrow lines feeding and being fed by the main routes.

The latest issue of the annual Report by the Railway Board on Indian Railways (for 1930—31) gives the total route mileage of all railways in India as 42,281 on March 31, 1931. Of this total the standard gauge accounts for 20,802 miles, the metre for 17,440 miles and the narrow gauges for 4,039 miles—49%, 41%, and 10% of the total, respectively. Numerically there are 42 broad gauge lines, 62 metre, and 61 narrow, the average route mileages being 500 miles broad, 280 miles metre, and 66 miles narrow. Of the narrow gauge lines, the Satpura system alone has 625 miles, the Barsi Railway 203 miles, and the Gaekwar’s Baroda line

318 miles; the remaining 58 railways therefore have a total of 2,893 miles between them, or an average of just under 50 miles. These figures shew very clearly the nature of the small lines and the purpose they are intended to serve.

The Railway Board Report also classifies the Railways according to earnings, ownership, and management; and as the figures may be of interest they are given here. (Class I Railways have gross earnings of Rs. 50 lakhs per annum and over; Class II Rs. 10 lakhs to Rs. 50 lakhs; Class III under Rs. 10 lakhs).

The figures given are route mileage.

	5’-6’’	3’-3½’’	2’ & 2’-6’’
Class I	20,802	15,060	2,158
Class II	...	2,253	970
Class III	...	127	911
<b>Total</b>	<b>20,802</b>	<b>17,440</b>	<b>4,039</b>
State owned	18,888	11,006	1,595
Other	1,914	6,434	2,444
<b>Total</b>	<b>20,802</b>	<b>17,440</b>	<b>4,039</b>
State managed	14,815	3,157	925
Other	5,987	14,283	3,114
<b>Total</b>	<b>20,802</b>	<b>17,440</b>	<b>4,039</b>

A statement is also given, for narrow gauge lines only, showing their length, date of first opening, and particulars of ownership and management.

**1. Lines owned by the State.**

Name	Gauge	Miles	Opened	Worked by
Purulia Ranchi	2½	117	1907	B. N. Ry.
Raipur Dhamtara	2½	57	1900	Do.
Satpura	2½	625	1903	Do.
Bombay Baroda & Central India	2½	80	1914	B.B. & C.I.R.
Eastern Bengal	2½	17	1899	E. B. Ry.
Dharwa-Pusad	2½	43	...	G. I. P. Ry.
Kalka-Simla	2½	60	1903	N. W. Ry.
Kangra Valley	2½	103	1928	Do.
Kohat-Thal	2½	62	1903	Do.
Trans-Indus (Kala-bagh Bannu)	2½	159	1913	Do.
Zhob Valley	2½	174	1921	Do.
Morappur-Hosur	2½	73	1906	S. I. Ry.
Tirupattur - Krishnagiri	2½	26	1905	Do.
Jorhat (Provincial)	2	32	1883	R. S. N. Co. & I.G.N.R. Co.

**2. Lines owned by Indian States.**

Parlakimedi Light	2½	25	1900	B. N. Ry.
Piplod-Devgad-Baria	2½	10	1929	B.B. & C.I.R.
Rajpura State	2½	39	1897	...
Gaekwar’s Baroda State	2½	318	1873	Do.
Bodeli-Chhota Udaipur	2½	23	1917	Baroda State
Kolar District	2½	64	1913	Mysore State
Tarikere-Narasimharajapura Ltd.	2	27	1915	Do.
Cutch State	2½	52	1905	Cutch State
Dholpur State	2½	55	1908	Dholpur State
Gwalior Light	2	253	1899	Gwalior State

3. Lines owned by Companies.

Name	Gauge	Miles	Opened	Worked by
Mayurbhanj ...	2½	71	1905	B. N. Ry. A
Champaner-Shivrajpur-Pani Light ...	2½	81	1911	B. B. & C. I. Ry. A
Godhra-Lunavada ...	2½	25	1918	Do. A
Nadiad-Kapadvanj... ..	2½	28	1918	Do. A
Khulna-Bagerhat ...	2½	20	1918	E. B. Ry. A
Dhond-Baramati ...	2½	27	1914	G. I. P. Ry. A
Ellichpur-Yeotmal ...	2½	118	1918	G. I. P. Ry. A
Pachora-Jamner ...	2½	85	1918	Do. A
Pulgaon-Arvi ...	2½	22	1917	Do. A
Jacobabad-Kashmor	2½	77	1914	N. W. Ry. A
Larkana-Jacobabad	2½	58	1922	Do. A
Barsi Light ...	2½	208	1905	Company B
Darjeeling-Himalayan ...	2	51	1880	Do. C
Darjeeling Extensions ...	2	95	1914	Do. A
Howrah-Amta Light	2	44	1897	Do. D
Bangalore-Chik Ballapur Light ...	2½	39	1915	Mysore State E
Shahdara (Delhi) Saharanpur Lt. ...	2½	92	1907	Company B
Ahmadpur-Katwa ...	2½	82	1917	Do. F
Arrah-Sasaram Lt. ...	2½	65	1911	Do. D
Bankura Damodar River ...	2½	60	1916	Do. F
Baraset-Basirhat Lt.	2½	52	1905	Do. D
Bengal Provincial	2½	88	1894	Do. G
Dashgara Jamalpur-ganj ...	2½	8	1917	B. P. Ry. F
Bukhtiarpur-Bihar Light ...	2½	88	1908	Company D
Burdwan-Katwa ...	2½	82	1915	Do. F
Dehri-Rohtas Lt. ...	2½	26	1911	Do. B
Futwah-Islampur ...	2½	27	1922	Do. F
Howrah-Sheakhala Light ...	2	20	1897	Do. D
Jagadhri Light ...	2	8	1911	Company G
Jessore-Jhenidah ...	2½	87	1918	Do. G
Kalighat-Falta ...	2½	26	1917	Do. F
Kulasekarapatnam Light ...	2	27	1915	Do. G
Matheran Light ...	2	18	1907	Do. B
Tezapore-Balipara Lt.	2½	20	1894	Do. D
Tirupati-Tiruchanur Light ...	2	8	...	Do. G
Trivellore Light ...	2	2	1921	Do. G

only a fixed rate of interest, but a share in the profits of a particular Branch Line; there appears to be no particular advantage of using a financial half-way house specially to float a loan on such terms; there appears to be no reason why the Government should not float the loan direct." This is a very fair sample of official journalese, but what it meant is that if, in future, any branch lines are to be built, Government will either do its own building, or at least supply the necessary funds.

B. Companies subsidised by the Government of India.

There are four of these—Barsi, Shahdara-Saharanpur, Dehri-Rohtas and Matheran; and the conditions for the first two are:—

I. Barsi—receives land only from Government, but no financial aid, all profits going to the Company. Government may determine the contract in 1944 or 1954, and if it does so shall pay to the Company in England in sterling a sum such as, when added to any unspent capital, shall amount to the total paid-up capital expended with the authority of the Government.

II. Shahdara (Delhi)-Saharanpur—receives land only from Government. The Local Government (U. P. A. & O.) provide free land sufficient for a single 5'-6" track, with land for all works and conveniences; together with the use of portions of the local roads. The Government give no financial guarantee but take half of the profits in excess of 4% on the paid-up capital. The Local Government may determine the agreement at certain intervals (the next being 1934) and can then buy the line, paying to the Company the value calculated at 25 years' purchase of the average annual profits for the preceding 3 years, subject to a minimum of the capital expended and a maximum of 25% in excess thereof.

C. Company subsidised by the Local Government.

Darjeeling-Himalayan—Government land and the use of the cart road are given free: other land if necessary is acquired by Government and transferred to the Company at cost price. The Government to pay enough to make the gross receipts up to Rs. 2 lakhs annually. Half the net profits in excess of 5% are applied in repayment to the Government of the amount spent on maintaining the cart road during the year, or in making good the deficiency in gross receipts. Government may take over the line at 10 year intervals (next date 1939) paying its value as a dividend-earning investment plus a bonus of 20%.

D. Companies subsidised by District Boards.

A typical example of these is the Howrah-Amta. The District Board grant free use of the side of the Board's road, and agree to pay such sum as may be required to make the net profits equivalent to a dividend of 4%, subject to a maximum payment of Rs. 1,100 per annum per mile, or Rs. 28,000/- per annum. Profits in excess of 4% are shared equally between the District Board and the Company. The District Board may purchase the line at stated intervals, the price being the value of the line as a dividend-earning investment, together with a bonus of 20%.

E. Company guaranteed by an Indian State.

The Bangalore-Chik Ballapur was floated by an Indian Company under a guarantee, from the Mysore Durbar, of 4% per annum on the subscribed capital. The Company failed to raise the entire capital, and the Mysore-Durbar then subscribed the balance as joint owners, the Company retaining the option of repaying the amount later on.

- A. Branch Line Company under rebate terms.
- B. Company subsidised by Government of India.
- C. Company subsidised by Local Government.
- D. Company subsidised by District Board.
- E. Company guaranteed by Indian State.
- F. Branch Line Company under guarantee terms.
- G. Unassisted Company.

It will be seen that the Company-owned lines work under various conditions, of which a few words of explanation may be given.

A. Branch Line Companies under rebate terms:

In 1925 the Railway Department of the Government of India published a Resolution on the subject of the financing of branch lines of railways. This Resolution states that branch and feeder lines are constructed under an agreement whereby the State either guarantees a minimum return on Capital (see F below), or alternatively "undertakes that the line shall receive out of the earnings of the main line from traffic contributed by the branch, such a sum, known as a rebate, as will make up the total earnings of the branch to a given sum, while the branch in each case shares with the main line any profit exceeding the guaranteed minimum" This scheme was evolved at the end of last century, when Government was unable to provide capital; but the Acworth Committee damned it very thoroughly, and in consequence the Government decided to abandon the policy and to reduce the number of Branch Line Companies. "If on any occasion the Government of India should be unable to find funds for construction . . . and should it be considered advisable to tap fresh sources for subscription to railway loans by offering terms different from those given to the ordinary Government loans, that is, by offering not

### F. Branch Line Companies under guarantee terms.

The Burdwan-Katwa is typical of this group. Government provides land free. When the net receipts are not sufficient to pay interest at  $3\frac{1}{2}\%$  on the capital, the Government makes the amount up to this figure; if the net receipts are not over 5% they go to the Company, and any excess over 5% is divided equally between the Government and the Company. In 1946, or at 10-year intervals thereafter, Government can purchase the line, paying 25 times the average net earnings of the preceding 3 years.

### G. Unassisted Companies: These need no explanation.

It is interesting to make some investigation into the financial results of the various Companies, with a view to discovering which mode of proprietorship is most advantageous; and we have therefore taken out figures, for the three years 1927—1930. (a) of the return represented by the annual net earnings as compared with the capital outlay; and (b) of the working ratio—i.e., the ratio of working expenses to gross earnings.

Railway	(a) % of return on Capital	(b) Working ratio
Purulia Ranchi ...	8'50	64'80
Raipur Dhamtara ...	9'15	47'17
Satpura ...	0'27	97'24
B. B. & C. I. Ry. ...	0'89	92'75
Kalka Simla ...	Nil.	109'02
Kangra Valley ...	Nil.	421'65
Trans Indus ...	Nil.	158'67
Morrappur-Hospur ...	Nil.	124'08
Tirupattur Krishnagiri ...	0'43	101'04
Jorhat Provincial ...	Nil.	101'45
Parlakimedi ...	4'57	49'45
Piplod Devgad Baria ...	3'16	49'95
(1929-30 only)		
Rajpipla ...	3'64	70'40
Gækwar's Baroda ...	1'20	84'78
Bodeli Chhota Udaipur ...	3'49	82'65
Kolar District ...	3'04	78'47
Tarikere, etc. ...	1'68	62'68
Cutch ...	3'79	52'51
Dholpur ...	5'60	56'28
Gwalior ...	2'92	66'80
Mayurbhanj ...	4'59	44'81
Champaner ...	5'60	69'48
Godhra Lunavada ...	5'60	75'75
Nadiad Kapadvanj ...	5'60	60'49
Khulna Bagerhat ...	6'77	45'00
Dhond Baramati ...	6'82	45'00
Ellichur Yeotmal ...	6'98	45'00
Pachora-Jamner ...	5'62	45'00
Jacobabad Kashmir ...	5'36	45'00
Larkana-Jacobabad ...	4'89	45'00
Barsi ...	6'64	52'88
Darjeeling Himalayan ...	9'88	69'16
Do. Extensions ...	5'00	50'00
Howrah Amta ...	7'99	66'47
Bangalore, etc. ...	3'08	74'60
Shahdara Saharanpur ...	3'83	43'51
Ahmadpur Katwa ...	Nil	102'92
Arrah Sasaram ...	5'68	62'11
Bankura Damoodar ...	Nil	116'88
Baraset Basirhat ...	5'59	71'31
Bengal Provincial ...	2'74	79'19
Dashgara Jamalpur-ganj ...	2'38	64'67
Bukhtiarpur Behar ...	7'17	63'55
Burdwan Katwa ...	1'78	82'04
Dehri Rohtas ...	11'54	51'64
Futwah-Islampur ...	3'02	62'91
Howrah-Sheakhala ...	6'96	70'86
Jagadhri ...	4'47	81'69
Jessore-Jenidah ...	0'44	94'82
Kalighat-Falta ...	2'85	81'95
Kulasekarapatnam ...	2'75	79'72
Matheran ...	1'84	85'87
(1928-30)		
Tezapore Balipara ...	9.07	76'57
Trivellur ...	Nil	160'62

The averages of these figures are instructive. For ten State-owned lines the average return is 1.42%, and the average working ratio 131.79%. The calculations omit the Eastern Bengal Railway, whose working statistics are not separately available; they also omit the Kohat-That and Zoob Valley

lines, which are purely military and are not expected to pay. If we also exclude the Khangra Valley line as being of too recent construction, the return is 1.58% and the ratio 99.58%.

For lines owned by Indian States the averages are 3.31% and 64.89%: and for Company owned lines 4.88% and 75.74%. There may, of course, be local conditions other than ownership which affect these results: but considering the position from the aspect of these figures alone, it appears that nationalisation is hardly the panacea that some people claim. The State lines give a return of  $1\frac{1}{2}\%$ : Indian State lines more than double this, and Company lines more than treble it. The State lines spend all but  $\frac{1}{2}\%$  of their income—if we include the Khangra Valley line they have overspent their income by nearly a third. Indian State lines save one-third, and Company lines one quarter of their income. Further comment appears to be needless—as it certainly would be ineffective under present circumstances.

From the point of view of the investor, many of these Railway shares appear to be attractive at present rates. There are a number of quotations as on April 30, 1932.

Railway	RATE OF DIVIDEND PAID			Per Price	Return %
	1929	1930	1931		
Ahmadpur-Katwa ...	3½	3½	3½ <sup>10</sup>	100 58	6'4
Arrah-Sasaram ...	4½	4	4	100 60	6'7
Bankura-Damoodar ...	3½	3½	3½ <sup>10</sup>	100 58	6'2
Baraset-Basirhat ...	4½	4	4	100 59	6'8
Bukhtiarpur-Bihar ...	6	5	5	100 68	7'9
Burdwan-Katwa ...	3½	3½	8	100 54	5'6
Darjeeling-Himalayan ...	12	10	9	100 84	10'7
Dehri-Rohtas ...	12½	6½	5½	10 12	4'6
Dhond-Baramati ...	6	6	5½	100 74½	7'4
Futwah-Islampur ...	3½	3½	3½	100 52½	6'2
Howrah-Amta ...	10	6½	5	100 82	6'1
Howrah-Sheakhala ...	7	5	4	100 69	5'8
Kalighat-Falta ...	3½	3½	3½	100 48	7'8
Larkana-Jacobabad ...	4½	4½	4	100 76	5'8
Mayurbhanj ...	4	4	3½	100 49½	7'6
Pachora-Jamner ...	4½	4½	...	100 52	...
Shahdara-Saharanpur ...	12	9	6	100 88	6'8

The average return, at these prices, and assuming the last declared rate of dividend, is therefore  $6\frac{1}{2}\%$ . Moreover, it will be seen that there has been a marked tendency for dividends to come down since 1929, this being due—at least in part—to the general depression in trade. If, as we all hope, business is going to improve in the not too distant future, the improvement should bring with it an increase in rail-borne traffic, with a consequent increase in earnings, a revival of dividends and a rise in share prices. So that, on the face of it, the purchase of these shares now would possibly prove to be not only a sound investment but also a profitable speculation. For some of the Companies the dividend is guaranteed at  $3\frac{1}{2}$  or 4%, and with prices ranging from 50 to 60 per 100, the return is not to be despised.

A word of warning is necessary, however. The recent decrease in traffic and in dividends is not to be explained solely by talk of trade depression. Railways throughout the world have for several years suffered from a trouble which is more serious, because less transient than the slump; this trouble is the competition from road motors, whose advantages are too well known to need description here. The Railways in Britain have now obtained powers to run their own road services, and this to some extent has helped them to meet outside competition. In India the Railways are still governed by the Indian Railways Act, which took effect in 1890 and has not so far been modernised. In 1890 motors were very much in their infancy, and it does not appear to have occurred to anyone in those days that road transport might develop as it has done. Consequently the Act, in this respect, is completely out of date. There is only one section of the Act which deals with the question of road

traffic: that is section 51, which permits Railway Companies, with the sanction of the Governor-General in Council, *i.e.*, of the Railway Board—to “construct and maintain roads for the accommodation of traffic passing to or from the Railway”; “to provide and maintain any means of transport which may be required for the reasonable convenience of passengers, animals or goods carried or to be carried on the Railway”; and to “charge tolls on the traffic using such roadways, roads, or means of transport . . . . according to tariffs to be arranged from time to time with the sanction of the Governor-General in Council.”

The stumbling block in this rule is to be found in the words “reasonable convenience”; in practice this means that Railways are not permitted to run their own road services in competition with their own rail services. That is to say, if a Railway has its track running between two points A & B, it cannot run a road service between A & B, as such a road service would not be a reasonable convenience. Now many of the Indian narrow gauge lines have their alignment actually alongside existing

roads, and there is therefore opportunity for direct competition, mile for mile. It is a simple matter for anyone *except the Railway Company*, to secure a license to run a motor bus on these roads; motor buses are necessarily speedier than narrow gauge trains, they can pick up and put down traffic where they like and not merely at specified stations, they are to a very great extent free from the local taxation which can be such a burden on Railways, and they are infinitely less controlled as regards the legal limits of speed and carrying capacity. The small Railways are therefore at a very serious disadvantage, and with the present legislation it does not seem possible to do anything whatsoever.

The Railway Board has at last realised that some action is necessary, and is considering a revision of the Railway Act and its translation into modern language; but the race between the Mills of God and the Mills of Government is apt to be a neck-and-neck affair, and there is no saying how long it will be before the light railways can start on the road to recovery.

**PUBLIC UTILITIES II :**

**CITY ELECTRIC SUPPLY**

BY MR. S. N. MUKERJEE, A.C.A., B.A., LL.B.

It is indisputably true that electricity is the most flexible power agent in existence and no limitation can be placed on its adaptability to meet the needs of man—the truth of such statement is realised every day when we find that isolated independent enterprise which was the only medium of supply for communal luxury is being gradually displaced by more advanced process of reorganisation for the attainment of co-ordinated electricity supply system. Development of electricity in India can be said to have started only within recent years. In the early stages production and distribution of electricity for the use and benefit of the people were limited to private enterprise and the early licenses issued by the local Governments were almost invariably to companies formed in India or in England. The history of the difficulties experienced and encountered by these pioneer undertakings is yet to be written. India being pre-eminently an agricultural country, the conditions of electrical development are entirely different and more diverse in character both in conditions of application and in function than most of the European countries.

In 1917 only twenty-eight licensed undertakings were operating in this country. The combined plant capacity of these undertakings was 104,000 Kilowatts with a total sale of 154 millions units. In 1927-28 the total capacity was raised to 185,000 K.W. with an output of 230 millions units. The statement given below will show where India stands in comparison with Great Britain and the United States of America.

Year	Total capacity in K. W.
1927 U. S. A.	... 36,275,000
1927 Great Britain	... 8,964,699
1927 India	... 185,000

In recent years change from the reciprocating steam and oil engine has been made and in practically all the major stations and many of the smaller undertakings steam turbine driven plant has been instituted. Hydro-electric surveys are being carried out by the Government and notable examples of these are the Punjab Hydro-electric Scheme, Madras Presidency Scheme and Ganges Canal Hydro-electric Scheme with a total capacity of 86,000 K.W. Local Governments with the object of helping small power users and the husbandmen to avail themselves of the advantages from the use of electricity have constituted committees in conjunction with Municipalities and District Boards for the provision of pure water and reasonable sewage disposal schemes.

The primary object of the Canal Scheme is being assisted by the use of the electrical driven plant and miles of unprofitable barren lands have been rendered fertile and economically productive by the application of electric power.

A tabulated survey prepared by the American investment banking firm of Pynchon & Co. of the world's electricity output makes no mention of India! The list is as follows:—

	Millions of K. W. Hours.
United States	... 125,000
Germany	... 34,000
Dominion of Canada	... 18,000
Great Britain	... 16,200
France	... 15,500
Japan	... 11,500
Italy	... 9,800
Norway	... 8,500
Russia	... 6,500



Switzerland	...	...	5,520
Sweden	...	...	5,000
Belgium	...	...	4,486
China	...	...	3,050
Spain	...	...	3,000
Poland	...	...	2,600
Austria	...	...	2,500
Union of South Africa	...	...	1,900
Australia	...	...	1,900
Czechoslovakia	...	...	1,700
Mexico	...	...	1,400
Holland	...	...	1,400
Brazil	...	...	1,200
Argentina	...	...	930
Hungary	...	...	750
Chile	...	...	400
Cuba	...	...	300
Denmark	...	...	300
Uruguay	...	...	125
Ireland	...	...	100
Peru	...	...	80
Lithuania	...	...	15
Iceland	...	...	10

Very limited data is available on the subject of investment in the electric light and power industry, but such rough estimates as have been gathered, put the world total around at about 3,760 millions sterling. The total amount invested in India through private enterprises is approximately Rs. 21,69,63,000. Statistics show that about 75 per cent. of the industry is electrified in the United States, about 70 per cent. in Germany and 50 per cent. in Great Britain—no reliable statement can be given about Indian Industry.

The need for speedy traction in and around large cities is met by electric trains which by reason of speed, quick acceleration and flexibility of service are best fitted to deal with the rush traffic of the worker who is compelled to reside in districts remote from his place of employment, and in Bombay is an excellent example of the benefits of this system.

In the cities themselves the excellent services of electric trams have for years dealt with the needs of the people who can avail themselves of a cheap and efficient transport.

Colliery and other mines attain maximum safety efficiency and output by the use of electricity and the large mills of the country bear testimony to the advantages of electricity.

The production of steel by the aid of electric furnaces has not been attempted as yet in earnest in India and this with other kindred uses has still to be explored, the experience of England and other countries may lead to serious experiment and success in this direction.

Manufacture of the plant required for the production of electricity has been left to other countries where after many years of research and practical experience, units of sizes which twenty years ago were unthought of are now common, and India has thus far not attempted to enter into this field.

In recent years, however, the manufacture of electric cables and wires has been accomplished in this country and the success attending this venture will encourage progress in other directions.

Cheap power is the major asset in maintaining the prosperity of the people and unless we direct our activities towards this, successful and continued expansion will not be achieved. So long as India is indifferent towards the development of her electrical power, the limitations prevailing in both industrial and social life will not be removed. It is hoped that the local Governments will encourage the supplies and give further help and assistance to the electrical industry in India—this is palpably needed at the present juncture.

The monopoly for the electrification of the principal cities of India was, in the original instances, secured by companies registered in England with sterling capital. Of these sterling companies, it is only the Bombay Electric Supply concern which, early in the last decade, was transformed into an Indian concern with a rupee capital. Calcutta, Madras, Rangoon, Cawnpore and Delhi are now served in this behalf by foreign concerns. Lahore and Karachi have been served by Indian concerns from the beginning.

It is only the Bombay Electric Supply Company that does not generate its own power. It buys electrical energy in bulk from Tata Hydro-electric combine and sells it to the retail users at the specified rates. The Bombay Electric Supply Company has also a monopoly for running trams and buses in the Bombay island.

In respect of the mofussil towns, the license for electrical undertakings has been given, in the generality of cases, to firms who, in their turn, have transferred their rights under the license to joint stock companies formed for the purpose. Amongst firms associated with this class of enterprise, the most notable are Messrs. Martin & Co., Octavius Steel & Co., Killick Nixon & Co., H. M. Mehta & Co., and Jaitly & Co. Messrs. Begg Dunlop & Co., and Bird & Co., have also stray electrical enterprises under their agency.

Some municipalities have, however, exploited the possibilities of electricity, departmentally.

The retail distribution from the hydro-electric projects of the Punjab and U.P. is not done by the Governments concerned but entrusted to private enterprises. Limited companies have been formed for working such licenses.





## PUBLIC UTILITY SECTION III :

# HYDRO-ELECTRIC DEVELOPMENT IN INDIA.

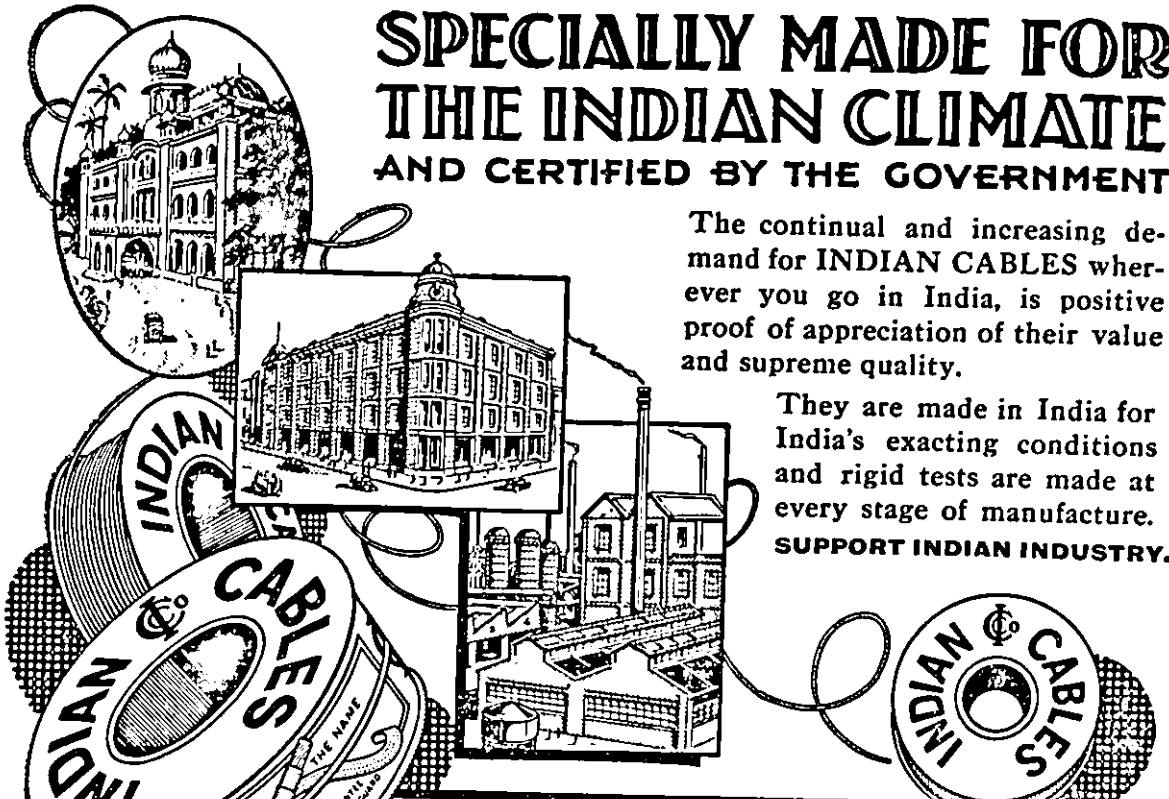
Electrical development in India, unlike most other phases of our national economy, is as important for what has so far been achieved as for what yet remains to be done. The material progress of India's millions unquestionably requires a vast industrial development commensurate with the scope which this country offers. But India is not adequately endowed with coal, the traditional force of power, or its later rival, oil. While for other countries electrical development would be more of an improvement suggested by the progress of science, for India electrical development would be the sole and indispensable condition of economic progress. This is as much as saying that before the development of electricity and the invention of the various uses to which it is now put, industrial progress in India would have seemed less feasible than it does to-day. It is necessary to dwell on this point as there is a tendency to regard the vast hydro-electric schemes that have been completed and that are still in progress as more the concern of electrical engineers and other technicians than a point of vital importance to the well-being of the average man.

Electrical development is affected both by the establishment of large public utility companies in big industrial areas, and also by taking advantage of the water power available in an area to institute large hydro-electric schemes. The latter enables the distribution of current over large areas at comparatively small cost. Though the institution of such schemes requires the outlay of big amounts, once the schemes are instituted, progress is heady and conditions of all-round improvement ensue without delay. But the former is dependent upon a number of conditions which are not satisfied easily. Development through the activities of isolated joint stock companies necessarily means that progress can be attained only when the conditions generally favourable to joint stock enterprise are present. Though there are periods of boom it is rarely, if at all, that a substantial part of the available new capital flows into one particular direction. Besides, as electrical companies have to depend not so much on the demand for the amenities of civilised urban life, as on the needs of industries for power, it will be a long time before the smaller towns or the rural areas can secure electric current on anything like a fair rate.

It will be seen from the above analysis that electrical development of the first of the two kinds mentioned has to be slow, meagre and unsatisfactory. The big industrial cities have naturally been the first to have electric supply companies in their midst facilitating both the processes of industrial production and also the domestic conveniences of the inhabitants of those areas. It would hardly be possible, nor indeed would it be useful or necessary, to trace the development of electric supply companies over India's urban areas. In a sense, they are rather the result, than a potential cause of industrial activity. The hydro-electric schemes, on the other hand, have the merit of producing conditions for which the ordinary joint-stock companies would only have to wait. It is fortunate that among the many gifts that nature has lavishly bestowed on this country, water power is by no means the least. In the hilly tracts of India are gigantic falls which lend themselves admirably to their utilisation

in hydro-electric projects. The projects, too, can be of such vast dimensions that the neighbouring plains are afforded the full share of their benefits. It follows from this, that those regions which are very distant from hilly tracts and the source of big river systems, have to depend on the slower and more prosaic process of electrifying themselves. From the point of view of hydro-electric development, those which are most fortunately situated are in their order of importance, Bombay, Mysore, Southern and South East India, the U. P. and the Punjab; and the other parts of India are in this respect less fortunate.

The credit for pioneering in hydro-electric schemes goes to the Mysore State which harnesses the Cauveri falls to the purpose of generating electric energy for domestic and industrial consumption throughout the State. This project is the oldest in conception, in execution, and in development. It is also unique in the great blessing it has conferred upon the large population. The idea of utilising the Cauveri falls is reported to have been mooted first in 1894 when attention was drawn to the possibility of long distance transmission of power. Further investigations afterwards followed. But the credit of giving single-minded devotion to the task of bringing it to fruition despite all the obstacles of the day, belongs to the Indian statesman, Sir K. Seshdari Iyer, the famous Dewan of Mysore. In 1899 the decision was reached by the Government to utilise the fall for the production of electric power to be transmitted to industrial undertakings in different parts of the State including the Kolar gold mines. The primary consideration was that industrial enterprises throughout the State would get the supply of cheap motive power. The preliminaries consisted in acquiring from the Madras Government the right to use the whole of the water power. The falls occur in the river Cauveri which at this point forms the boundary between the Mysore State and the Coimbatore district, where the stream forms the famous island of Sivasamudram. The river has falls on both its branches, the British side being known as Bar Chakki and other side as the Gangana Chakki. The head works are about two miles above the falls and as in all similar cases the water has to be diverted by means of a masonry dam 9 ft. high and 2,400 ft. long across the river. The flow is of course controlled by suitable gates. The generating station is situated in a place where are located the control gates for regulating the flow from the penstock and pipe lines conveying the water to the turbines. Two parallel channels about three miles in length conduct the water to the forebay above the generating station. The capacity of the channel is 1,200 cusecs. But the full capacity will be utilised only when the growth of the demand for power warrants it. A silt reservoir with a capacity of five million cubic feet is also provided to ensure that water going into the turbines is free from silt. The average power generated during the month is 14,310,000 B. T. units. The power is generated at a voltage of 2,200. The principal consumers of the power are the Kolar gold mines which are 92 miles away, Bangalore at a distance of 60 miles and Mysore, 37 miles. The Mettur project in the Madras Presidency is also during its present constructive stage getting



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its supply of electric power from the Mysore hydro-electric works.

No account of the Mysore project would be adequate or complete without a reference to the provision of storage reservoir at Krishnarajasagara which enables the flow of water available at any time to be reserved and regulated according to the needs of the moment. The vast difference that it makes will be seen from the fact that during the dry weather the flow of the Cauveri at Sivasamudram does not exceed 100 cusecs; but with the storage it is possible to have 900 cusecs. Penstock pipes are provided in the reservoir dam to enable an increase in the supply of electricity generated at Krishnarajasagara according to the requirements. The Krishnarajasagara dam is 8,600 ft. in length and 124 ft. high above the river bed. The catchment area is 4,100 square miles and the storage capacity is 44,827 million cubic ft. The water spread is 49.5 square miles. Among the advantages of the storage reservoir is the possibility of bringing a higher area of land under irrigation than has been possible till now in a country subject to frequent drought. The advantages that have flowed from the hydro-electric project in Mysore can be appreciated even by a casual visitor to that State. It may be generally stated here that as a result Mysore is one of the foremost industrial states of India. The State itself has initiated a number of capitalist enterprises which are yielding an annual revenue of about Rs. 30 lakhs. The amenities of civilised life like electric light, etc., are available to the most obscure parts of the State and at a rate which compares most favourably with the rates elsewhere in India and the world.

Next to the Mysore project in the order of chronology but far more spectacular from every point of view is the hydro-electric enterprise projected by the Tatas and intended to exploit the possibility, from this point of view of the Western Ghats. The Tata Hydro-Electric scheme embraces three companies, namely, Tata Hydro-Electric Power Company, Andhra Valley Power Company and Tata Power Company. The three companies are alike in various ways; and through the various links between them they must be considered as a single unit. Taken together, they take the first place in India as the most gigantic hydro-electric power scheme. Possibly, they constitute the world's biggest hydro-electric project. The capital scheme of the three companies involved Rs. 16½ crores; and the block expenditure comes to Rs. 16 crores. Among the many marvellous achievements of the Tata House in regard to the pioneering of industries in India, the hydro-electric projects are not the least notable. The power generated by the three Companies is utilised for the electrification of a section of the B. B. and C. I. Rly. and the G. I. P. Rly. and by most of the cotton mills in the Bombay island. The Bombay Electric Supply & Tramways Company, which has the monopoly for the retail supply of electrical power in the City of Bombay, finds power in the bulk from the Tata companies. Even after meeting all these demands, the productive capacity of the three projects is not utilised to the full. The Kalyan power scheme of the G. I. P. Rly. was a needless outlay on the part of the railway administration; and the cost per unit to the railway from the working of the Kalyan power station is higher than the rate at which the G. I. P. buy the part of their requirements from the Tatas. There can be no doubt that the Kalyan power station was a needless duplication of effort, while without that effort and outlay, the railway would have secured power cheaper. Owing to the prevalent trade depression, there has been no expansion in the consumption of electrical power. In the result, the Tata Hydro-electric Companies are working, and may have to continue to work, only to partial capacity. These projects have been a tremendous success not only as engineering enterprises; the shareholders have been

in receipt of satisfactory dividends in the case of the two companies started in the earlier years, while the Tata Power Company, the last of the trio, is now on a dividend-paying basis.

Madras, though lagging behind the other provinces in respect of general industrialisation, promises to go ahead in the future. The hopes are based solely on the possibilities that are being opened out by the Pykara Hydro Power Scheme. The main engineering features of this scheme are briefly summarised: The Pykara River rises on the slopes of the Mukurti Peak, 12 miles due west of Ootacamund, the summer headquarters of the Madras Government and after a winding course of about 15 miles on the Nilgiri Plateau, it plunges down to the plains below in two falls, 180 and 200 feet. A total drop of over 4,000 feet is taken within a few miles and thereafter the river becomes known as the Moyar which, skirting the foot of the Nilgiri Plateau on the north, eventually joins the Bhavani. The 4,000 feet difference in level, between the edge of the plateau, where the main falls begin and the Moyar River at the foot of the plateau, is the head available for development. Initially it is proposed to utilise only the first 3,000 feet under the name of the Pykara Scheme and when the demand for power increases, the lower 1,000 feet will be developed with the name of Moyar Scheme. Full investigations show that the Pykara River is capable of producing 100,000 horse power, although it would be many years before the demand can develop to that extent. The scheme as now sanctioned is for developing a maximum of 21,000 horse power for the Nilgiris and Coimbatore districts only. As the demand increases additional reservoirs will be constructed on the plateau for storing larger quantities of water, until the full possibilities of the site, namely, 100,000 horse power are brought into use. The designs have been so drawn up that a minimum of capital is, at any time, kept locked up on unproductive works or equipment but flexible enough to admit of extensions at a minimum of cost. The catchment area which is to be utilised is about 38 square miles in extent and receives an annual rainfall averaging about 105 inches. The highest floods known have been in July, the river discharging more than 20,000 cusecs, and the lowest flow observed has been in May, being only 15 cusecs. It is apparent that a certain amount of regulation of the river by storage is necessary before continuous power can be generated. The catchment has, fortunately, several suitable reservoir-sites; and for this reason the Pykara Scheme is considered a very flexible and attractive development. Additional storage can be obtained at any time, to cope with an increase in power demand, by constructing a series of dams one after another.

The waters of the Pykara will be diverted by a small dam constructed across the river about a mile above the main fall and an aqueduct 7,000 feet long will convey them to a forebay on the edge of the plateau. They will be supplemented by another and an independent supply from a reservoir formed by a dam across the Glen Morgan stream. The effective storage provided will be about 84 million cubic feet and this will serve all purposes for a number of years.

From the forebay the water will be taken through a pipe 78 inches in diameter of riveted steel which lower down branches into two high pressure penstock pipes varying from 27 inches to 21 inches and these will carry the water down the hillside to the power house 3,000 feet below. These pipes will have a length along the slope of about 10,000 feet and in the lower portions where the water pressure will be very high, the pipes will be made of special steel and it may be necessary to further reinforce them by steel bands. For this reason the scheme will be unique in India and it is believed that there are only four schemes in the world where higher heads

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have been developed. The cost of these pipes along with their supports when erected will be about Rs. 18 lakhs. A permanent haulage track will be laid alongside the pipes to convey men and material between the top and bottom of the plateau. The penstock pipes end in a manifold from which water will be led into three generator units, each of 7,800 k. w., maximum rating. One of these will be spare for use in emergencies.

Power will be generated at 11,000 volts and transformed up to 66,000 volts for transmission to Coimbatore. It is proposed to instal high tension transformers outdoors, and when the demand for power increases, more turbo generators will be installed and the transmission raised to 1,10,000 volts.

The power generated at Pykara will be transmitted to different centres of consumption by high voltage overhead lines. A double circuit 66,000 volts line (50 miles long) will carry power to the Coimbatore sub-station and branch lines at 22,000 volts will radiate from this sub-station to the other centres in the district such as Tirupur, Pollachi and Anamalais. The Nilgiris District load will be catered for by branch lines from the Pykara Power house itself. The principal users of power would be the cotton mills at Coimbatore, Tirupur and Pollachi, who are expected to take more than half the output. A large proportion would also be used by the tea estates in the Nilgiris and Anamalais. The rest of the power will be for the lighting of towns and supply small factories, flour mills, ginning mills, rice mills, etc. Also, it is expected that the South Indian Railway may have, at least, a portion of their Nilgiris Section electrified and their stations in the districts near the power lines lit up by electricity.

The hydro-electric scheme of the United Provinces is unique in that it serves a purely agricultural area without counting on the concentrated demand for energy which usually forms the nucleus of any large system of electrical supply. The United Provinces has a large area in which agricultural land is denied the advantage of natural gravity canals. The water supply has perforce to be by pumping from rivers, tube wells and the large open wells. The possibility of placing at the command of the average cultivator a certain volume of cheap electrical energy which he might utilise for the purposes of pumping water from the wells and other sources which cannot be made to reach the fields by the ordinary force of gravity suggested the installation of a hydro-electric supply. In the earlier stages doubts were felt whether it was safe to attempt to utilise the waters of the Upper Ganges canal for the purpose of a hydro-electric project. For, unlike the Pykara or the Sivasamudram falls it was not a case of utilising waters running to waste to far more productive purposes. In the United Provinces, the failure of an attempt on the Upper Ganges canal might mean damage to a canal system which by itself was a large asset securing to the State an average annual revenue of Rs. 62 lakhs. With the general advance of engineering the scheme became more and more feasible.

The river supply at the head works at Hardwar varies according to the various seasons from 8,000 cusecs, the full capacity of the channel, to 5,000 cusecs. "The difference in the level intercepted between the slope of the canal which averages 1 foot per mile and that of the country is absorbed by a series of 13 vertical falls decreasing in height from 12 feet at the head to 6 feet near the tail. The total electric power available at the 10 falls which have been found suitable for power development is about 3,400 K. W. or 47,000 h.p., of which about 13,000 h. p. is now being developed by means of the project under review in addition to 2,000 h. p. of oil-engine stand by reserve."

It would be appropriate to sketch briefly the growth of the whole scheme. In 1927, a construction power station which was formerly at mile 7 of the canal was remodelled and adapted for giving

power to the Hardwar group of towns and to Roorkee. This station has now been abandoned and absorbed into the extended network. In 1928, two schemes were undertaken at the Bhola and Palra Falls. At the former were installed 4,500 h. p. turbo generator with a head of 14 feet together with a 400 h. p. local reserve oil set. The station has now been linked with the general transmission system. At Palra 300 horse power Kapla type sets were installed to supply power to Kurja and also pump cusecs from the Kali Nadi. The Ramganga scheme was a later idea and its purpose was to generate 4,000 horse power at the Bahadrabad Falls and utilise the energy by 220 miles of h. t. transmission lines for electrifying 11 districts. 200 cusecs of water were also to be pumped by means of electricity from the Ramganga river to a height of 36 feet at 590 miles away from the power station. This was to irrigate 50,000 acres of fertile land for which no ordinary scheme of irrigation would avail. The total estimated cost of the combined electrical and irrigation project was Rs. 47½ lakhs. The distribution of power in bulk is made through the agency of commercial companies with adequate resources to supply a smaller district. The probable future development of the scheme may be understood from the fact that the first stage of the development will be loaded up for 5 years and that thereafter it will be necessary to continue electrification at the rate of 1 fall per year so that 1941 will see the scheme in full completion. The ultimate capacity will then be 33,400 K. W., of which 26,500 K. W. will be constantly available plus 1,000 K. W. of oil-engine reserve.

The Uhl river project of the Punjab was first conceived after a complete hydro-electric survey of the Province in the year 1921. The Electricity Board advised the Government to concentrate on it to the exclusion of rival schemes. A description of it with an emphasis on its more difficult aspects will not only

A description of the scheme with an emphasis on the more difficult aspects thereof will not only explain the delays which aroused popular criticism but also give an idea of the extent to which nature has been conquered in the service of man's material needs. The river Uhl flows in a valley which is 6,000 feet above sea level. It is divided from the Kangra Valley by a ridge which is 9,000 feet high and more or less completely inaccessible. The purpose of the whole scheme is to take the waters of the Uhl and its tributary to the Kangra Valley. As it is out of the question to take the waters round the ridge, the only alternative is to drive a tunnel through the ridge. It will be seen from this that the head-works are to be situated in the Uhl Valley where the River of that name is joined by its tributary. The pipe lines of the power house are situated in the Kangra Valley; and the water is to be carried through 2¼ miles of concrete lined tunnel of more than 9 feet in diameter. From the mouth of the tunnel at the Kangra end, the water is dropped through steel pipes 1,800 feet down to the power house. The distribution of electricity will be done by means of transmission line carried on steel tunnels from the power house at Jogindernagar. The building of a dam nearly 270 feet high across the gorge through which the Uhl passes enables a tenfold increase in the pressure of the pipe-line. It is also intended to construct a second power house below that in the Kangra Valley conveying the water through another pipe-line and dropping it another 1,200 feet in order to secure the requisite pressure. The details of the execution of the project are matters of the highest engineering interest; and rendered in non-technical and more vivid language, it may be a thrilling tale from which school children might imbibe a romantic love of engineering. But here we must content ourselves with pointing out that all the difficulties have been ultimately surmounted, and it is now certain that the scheme will before long shower its benefits on the people of the province.

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## AGRICULTURAL SECTION

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## RELEVANT STATISTICS

BY MR. M. VAIDYANATHAN, M. A., L. T., F. S. S.,

STATISTICIAN, IMPERIAL COUNCIL OF AGRICULTURAL RESEARCH, GOVERNMENT OF INDIA.

### SCOPE & PLAN OF AGRICULTURAL STATISTICS

Agricultural statistics embraces, as the name indicates, all statistics relating to the agricultural progress of a country and must include figures, not only of acreage and yield, stocks, trade returns, and prices with all their fluctuations, but also data concerning the economics of the agricultural producer, the costs of agricultural production, so to say, the primary elements of which are the farmer's domestic budget and his costs of cultivation. But in a country like India where agriculture is at once economically the most important, and technically the most backward, industry, agricultural statistics should also show how far the agriculturist has taken to improved methods of cultivation and to what extent he has availed of the results of scientific research here and elsewhere in the matter of improving the yield of his farm.

Recent developments in world economy have also tended to widen the scope of the agricultural statistics of a country. Not to speak of the increasing recognition, thanks to the depression, of agriculturists all over the world of the need of statistics showing the position and prospects of a commodity, most agricultural commodities have come to have a world market. Alike in regard to production and supply on the one hand, and the state and prospects of consumption and demand on the other, it is the world position that counts. It is true that India is in a different position from other countries in the sense and to the extent that her main crops—particularly food crops—are produced for her own consumption and that only a portion of her produce such as fibers and oil-seeds have had to find markets outside. But the general world depression has dragged India, too, into the mire and her agricultural problems are mixed in the tangle of international economic problems. The position of our wheat is an instance in point. Though our exports of wheat are negligible compared to our production of about 9 million tons, our internal wheat prices are nevertheless, regulated by world factors such as stocks in the United States of America and Canada, and demand in the markets of Liverpool, Argentina and Manitoba. Hence the agricultural statistics of a country cannot be complete unless they enable an analysis of all the factors that influence the position and prospects of its agriculture.

Though the full scope of agricultural statistics has been indicated above, the present compilation is limited to thirteen tables only, of which it can by no means be claimed that they are either exhaustive or even comprehensive. Tables I to III represent details of acreages sown in India by provinces and by crops. An administrative province is not always a convenient unit for a study of agricultural operations, and a redistribution of India by crops, besides being useful for our purposes, would at any rate be more rational than most other bases of redistribution suggested here and there. But so far as crop acreage

figures in British India go, they are considered to be very accurate, except in permanently settled tracts like Bengal where, too, conditions are fast improving. Indian States have not yet fallen in line with British India in the matter of statistics, and though progressive States have recognised the need for them, the statistics of the majority of them are still defective.

### GENERAL POSITION IN BRITISH INDIA.

Table I (A) represents the areas in British India during the triennium ending 1929-30, as published in *Agricultural Statistics of India*, Vol. I (issued by the Department of Commercial Intelligence and Statistics) classified into cultivated and uncultivated areas. The latest year for which these statistics are available is 1929-30. The Provinces furnish annual returns of these statistics from which the final figures are struck. The year to which the data relate ends generally on the 30th June except in Assam where it ends on the 31st March and in Central Provinces and Berar on the 31st May.

Table I (B) relates to the statistics in Indian States (for seventy reporting States only representing 56 per cent. of the total area of the Indian States) as published in *Agricultural Statistics of India*, Vol. II. for which 1928-29 is the latest year for which the data are available. The figures for the Indian States are incomplete and considered to be far less accurate than those for British India.

In Table I (A) and I (B) Percentage figures are given. As classifications of areas are being revised periodically in the case of British India and as new States are being brought in every year for the purpose of these statistics, the figures for successive years are not strictly comparable.

But the percentages for British India indicate that the net area sown in British India is just one-third the total area, and that the area under food crops is four-fifths the area under all crops. The irrigated area is only one-fifth the total area sown.

The data for States indicate the net area sown in the Indian States is somewhere about 48 per cent. of the total area, considerably higher than in British India. The area under food crops seems, however, to be less than in British India, just between 72 to 77 per cent. only of the gross area. The irrigated area is about 12 per cent. only of the total net sown area, whereas in British India it is more than 20 per cent.

### DISTRIBUTION OF ACREAGE AMONG PRINCIPAL CROPS.

Table II represents the areas of principal crops in India classified into main food and main non-food crops and sub-divided further as given in *Agricultural Statistics of India*. The data are taken from



*Estimates of Area and Yield of Principal Crops in India 1930-31* so far as 1929-30 figures are concerned in case of all crops, and for 1930-31 only in the case of non-forecasted crops; but for forecasted crops (wheat excluded) revised figures for 1930-31, and final figures for 1931-32 have been taken from the *Weekly Indian Trade Journal*. In the case of wheat the fourth forecast has just been issued (May 26, 1932) and hence 1931-32 figures are represented by this forecast, while those of 1930-31 by the final figures published in August, 1931.

It is easily seen from the table that of the main food crops, rice comes foremost occupying more than 80 million acres, *i.e.*, nearly 25 per cent. of the total gross sown area. Then come wheat and jowar each occupying more than 30 million acres, *i.e.*, more than 10 per cent. of the gross area; bajra and gram each between 13 to 16 million acres or roughly 4 per cent. Sugarcane is grown in about 2.8 million acres, *i.e.*, in about .9 per cent. only of the total sown area. Of the oilseeds, groundnut, rape and mustard and sesamum have each taken between 5 to 6 million acres or roughly 1.5 per cent.; while linseed takes about 3 million acres or .8 per cent. Cotton has occupied more than 23 million acres (*i.e.*, 7.5 per cent. of the total area) though showing a decrease of 2.4 million acres in 1931-32 when compared to 1929-30. Jute has occupied 1.9 million acres in 1931, just more than 50 per cent. only of the acreage in 1930.

The crops in India are generally conservative showing the same extent of cultivation from year to year but those that have shown increases in acreage in recent years are rice, wheat, sugarcane and all the oilseeds; while cotton is showing a tendency to decline. Jute is however showing signs of fast dwindling.

### CROP FIGURES AND FORECASTS.

Table III gives the acreages of principal crops in India by provinces classified into forecasted and non-forecasted. Forecasts of acreage and yield are now issued by Government for eleven crops as shown in the table at different periods during the progress of the season. The difference between the forecasted and non-forecasted lies presumably in the importance of the former from trade standpoint. Of the eleven crops, wheat and cotton have each five forecasts; sesamum four; rice, sugarcane, Groundnut, linseed and rape each three; jute and indigo each two; and castor one only. The following table gives the months on which the All-India forecasts are issued:—

Crop.	Months.
Rice	October, December, February.
Wheat	January, March, April, May, August.
Sugarcane	August, October, February.
Cotton	August, October, December, February, April.
Jute	July, September.
Linseed, Rape and Mustard	January, March, June.
Sesamum	September, October, January, April.
Castorseed	February.
Groundnut	August, October, February.
Indigo	October, December.

At each final forecast, the corresponding figures of the previous season are revised, and such revised figures form conclusive data of the previous year's acreage and yield.

In the case of non-forecasted crops, the season and crop Reports issued by Provinces and States at the end of the year are the only authority and hence the data in the case of these crops are usually available only at a late period.

The crop acreage data in India are considered to be very accurate excepting in the permanently

settled tracts like Bengal. Analysing the data given in Table III it is seen that:—

(1) For Madras rice is a very important crop occupying more than 11 million acres, cotton about 2.4 and groundnut about 3.0; jowar and bajra are about 5 and 3 respectively. Sesamum, castorseed and indigo are largely grown here when compared to the other provinces.

(2) Jowar is the main crop for Bombay occupying about 9 million acres; then cotton about 6 to 7 million acres; and bajra comes next about 4.5. Rice and wheat are grown in 3 and 2 million acres respectively.

Sind is fast developing with her irrigation facilities and most of these staple crops are grown in large quantities there.

(3) In Bengal rice and jute are the premier crops normally with an acreage of 20 and 3 millions respectively but with a considerable decrease of jute acreage last season.

(4) In United Provinces and Punjab wheat is the main crop occupying about 7 and 11 million acres respectively. Rice is largely grown in United Provinces but it is nil in the Punjab. United Provinces is the chief sugar-producing province in India, growing more than 1.5 million acres out of a total acreage of 2.9 million under sugar-cane in India. Cotton is now largely grown in the Punjab to the extent of 2.5 million acres though United Provinces grows very little. Linseed and rape in United provinces occupy nearly .3 and .3 million acres respectively. United Provinces grows in appreciable quantities barley, jowar, bajra, maize and gram.

(5) To Bihar and Orissa, rice is the main crop growing 14 million acres; jute is also grown though not as much in Bengal.

(6) Central Provinces grows rice, wheat and jowar in moderate quantities.

(7) Assam grows rice and tea.

(8) Of the Indian States, Hyderabad grows 3.5 million acres of cotton, and 9 millions of jowar; and to Mysore coffee is an important crop.

### SPREAD OF IMPROVED CROPS IN BRITISH INDIA AND NATIVE STATES.

In Table IV are given areas under improved varieties of crops in several provinces and States compiled by the Provincial Departments of Agriculture. Though these data cannot in the very nature of things be accurate, they give a general indication of the progress achieved in India in this direction. And it must be pointed out that in any future design of agricultural statistics in India the figures for acreage and yield under improved varieties of crops must always find a prominent place.

Areas under improved varieties of crops in several provinces during 1928-29 to 1930-31 are due mainly to the propaganda of the Provincial Departments of Agriculture and natural spread of the efficacy of improved seeds. Though the quantities of seed issued by the Departments and hence the acreages sown can be correctly estimated, the effects of natural spread can, if at all, be only guessed. This table has been specially compiled by the Imperial Council of Agricultural Research from information supplied by the provinces and states. 1930-31 figures are not available for all the provinces, and such of the data as have been supplied have been filled up in the table.

Though the figures cannot be accurate for reasons explained above, they indicate roughly the amount of progress achieved by the Government Departments of Agriculture in India at least in one phase of agricultural activity, that is, the demonstration to the cultivator of how improved strains of crops can give him adequate additional return. In 1929-30 the acreage under improved crops for British India alone was about 13 million acres out of which



the marketable crops, cotton, wheat, rice and jute, have taken an appreciable share.

### PROGRESS OF IRRIGATION.

Table V represents irrigated areas in British India by sources and provinces during 1929-30, the latest year for which published statistics are available. The table brings out how far the several provinces have developed their irrigation facilities. The last column gives for each province the percentage of the irrigated area to the total gross area sown.

From the table it will be seen that of the provinces in India the Punjab makes the fullest use of the Government canals for cropping and Madras, Bombay and United Provinces on a smaller scale. Of the irrigated crops, rice in Madras and Bihar and Orissa, and wheat in the Punjab and United Provinces come foremost; and on a smaller scale rice in Bombay, Bengal and Burma and sugarcane in United Provinces. The only provinces having a smaller percentage than 10 per cent. of the irrigated area are Bengal, Central Provinces and Burma; while the Punjab has nearly 60 per cent., Madras 30 per cent. United Provinces 35 per cent. and Bihar and Orissa 20 per cent.

### CROPS FORECASTED AND NON-FORECASTED.

Table VI represents estimated yields of the main crops by Provinces and States in India during the years 1929-30 to 1931-32. For reasons explained in connection with table III the crops are classified into forecasted and non-forecasted; and in the case of forecasted crops the latest forecasts available have been incorporated. As explained already the revised figures for 1930-31 are available in the case of all forecasted crops excepting the wheat for which the forecast (published in May, 1932) is alone available for wheat estimates. The table given in connection with the explanation of table III gives the dates on which these forecasts are issued.

It is probably necessary to examine at this stage however briefly how yields of crops are estimated in India. Appendix I to 'Estimates of Area and Yield of Principal Crops in India' explains briefly the method of framing these estimates. Three factors are brought in for framing an estimate of out-turn viz. the acre, the condition factor and the standard normal outturn per acre; the condition factor representing the ratio of the current crop to a normal crop and the normal yield being defined to be 'the average yield on average soil in a year of average character'. The product of the three factors gives the estimated yield of the crop in any locality. While the crop acreage in India is considered to be accurate except in permanently settled tracts, the condition factor is left to the judgment of the reporting agency which is usually the revenue staff except in those tracts where the absence of revenue staff necessitates less satisfactory arrangements. The condition factor is usually reported as so many 'Annas' of a normal crop being based upon the idea that a 16 anna crop should represent the usual normal and that yields of a particular season should be expressed in sixteenths of the normal. But as it was found that village opinion has been regarding a sixteen anna crop as a first class crop instead of taking it to be a normal, now in most of the provinces the normal crop is equated to 12 or 13 annas. A clear understanding is therefore necessary between the reporting and compiling agencies for a correct interpretation of 'the condition factor'. With regard to the third factor—the standard normal outturn per acre—entering into the computation of the estimated yield, the method adopted in most of the provinces is a periodical system of crop cut-

ting experiments by which an estimate of a normal crop is deduced. There are practical difficulties in deducing a correct estimate of a normal by such a process, as the nature of the crop the homogeneity of the area chosen and the identity of the times of harvest are all factors that influence the accuracy of the average. Though the forecast estimates as framed by the provinces and states in India may be improved in some directions they are considered on the whole to be satisfactory.

Though the present methods of estimating the condition factor and standard outturn are indeed theoretically correct, unless they are worked out in a right spirit, and the estimates are verified and corroborated by independent methods, one must doubt the accuracy and reliability of the estimates of yields as now supplied by the provinces and states. The case of raw cotton statistics is an instance in point, where the trade estimates always differ considerably from those supplied by the government. The compiling agency in most of the provinces is the Revenue Staff; and however much they are competent to estimate the agricultural conditions in rural areas, so long as personal equation enters into estimating the condition factor of a crop, the compiling agency must watch carefully the reports of the individual areas and eliminate or reduce to the minimum the effects of that personal equation. The other factor that enters into the estimates of yield is what is known as standard or normal outturn per acre by which an estimate of an average yield in an average soil during an average season is sought to be judged. Here, too, there has been no attempt at standardisation so far, and different methods are being adopted in different provinces. The methods adopted in crop cutting experiments conducted in India required an improvement in that the number of samples should be increased to cover different soils of varying fertility, and in that harvesting should be done distributed regularly both in time and space. The problem of arriving at a standard outturn is thus purely statistical, and in every case where crop-cutting experiments are conducted the data must be subjected to a strict statistical analysis before the final average is struck. Besides improving the technique that is being adopted in estimating the yields of a crop, there is the other side of the question, that is, that in every case these forecasted estimates must be scrutinised at the end of the season with all available data for verification, such as the statistics of internal trade and consumption in the locality considered. It is unfortunate that the Rail and River Borne Trade Returns have now been discontinued—except for raw cotton—and it must be recognised that without a correct knowledge of the internal movement of staple crops which, as we have already noted, are mainly consumed in the country itself, the Indian agricultural statistics or economics would be much the poorer; and the sooner these useful returns are revived the better it is for the Indian agriculturist.

### YIELDS, PER ACRE, AVERAGE AND STANDARD.

Table VII has been compiled to show how the average yield per acre for each crop in the several provinces has varied from year to year.

Though the average yields for a whole province may be misleading in view of the heterogeneous character of the diverse soils and conditions of a province, the above statistics is instructive in bringing out how several provinces compare and how with respect to the same province the average yields change from year to year. They also furnish an answer to the question frequently asked whether the soil in India is deteriorating. Thus with respect to rice the averages for Madras, Bengal and United Provinces have always stood higher than other provinces; wheat yield in United Provinces is on an

average higher than in the Punjab; Madras sugarcane gives better yields than United Provinces the largest sugarcane area; and United Provinces oil-seeds have stood higher than other provinces.

The average yields per acre for forecasted crops by provinces are compared to the standard or normal yields. The average yields have been based on data given by tables III and VI. The significance of a standard yield has already been explained with reference to table VI. In view of the importance of the forecasted crops, their cases alone have been considered here.

#### FOREIGN TRADE IN RELATION TO DOMESTIC PRODUCTION.

Table VIII estimates the statistics of exports in relation to the total production; and the percentages worked out bring out the fundamental truth that our balance of trade is kept up only by raw materials of manufacturing industry, and that so far as exports of food-stuffs go, what is usually known as 'exportable surplus' is not, and cannot be, the balance left after consumption in the country itself.

Since the present economic depression seems to have started from October 1929, production and net exports have been compiled for (1) 1930-31, (2) 1931-32, as compared to the average of three years, ending 1929-30. The export year of a crop should always depend upon its period of harvest which therefore varies with different crops, and again the export data must always be studied with reference to production *preceding* the export year; but in the Table VIII to strike at a uniformity and a rough indication of the present position, exports of a fiscal year have been considered with reference to the production of the season not exactly preceding it, but almost synchronous with it. For cotton, percentage figures have not been struck, as the weightage for the manufactured goods exported or imported is not indicated in the sea-borne trade returns. Rice statistics are given for India (excluding Burma) and Burma separately, as exports of rice are mainly from Burma and as Burma is on the verge of separation from India.

From the above statistics it is seen that the crops which are of considerable account to India in the matter of exports are linseed, castorseed, jute, coffee, tea and rubber exporting a high percentage between 60 to 95 per cent. of the total production. Groundnut maintains an export of 25 per cent. of the production while rice and rape maintain 5 to 7 per cent. only. Wheat, that has attracted considerable attention in recent times has been on balance only an article of import, while tobacco has kept up an export of only 1.5 per cent. of the total produce. The exports of other crops in India are practically negligible when compared to their production.

#### PRICES OF AGRICULTURAL PRODUCTS.

Table IX represents prices of main agricultural commodities in India from January 1931 to June 1932 as compared to June 1913 (pre-war), and October 1929 when the present economic depression seems to have started. For the purpose of this table prices of eight different crops have been considered at representative centres of production. The last two columns give percentage fall in prices in June 1932 from those prevailing in June 1913 and October 1929.

It is seen from the statement that jute has been most hard-hit with a percentage fall in prices of 62.7 as compared to pre-war; then comes cotton with a drop of 47.8%, and then Bengal rice with a fall of 40.9. The decline in other commodities considered have ranged between 20 to 30%. It is also seen that linseed had a boom price in October, 1929 and the present price has a 60% fall from that level.

#### WHEAT & COTTON—PRICE PARITIES.

Table X is compiled from the monthly bulletins of the International Institute of Agriculture with a view to compare the differences in prices from month to month between Indian wheat and cotton and foreign varieties selling in Liverpool Market—Data from January 1930 to April 1932 have been used to work out percentage monthly parities.

It is seen that in the case of wheat while the parities in 1930 have varied between 3 to 5%, there have been very few quotations for Indian wheat in 1931 and none so far in 1932. Indian cotton M.G. Broach F.G. has sold less than American Middling by 20 to 37% in 1930 and till September 1931; while since September 1931 the differences have been considerably smaller by a range of 5 to 10% only. This may be deemed an encouraging sign for Indian Cotton.

#### COTTON STATISTICS

##### Production, Exports, Imports, Stocks and world consumption of Indians.

Table XI is intended to examine the present position of cotton production in India. The controversy regarding long staple *versus* short staple must be settled one way or the other in the interests of the Indian Cotton Grower.

The following are given in this connection:—

1. Production by varieties and staples (with acreage by varieties)
2. Quantities exported from and imported into India.
3. Stocks of cotton held in Bombay and
4. estimated world's consumption of Indian cotton by countries.

While production is given by seasons, exports are given by fiscal years (ending March 31st) imports and stocks by cotton years (ending August 31st) and world's consumption by years (ending July 31st) These statistics explain how far we are able to meet world cotton demand and supply after meeting our own requirements. Table XI (D) brings out details of foreign cotton by sources imported into India.

It is interesting to see from the above tables that India's production of cotton has recently stood at 5 million bales though the production during 1931-32 has fallen short by 1 million bales. Table XI (B) estimates that out of this nearly 25% is long stapled though the trade estimates go to the extent of 33%. Of the long stapled, Hyderabad Gaorani, Navasari, and Cambodia are the main varieties while of the short stapled Omras carry the palm. Though the details of our exports of raw cotton are not available by varieties and staples, we can take it that most of our exports are short-stapled. Our exports go mainly to Japan to the extent of more than 40% of our total exports of about 4 million bales. Of our imports during the cotton year 1930-31 (ending August 31st) East Africans, Egyptians and Americans are responsible for nearly a lakh and a half bales. But during the current year the Americans seem to be making headway and receipts in Bombay from September 1st, 1931 to June 2nd, 1932 have gone up to more than 230,000 bales as compared to 140,000 only the previous year. Regarding the cotton trade position in Bombay the stocks held by the mills or outside, on the 31st August 1931 are only slightly less than the corresponding figures of the previous year though the figures show continuous decrease since 1929. The world consumption, however, of Indian cotton in 1930-31 shows an increase over 1928-29 with an index of 149 on the basis of 1913 consumption equated to 100.

**INDIAN CROPS AND FOREIGN COMPETITION.**

Table XII gives some international statistics regarding a few crops which have had to face a severe competition in the world markets. As explained already the agricultural statistics of India must contain more information regarding agriculture in other countries, the economic position in those countries, and the state of world markets dealing with the crops in which we are interested.

Estimated average production during the past three seasons, average net exports for the triennium ending 1928-29 and net exports during 1929-30, 1930-31 and for available months during 1931-32 in the main exporting countries of the world are given of such of the crops produced in India that had to face severe world competition in the recent economic depression. Though probably very agricultural crop suffered from low prices, wheat, rice, cotton, linseed, coffee and tea produced in India had to compete severely with foreign produce, and the cases of these crops alone have been considered here.

It is interesting to see from the above table that, so far as wheat is concerned, all the exporting countries have been hard-hit and that Canada that usually maintains a high percentage of exports even to the extent of 90% of its production had during 1929-30 to bring it down to 50% only though during 1930-31 it slowly improved it to 75%. The same is the case with Australia. But the position of Russia is peculiar, as she recovered her pre-war position as an exporter of wheat only in 1930-31.

In the matter of rice Indian exports are mainly from Burma and have kept up to the usual demand.

Indo-China and Siam are the main competitors.

Argentine is the main competitor to India in the world supply of linseed.

In cotton the United States of America is the most potent factor in world prices. And her low exports during 1929-30, accompanied by release of huge stocks during 1930-31 and later have produced the most depressing effects in the raw cotton trade.

In coffee Brazil is the main world supplier, and our trade is very much influenced by her position.

India, along with Ceylon and Java, holds the world monopoly of tea, and their mutual position usually reacts on its prices.

**CATTLE WEALTH—OR POVERTY?—OF INDIA.**

Table XIII has been added to indicate the strength of the cattle population in relation to our arable land, as compared to the other countries. The Animal Husbandry work in India is still in its infancy, and a more correct appreciation of this side of agricultural activity would lead to the improvement of methods of taking live stock census, and of recording their births and deaths. The data have been taken from the "International Year Book of Agricultural Statistics, 1930-31."

From the last column it is seen that the number of cattle per 100 acres of arable land in British India is only 50, as much as there is in Argentina; while New Zealand shows a record of 190, and Netherlands, Switzerland, and Union of South Africa exceed 100. But on the net area sown, the number of cattle for every 100 acres in British India works out to 68.



TABLE I (A).

General Summary of Agricultural Statistics of British India.

(a) Classifications of areas.

	(In million acres.)		
	Years.		
	1927-28.	1928-29	1929-30
Area under forest	87	87	87
Uncultivated.			
Area not available for cultivation	150	149	147
Culturable waste other than fallow	155	155	155
Cultivated.			
Fallow land	51	48	50
Net area sown	224	228	228
Total area	667	668	368

(b) Details of Cultivated Area.

	(In million acres.)		
	Years.		
	1927-28.	1928-29	1929-30.
Net area sown	224	228	228
*Gross area sown	256	262	261
Area under irrigation	43	50	51
Area under food crops	208	211	210
Area under non-food crops	48	51	50

\*This includes net area sown plus area sown more than once.

(c) Percentage figures arising out of (a) and (b).

	1927-28.	1928-29.	1929-30.
1. Per cent. of net area sown to the total area	33.7	34.1	34.1
2. Per cent. of area under irrigation to the net area sown	19.2	21.9	22.4
3. Per cent. of area under food crops to the gross area sown	81.3	80.6	80.5
4. Per cent. of area under non-food crops to the gross area sown	18.7	19.4	19.5

TABLE I (B).

General Summary of Agricultural Statistics of Indian States.

(a) Classifications of areas.

	(In million acres.)		
	Years.		
	1926-27.	1927-28.	1928-29.
Area under forest	17	18	17
Uncultivated—			
Area not available for cultivation	24	24	25
Culturable waste other than fallow	17	16	16
Cultivated—			
Fallow land	11	12	11
Net area sown	65	65	67
Total area	134	135	136

(b) Details of Cultivated Area.

	(In million acres.)		
	Years.		
	1926-27.	1927-28.	1928-29.
Net area sown	65	65	67
*Gross area sown	68	68	71
Area under irrigation	8	8	9
Area under food crops	51	50	51
Area under non-food crops	17	17	18

\*This includes net area sown plus area sown more than once; but as details are not available for certain areas the gross area does not tally with the sum of areas under food crops and under non-food crops.

(c) Percentage figures arising out of (a) and (b).

	1926-27.	1927-28.	1928-29.
1. Per cent. of net area sown to the total area	48.5	48.1	49.3
2. Per cent. of area under irrigation to the net area sown	12.3	12.3	13.4
3. Per cent. of area under food crops to the gross area sown	75.0	76.9	71.8
4. Per cent. of area under non-food crops to the gross area sown	25.0	23.1	28.2

TABLE II.

Area of principal crops in India (including Indian States)  
(In million acres)

	1929-30.	1930-31.	1931-32.
(a) Main food crops—			
Rice	80.6	82.7	84.0
Wheat	31.7	32.0	33.8
			(forecast May, 1932).
Barley	7.0	(a) 6.6	
Jowar	33.2	(a) 33.1	
Bajra	16.1	(a) 13.8	
Maize	7.4	(a) 6.4	
Gram	13.2	(a) 12.4	
Sugarcane	2.5	(a) 2.8	2.9
(b) Main non-food crops—			
Oilseeds—			
Groundnut	5.7	6.6	5.6
Linseed	2.8	3.0	3.2
Rape and Mustard	5.9	6.6	6.1
Sesamum (til or jinjili)	5.3	5.6	5.5
Castor seed	1.3	1.5	1.6
Fibres.			
Cotton	25.9	23.8	23.5
Jute	3.5	1.9	
Drugs and narcotics.			
Tea	.8	.8	
Coffee	.2	.2	
Tobacco	1.3	1.3	
Dyes and Tanning Materials.			
Indigo	.07	.06	
Miscellaneous crops.			
Rubber	.2	.2	

(a) Incomplete.

TABLE No. XIII.

Cattle Census in relation to arable land in some principal countries of the world.

Country	(In millions)		
	Acreage under arable land	Cattle population	Number of cattle per 100 acres of arable land
Germany	50.7	18.4	32
Austria	4.8	2.2	46
Denmark	6.0	3.1	45
Spain	39.8	3.7	10
France	54.8	15.6	28
Great Britain	12.6	7.1	56
Hungary	18.8	1.8	18
Italy	34.1	6.9	20
Netherlands	2.8	2.4	104
Poland	45.6	9.4	21
Roumania	31.8	4.0	18
Switzerland	1.2	1.6	133
Czechoslovakia	14.4	4.5	31
Union of Socialist Soviet Republics	246.2	52.6	21
Yungo Slavia	17.5	3.8	22
Canada	62.4	3.9	14
United States	355.8	59.0	17
Argentina	64.0	32.2	50
Japan	14.4	1.5	10
Egypt	8.5	1.6	19
Union of South Africa	9.8	10.7	116
Australia	80.4	11.2	37
New-zealand	2.0	8.8	190
British India	308.7	154.6	50

**Table III.**  
**Acreeges of the Main Crops by Provinces.**  
**(A) Forecasted Crops.**  
**(In Million Acres)**

PROVINCES	RICE			WHEAT			SUGAR-CANE			COTTON			JUTE		
	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32
	(Revised)			Final)											
Madras ... ..	11'8	11'7	11'6	...	...	...	0'1	0'1	0'1	2'5	2'1	2'3			
Bombay, (including Sind and Indian States)...	3'6	3'7	3'5	2'5	2'8	2'9	0'09	0'09	0'09	7'8	6'3	6'2			
Bengal ... ..	20'2	20'6	22'1	0'1	0'1	0'1	0'2	0'2	0'2	0'08	0'08	0'08	3'0	1'6	
United Provinces ... ..	6'9	6'8	6'7	7'8	7'7	7'6	1'4	1'5	1'5	0'9	0'8	0'8			
Punjab ... ..	...	...	...	11'8	10'6	10'9	0'8	0'4	0'5	2'5	2'5	2'5			
Burma ... ..	12'9	13'0	12'5	...	...	...	...	...	...	0'8	0'4	0'2			
Bihar and Orissa ... ..	14'2	13'9	14'1	1'2	1'2	1'2	0'8	0'8	0'8	0'07	0'07	0'07	0'2	0'1	
Central Provinces and Berar ... ..	5'9	6'8	7'0	3'1	3'1	3'6	0'02	0'02	0'02	5'2	4'8	4'6			
Assam ... ..	4'2	4'5	4'5	...	...	...	0'03	0'03	0'03	0'04	0'04	0'04	0'2	0'1	
North-West Frontier Province ... ..	...	...	...	1'0	0'9	0'9	0'05	0'05	0'04	0'02	0'01	0'02			
Ajmer-Merwara ... ..	...	...	...	0'03	0'02	0'03	...	...	...	0'03	0'03	0'03			
Coorg ... ..	0'08	0'08	0'08	...	...	...	...	...	...	...	...	...			
Delhi ... ..	...	...	...	0'03	0'04	0'04	...	...	...	...	...	...			
Hyderabad ... ..	0'5	0'7	0'9	1'0	1'2	1'3	0'04	0'03	0'04	3'5	3'5	3'6			
Mysore ... ..	0'7	0'8	0'7	...	...	...	0'03	0'04	0'04	0'07	0'07	0'08			
Baroda ... ..	0'2	0'2	0'2	0'7	0'7	0'7	...	...	...	0'8	0'7	0'7			
Gwalior ... ..	...	...	...	0'9	1'1	1'1	...	...	...	0'6	0'6	0'6			
Central India ... ..	...	...	...	1'8	1'9	2'3	...	...	...	1'4	1'3	1'2			
Rajputana ... ..	...	...	...	1'2	1'2	1'8	...	...	...	0'5	0'5	0'4			
Travancore ... ..	...	...	...	...	...	...	...	...	...	...	...	...			
Cochin... ..	...	...	...	...	...	...	...	...	...	...	...	...			
Tripura (Bengal) ... ..	...	...	...	...	...	...	...	...	...	...	...	...			
Cooch Behar ... ..	...	...	...	...	...	...	...	...	...	...	...	...			
<b>TOTAL</b> ... ..	<b>80'6</b>	<b>82'7</b>	<b>84'0</b>	<b>81'7</b>	<b>82'0</b>	<b>83'8</b>	<b>2'5</b>	<b>2'8</b>	<b>2'9</b>	<b>25'9</b>	<b>23'8</b>	<b>23'5</b>	<b>3'5</b>	<b>1'0</b>	

As figures with the zeros after the decimal point are omitted, the totals do not tally in some cases with the actual additions in the above table ; and the totals given are those taken from the original sources.

Table III—(Contd.)  
**Acreeages of the Main Crops by Provinces**  
**(A) Forecasted Crops.**  
*(In Million Acres.)*

PROVINCES	LINSEED			RAPE AND MUSTARD			SESAMUM			CASTOR SEED			GROUNDNUT			INDIGO		
	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32
Madras ...	...	...	...	...	...	...	0'8	0'8	0'8	0'8	0'3	0'3	3'2	3'6	2'7	0'05	0'05	
Bombay (including Sind and Indian States) ...	0'1	0'1	0'1	0'4	0'2	0'2	0'5	0'7	0'7	0'1	0'1	0'1	1'3	1'6	1'5			
Bengal ...	0'1	0'1	0'1	0'7	0'8	0'8	0'2	0'2	0'2									
United Provinces	0'7	1'0	0'3	2'6	3'5	0'8	1'1	1'1	1'1									
Punjab ...	0'03	0'03	0'03	1'0	0'9	1'0	0'1	0'1	0'2									
Burma ...	...	...	...	...	...	...	1'2	1'3	1'3	...	...	...	0'6	0'6	0'4			
Bihar and Orissa	0'7	0'7	0'7	0'7	0'7	0'6	0'2	0'2	0'2	0'03	0'03	0'05						
Central Provinces and Berar ...	0'8	0'8	0'9	...	...	...	0'5	0'6	0'5	0'05	0'05	0'04						
Assam ...	...	...	...	0'8	0'4	0'8												
North-West Fron- tier Province ...	...	...	...	0'1	0'08	0'08												
Ajmer-Merwara ...	...	...	...	...	...	...	0'02	0'02	0'02									
Coorg ...																		
Delhi ...																		
Hyderabad ...	0'2	0'3	0'3	0'01	0'01	0'01	0'6	0'6	0'5	0'6	0'8	0'3	0'6	0'7	0'8			
Mysore ...	...	...	...	...	...	...	...	...	...	0'1	0'1	0'1						
Baroda ...	...	...	...	0'02	0'02	0'02	0'07	0'07	0'09	0'8	0'06	0'07						
Gwalior ...																		
Central India ...																		
Rajputana ...	0'06	0'08	0'1	0'04	0'09	0'04	0'05	0'05	0'04									
Travancore ...																		
Cochin ...																		
Tripura (Bengal)																		
Cooch Behar ...																		
<b>TOTAL ...</b>	<b>2'8</b>	<b>3'0</b>	<b>3'2</b>	<b>5'0</b>	<b>6'6</b>	<b>6'1</b>	<b>5'3</b>	<b>5'6</b>	<b>5'5</b>	<b>1'8</b>	<b>1'5</b>	<b>1'6</b>	<b>5'7</b>	<b>6'6</b>	<b>5'6</b>	<b>0'07</b>	<b>0'06</b>	

Table III.—(Contd.)  
 Acreages of the Main Crops by Provinces.  
 (B) Main Non-forecasted Crops  
 (In Million Acres).

PROVINCES	BARLEY			JOWAR			BAJRA			MAIZE			GRAM		
	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32
Madras ...	...	...	...	5'2	4'8	...	2'9	2'9	...	0'1	0'1	...	0'08	0'09	...
Bombay (including Sind and Indian States)	0'03	0'04	...	9'4	9'2	...	4'4	5'1	...	0'2	0'2	...	0'7	0'9	...
Bengal ...	0'08	0'08	...	...	...	...	...	...	...	0'09	0'09	...	0'2	0'2	...
United Provinces ...	4'3	4'2	...	2'5	2'5	...	2'1	2'0	...	2'3	2'4	...	4'2	5'1	...
Punjab ...	0'9	0'7	...	1'1	0'9	...	3'4	3'2	...	1'1	1'1	...	3'2	2'1	...
Burma ...	...	...	...	0'5	0'4	...	...	...	...	2'0	2'0	...	0'2	2'0	...
Bihar & Orissa ...	1'4	1'4	...	0'08	0'08	...	0'07	0'07	...	1'7	1'6	...	1'5	1'5	...
Central Provinces & Berar ...	0'02	0'02	...	4'3	4'7	...	0'1	0'1	...	0'2	0'2	...	1'2	1'3	...
Assam ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North-West Frontier Province ...	0'2	0'2	...	0'1	0'08	...	0'2	0'1	...	...	...	...	...	...	...
Ajmer-Merwara ...	0'08	0'05	...	0'07	0'07	...	0'08	0'02	...	0'5	0'5	...	0'2	0'2	...
Coorg ...	...	...	...	...	...	...	...	...	...	0'1	0'09	...	0'04	0'03	...
Delhi ...	0'01	0'01	...	0'03	0'03	...	0'07	0'07	...	...	...	...	...	...	...
Hyderabad ...	0'05	(a)	...	9'0	9'0	...	2'1	(a)	...	0'9	(a)	...	1'1	(a)	...
Mysore ...	...	...	...	0'8	0'7	...	0'1	0'07	...	(f)	...	...	0'7	0'8	...
Baroda ...	...	...	...	0'3	(a)	...	0'6	(a)	...	...	...	...	0'02	(a)	...
Gwalior ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Central India ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rajputana ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Travancore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cochin ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tripura (Bengal) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cooch Behar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL</b> ...	7'0 <sup>c</sup>	(b) 6'6	...	33'2	(b) 33'1	...	10'1	(b) 13'8	...	7'4	(b) 6'4	...	13'2	(b) 12'4	...

(a) Not available.  
 (b) Incomplete.  
 (f) Less than 500 Acres.

**Table III—(Contd.)**  
**Acres of the Main Crops by Provinces.**  
 (B) Main Non-forecasted Crops.  
 (In Million Acres.)

PROVINCES	TOBACCO			COFFEE			TEA			RUBBER		
	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32
Madras ... ..	0·3	0·2	...	0·04	0·04	...	0·07	0·07	...	0·02	0·01	...
Bombay (including Sind and Indian States) ...	0·2	0·1	...	...	...	...	...	...	...	...	...	...
Bengal ... ..	0·8	0·8	...	...	...	...	0·2	0·2	...	...	...	...
United Provinces ... ..	0·16	0·7	...	...	...	...	...	...	...	...	...	...
Punjab ... ..	0·0	0·07	...	...	...	...	...	...	...	...	...	...
Burma ... ..	0·1	0·1	...	...	...	...	...	...	...	...	...	...
Bihar & Orissa ... ..	0·1	0·1	...	...	...	...	...	...	...	...	...	...
Csntal Provinces & Berar ... ..	0·01	0·02	...	...	...	...	...	...	...	...	...	...
Assam ... ..	0·01	0·01	...	...	...	...	0·4	0·4	...	...	...	...
North-West Frontier Province ... ..	0·01	0·01	...	...	...	...	...	...	...	...	...	...
Ajmer-Merwara ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Coorg ... ..	0·04	...	...	0·04	0·04	...	...	...	...	...	...	...
Delhi ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Hyderabad ... ..	0·08	0·09	...	...	...	...	...	...	...	...	...	...
Mysore ... ..	0·02	0·02	...	0·09	0·08	...	...	...	...	...	...	...
Baroda ... ..	0·05	0·04	...	...	...	...	...	...	...	...	...	...
Gwalior ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Central India ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Rajputana ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Travancore ... ..	...	...	...	...	...	...	0·07	0·07	...	0·05	0·05	...
Cochin ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Tripura (Bengal) ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Cooch Behar ... ..	...	...	...	...	...	...	...	...	...	...	...	...
<b>TOTAL ... ..</b>	<b>1·8</b>	<b>1·8</b>	<b>...</b>	<b>0·2</b>	<b>0·2</b>	<b>...</b>	<b>0·8</b>	<b>0·8</b>	<b>...</b>	<b>0·2</b>	<b>0·2</b>	<b>...</b>

As figures with two zeros after the decimal point are omitted, the totals do not tally in some cases with the actual additions in the above table, and the totals given are those taken from the original sources.



Table IV—(Contd).

## Areas under new and improved crops in British India in 1928-29—1930-31

(In acres.)

## (A) British India.

PROVINCES	RICE			COTTON			WHEAT		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
	Madras ... ..	215,931	1,518,680	292,478	425,468	260,187	800,572	...	...
Bombay ... ..	17,405	1,528	3,447	1,036,878	898,321	410,296	29,684	285	11,259
Sind ... ..	...	2,853	2,890	...	66,005	90,028	...	84,821	86,052
Bengal ... ..	185,255	192,885	228,288	...	...	...	...	...	...
United Provinces ... ..	...	...	...	215,000	220,000	255,000	1,890,000	1,600,000	1,800,000
Punjab ... ..	...	...	...	1,524,470	1,891,000	1,450,200	2,099,580	2,516,600	2,448,000
Burma ... ..	828,125	882,972	486,804	6,570	5,002	9,890	...	...	...
Bihar and Orissa ... ..	20,251	28,051	15,184	...	...	...	5,198	8,462	28,206
Central Provinces ... ..	181,696	220,976	...	627,671	660,199	...	269,907	855,057	877,872
Assam ... ..	12,562	16,826	...	...	...	...	...	...	...
North-West Frontier Province ... ..	...	...	...	...	...	...	...	...	...
Total British India ... ..	956,255	2,354,271	...	8,886,052	8,000,914	...	4,124,819	4,894,725	...

PROVINCES	JUTE			SUGARCANE			OTHER CROPS		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
	Madras ... ..	...	...	...	9,790	22,202	21,821	172,572	36,965
Bombay ... ..	...	...	...	2,513	...	...	480,541	8,654	8,988
Sind ... ..	...	...	...	...	...	...	...	889	410
Bengal ... ..	1,187,605	1,176,352	10,415,502	67,019	74,305	100,000	8,848	8,699	17,816
United Provinces ... ..	...	...	...	281,000	281,184	678,000	214,000	218,000	Barley, ... 84,000 Gram ... 76,000 Miscellaneous 184,000
Punjab ... ..	...	...	...	88,818	79,860	70,000	...	...	...
Burma ... ..	...	...	...	...	1,781	250	182,099	144,706	166,256
Bihar and Orissa ... ..	...	104	...	46,088	81,575	70,484	8,382	8,887	...
Central Provinces ... ..	...	...	...	...	1,850	4,269	224,984	267,185	306,456
Assam ... ..	6,060	68,206	...	8,244	6,818	6,900	2,781	18,134	...
North-west Frontier Province ... ..	...	...	...	620	550	40,500	9,120	41,000	...
Total British India ... ..	1,148,665	1,289,662	...	498,592	768,805	...	...	727,519	...

Table IV—(Contd).  
(b) Indian States.  
(So far as information is available).  
(In Acres).

STATES	RICE			COTTON			WHEAT		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
Mysore ...	20,000	30,908	...	15,000	16,972	...	...	...	...
Hyderabad ...	...	...	...	94,500	82,800	114,100	...	...	...
Baroda ...	*250	8,120	161	*14,250	85,054	*6,594	*60	1,061	*35
Travancore ...	*438	11,000	1,261	...	...	...	...	...	...
Gwalior ...	...	...	...	*4,189	2,500	...	*1,909	500	...
Patiala ...	...	...	...	...	...	165,000	...	...	856,750
<b>Total</b> ...	<b>20,688</b>	<b>50,028</b>	<b>...</b>	<b>127,989</b>	<b>187,826</b>	<b>...</b>	<b>...</b>	<b>1,561</b>	<b>...</b>

STATES	MILLET			SUGAR-CANE			OTHER CROPS		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
Mysore ...	...	189,038	...	6,000	3,621	...	200,000 (Rape only)	68,865	...
Hyderabad ...	...	...	...	...	...	26	7,467 (Groundnut only)	91	340
Baroda ...	...	...	...	...	...	...	...	...	...
Travancore ...	...	...	...	...	...	...	...	...	...
Gwalior ...	*918	4,000	...	*5	...	...	*871	...	...
Patiala ...	...	...	...	...	...	...	...	...	...
<b>Total</b> ...	<b>...</b>	<b>193,038</b>	<b>...</b>	<b>...</b>	<b>3,621</b>	<b>...</b>	<b>...</b>	<b>68,456</b>	<b>...</b>

\* Departmental spread only.

Table IV—(Contd).  
(c) Areas in acres under improved crops.

CROPS	IN BRITISH INDIA			IN INDIAN STATES (So far as known).			TOTAL		
	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31	1928-29	1929-30	1930-31
Cotton ...	3,836,052	3,000,914	...	127,939	187,326	...	3,963,991	3,188,240	...
Wheat ...	4,124,829	4,894,725	...	2,086	1,561	...	4,126,905	4,896,286	...
Rice ...	956,225	2,354,271	...	20,688	50,028	...	976,913	2,404,299	...
Jute ...	1,143,665	1,289,662	...	...	...	...	1,143,665	1,289,662	...
Sugar-cane ...	493,592	763,805	...	6,298	3,621	...	499,890	767,426	...
*Groundnut ...	519,879	102,490	...	7,467	67,685	...	526,896	170,175	...
*Millets ...	146,346	164,954	...	200,913	193,038	...	347,849	357,992	...
*Gram ...	216,406	201,831	...	...	...	...	216,406	201,831	...
*Potatoes ...	11,881	13,134	...	...	...	...	11,881	13,134	...
Other crops ...	361,465	245,110	...	771	771	...	362,236	245,881	...
<b>Total</b> ...	<b>11,869,630</b>	<b>12,980,896</b>	<b>...</b>	<b>316,262</b>	<b>504,030</b>	<b>...</b>	<b>12,175,892</b>	<b>13,484,926</b>	<b>...</b>

\* Not separately reported by some Provinces.

**Table V.**  
**Irrigated Areas by sources and Crops in several Provinces of British India during 1929-30.**  
*(In Million Acres.)*

PROVINCE OR STATE	AREA IRRIGATED FROM:—					TOTAL
	Government Canals	Private canals	Tanks	Wells	Other sources	
Madras	8.7	0.2	3.4	1.4	0.5	9.2
Bombay	3.4	0.08	0.1	0.7	0.2	4.5
Bengal	0.05	0.2	0.9	0.04	0.3	1.4
United Provinces	3.3	0.02	0.05	5.6	2.0	11.0
Punjab	10.6	0.4	0.04	4.0	0.1	15.2
Burma	0.6	0.8	0.2	0.02	0.3	1.5
Bihar and Orissa	0.9	0.9	1.6	0.6	1.4	5.3
Central Provinces and Berar	(a)	0.9	(a)	0.1	0.04	1.00
Assam	0.01	0.3	...	...	0.3	0.6
North-West Frontier Province	0.4	0.4	...	0.03	0.09	1.0
Ajmer-Merwara	...	...	...	0.1	...	0.1
<b>TOTAL FOR INDIA</b>	<b>23.1</b>	<b>3.7</b>	<b>6.3</b>	<b>12.7</b>	<b>5.3</b>	<b>51.0</b>

**Area of Crops Irrigated.**  
*(In Million Acres.)*

PROVINCE OR STATE	RICE	WHEAT	BARLEY	JOWAR	BAJRA	MAIZE	SUGARCANE	COTTON	OTHER CROPS	TOTAL	Per cent. of the Irrigated Area to total gross Area sown.
Madras	8.0	...	...	0.4	...	...	0.09	0.2	2.4	11.1	28.2
Bombay	1.4	0.5	0.02	0.8	...	0.03	0.07	0.4	1.7	4.9	14.3
Bengal	1.3	0.01	...	...	...	...	0.03	...	0.3	1.6	6.8
United Provinces	0.8	3.8	2.2	0.1	...	0.3	1.0	0.5	3.4	12.1	35.3
Punjab	0.8	5.6	0.4	0.2	...	0.5	0.03	2.1	5.9	15.3	58.3
Burma	1.4	...	...	...	...	...	...	...	0.1	1.5	8.1
Bihar and Orissa	3.5	0.3	0.1	...	...	0.06	0.01	...	1.4	5.4	21.6
Central Provinces and Berar	0.9	...	...	...	...	...	0.02	...	0.1	1.0	4.0
Assam	0.6	...	...	...	...	...	...	...	0.0	0.6	10.7
North-West Frontier Province	0.03	...	0.09	0.02	0.01	0.3	0.05	0.02	0.5	1.0	40.0
Ajmer-Merwara	...	...	0.04	...	...	0.03	...	0.03	0.1	0.2	33.3
<b>TOTAL FOR INDIA</b>	<b>18.8</b>	<b>10.6</b>	<b>3.0</b>	<b>1.7</b>	<b>1.5</b>	<b>1.3</b>	<b>1.7</b>	<b>3.2</b>	<b>13.1</b>	<b>54.9</b>	<b>23.9</b>

(a) Included in Private Canals.

N. B.—As figures with two zeros after the decimal point are omitted, the totals do not tally in some cases with the actual additions in the above table; and the totals given are those taken from the original sources.

Table VI.  
Estimated Yields of the main Crops by Provinces in India.  
(A) Forecasted Crops.  
(In Million Tons.)

PROVINCES	RICE			WHEAT			SUGAR-CANE (Gur)			* COTTON			JUTE	
	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32 Forecast May, 1932	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1930	1931
Madras ...	5.8	5.4	5.8	...	...	...	0.8	0.8	0.8	0.5	0.4	0.4	...	...
Bombay (including Sind and Indian States) ...	1.4	1.6	1.6	0.5	0.6	0.6	0.2	0.2	0.2	1.8	1.8	1.8	...	...
Bengal ...	8.2	9.2	9.5	0.08	0.03	0.03	0.2	0.2	0.3	0.02	0.02	0.02	9.9	5.0
United Provinces ...	1.5	1.7	2.0	3.8	2.7	2.6	1.8	1.6	2.2	0.8	0.8	0.2	...	...
Punjab ...	...	...	...	4.2	3.6	3.2	0.2	0.3	0.4	0.8	0.8	0.6	...	...
Burma ...	5.0	5.1	4.2	...	...	...	...	...	...	0.07	0.09	0.03	...	...
Bihar & Orissa ...	6.0	5.6	5.7	0.5	0.5	0.5	0.8	0.8	0.8	0.01	0.01	0.01	0.6	0.8
Central Provinces and Berar ...	1.9	1.7	2.8	0.6	0.6	0.7	0.04	0.03	0.04	1.2	1.1	0.5	...	...
Assam ...	1.8	1.4	1.5	...	...	...	0.03	0.03	0.03	0.02	0.02	0.02	0.6	0.2
North-West Frontier Province ...	...	...	...	0.2	0.2	0.2	0.06	0.06	0.05	...	...	...	...	...
Ajmer-Merwara ...	...	...	...	...	...	...	...	...	...	0.01	0.01	0.01	...	...
Coorg ...	0.05	0.05	0.05	...	...	...	...	...	...	...	...	...	...	...
Delhi ...	...	...	...	0.01	0.01	...	...	...	...	...	X	X	...	...
Hyderabad ...	0.1	0.2	0.3	0.1	0.1	0.2	0.04	0.05	0.07	0.4	0.7	0.5	...	...
Mysore ...	0.2	0.2	0.2	...	...	...	0.03	0.04	0.03	0.01	0.01	0.01	...	...
Baroda ...	0.03	0.05	0.06	0.02	0.02	0.02	...	...	...	0.1	0.1	0.1	...	...
Gwalior ...	...	...	...	0.3	0.3	0.3	...	...	...	0.09	0.1	0.08	...	...
Central India ...	...	...	...	0.3	0.3	0.4	...	...	...	0.2	0.2	0.1	...	...
Rajputana ...	...	...	...	0.4	0.3	0.4	...	...	...	0.07	0.07	0.06	...	...
Cooch Behar ...	...	...	...	...	...	...	...	...	...	...	...	...	0.08	0.02
<b>TOTAL</b> ...	<b>81.1</b>	<b>82.2</b>	<b>82.8</b>	<b>10.5</b>	<b>9.8</b>	<b>9.1</b>	<b>2.8</b>	<b>3.2</b>	<b>3.9</b>	<b>5.2</b>	<b>5.2</b>	<b>4.1</b>	<b>11.2</b>	<b>5.5</b>

PROVINCES	LINSEED			RAPE AND MUSTARD			SESAMUM			CASTOR SEED			GROUNDNUT (Nuts in Shell)			INDIGO (Dye)	
	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31	1931-32	1929-30	1930-31
Madras ...	...	...	...	...	...	...	0.1	0.1	0.1	0.08	0.08	0.08	1.5	1.8	1.3	0.01	0.01
Bombay (including Sind and Indian States) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bengal ...	0.01	0.02	0.01	0.04	0.08	0.02	0.06	0.08	0.08	0.02	0.02	0.02	0.8	1.0	1.1	...	...
United Provinces ...	0.02	0.2	0.2	0.1	0.1	0.1	0.08	0.03	0.03	...	...	...	...	...	...	...	...
Punjab ...	0.1	0.2	0.2	0.5	0.5	0.4	0.1	0.1	0.1	...	...	...	...	...	...	...	...
Burma ...	...	...	...	0.2	0.1	0.2	0.01	0.01	0.01	...	...	...	...	...	...	...	...
Bihar & Orissa ...	...	...	...	...	...	...	0.05	0.08	0.03	...	...	...	0.2	0.2	0.1	...	...
Central Provinces and Berar ...	0.1	0.09	0.09	0.2	0.1	0.1	0.08	0.08	0.08	...	...	...	...	...	...	...	...
Assam ...	0.07	0.07	0.09	...	(a)	0.02	0.04	0.05	0.04	...	...	...	...	...	...	...	...
Hyderabad ...	...	...	...	0.06	0.06	0.05	...	...	...	...	...	...	...	...	...	...	...
Rajputana ...	0.02	0.02	0.02	...	...	...	0.04	0.04	0.02	0.04	0.05	0.06	0.1	0.2	0.2	...	...
<b>TOTAL</b> ...	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.1</b>	<b>...</b>	<b>...</b>	<b>2.7</b>	<b>3.1</b>	<b>2.7</b>	<b>0.01</b>	<b>0.01</b>

\* For Cotton and Jute estimates are in millions bales (1 bale=400 lbs.) L. In million cwts.

(a) Not available.

X. On a new basis adopted from 1931-32.

**Table VI.—(Continued)**  
**Estimated yields of the main crops by provinces in India**  
**(B) Main non-forecasted crops**  
*(In Million Tons.)*

PROVINCES	BARLEY		JOWAR		BAJRA		MAIZE		GRAM		TOBACCO		* COFFEE (cured)		* TEA		* RUBBER (dry)	
	1929-30	1930-31	1929-30	1930-31	1929-30	1930-31	1929-30	1930-31	1929-30	1930-31	1929-30	1930-31	1929-30	1930-31	1929-30	1930-31	1929-1930	1930-1931
Madras ... ..	(a)	(a)	1'5	1'8	0'8	0'8	0'06	0'06	0'02	0'02	0'1	0'1	8'1	6'8	27'4	26'4	2'7	2'0
Bombay (including Sind and Indian States) ... ..	0'01	0'01	1'8	1'9	0'5	0'7	0'07	0'04	0'1	0'2	0'1	0'1	...	...	...	...	...	...
Bengal ... ..	0'08	0'08	...	...	...	...	0'08	0'08	0'05	0'05	0'1	0'1	...	...	110'0	97'0	...	...
United Provinces ... ..	1'4	1'8	0'6	0'5	0'4	0'4	0'9	0'9	1'2	1'4	0'07	0'04	...	...	1'5	1'8	...	...
Punjab ... ..	0'8	0'2	0'09	0'08	0'8	0'4	0'4	0'4	0'8	0'9	0'02	0'08	...	...	1'9	1'9	...	...
Burma ... ..	...	...	0'05	0'05	...	...	0'04	0'04	...	...	0'05	0'05	...	...	...	...	11'2	10'0
Bihar and Orissa ... ..	0'5	0'5	0'08	0'08	0'08	0'08	0'6	0'5	0'5	0'5	0'07	0'07	...	...	0'9	0'8	...	...
Central Provinces and Berar ... ..	...	...	1'0	1'2	0'08	0'04	0'1	0'1	0'2	0'2	...	...	...	...	...	...	...	...
Assam ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	258'9	238'4	...	...
North-West Frontier Province ... ..	0'08	0'06	0'01	0'01	0'08	0'01	0'2	0'2	0'08	0'02	(a)	(a)	...	...	...	...	...	...
Ajmer-Merwara ... ..	0'01	0'01	...	...	...	...	0'02	0'08	...	...	...	...	...	...	...	...	...	...
Coorg ... ..	...	...	...	...	...	...	...	...	...	...	...	...	14'7	9'1	0'2	0'2	0'5	0'4
Delhi ... ..	...	...	...	...	...	0'01	...	...	...	...	...	...	...	...	...	...	...	...
Hyderabad ... ..	(a)	(a)	1'2	1'8	(a)	(a)	(a)	(a)	(a)	(a)	0'01	0'02	...	...	...	...	...	...
Mysore ... ..	...	...	0'1	0'1	(a)	...	...	...	0'07	0'01	...	...	16'4	16'4	0'1	0'2	0'02	0'02
Baroda ... ..	...	...	(a)	(a)	(a)	(a)	...	...	(a)	(a)	...	...	...	...	...	...	...	...
Travancore ... ..	...	...	...	...	...	...	...	...	...	...	...	...	0'07	0'4	30'5	28'0	10'9	0'4
Cochin ... ..	...	...	...	...	...	...	...	...	...	...	...	...	0'02	0'8	...	...	2'8	2'6
Tripura (Bengal) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1'4	1'2	...	...
<b>TOTAL ... ..</b>	<b>8'8</b>	<b>2'4</b>	<b>6'4</b>	<b>6'5</b>	<b>2'0</b>	<b>2'4</b>	<b>2'4</b>	<b>2'4</b>	<b>8'1</b>	<b>8'4</b>	<b>0'6</b>	<b>0'6</b>	<b>89'4</b>	<b>88'0</b>	<b>432'8</b>	<b>391'1</b>	<b>28'0</b>	<b>24'4</b>

*N.B.*—As figures with two zeros after the decimal point are omitted, the totals do not tally in some cases with the actual additions in the above table; and the totals given are those taken from the original sources.

\* In million lbs. (a) Not available.

A. Average Yield per Acre,  
B. Standard Yield per Acre.

Table VII

## Average Yield per Acre and Standard Yield per Acre.

## (A) Forecasted Crops.

(In lbs.)

PROVINCES	RICE				WHEAT				SUGARCANE (GUR)			
	A		B		A		B		A		B	
	1929-30	1930-31	1931-32		1929-30	1930-31	1931-32		1929-30	1930-31	1931-32	
Madras ... ..	1,045	1,031	1,015	1,055	...	...	...	...	6,286	6,220	6,107	6,880
Bombay (including Sind and Indian States) ...	905	968	1,044	1,280 *1,364	495	468	462	(g) 575 (h) 780 } *	5,678	5,901	5,757	6,950 *7,600
Bengal ... ..	908	1,002	961	(a) 1,022 (b) 892 (c) 1,142	587	533	564	(h) 721	2,489	2,792	2,625	3,054
United Provinces ... ..	498	565	677	900	1,026	790	819	1,050	2,159	2,878	3,185	2,600
Punjab ... ..	...	...	...	...	833	749	746	795	1,488	1,588	1,744	1,953
Burma ... ..	868	885	749	1,000	...	...	...	...	...	...	...	...
Bihar & Orissa ... ..	946	903	912	(a) 987 (b) 741 (c) 800	961	838	855	(d) 984 (e) 451 (f) 861	2,441	2,241	2,439	2,460
Central Provinces and Berar ... ..	781	555	718	647	446	459	468	577	3,665	3,627	3,564	3,186
Assam ... ..	713	681	771	(a) 896 (b) 706 (c) 1,008	...	...	...	...	2,008	2,104	2,240	2,576
North-West Frontier Province ... ..	...	...	...	...	526	544	536	612	2,767	2,764	2,647	1,892
Ajmer-Merwara ... ..	...	...	...	...	850	560	560	697	...	...	...	...
Coorg ... ..	1,430	1,448	1,457	...	...	...	...	...	...	...	...	...
Delhi ... ..	...	...	...	1,464	679	589	560	823	2,240	896	1,493	2,296
Hyderabad ... ..	667	582	742	...	234	258	258	...	2,361	3,228	4,160	...
Mysore ... ..	652	666	675	...	413	363	373	450	2,240	2,122	1,991	3,847
Baroda ... ..	885	486	599	1,071	614	614	522	...	3,360	4,480	3,360	...
Gwalior ... ..	...	...	...	...	423	541	584	...	...	...	...	...
Central India ... ..	...	...	...	...	334	374	350	...	...	...	...	...
Rajputana ... ..	...	...	...	...	696	577	640	...	...	...	...	...

(a) Winter Rice  
(b) Autumn Rice  
\* Refers to Sind(c) Summer Rice  
(d) Bihar  
(e) Chota Nagpur(f) Orissa  
(g) Irrigated  
(h) Unirrigated

**Table VII.**  
**Average yield per acre and standard yield per acre**  
**(A) Forecasted crops (continued)**  
*(In lbs.)*

A. Average yield per acre  
 B. Standard yield per acre

Provinces	COTTON (ginned)				JUTE				LINSEED			
	A		B		A		B		A		B	
	1929-30	1930-31	1931-32		1929	1930	1931		1929-30	1930-31	1931-32	
Madras ... ..	82	74	79	87	...	...	...	...	...	...	...	...
Bombay (including Sind and Indian States) ... ..	72	83	84	182 *181	...	...	...	...	213	232	232	360
Bengal ... ..	108	99	91	155	1,227	1,302	1,240	1,331	373	367	356	473
United Provinces ... ..	124	152	111	170	...	...	...	...	450	362	389	500
Punjab ... ..	126	123	81	(i) 130 (j) 146	...	...	...	...	240	166	210	...
Burma ... ..	80	97	60	110	...	...	...	...	...	...	...	...
Bihar and Orissa ... ..	75	81	82	155	1,208	1,042	918	1,200	366	322	315	402
Central Provinces and Berar ... ..	97	89	43	102	...	...	...	...	192	196	208	212
Assam ... ..	146	143	162	176	897	1,290	800	1,400	...	...	...	...
North-West Frontier Province ... ..	94	92	89	90	...	...	...	...	...	...	...	...
Ajmer-Merwara ... ..	129	142	163	216	...	...	...	...	...	...	...	...
Coorg ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Delhi ... ..	133	100	169	165	...	...	...	...	...	...	...	...
Hyderabad ... ..	51	43	56	...	...	...	...	...	...	...	...	...
Mysore ... ..	52	56	43	47	...	...	...	...	...	...	...	...
Baroda ... ..	66	77	76	...	...	...	...	...	148	142	168	...
Gwalior ... ..	56	67	48	...	...	...	...	...	...	...	...	...
Central India ... ..	61	67	44	...	...	...	...	...	...	...	...	...
Rajputana ... ..	53	58	68	...	...	...	...	...	118	246	236	...

(i) Desi

(j) American

\* Refers to Sind

**Table VII**  
Average yield per acre and standard yield per acre  
(A) Forecasted crops—(Continued).  
(In lbs.)

A. Average yield per acre.  
B. Standard yield per acre.

PROVINCES	RAPE AND MUSTARD				SESAMUM				CASTOR SEED			
	A		B		A		B		A		B	
	1929-30	1930-31	1931-32		1929-30	1930-31	1931-32		1929-30	1930-31	1931-32	
Madras	...	...	...	...	298	294	290	301	227	222	221	231
Bombay (including Sind and Indian States)	268	280	244	625 (g) 482* (h) 321*	256	270	277	400 *274	350	326	341	...
Bengal	426	405	404	483	371	331	362	495	...	...	...	...
United Provinces	458	294	856	600	191	227	227	280	640	640	840	...
Punjab	818	856	878	435	184	196	197	...	...	...	...	...
Burma	...	...	...	...	91	127	58	160	...	...	...	...
Bihar and Orissa	546	501	477	492	357	344	336	350	326	326	332	350
Central Provinces and Berar	...	...	543	...	167	190	166	210	429	448	458	400
Assam	418	395	381	504	...	...	...	...	...	...	...	...
North-West Frontier Province	152	248	204	314	...	...	...	...	...	...	...	...
Ajmer-Merwara	...	...	...	...	45	85	82	72	...	...	...	...
Delhi	179	57	140	325	...	...	...	...	...	...	...	...
Hyderabad	63	64	98	...	142	186	106	...	149	127	165	...
Mysore	...	...	...	...	...	...	...	...	126	184	127	...
Baroda	236	224	213	...	124	130	138	...	135	224	204	...
Rajputana	521	124	392	...	140	215	158	...	...	...	...	...

**Table VII**  
Average yield per acre and Standard yield per acre

PROVINCES	GROUNDNUT (Nuts in shell)				INDIGO (Dye)			
	A		B		A		B	
	1929-30	1930-31	1931-32		1929-30	1930-31	1931-32	
Madras	1,062	1,107	1,041	1,120	24	24	...	28
Bombay (including Sind and Indian States)	1,847	1,466	1,595	(g)2,500 (h)1,150	22	21	...	...
United Provinces	...	...	...	...	11	15	...	18
Punjab	...	...	...	...	20	20	...	...
Burma	745	694	684	1,000	...	...	...	...
Bihar and Orissa	...	...	...	...	23	10	...	15
Hyderabad	525	535	616	...	...	...	...	...

(g) Irrigated.      \*Refers to Sind.  
(h) Unirrigated.



Table VIII

Statistics of Production, Exports and Imports of Main Agricultural Crops in India

Production data are for the seasons and exports or imports for the fiscal years  
(1st April to 31st March).

RICE				Average of three years ending 1929-30	1930-31	1931-32
Production (in tons)—						
India (excluding Burma)	...	...	...	25,512,000	27,055,000	28,588,000
Burma	...	...	...	4,992,000	5,143,000	4,182,000
			<b>Total</b>	30,504,000	32,198,000	32,770,000
Exports (in tons to Foreign Countries)—						
India (excluding Burma)—						
Rice in the husk	...	...	...	5,444	4,424	238,044
Rice not in the husk	...	...	...	279,178	278,891	
Rice, flour and ground rice	...	...	...	461	185	
Burma—						
Rice in the husk	...	...	...	82,381	21,021	2,133,735
Rice not in the husk	...	...	...	1,792,571	1,975,393	
Rice, flour and ground rice	...	...	...	1	...	
Total—						
Rice in the husk	...	...	...	87,325	25,445	70,291
Rice not in the husk	...	...	...	2,071,744	2,258,784	2,801,415
Rice, flour and ground rice	...	...	...	462	185	73
Exports (in tons) from Burma to India (Coastal)—						
Rice in the husk	...	...	...	182,158	175,403	Not published
Rice not in the husk	...	...	...	963,329	813,967	
Imports into India (Mainly from Straits Settlements and Indo-China) :—						
Rice in the husk	...	...	...	19,403	1,571	...
Rice not in the husk	...	...	...	66,672	7,445	17,931
Net exports from India in million tons	...	...	...	2.0	2.3	2.3
% of net exports to total production	...	...	...	6.6	7.1	7.0

WHEAT

Production (in tons)	...	...	...	8,912,000	9,305,000	9,312,000
Exports (in tons)—						May, 1932
Wheat	...	...	...	142,469	196,505	20,215
*Wheat flour	...	...	...	55,091	46,909	42,724
Imports (in tons)—						
Wheat	...	...	...	329,387	232,034	111,269
*Wheat flour	...	...	...	134	120	34
Net exports or imports (in tons)	...	...	...	-104,433	+34,654	-27,019
% of net exports to total Production	...	...	...	...	Negligible	...

\* On the basis 1 ton flour=1½ tons wheat. +Net exports. -Net import.

BARLEY

Production (in tons)	...	...	...	2,301,000	2,392,000	...
Exports (in tons)	...	...	...	71,681	1,184	26,866
Imports (in tons)	...	...	...	142	166	Nil
Net exports in tons	...	...	...	71,539	968	26,866
% Net exports to total production	...	...	...	3.0	.04	...

GRAM

Production (in tons)	...	...	...	2,976,000	3,367,000	...
Exports (in tons)	...	...	...	14,351	11,932	15,890
Imports (in tons)	...	...	...	31	115	Nil
Net exports (in tons)	...	...	...	14,320	11,817	15,890
% of net exports to total production	...	...	...	0.5	0.3	...

TOBACCO

Production (in tons)	...	...	...	609,000	572,000	...
Exports (in lbs)—						
Unmanufactured	...	...	...	28,997,513	27,970,510	25,426,632
Manufactured	...	...	...	1,074,234	1,122,122	834,617
			<b>Total</b>	30,071,747	29,092,632	26,261,249
Imports (in lbs)—						
Unmanufactured	...	...	...	5,099,172	1,608,381	2,844,919
Manufactured	...	...	...	5,555,237	3,321,606	1,632,537
			<b>Total</b>	10,654,409	4,929,987	4,477,456
Net exports (in lbs)	...	...	...	19,387,338	24,162,645	21,783,793
% of net exports to total production	...	...	...	1.4	1.9	...

Table VIII

Statistics of Production, Exports and Imports of Main  
Agricultural Crops in India.—(Contd).

GROUNDNUT				Average of three years ending 1929-30	1930-31	1931-32
Production (in tons)	...	...	...	2,814,000	3,154,000	2,697,000
(Shell)	...	...	...			
Exports (in tons)	...	...	...	705,808	601,204	671,973
Imports (in tons)	...	...	...	81	80	...
(Mainly from Straits Settlements)	...	...	...			
Net exports (in tons)	...	...	...	705,227	601,174	671,973
% of net exports to total production	...	...	...	25·1	19·0	24·9
LINSEED						
Production (in tons)	...	...	...	848,000	877,000	411,000
Exports (in tons)	...	...	...	209,187	256,799	120,283
Imports (in tons)	...	...	...	78	21	...
Net exports (in tons)	...	...	...	209,059	236,778	120,283
% of net exports to total production	...	...	...	60·9	60·8	29·2
RAPE AND MUSTARD						
Production (in tons)	...	...	...	947,000	988,000	1,023,000
Exports (in tons)	...	...	...	65,726	85,878	56,670
Imports (in tons)	...	...	...	...	...	...
% of net export to total production	...	...	...	7·0	8·6	5·5
SESAMUM						
Production (in tons)	...	...	...	499,000	526,000 (Revised)	465,000 (Final)
Exports (in tons)	...	...	...	17,445	1,116	12,822
Imports (in tons)	...	...	...	89	807	1,829
Net exports (in tons)	...	...	...	17,406	809	10,493
% of net exports to total production	...	...	...	3·5	0·2	2·8
CASTOR-SEED						
Production (in tons)	...	...	...	119,000	120,000	149,000
Exports (in tons)	...	...	...	116,490	91,022	108,974
Imports (in tons)	...	...	...	...	...	...
% of net exports to total production	...	...	...	97·9	75·9	72·7
COTTON-SEED						
*Production (in tons)	...	...	...	1,888,000	1,741,000	1,855,000
Exports (in tons)	...	...	...	114,028	41,350	11,655
Imports (in tons)	...	...	...	...	...	...
% of net exports to total production	...	...	...	6·0	2·4	0·9

\* Estimated on a basis of  $\frac{1}{4}$  ton seed for every bale of Cotton.

Table VIII.

Statistics of Production, Exports and Imports of Main Agricultural Crops in India.—(Contd.)

COTTON			Average of three years ending 1929-30	1930-31	1931-32
Production (in bales) of 400 lbs.	...	...	5,668,000	5,224,000	4,064,000
Exports (in tons) Raw	...	...	628,118	701,069	423,080
Imports (in tons) Raw	..	...	89,641	58,464	79,328
JUTE			Average of three years ending 1930	1931	1932
Production (in bales) of 400 lbs.	...	...	10,498,600	5,559,900	...
			Average of three years ending 1929-30	1930-31	1931-32
Exports (in tons) Raw	...	...	865,551	619,705	586,618
Manufactures (Including twist and yarn).	...	...	918,061	766,649	668,618
Total exports (Raw and manufactures) in tons	...	...	1,783,612	1,386,354	1,250,286
% of exports to total production.	...	...	94.7	73.7 (based upon 1930 production)	...
COFFEE			Average of three years ending 1929-30	1930-31	1931-32
Production (in lbs.) (Cured)	...	...	34,251,000	32,978,000	...
Exports (in cwts.)	...	...	219,506	292,889	155,600
Imports (in cwts.) other than roasted or ground	...	...	49,962	42,591	4,798
Net exports (in cwts.)	...	...	169,544	250,298	150,807
% of net exports to total production	...	...	55.4	84.9	...
TEA			Average of three years ending 1929.	1930	1932
Production (in lbs.)	...	...	409,805,000	391,080,000	...
			Average of three years ending 1929-30	1930-31	1931-32
Exports (in lbs.)	...	...	865,950,170	856,288,940	841,575,804
Imports (in lbs.)	...	...	9,246,481	6,648,261	6,969,252
Net exports	...	...	856,708,689	849,590,679	834,606,052
% of net exports to total production.	...	...	87.3	88.2	...
RUBBER			Average of three years ending	1930	1931
Production (in lbs.) (Dry)	...	...	1929	1930	1931
	...	...	26,968,000	24,351,500	...
			Average of three years ending 1929-30	1930-31	1931-32
*Exports in lbs.	...	...	25,638,660	28,327,301	15,096,191
*Imports in lbs.	...	...	144,005	223,494	456,208
Net exports in lbs.	...	...	25,489,655	28,103,807	14,639,988
% of net exports to production.	..	...	94.4	94.7	...

\*These exclude manufactured rubber. While exports of manufactures are not considerable, imports in the form of pneumatic motor covers, tubes and tyres have run to about 8 crores of Rupees.

**Table IX.**  
**Prices of Main Agricultural Commodities in India representative of centres of production**  
(From January, 1931—June, 1932)  
Compared to October, 1929 and July, 1913

*Prices as in the beginning of the first week of each month, but where quotations are not available for the nearest period.*

Commodity	July 1913		October 1929		January 1931		February 1931		March 1931		April 1931		May 1931		June 1931		July 1931		August 1931		September 1931	
	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
1. Raw Jute, Calcutta (Firsts, per bale of 400 lb) ...	69	0 0	60	0 0	28	4 0	25	12 0	27	4 0	23	4 0	30	12 0	30	8 0	23	12 0	27	12 0	30	12 0
2. Raw Cotton, Bombay F.G.M.G. Broach fully pressed per candy of 784 lb	237	0 0	314	0 0	173	8 0	187	8 0	218	8 0	205	0 0	178	0 0	169	12 0	191	8 0	171	0 0	154	0 0
3. White Rice—																						
(a) Rangoon Big Mills Special, per 100 baskets of 75 lb each ...	332	8 0	460	0 0	210	0 0	210	0 0	192	8 0	205	0 0	177	8 0	172	8 0	165	0 0	207	8 0	237	8 0
(b) Calcutta Seeta No. 1 per B. maund ...	6	14 0	7	4 0	5	12 0	5	0 0	5	0 0	5	4 0	5	12 0	5	12 0	5	4 0	5	8 0	5	10 0
4. White wheat, Lyallpur, (1½ per dirt, 2 per cent. barley per maund f.o.r. Lyallpur ...	3	3 0	4	8 0	2	0 3	2	3 3	2	1 6	2	0 0	1	9 6	1	10 0	1	10 0	1	14 0	1	12 0
5. Linseed, Bombay Bold per cwt. ready ...	8	1 0	13	18 0	6	14 0	6	11 0	7	14 0	7	7 0	6	14 0	6	4 0	6	10 0	6	10 0	5	13 0
6. Groundnuts, Madras-Machine decorticated per candy (500 lb) ...	48	5 0	53	0 0	24	0 0	26	0 0	27	0 0	29	0 0	29	0 0	26	0 0	27	0 0	29	0 0	28	0 0
					to		to		to		to						to		to			
					23	0 0	27	0 0	28	0 0	30	0 0					29	0 0	30	0 0		
7. Rape and Mustard Seed, Bombay-Brown, Cawnpore per cwt. ready ...	8	3 6	9	14 0	6	8 0	6	8 0	7	0 0	7	0 0	7	4 0	7	0 0	7	0 0	7	4 0	7	2 0
8. Gingelly, Bombay-White, Bold per cwt. ready ...	12	6 0	11	13 0	6	5 0	7	4 0	7	12 0	8	6 0	8	2 0	8	0 0	8	2 0	9	0 0	9	0 0

Table IX.—(Contd.)

Prices of Main Agricultural Commodities in India representative of centres of production  
(From January, 1931—June, 1932)

Compared to October, 1929 and July, 1913

Prices as in the beginning of the first week of each month, but where quotations are not available for the nearest period.

Commodity	October 1931		November 1931		December 1931		January 1932		February 1932		March 1932		April 1932		May 1932		June 1932		% fall in prices in June 1932 as compared to July 1918	% fall in prices in June 1932 as compared to October 1929
	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.		
1. Raw Jute, Calcutta (Firsts, per bale of 400 lb) ...	88	0 0	40	8 0	40	0 0	37	0 0	84	12 0	83	4 0	81	8 0	29	0 0	25	12 0	62.7	57.1
2. Raw Cotton, Bombay F.G.M.G. Broach fully pressed per candy of 784 lb	169	0 0	183	8 0	183	0 0	200	0 0	207	0 0	237	8 0	187	0 0	171	8 0	150	0 0	47.8	56.4
8. White Rice—																				
(a) Rangoon Big Mills Special, per 100 baskets of 75 lb each) ...	202	8 0	215	0 0	207	8 0	207	8 0	215	0 0	247	8 0	250	0 0	247	8 0	230	0 0	30.9	50.0
(b) Calcutta Seeta No. 1 per B, maund. ...	5	8 0	5	0 0	5	4 0	5	4 0	4	14 0	4	0 0	4	4 0	4	2 0	4	0 0	40.9	53.5
4. White wheat, Lyallpur (1½ per dirt, 2 per cent. barley per maund f.o.r. Lyallpur	1	9 0	1	14 6	2	8 0	2	10 6	2	7 0	2	5 6	2	0 0	1	15 6	2	8 6	30.4	49.8
5. Linseed, Bombay Bold per cwt., ready ...	6	6 0	6	8 0	6	0 0	6	4 0	6	5 0	7	8 0	6	0 0	5	12 0	5	8 0	81.9	60.1
6. Groundnuts, Madras-Machine decorticated per candy (500 lb) ...	28	8 0	31	12 6	28	0 0	28	11 0	36	4 0	38	8 0	42	8 0	36	0 0	38	8 0	20.8	27.4
7. Rape and Mustard Seed, Bombay-Brown, Cawnpore per cwt., ready ...	7	4 0	7	8 0	7	4 0	7	0 0	7	8 0	8	10 0	6	10 0	6	6 0	...	...	22.4 (May prices).	85.5 (May prices).
8. Gingelly, Bombay-White, Bold per cwt., ready ...	8	14 0	8	9 0	7	4 0	7	12 0	9	2 0	10	4 0	9	2 0	8	14 0	8	12 0	29.3	25.9

Table X (A)

(Taken from The Monthly Bulletin of the International Institute of Agriculture, Rome).

Prices of wheat in London and Liverpool C.I.F. shipping current month  
(Shillings per 480 lbs.)

(The monthly averages are based on Friday quotations)

MONTH	1980		1931		1982	
	No. 8 Manitoba	Choice white Karachi	No. 8 Manitoba	Choice White Karachi	No. 8 Manitoba	Choice White Karachi
January	48/8	n. q.	28/1	n. q.	27/8	n. q.
February	42/8	43/5	24/5	n. q.	29/6	n. q.
March	39/4	40/-	28/8	n. q.	29/5	n. q.
April	41/1	40/11	28/2	n. q.	*27/4	n. q.
May	39/8	39/10	28/9	24/6	...	...
June	38/7	38/-	22/-	22/7	...	...
July	35/8	34/6	21/1	21/8	...	...
August	34/11	35/4	19/9	n. q.	...	...
September	30/7	31/1	*18/11	n. q.	...	...
October	28/4	28/7	24/8	25/6	...	...
November	25/10	27/2	29/1	32/-	...	...
December	24/1	25/1	28/2	n. q.	...	...

Percentage Parities

January	100	...	100	...	100	...
February	100	101'8	100	...	100	...
March	100	101'7	100	...	100	...
April	100	99'6	100	...	100	...
May	100	100'4	100	108'2	...	...
June	100	101'1	100	102'7	...	...
July	100	98'6	100	102'8	...	...
August	100	101'2	100	...	...	...
September	100	101'7	100	...	...	...
October	100	100'9	100	105'2	...	...
November	100	105'1	100	110'0	...	...
December	100	104'1	100	...	...	...

n. q. No quotation.

\*Average for the first three weeks only.

Table X (B)

Prices of Cotton in Liverpool

(Pence per lb.)

MONTH	1930.		1931		1932	
	Middling	M. G. Broach Fully good	Middling	M. G. Broach Fully good	Middling	M. G. Broach Fully good
January	9'37	n. 7'01	5'48	n. 4'07	5'44	n. 5'81
February	8'56	n. 6'14	5'95	n. 4'59	5'78	n. 5'47
March	8'30	n. 5'92	5'96	n. 4'56	5'47	n. 5'09
April	8'74	n. 6'15	5'68	n. 4'81	5'85	4'45
May	8'61	n. 6'00	5'21	n. 4'08	...	...
June	7'97	n. 5'42	4'98	n. 4'00	...	...
July	7'68	n. 5'06	5'06	n. 4'16	...	...
August	6'95	n. 4'40	3'90	n. 3'19	...	...
September	6'28	n. 4'22	3'72	n. 3'00	...	...
October	5'86	n. 4'22	4'72	n. 4'12	...	...
November	5'97	n. 4'41	4'97	n. 4'54	...	...
December	5'44	n. 4'00	5'25	n. 4'83	...	...

n. Nominal

Percentage Parities

January	100	74'8	100	74'2	100	97'6
February	100	71'7	100	77'1	100	94'6
March	100	71'8	100	76'5	100	92'8
April	100	70'8	100	79'3	100	93'1
May	100	69'7	100	77'5	...	...
June	100	69'1	100	81'1	...	...
July	100	67'6	100	80'1	...	...
August	100	68'8	100	81'8	...	...
September	100	67'7	100	80'1	...	...
October	100	72'1	100	87'8	...	...
November	100	73'9	100	91'3	...	...
December	100	73'5	100	92'0	...	...

Table XI (A)

(Taken from Indian Trade Journal).

Estimated Acreage and Production of  
Indian Cotton by varieties

DESCRIPTIONS OF COTTON	1929-30		1930-31		1931-32	
	Acreage	Production Bales	Acreage	Production Bales	Acreage	Production Bales
<b>Oomras—</b>						
Khandesh ... ..	1,373	249	1,211	273	1,137	165
Central India ... ..	2,021	300	1,903	317	1,810	204
Barsi and Nagar ... ..	2,629	341	2,315	438	2,598	355
Hydrabad Gaorani ... ..	916	126	971	126	862	115
Berar ... ..	3,443	717	3,221	658	3,130	316
Central Provinces ... ..	1,732	635	1,529	478	1,449	138
<b>TOTAL</b> ... ..	<b>12,114</b>	<b>2,268</b>	<b>11,150</b>	<b>2,340</b>	<b>11,004</b>	<b>1,323</b>
<b>Dholleras</b> ... ..						
Dholleras ... ..	2,807	509	2,533	559	2,106	577
<b>Bengal-Sind—</b>						
United Provinces ... ..	929	289	845	322	786	218
Rajputana ... ..	541	78	551	84	433	72
Sind-Punjab ... ..	2,053	595	1,889	567	2,000	479
Others ... ..	76	15	75	16	74	16
<b>TOTAL</b> ... ..	<b>3,604</b>	<b>977</b>	<b>3,360</b>	<b>939</b>	<b>3,323</b>	<b>785</b>
<b>American—</b>						
Punjab ... ..	806	243	837	269	763	217
Sind ... ..	27	8	65	20	59	14
<b>TOTAL</b> ... ..	<b>833</b>	<b>256</b>	<b>902</b>	<b>289</b>	<b>822</b>	<b>231</b>
<b>Broach</b> ... ..						
Broach ... ..	1,324	284	1,232	277	1,237	280
<b>Coompta-Dharwars</b> ... ..						
Coompta-Dharwars ... ..	1,746	234	1,356	178	1,569	219
<b>Westerns and Northern</b> ... ..						
Westerns and Northern ... ..	1,551	172	1,540	192	1,874	221
<b>Cocanadas</b> ... ..						
Cocanadas ... ..	259	45	199	32	198	34
<b>Tinnevellies</b> ... ..						
Tinnevellies ... ..	601	162	525	129	548	140
<b>Salems</b> ... ..						
Salems ... ..	221	38	200	36	199	36
<b>Cambodias</b> ... ..						
Cambodias ... ..	395	144	248	90	283	121
<b>Comillas, Burmas and other sorts</b> ... ..						
Comillas, Burmas and other sorts ... ..	467	104	517	123	359	67
<b>GRAND TOTAL</b> ... ..	<b>25,922</b>	<b>5,243</b>	<b>23,812</b>	<b>5,224</b>	<b>23,522</b>	<b>4,064</b>



TABLE XI (B)

Indian Cotton Crops classified by staple lengths.

(In thousands of Bales of 400 lbs. each.)

Taken from Cotton Improvement in India by Indian Central Cotton Committee, 1931.

	1915-18 Average	Forecast crop- average 1925-30	Trade estimates, normal season.
Long Staple 3/8 inch and above			
Oomras—			
* Hyderabad Gaorani ...	168	186	250
Verum 262 ...	...	2	200
Broach—			
Surat-Navsari mostly 1027			
A. L. F. (Staple 1") ...	...	98	350
Others ...	190	77	
Kumpta-Dharwar—			
Gadag 1 (Staple 1") ...	...	18	200
Dharwar 1 (Staple 3/8") ...	...	23	
Jayawant (Staple 1") ...	...	...	
Others ...	282	245	
Westerns and Northern—			
Hagari 25 (Staple 3/8") ...	...	22	250
Hagari 1 (Staple 3/8") ...	...	...	
Nandyal 14 (Staple 1 1/10" to 1") ...	...	8	
Others ...	198	285	
Tinnevelly—			
Karunganni C-7 (Staple 1") ...	...	8	180
Karunganni others (Staple 3/8") ...	40	155	
Others ...	66	...	
Cambodia.—			
Coimbatore 1			
Staple 1" and over) ...	...	...	160
Coimbatore 2			
(Staple 1" and over) ...	...	7	
Irrigated Cambodia			
(Staple 1" and over) ...	101	96	
Others ...	65	34	
Punjab and Sind Americans—			
280-F (Staple 1" to 1 1/16") ...	...	2	450
* 4-F (Staple 3/8") ...	43	252	
TOTAL, LONG STAPLE	1,148	1,458	2,060
Short Staple Below 3/8 inch—			
Oomras (part) ...	1,631	2,864	2,300
Broach (part) ...	98	89	...
Dholeras ...	472	598	400
Bengals ...	687	936	1,300
Salems ...	13	87	...
Cocanadas ...	87	43	200
Comillas, Burmahs, etc. ...	79	108	...
TOTAL, SHORT STAPLE	8,012	4,164	4,200
GRAND TOTAL	4,160	5,622	6,260

\* If marketed pure.

TABLE XI (C)

Exports of Raw Cotton from India to various countries for year ending 31st March.

(In Thousands of bales of 400 lbs.)

Countries	1929-30	1930-31	1931-32*
United Kingdom ...	270	281	163
Other parts of the British Empire	7	6	..
Total British Empire	277	287	..
Japan ...	1,640	1,686	1,060
Italy ...	393	362	181
France ...	253	232	79
China (exclusive of Hongkong, etc.)	566	606	430
Belgium ...	341	217	119
Spain ...	80	106	44
Germany ...	344	309	163
Austria ...	...	...	...
Other Countries	176	121	...
Total Foreign Countries	3,793	3,639	...
TOTAL	4,070	3,926	2,369

\*Full details of 1931-32 returns are not yet available.

TABLE XI (D)

Imports of Foreign Cotton into Bombay

(BOMBAY CHAMBER OF COMMERCE)

(Year ending 31st August.)

(Bales of 392 lbs. net)

Descriptions	1928-29	1929-30	1930-31	* 1st Sept. 1931 to 2nd June 1932
East Africans ...	107,747	134,533	179,473	...
Egyptians ...	1,636	12,387	148,947	...
Americans ...	11,719	15,889	140,296	230,644
Persians ...	1,774	704	1,438	...
TOTAL	122,876	163,513	470,832	...

\*Taken from *Bombay Weekly Statistics* published by the East India Cotton Association, Limited.

† Includes 178 bales of Russian Cotton.

**TABLE XI E.**  
**Statement of Stocks of Cotton in Bombay**  
*(Indian and Foreign.)*  
**exclusive of Cotton held by the Mills.**  
*(Taken from the Bombay Cotton Annual 1930-1931) No. 12.*

DESCRIPTIONS	ON 31ST AUGUST 1929.			ON 31ST AUGUST 1930.			ON 31ST AUGUST 1931		
	Bales unsold.	Bales sold but not delivered.	Total number of bales.	Bales unsold.	Bales sold but not delivered.	Total number of bales.	Bales unsold.	Bales sold but not delivered.	Total number of bales.
Broach ... ..	15,053	2,636	17,689	31,012	12,246	43,258	38,377	5,697	44,274
Dhollera descriptions including Cutch (full, $\frac{3}{4}$ and $\frac{1}{2}$ pressed bales.) ... ..	40,291	11,727	52,018	37,354	4,854	42,208	57,559	3,565	61,124
Oomra descriptions ... ..	258,790	45,876	304,666	239,565	89,185	328,700	145,767	19,646	165,413
Khandesh ... ..	57,103	9,128	66,231	43,988	9,144	53,132	43,244	3,204	46,448
Bengals (including Sind, Punjab and Rajputana) ... ..	63,121	10,670	73,791	28,276	17,806	46,082	38,800	3,179	41,979
Punjab American ... ..	7,471	496	7,967	775	1,161	1,936	8,009	1,482	4,491
Dhawar ... ..	5,091	1,521	6,612	1,951	997	2,948	660	...	660
Comptas, Tinnevelly and Cambodia ... ..	29,249	14,543	43,792	16,785	16,775	33,560	37,416	7,008	44,424
Western-Northern Descriptions ... ..	25,486	10,365	35,851	9,048	13,833	22,881	22,466	7,676	30,142
Persians ... ..	31	...	31	...	...	...	...	...	...
Americans ... ..	333	816	649	297	290	587	11,838	10,820	22,658
Egyptians ... ..	...	...	...	...	15	15	2,021	1,947	3,968
East Africans ... ..	13,592	6,579	20,171	12,293	3,545	15,838	32,645	11,406	44,051
Other sorts ... ..	26,863	1,918	28,276	10,628	899	11,527	10,879	181	11,060
<b>TOTAL</b> ... ..	<b>541,974</b>	<b>115,770</b>	<b>657,744</b>	<b>431,972</b>	<b>170,700</b>	<b>602,672</b>	<b>444,881</b>	<b>75,811</b>	<b>520,692</b>

TABLE XI (F)

Statement of Stocks of Cotton held by the Mills in Bombay on 31st August

		Cotton actually on hand in Mill Godowns (Actual number of bales).	Ready Cotton bought but not taken delivery of (Actual number of bales)	Total. (Actual number of bales)
1929	...	236,439	24,628	261,067
1930	...	166,332	23,643	190,525
1931	...	164,209	15,432	179,641

TABLE XI (G)

Estimated world's Consumption of Indian Cotton by various Countries.

(INTERNATIONAL COTTON FEDERATION)  
(Year ending 31st July)  
(In Thousands of Bales.)

Countries	1928-29	1929-30	1930-31
Great Britain	183	188	252
% on 1918	345	355	475
France	217	224	224
Germany	252	271	208
Russia	...	113	*114
Poland	23	24	22
Italy	225	261	236
Czecho-slovakia	90	109	83
Austria	40	35	25
Spain	74	92	85
Belgium	175	180	149
Switzerland	9	10	10
Other European	45	56	56
Total Continent	1,150	1,375	1,212
% on 1918	141	169	149
India	1,880	2,243	2,298
Japan	1,488	1,697	1,500
China	398	463	520
Total Asia	3,766	4,403	4,318
% on 1918	123	143	140
U. S. A	35	61	43
All others	44	60	85
Grand Total	5,178	6,087	5,860
% on 1931	131	154	149

\* Complete return not received, estimated from trade sources.

Taken from International Year Book  
of Agricultural Statistics

Table XII

## International Statistics.

Estimated average production and net exports for certain principal crops in the main  
exporting countries of the world.

(In Million Tons)

## (1) Wheat and Flour.\*

COUNTRY	Estimated average production of wheat for the triennium ending 1932 season	Average net exports for the triennium ending 1928-29 (ending July, 31)	Net exports during 1929-30 (ending July, 31)	Net exports during 1930-31 (ending July, 31)	Net exports during seven months 1931-32 (Aug. 1st to end Feb.)
Hungary ...	2.6	0.7	0.9	0.5	0.4
U. S. S. R. ...	81.0	† Varying between 0.2 to 1.3	0.3	3.4	Not known
Canada ...	10.3	9.3	5.5	7.7	3.8
United States ...	25.3	4.8	4.2	3.3	2.1
Argentina ...	6.7	4.9	4.6	3.7	1.8
Australia ...	5.8	2.5	1.8	4.5	2.5

\* Flour reduced to grain on the basis 3 units of flour = 4 units of wheat.

† In the earlier years U. S. S. R. was importing.

## (2) Rice.

COUNTRY	Estimated average production for the triennium ending 1932	Average net exports for the triennium ending 1929	Net exports during 1930 (ending December)	Net exports during 1931 (ending December)
India ...	30.3	2.0 (Fiscal year)	2.3 (Fiscal year)	2.3 (Fiscal year)
Indo-China ...	5.8	1.3	1.2	1.1
Siam ...	4.2	1.1	1.0	1.2
Argentina ...	1.7 (Three years preceding 1931)	1.6	(8) Linseed. 1.3	2.1
India ...	0.4	0.2 (Fiscal year)	0.3 (Fiscal year)	0.1 (Fiscal year)

## (3) Cotton (Raw.)

COUNTRY	Average production during the triennium ending 1932 season	Average net exports ending 1928-29	Net exports during 1929-30 (ending July 31)	Net exports during 1930-31 (ending July 31)	Net exports during 1931-32 (Seven months—August 1 to end February)
United States ...	4.3	1.7	0.2	1.8	1.6
India ...	1.3	0.6	0.7	0.7	0.2
Egypt ...	0.4	0.3	0.1	0.3	0.2 (till January)

## (4) Coffee.

(In Million lbs)

		Ending June 30	ending June 30	(Eight months—July 1 to end February)
Brazil ...	2,464	2,016	1,996	2,317
India ...	34	19	32	23
Java and Madura ...	112	74	56	38

## (5) Tea.

(In Million lbs.)

COUNTRY	Average estimated production during the triennium ending 1932	Average net exports during the triennium ending 1929	Net exports during 1929-30 (ending June 30)	Net exports during 1930-31 (ending June 30)	Net exports during 1931-32 July 1 to end February
Ceylon ...	243	224	251	247	145
India ...	409	357	370	347	304
Java and Madura ...	147	134	155	159	93 (upto January)
Japan ...	89	(Importing)	25	24	17 (upto January)

## INDUSTRIAL SECTION I :

# THE INDUSTRIAL PROBLEM

### CONDITIONS OF PROGRESS.

#### Problem not so serious.

##### *Vision of a Creditor Nation.*

In a speech at a farewell function Sir Basil Blackett endeavoured to paint the India of a not very distant future as a country which, far from being the debtor which she is to-day, would actually be in the van of the creditor nations of the world. A sudden transformation from the position of the debtor to creditor nation is by no means unknown to the world's economic history. Leaving aside the less notable instances, there is the United States of America which quickly left behind the debtor phase of her economic evolution and has almost within a decade come to hold the whole world in fee. If the economic parallelism between the United States of America a century ago and India to-day is borne in mind, one can understand that the picture that Sir Basil drew was not the creature of a vivid imagination but the considered prophecy of one who could see into the economic tendencies of the future. While it is pleasing to think of India occupying a position in world economy comparable only to that of the United States before the onset of the present trade depression, it is discouraging and disquieting to contemplate the handicaps under which India will have to run the race of economic competition in the modern world. For there is no phase of our national economy to-day which is far removed from the primitive stage. Agriculture admittedly, the foremost industry, is by far the most backward. The staple industries deserve to be called as such in relation only to the other industries and not to the place they occupy in the economic life of the whole country. An illiterate people, familiar only with the most primitive standards of living, and slaves to the age-old habits of hoarding, a middle class who are strangers to the conception of life which makes for an arduous economic life, a system of banking which is by no means an unquestionable success even in the comparatively simple business of commercial banking, technical knowledge or training more or less completely absent, a labour force still inefficient even in unskilled labour—with conditions like these, the position of a creditor nation is a dream, the sooner forgotten, the better. A little contemplation of the questions connected with economic developments will show that conditions are not such that improvements can be left as a mere question of time.

##### *Cleavage of Opinion.*

The problems presented by such conditions are so varied and so intricate that there have naturally been serious misconceptions at every stage in regard to their real nature. It is believed on the one hand, that no amount of conscious effort would suffice to overcome the handicaps which are the result of centuries of national life utterly alien to the role which it is now desired India should play. It is therefore, contended that such changes as are desired must be a matter of mere evolution in which neither the State nor enthusiastic private bodies can do any-

thing considerable. This body of opinion would discourage any public policy aiming at the provision of the conditions essential for rapid industrial development. On the other hand, there has for a long time been a set of ardent public men who have urged that, precisely because the problems are varied and intricate, it is unwise to wait for time to work its tardy transformation, and enlightened public policy must attack at various points the vicious circles within which our economic future is imprisoned. The best point in their argument is that if such an effort is not taken, India would economically be doomed for ever. It may be said that till to-day this sharp cleavage of opinion has been on more or less national lines. The former has been the standpoint of the foreign government and its supporters amongst foreign business classes in the country. The latter view has been preached by the leaders of nationalistic politics reinforced now and again, by Indian businessmen who have felt the weight of the undue competition of foreigners here and abroad.

##### *Face Facts.*

This cleavage, though for obvious reasons, it is on racial lines, would not, however, blind us to the intrinsic difficulty of the problems with which we are faced. While an attitude of fatalism to the industrial and economic progress of India stands rightly self-condemned, it would not, on the other hand, help matters if the difficulties in our way are either overlooked or underrated. The essential conditions of industrial progress, as they may be deduced from the state of the modern industrial nations when they started on a similar career, are: a keenness of outlook and understanding on the part of the people enabling them to fight the battle of economic life with vim and zest, and to adapt themselves to the changes which an ever-changing world renders necessary; a habit of investment amongst classes who are prosperous and thrifty enough to be able to put by something out of their earnings; a class of industrial enterpreneurs, big banks and financial houses, technicians of various kinds, a large population of skilled workers and a nation politically competent to keep the mental and moral progress of the country equal to the requirements of economic progress. In other words, a very ordered national life in the fullest sense of the term is essential if the people are to distinguish themselves in the economic life. There is no use trying to think of national industry as a water-tight compartment separate from, and unconnected with, the other departments of national life. If this is realised, then it will be appreciated that neither state action nor a policy of pure *laissez faire* would by itself be suited to the realisation of the purpose we have in mind. The view taken in this article is that the factors which are essential for industrial development are not acquired all together, as if they are the raw materials required for a factory production. They are qualities essentially inter-dependent and mutually helpful in their growth; and all that is required is that we should make sure from time to time that we are on the right track.

*Barring Socialism,*

It is not the purpose of this article to suggest any specific measures for the realisation of our ends. All that is attempted is an examination of the facts involved and a clarification of the ideas now prevailing in regard to what should be done to render possible our industrial and economic progress. It must, however, be made clear that this examination does not take into consideration the possibilities, or, if possible, the prospects, of a scheme of vast economic development such as the Five Year Plan in Russia. More things are possible in a healthy socialist state than this capitalistic world can dream of. But, socialism is not practical politics; and the enquiry that follows is only thinking of a second best alternative.

*Fever of Enterprise.*

As has been indicated in the first paragraph, the foremost condition of economic progress and industrial development is an avidity on the part of the people of all classes for material progress. By this is meant not simply a change from an attitude of indifference to material advancement—partly philosophical, and partly arising from mental and physical inertia—which characterises the average Indian, but the fever of activity with which a whole nation is seized on the eve of a prosperous period in its fortunes. Such a fever of activity is noticeable in England of the 17th and 18th centuries, in Germany of the middle of the last century and in Japan in the closing years of the last and the opening decades of the present century. Such a feeling is obviously not got to order. It is possible that it is deeply woven into the destiny of nations and the course of affairs on this planet. Even from this standpoint, an observer of the cyclic course of national fortunes will find it possible to command the fullest faith in the destiny that awaits this country and in the possibility, nay, certainty, of the peoples of India showing a similar sentiment.

*Pressure of Savings on Investment.*

Whether this proves to be true or not, it admits of, and calls for, no deliberate action on the part of anybody. The other conditions are, as has been mentioned already, impossible to set out in any definite order. They are inter-dependent and mutually helpful in their growth. Bearing this in mind we may proceed to offer a few remarks on the conditions of industrial development in the future. The fact which is most often overlooked in India is that industrial development is almost always the result of the pressure of surplus savings seeking remunerative investment. No country has been able to achieve much merely because of the rise of a few gifted captains of industry who are able to infuse such confidence in people as to induce them to save more and place such savings at their disposal for investment in new enterprise. It follows therefore that when savings are barely equal to the volume of riskless investment that is offered in a country, they will not choose the channels of new enterprise in preference to the fields of assured return. It is only when the total volume of savings in a country exceeds the new loans offered by Government, that they are forced into new channels. In this connection, it is interesting to recall that Mr. J. M. Keynes has calculated in one of his works that the present national wealth of England may be traced directly to the conditions prevalent in the opening years of the 17th century. There was according to him a certain period in which any man who cared to make money could scarcely help doing so. His theory of economic advancement during a period of profit inflation is only a variation of the thesis that is now being offered, namely, that advanced industrial development does not result except from the pressure of surplus savings.

*Our Own Experience.*

In India, too, our experience of the last two decades tends to strengthen our suggestion. The War and post-War years were a period in which the Indian commercial classes made large sums of money; and the boom of 1919-1921 followed them both chronologically as well logically. Though an analysis of the working of the boom companies may reveal numerous points of weakness in the management and other matters pertaining to the conduct of industrial enterprise, it would still be substantially true to suggest that the wholesale failures of these boom companies was due more to the profit deflation caused by Government's policy of monetary deflation than to any other single factor. In other words, enterprise, expanded throughout a period in which savings seeking investment were at high pressure, and contracted to a greater extent later naturally came to grief and tended to cause a heavy shrinkage in the volume of such savings.

*Conditions of Increased Savings.*

The foregoing paragraph suggests that the primary condition of industrial development raises the higher question of the economic progress of the country as a whole. This is a far graver problem; and its solution must come mainly from a careful husbanding of the national resources which only a national government will attempt or can achieve. To go into greater details into this question would extend illimitably the scope of this article. Suffice it here that, if the drain of resources caused directly and indirectly by the political subjection of this country to a foreign nation were stopped, and if the progress of the industries that are already in being, is achieved even to the limited extent that is indicated by recent experiences and present conditions, there will be in the country a sufficient increase of all-round economic wellbeing. A policy of monetary inflation may also facilitate the growth of savings in the higher classes; and even if savings do not come down with high pressure into the channels of industrial development, they will be sufficient to give the start on which the subsequent development of this article will be found to lay heavy emphasis.

*Growth of Investment Habit.*

It must, however, be conceded that savings do not necessarily or inevitably lead to the establishment of new enterprise. Not to speak of the lag that want of other conditions may cause, in India there has always been the danger that any surplus of income over expenditure would automatically go into sterile hoards. It may be readily stated that investment especially in a country like India is a habit which takes time to grow. But it is true, at the same time, that ideas now prevalent in regard to the state of the investment habit in India are not the result of any critical examination but a mere survival of views that had been propounded decades ago. Few among those who assert that the investment habit is yet to grow in India have stopped to think of the immense amount of new capital that joint-stock companies during the boom period were able to mobilise for investment in their own schemes. Nor do they consider that the downward curve of new capital issues since then, is due as much to the lower savings as to the waning faith of the investing public in the class of industrialists we have at present. There is another point which has to be borne in mind in this connection and that is, the vast increase that was effected in the borrowings of the Government during recent years. Careful calculations will show that the amount of new capital available in the country during the last few years was barely equivalent to the amount of new loans issued by the Government. In this circumstance, the absence of new joint stock ventures should not be deemed as supporting the contention that the

investment habit in India is still in an early stage and that such growth as had taken place during the boom period has received a very serious setback.

#### *Ornaments and Hoards.*

There is, however, a certain love of ornaments which, combined with the traditional inclination to hoard, forms a formidable obstacle to the growth of the investment habit in India. But it is essential to recognise that ornaments are part of the economic needs of the average Indian. It must also be recognised that the outlay of the average Indian on jewellery is no more than what women in the West spend on the trinkets of fashion. While the latter is a perishable waste the former is a lasting asset. Be that as it may, we may rely upon it that savings over and above the ornaments considered by an individual to be in keeping with the status of his family will come into the general pool of new capital seeking investment. As regards the outlay of ornaments we would have to await a change in popular taste which is bound to come with increasing education, especially of the womenfolk. There is, thus, really no *problem* as is suggested by the frequent use of the term hoarding habit. The Indian peasants have proved themselves capable of overcoming their bias in favour of the precious metals if circumstances require them to do so. A year ago a proposition like this might have been hard to substantiate; but since the middle of last year there has been such an inflow of gold from the upcountry areas into the cities, first for sale to the currency authorities and then later for purposes of export to foreign countries, that there can be no reasonable doubt that the Indian masses are quite capable of assuming a proper outlook in regard to matters affecting their domestic economy.

#### *Is the last boom a Set-back?*

The above analysis must not obscure one point which is very germane to our discussion. The experiences of investors after the last boom are by no means calculated to strengthen or preserve the habit of investment in the country. Reference has already been made to what is regarded as the prime cause of the fate which overtook boom companies. But, it is idle to expect the ordinary investor to see matters in such a proportion. It will weigh not a little with him that the hands of the management of companies which came to an unfortunate end are by no means clean. There have been instances in which the originators and the managers of joint stock companies have shown little regard for the interest of the men who entrusted them with their monies. Though, it is unwise to exaggerate the effect of this experience on the habit of investment as such, it is altogether foolish to underrate the cumulative effect of many such instances of mismanagement on the attitude of Savers to new enterprise.

#### *Managing Agency.*

This raises the old problem of securing integrity in industrial management. In the closing years of the last century when British capital flowed in a heady volume into India, the managing agency system was regarded as affording the best assurance of efficiency and integrity to the investor who was ordinarily thousands of miles away from the field of operations. In those times the managing agents were a body of men who were acquainted with this country, who had considerable experience of men and things here, who had undoubted business experience and were capable of making up their deficiencies of technical learning in the most economic manner. Given such men, the investor could have no hesitation in entrusting them with his savings. And the managing agents, too, could avail themselves of the full confidence of the investor to use the funds to the utmost productivity. Industrial enterprise in India has

naturally taken the cue from the customs of the past. The managing agency system which arose to satisfy the peculiar requirements of an investor thousands of miles away was taken over even by those who could keep a constant watch over the doings of those with whom he has entrusted his monies. It is easy to explain how this situation arose. The managing agencies of those days who formed their companies out of British capital were also able to command the confidence of investors on this side of the country. The companies with pure indigenous capital were also formed on the same model and managing agencies gradually became a rage.

#### *A Simple Principle of Governance.*

It is natural that the system should yield different results in different conditions. When it is not justified by the conditions prevalent, it naturally gives rise to abuses. And the more unsuited it is to the conditions the more are the abuses. This is hardly the place in which a full consideration of the pros and cons of the system of managing agencies is either possible or appropriate. But it is mere commonsense to apply in this case the principles of Government which political science teaches us. It is one thing to give every assurance of strength and support to the executive heads of a nation, it is quite another to put in the Cabinet men who can with their resources resist every attempt to dislodge them from power. No democrat would ever allow a commander-in-chief to become the head of a republic. Apply this principle to the problem of company management and the folly of having a strong and practically irremovable executive will be realised.

#### *Problem of Integrity in Management.*

To correct the dangers of the managing agency system would still leave intact the problem of securing integrity in company management. In so far as this problem is common to all countries of the world, it is more or less insoluble. It is only in respect of what are considered to be the peculiar dangers in India that any useful remarks can be offered. We need not labour about the point that there are more numerous and more serious instances of moral turpitude in business management in India than in other parts of the world. But there is no evidence to suggest that the businessman in this country is by nature more depraved than his compeers elsewhere. For the moral code of the ordinary businessman is not a bundle of preconceived notions of ethics. It is framed in the course of his business experience; principles and rules of action are adjusted in the light of such experience; and the decision to stick to them is in the case of the individual businessman a slow growth and in the case of agents acting on behalf of business corporations a matter of tradition. If a businessman or a business corporation is not given the chance to acquire the experience suggesting a definite body of moral rules, then it is unfair and useless to blame that individual or that corporation for failure to comply with the requisite standards. It is rarely that men take to business with a definite intent to make an illicit gain. Nor are there many going into the business line with highly developed notions of ethical conduct. It is essential, therefore, that conditions in the business world must be such as not to subject individual businessmen to a fiercer ideal than what they can stand. No one who is acquainted with business in India would ever suggest that such conditions have been provided. When a business weakens and shows signs of embarrassment, it is not easy to get the financial aid necessary for putting the business on a proper basis and releasing the energies of the management from the worries of a chaotic position. Matters go inevitably from bad to worse; the mentality of the man in charge gets dis-

torted and the danger of questionable dealings and deliberate dishonesty becomes more formidable than ever.

#### *Industrial Banks—a Preventive.*

The provision of credit facilities for industrial undertakings will be found to be a preventive in many of the cases of underhand business dealings, and as industries are technical propositions, industrial banking is on a different footing from other branches of modern banking. That India is woefully lacking in industrial banks and that it is high time that such institutions be founded and that of all the various types of industrial banks known to us this or that or the other is more suitable to us, these are questions which do not pertain to the subject on hand. But what is essential is that if industrial development is to proceed on the right lines, if businessmen are not to be forced into dishonest ways by lack of facilities and to retard the growth of confidence and habit of investment, then it is essential that there must be a class of financial institutions who will work in close co-operation with industrial units. Such financial institutions cannot be successful if they show to the industries the same attitude of aloofness which commercial banks show to their clientele. A far more detailed knowledge of the business in question would be essential for industrial banks. They have first to ensure the safety of such advances as they may have made. They have to make a constant study of the conditions and tendencies of industrial enterprise in the country so as to have a clear idea of the requirements and the possibilities of each of them. And more than all, they have to act as a liaison between those who provide finance and those who are capable of creative work. A certain degree of conflict has always been said to exist between the two. But competent industrial banks will be able by their own knowledge of the business on both sides to ensure fair play between the financier and the enterpreneur, offset the imprudent dash of the one by the cruel caution of the other and thereby bring about circumspect action, and full exploration of possibilities at all times. In this co-operation between finance and management there should be a greater assurance of integrity than is available in the present day.

#### *Equipment for Industrialisation.*

The consideration of the personnel and management leads us to the consideration of equipment of material and knowledge necessary for industrial development. And in this regard, too, we feel it necessary to offer a corrective to the traditional idea which with time has become a serious misconception. There was a time when it was thought that Indian youths went in as a rule for purely academic training and for confined themselves to what are known as the learned professions, and that therefore attempts should be made to turn the energies and attentions of a few at least to the attainment of technical training. And for this purpose, the establishment of technological institutions in India and the provision of scholarship and other facilities for young men to go abroad and qualify themselves as industrial experts found much favour in those days. The result was that most of such young men were unable to find scope for their genius and talent. In some industries, a sort of glut has prevailed in the markets; and it may be said that those who insisted on such training being given to young men have really put the cart before the horse. Given the conditions in which a healthy industrial development can take place, it should not be difficult for each industry to provide for the supply of technical ability. Both in regard to qualified engineers and technicians of the higher order and also in regard to skilled labour, a prosperous industry would always find it possible to undertake the measures necessary to ensure the supply of the requisite type in sufficient measure. The labour force about which

there is the greatest pessimism will undoubtedly respond to the general improvement in the economic conditions of the country and the special training which their own employers would arrange to be imparted to them.

#### *Need for Balanced Economy.*

Till now we have been examining the conditions which will give India a sound start in her career as an industrial nation. But there is another condition which, though not of less importance at the start, is in the later stages the fundamental basis of industrial progress. We have referred earlier to a well-ordered national life as the condition of a healthy development of national economy. Here we must stress the need for a proper balance of economic forces for the purpose we have in view. It may seem strange that this is deemed worthy of special mention for the orthodox economics that we all have learned teaches us to regard it as the inevitable result of individualist organisation. The balance is supposed to be brought into being and preserved in a mysterious manner by the interplay of forces set into motion by the exertions of profit-seeking individuals. It is somewhat too late in the day to argue in detail against that notion. Even countries which have gone forward on the engine of individualist economy have come to realise that for the safety of national economic life, special care must be taken that the economic equilibrium is not upset by ill-balanced forces. Such a view has a particular relevance and force in the conditions that obtain in India to-day. For a country has to be thought of not only as consisting of productive individuals, but also as a market. Modern science has placed at the disposal of capitalists and organisers of industry the means of effecting a large expansion of goods. But for expansion of demand they are more or less powerless except in regard to the wages and other emoluments given to their own employees. It follows, therefore, that State policy which must always aim at a certain degree of integration of individual enterprise, must make sure that the rise in the standard of living is commensurate with the increase in the productive capacity of our industries. Take for instance, the cotton mill industry of India. Up to the point at which the products of indigenous manufacture displace completely the present import trade, they are assured of their market. The foreign markets will afford less scope to the extent that the pressure of the competition of foreign producers is diverted from this country to the consumers of cotton piecegoods abroad. If a displacement of foreign imports is not to mark the limit of the expansion of our cotton mill industry, it is necessary that the masses of the country should be put in possession of more purchasing power than they now can claim. In this connection it is interesting to recall a pamphlet issued by the Bengal Chamber of Commerce early in 1929, in which they urged that all the available capital in India should aim at the improvement of agriculture and all other matters bearing on the prosperity of the masses in the country. For they contended that without such a broadening of the basis of consumption in this country, any attempt to build a vast industrial super-structure would be like tending the foliage without caring for the roots. While the obvious implications of this argument may be questioned, its significance to the enquiry now on hand can hardly be underrated. Once the start in industrial life is made, India is bound to feel the necessity of special measures calculated to raise the standard of living and the purchasing power of the masses. It may be taken for granted that the improvement in agriculture and agricultural methods will solve this problem to an appreciable extent. When agricultural banks and co-operative societies enable the cultivators to produce more and retain a far bigger portion of their

*(Continued on page 218.)*



## INDUSTRIAL SECTION II :

# THE INDIAN TARIFF BOARD

### HISTORICAL SKETCH.

The Indian Tariff Board is the natural result of the decision of the Government of India to change the fiscal policy and adopt a policy of Protection to be applied with discrimination. This decision was based on the findings of the Fiscal Commission that the industrial development of India had not been commensurate with the size of the country, its population and its natural resources and that the fullest development must be aimed at by a policy of judicious protection. The Fiscal Commission also laid down the guiding principles of such a policy and recommended that in its application the Government of India should be advised by a Tariff Board consisting of not less than three members conducting their enquiries under conditions of the utmost publicity. The Legislative Assembly accepted these recommendations in a resolution of February 16, 1923. And the Tariff Board was appointed in March, 1923, initially for one year as a measure of cautious experiment, and later on the basis of a biennial renewal. The Tariff Board has continued to function without a break since its inception and it is an indication of prevailing conditions as well as future possibilities that there has at no stage been any lack of work as has been the case with, for instance, the Railway Rates Advisory Committee. Though the Dissenting minute of a minority of the Fiscal Commission recommended that two of the three members of the Board should be elected by the non-official members of the Legislature and there should also be two assessors chosen from the commercial and mercantile community, the constitution of the Tariff Board which consists of three members one of whom is a Government official has been found by experience to be quite suited to the purpose. There has so far been no demand for any change in the constitution of the Board, which in its present form may be regarded as part of our permanent machinery of government.

The personnel of the Board, the matters referred to it, the decisions thereon and the action finally taken by the Government of India and the Legislative Assembly will be found in a tabular statement attached. It must be remembered that the Tariff Board is not concerned exclusively with the imposition of protective duties, nor even with mere changes in the customs tariff. It is the Board's duty to advise the Government in regard to all matters pertaining to the policy of discriminating Protection which involves besides the imposition of new duties or enhancement of existing ones, the removal or reduction of import duties on raw materials entering into any indigenous manufacture, the grant of bounties to industries in either a direct or an indirect manner.

In fact, the Fiscal Commission had laid down that the duties of the Tariff Board would be "*inter alia* to investigate the claims of particular industries to protection, to watch the operation of the tariff, and generally to advise government and the Legislature in carrying out the policy" of discriminating protection. But so far there has been no case of the Tariff Board acting on its own initiative and tendering advice to the Government on matters which have not been specifically referred to it. The procedure in the case of Tariff Board enquiries is very simple.

The industry concerned applies to the Government making a *prima facie* case for protection; and if and when the Government think it fit the application is referred to the Tariff Board for enquiry and report. As recommended by the Fiscal Commission, conditions of the utmost publicity are ensured though, of course, proceedings *in camera* are resorted to, when the evidence tendered is of such a nature that its publication will involve the divulging of trade secrets. The interests concerned and public bodies like the various commercial associations submit their memoranda supplemented, where necessary, by oral evidence. The report has to be submitted to the Government; and on its acceptance by Government, the desired changes are effected by the normal processes of legislation. The Tariff Board is of necessity an advisory body, the final decision resting with the Government and the Legislature. It is difficult to think of any improvements in the present procedure, though, it must be admitted that the unrepresentative character of the Government involves the danger of reasonable applications being delayed by Government both before their reference to the Board and after submission of the report. But this danger cannot be met by giving each industry the right of direct access to the Tariff Board. But an obligation on the part of the Government to embody the recommendations of the Board in a Bill and bring the same before the Legislature may be deemed to be on a different footing.

The first task of the Tariff Board in reference to any application is, as required by the Fiscal Commission, to assure itself that the industry satisfies the fundamental conditions necessary for a grant of Protection, namely, (1) that the industry possesses natural advantages (2) that without the help of protection it is not likely to develop at all or not so rapidly as is desirable and (3) that it will eventually be able to face world competition without protection.

The rationale of the above conditions is obvious. Taken together they mean that, except in the case of industries which are essential for national defence and are therefore outside the pale of ordinary economic considerations, protection should be recommended only if the Board is sure it is not an avoidable or permanent burden on the consumer. This is in consonance with the principles of Free Trade which may be regarded as the permanent economic rule with protection as a mere temporary exception. Every report of the Tariff Board may be deemed to fall into two parts one showing whether the fundamental conditions are satisfied and the other detailing the specific scheme of Protection, and the reasons why the alternative methods are ruled out.

It is appropriate to attempt a short analysis of the work of the Tariff Board during the last nine years. At the moment of writing, two applications for protection are being examined by the Board, one referring to the cotton mill industry and the other to the glass industry. The former was referred to the Board in April, 1932, and in regard to the latter, the results, though perhaps formulated, have not yet been published. Leaving these two, the Board have so far undertaken and accomplished more than 35 enquiries. Of these, in only one or two cases has its

recommendations failed to meet with the acceptance of the Government. Wire and wire nails, which was one such, subsequently gained the protection it sought. In the other instance of the heavy chemicals industry, the publication of the report was delayed for two years after its submission to Government, after which it was granted tentatively a somewhat grudging measure of protection. In eight instances, the applications were turned down by the Tariff Board; and the Government acquiesced in its decision. In the case of magnesium chloride, coal and printers' ink, it was held that the case for protection was not established, though the latter gained a slight increase in the import duty. Cement failed to procure State help as it was found that what the industry suffered from was not the competition of foreign producers, but a state of overproduction at home, a position which it was for the industry to adjust as soon and as well as possible. The most outstanding instance in this category of rejected applications is that of oil, in which not only were the producing interests unable to establish a case for protection but a certain section of them was found to be unwilling to place the full facts before the Board.

There were four cases in which import duties on raw materials needed for Indian industries were either reduced or removed. In all the other cases, the applications have resulted in the grant of a substantial measure of protection. But the chief beneficiaries of the activities of the Tariff Board have been the cotton mill industry and the iron and steel industry. Latterly, matches, salt and sugar have come in for a substantial help of a protectionist kind. But nearly ten enquiries have been conducted by the Tariff Board in regard to articles which are closely connected with the iron and steel industry. The cotton industry has been referred to it twice, not including the occasion in which the condition and needs of the cotton industry were the subject of an *ad hoc* enquiry by Mr. Hardy, the Collector of Customs. While the help rendered to the cotton industry has been in the shape of an increase in the duty on imported yarn and piecegoods, the iron and steel industry has had all manner of help ranging from a change in the tariff to direct bounties doled out by the State. It would be unnecessary to detail the various steps taken to strengthen the iron and steel industry, as they are given in the table appended to this article.

Anyone with a close acquaintance with the reports of the Tariff Board can venture to say that it has all along worked within the framework of the stipulations made by the Fiscal Commission. Though the actions of the Government before and after reference to the Tariff Board have come in for a good deal of public criticism, the Board by itself has enjoyed a steady popularity. Neither its methods of enquiry nor its ultimate decisions have aroused any dissatisfaction except among those who represent the foreign interests who are inevitably affected by the protectionist measures suggested by the Board. And it must be emphasised that at no time did it cater to the uncritical bias of the populace in favour of protection. The instances in which applications were turned down are not few. Nor is the list of industries to which protection was recommended to be granted small. The fact that divergences of opinion between the Government and the Board are negligibly few—and this, in spite of the fact that in many instances its decisions were adverse to British industrial interests—is a testimony to the essential soundness of the Board's work. The personnel of the Tariff Board has throughout enjoyed a high reputation for capacity, earnestness, unswerving rectitude and loyalty to the high purpose for which the Board was instituted. To appraise the practical effects of a policy of discriminating protection is never an easy task; and more so today after three years of unprecedented economic depression. The acid test of the Board's work is whether the industries which have enjoyed the protection for some time have outgrown the need for such extraneous aid. That is, no doubt, the proper culmination of protective measures; and it must be confessed that so far there has been no instance of a protected industry being able to hold its own against foreign competition. On the other hand, there has been more than one instance of one protective measure having to be supplemented by another. It is not difficult to realise that the success of protection as indicated in the foregoing depends upon many other conditions which take time to be satisfied. So far as the Tariff Board is concerned, its work justifies the confident hope that when the economic development of the country is taken on hand by a representative government the Cabinet will find in the Board an invaluable lever of national uplift.

(Continued from page 216).

profits in their own hands, the resultant increase in mass consumption will no doubt take Indian industries a long way ahead. But, in the subsequent stages capitalists in India must in their own self-interest recognise the value of a liberal treatment of labour of all kinds. The industrial nations of Europe had progressed mainly on the strength of colonies and dependencies. In other words, it was possible for them to keep the wages of labour low and, at the same time, to secure the necessary broadening of consumption through foreign lands. It is unthinkable that India gets an opportunity of repeating the hated role of an Imperialist nation; nor can India hope to enter into a sphere of competition with foreign producers in free foreign markets. All things considered, the ideal of a roughly self-sufficient India, with a proper economic balance within the country and a fair equilibrium of trading and financial relations with the rest of the world is most suited to our own requirements and the state

of the world as we can foresee it in the future. Such a position would not be attained if economic progress were to be altogether lopsided, with savings borne of extreme inequality of income seeking new sources of investment on the one side, and the masses steeped in comparative poverty unable to consume the goods which the equipment of the nation is fully fitted to produce.

It will, we trust, be seen that the object of this article is only to correct prevalent misconceptions especially those which engender an unreasoning and undue pessimism in regard to the industrial future of this country. Much no doubt remains to be done; but much will be achieved once the start is made and there is no crushing handicap that will doom us from the start to failure in the race. Faith in oneself, faith in the nation, and confidence that the classes and masses will be imbued with such faith, these will achieve more than any cut-and-dry scheme of industrial improvement.

Tabular Statement showing the Working of the Tariff Board.

Serial No.	Date of reference	Personnel	Subject of Enquiry	Recommendations by Tariff Board	Action taken by Government
1	2	3	4	5	6
1.	July 10, 1923.	<i>President :</i> G. Rainy. <i>Members :</i> V. G. Kale, P. P. Ginwala.	Steel Industry.	Imposition of about 33½% import duty on iron & steel entering into British India.	Act providing for fostering and developing steel industry passed at a special session of the Assembly on 13th June, 1924. By this Act specific duties were imposed on various kinds of steel at varying rates; and bounties were also granted on the manufacture of certain kinds of steel.
2.	Oct. 8, 1924.	<i>President :</i> G. Rainy. <i>Members :</i> V. G. Kale, P. P. Ginwala.	Increase of Duties on Steel.	Held two enquiries in 1924 and 1925. Board recommended increase of duties in order that protection already granted may not be ineffective.	Adoption of a Resolution on 26th January, 1925, by the Assembly granting a bounty on steel manufacture in India between 1st October, 1924 and 30th September, 1925, at the rate of Rs. 20 a ton on 70% of the total weight of the ingots manufactured in each month, the total amount of the bounty payable during the year not to exceed Rs. 50 lakhs. In September, 1925, the Assembly granted bounties to the Steel Industry up to 31st March, 1927, at the rate of Rs. 12 per ton subject to a maximum of Rs. 60 lakhs up to 18 months ended 31st March, 1927.
3.	1925.	Do.	Do.	Do.	
4.	April 8, 1926.	<i>President :</i> P. P. Ginwala. <i>Members :</i> A. E. Mathias, J. Matthai.	Continuance of Protection to Steel Industry.	Board found that the Industry deserved further protection, made detailed report re: Rolled and Fabricated Steel Tinsplate and recommended protection for a period of 7 years. The Board suggested the appointment of a Statutory enquiry in 1933-34 to determine the extent of protection to be given.	The Steel Industry (Protection) Act, 1927, was passed extending protection to the Industry till 1933-34 and giving power to the Governor-General to increase the duties if protection is rendered ineffective by any change in prices of imported steel. Differential duties introduced on British and non-British Steel.
5.	April 8, 1926.	<i>President :</i> A. E. Mathias. <i>Member :</i> J. Matthai.	Manufacture of wagons, wire and wire nails, etc.	Tariff Board recommended protective duties, bounties, etc., on various kinds of Steel. This was the 2nd Report of the Tariff Board submitted after the 1927 Steel Protection Act was passed.	The Steel Industry (Protection) Act, 1928, was passed in the Assembly for giving effect to the main recommendations of the Board levying a duty of Rs. 2 per cwt. on iron and steel bolts, discontinuing protective duty on wire and wire nails, etc.
6.	1924.	<i>President :</i> G. Rainy. <i>Members :</i> P. P. Ginwala, V. G. Kale.	Magnesium Chloride at Kharaghoda in the Bombay Presidency.	The Board decided that the claim for protection was not justified.	The Government of India accepted Board's opinion and issued a Resolution in May, 1925, in accordance therewith.
7.	July 10, 1928.	<i>President :</i> G. Rainy. <i>Members :</i> P. P. Ginwala, V. G. Kale.	Removal of import duty on Sulphur.	The Tariff Board recommended removal of import duty on Sulphur, which is a raw material for Chemical and other industries.	Duty removed with effect from 9th June, 1924.
8.	April, 1924.	<i>President :</i> G. Rainy. <i>Members :</i> P. P. Ginwala, V. G. Kale.	Printing Ink. (Hooghly Ink Co., the only firm manufacturing printing ink).	Case for protection considered not established. Increase of Customs duty on imported printing ink from 2½% to 5% ad valorem.	
9.	1925.	<i>President :</i> G. Rainy. <i>Members :</i> P. P. Ginwala, V. G. Kale.	Cement Industry.	Tariff Board found that this industry was suffering from over-production and that the low price of cement was due to the competition amongst indigenous manufacturers. Accordingly no protectionist measure was recommended.	Government accepted this finding of the Tariff Board.

Serial No.	Date of reference	Personnel	Subject of Enquiry	Recommendations by Tariff Board	Action taken by Government
1	2	3	4	5	6
10.	1926.	<i>President:</i> G. Rainy. <i>Members:</i> P. P. Ginwala, V. G. Kale.	Paper and Paper pulp industry.	Levy of a specific duty of 1 per lb., on all writing paper and on all printing paper other than news-print.	Recommendation was duly embodied in an Act of the Legislature.
11.	June 10, 1926.	<i>President:</i> F. Noyce. <i>Members:</i> Rai Bahadur Harikissen Kaul, N. S. Subba Rao.	Cotton Textile Industry.	Majority of the Board proposed that the import duty on cotton piece-goods should be increased from 11% to 15% for 3 years, and a bounty should be given on the spinning of finer counts. The President was opposed to the bounty and recommended that an additional duty of 4% should be imposed on cotton manufactures including yarn imported from Japan for a period of 3 years. Board proposed remission of duties on Cotton textile machinery.	On 7th June, 1926, Government issued a communique stating that they could not accept the recommendation of the majority of the Board for grant of a bounty to the spinning of higher counts of yarn. Government also stated that in their opinion no case had been established for a general increase in the duty as a measure of protection. Government remitted import duty on cotton textile machinery and mill stores. At a later date Government of India modified their decision and a 5% import duty on cotton yarn was imposed with a specific minimum of -/1/6 pies per lb. This increase affected Japanese imports more than British imports.
12.	Sept. 30, 1925.	<i>President:</i> G. Rainy. <i>Members:</i> J. Matthai, P. P. Ginwalla (Minority).	Coal Industry.	Majority and Minority Reports. Board unanimously found that the case for a protective duty on all imported coal was not established.	Government issued a Resolution on 17th June, 1926, accepting this unanimous finding of the Tariff Board. Government also accepted the finding of the majority of the Board that in the circumstances imposition of an additional duty on coal imported from South Africa under Sec. 8A of the Indian Tariff Act, 1894, is not advisable.
18.	Mar. 28, 1925.		Ship Building Industry.	The Board found that Ship Building did not require protection except in so far as it was affected by the protective duties on Iron & Steel.	Government accepted this finding of the Tariff Board. Government postponed legislation in regard to import duty on ships and other vessels for inland and harbour navigation till the results of the Statutory enquiry into iron and steel industry were known. In the meanwhile Government gave exemption to iron and steel in ships and other vessels imported from inland and harbour navigation from so much of the protective duties as was in excess of 10% <i>ad valorem</i> or Rs. 35 per ton whichever was higher. By the Steel Industry (Protection) Act, 1927, this compensation was reduced to Rs. 23 per ton.
14.		<i>President:</i> G. Rainy. <i>Members:</i> V. G. Kale, P. P. Ginwalla.	Wire and Wire Nail Industry.	Tariff Board had no recommendation to make for the grant of supplementary protection.	Government accepted this finding. Government also accepted the recommendation of the Tariff Board that no higher duty should be imposed on wire nails than on wire.
15.	1925.	<i>President:</i> G. Rainy. <i>Members:</i> P. P. Ginwalla, V. G. Kale.	Galvanised Industry.	The Board recommended removal of the duty on imported spelter in accordance with the general principle enunciated in para 180 of the Fiscal Commission Report that raw materials should be required for Indian industries. Board were unable to recommend imposition of protective duty on imported galvanized iron wire.	On 8rd July, 1926, Government issued a Resolution that the recommendation for removing import duty on spelter should be considered at the time of the next budget and in connection with further protection for Steel industry in 1927. Government accepted the finding of the board in regard to non-imposition of a protective duty on imported galvanized iron wire.

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1	2	3	4	5	6
16.	1926.	<i>President:</i> P. P. Ginwala <i>Members:</i> A. E. Mathias J. Matthai.	Match Industry.	Tariff Board recommended the continuance of the duty of Re. 1-8 per gross without limit to the period of duration, and that the duty should be made protective.	Government of India accepted the finding of the Board that the Match Industry fulfilled the condition laid down by the Fiscal Commission. Government agreed with the recommendation of the Tariff Board and imposed by the Match Industry (Protection) Act, 1928, a protection duty of Re. 1-8 per gross on imported matches without any time limit. Government also accepted the finding that in the circumstances no action was called for against the Swedish Match Co. on the ground of unfair competition. Government noted the Board's recommendation that, should developments indicate that the Company is acquiring undue control to the detriment of Indian Industry, they should take steps to safeguard the industry.
17.		<i>President:</i> P. P. Ginwala. <i>Members:</i> A. E. Mathias, J. Matthai.	Oil Industry.	Majority and Minority Reports. Both recommended that no protection is necessary as, the case for protection to the oil industry was not established. The Tariff Board also severely criticised the Oil Companies for withholding much relevant information from the Government.	Government of India agreed that no action needed be taken.
18.		<i>President:</i> P. P. Ginwala. <i>Member:</i> J. Matthai.	Tariff equality in respect of manufacture of electric wires and cables.	Board suggested that a duty of 5% be levied on rubber insulated electric wires and cables.	Government imposed 5% duty on rubber insulated electric wires and cables by the Indian Tariff (Amendment) Act, 1921, passed on 22nd March, 1929. Government found that there were practical difficulties in removing the duty on electrolyte copper rod known as block rod, suggested by the Tariff Board.
19.	1927.	<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Plywood and tea-chest industry.	The Tariff Board recommended that the manufacture of plywood and tea-chests should be protected: that protection should be given for 5 years and that protection required is -/7/9.6 pies per standard chest.	Government accepted the recommendations of the Board but decided to impose a duty of 30% on all forms of plywood.
20.	1927.	<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Camel hair, cotton and canvas ply belting.	The Tariff Board recommended that a 5% ad valorem duty should be imposed on cotton belting, 5% ad valorem duty on hair belting and 5% ad valorem duty on canvas ply belting and that the duty of black proofing should be removed.	Government issued a Resolution on 10th February, 1926, accepting the recommendations of the Tariff Board except of the removal of the duty on black proofing. Government also reduced the duty on camel hair yarn to 5% ( <i>Vide</i> Tariff Amendment Act passed in March, 1928), and therefore decided to give relief to the Indian Cable Co. not by removal of duty but by allowing them to import their requirements of such rods free of duty.
21.		<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Tariff equality in respect of the manufacture of printing type.	In their Report dated 21st Jan., 1928, Tariff Board recommended that a specific duty of -/1/- per doz. should be levied on printing type in place of the existing duty of 2½% ad valorem.	Recommendation of the Board were approved by the Government who made necessary alterations in the Tariff by a clause in the Indian Tariff (Amendment) Act, 1929, passed on 22nd March, 1929.
22.		<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Tariff equality in respect of the manufacture of Manila Rope.	Board recommended that the duty on Manila Rope be entirely removed.	On 8th June, 1929, Government accepted in principle the recommendation of the Board and proposed to give effect to it when financial circumstances permitted. In July, 1930, duty of 15% on a Tariff valuation of Rs. 30 per cwt. on raw hemp was in force.

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1	2	3	4	5	6
23.	Sept., 1929.	<i>President:</i> P. P. Ginwalla. <i>Members:</i> A. E. Mathias, J. Matthai.	Salt Industry.	Tariff Board recommended imposition of additional duty on imported salt, also proposals for establishment of a Marketing Board etc.	On 5th April, 1931, the Salt (Additional Import Duty) Act, 1931, received the assent of the Governor-General. Under the Act an additional duty of $\frac{1}{4}$ / $\frac{1}{6}$ per maund was imposed on Salt imported into any port in British India but produced outside India and the Act came into effect on 17th March, 1931. The Act was renewed in 1932. Adopted by Government.
24.	1927.	<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Charges in tariff entries relating to printing paper.	Tariff Board recommended some changes in the Tariff Schedule which regulates the duty payable on news print.	In their resolution, dated 5th September, 1929, the Government observed that the imposition of duties proposed by the Board would not lead to the development of industries but would rather tend to perpetuate its existing uneconomic organisation. Government also were of the opinion that before reaching any final decision some questions arising out of the Tariff Board's Report may be submitted to expert examination, subject to any new factors which may emerge in the course of the expert examination the scale of assistance proposed by the Board as accepted by the Government of India. Government imposed protective duties till 31st March, 1932, pending further consideration of the possibility of re-organisation of the industry on economical basis.
25.	July 16, 1928.	<i>President:</i> P. P. Ginwalla. <i>Members:</i> A. E. Mathias, J. Matthai.	Heavy Chemical Industry.	Board recommended that the conditions laid down by the Fiscal Commission are substantially fulfilled by the Chemical Industry and they recommended measures of protection to the industry.	Government accepted Board's finding and in January, 1931, the Assembly passed a resolution that the duties mentioned in Government's resolutions of 30th December, 1930, should be continued up to 31st March, 1930.
REMARKS—					
Publication of this Report was delayed for about 2 years, after it was submitted.					
26.	Sept. 30, 1930.	<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Additional protection to galvanized sheets.	Board recommended additional protection to the manufacture of galvanized sheets. Board recommended additional duty of Rs. 87/- per ton on imported galvanized sheet unfabricated.	Government accepted Board's finding and in January, 1931, the Assembly passed a resolution that the duties mentioned in Government's resolutions of 30th December, 1930, should be continued up to 31st March, 1930.
27.	1930.	<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai, F. I. Rahimtoola,	Sugar Industry.	The Tariff Board reported in 1931 that the Industry fulfilled the condition laid down in the Fiscal Commission and should be protected by the imposition of additional duties on sugar. Board recommended the imposition of a duty of Rs. $7\frac{1}{4}$ per cwt. for first seven years and Rs. $6\frac{1}{4}$ per cwt. for a further period of 8 years. The Board further recommended that the period of protection should be for 18 years.	An Act to provide for the fostering and development of the sugar industry in British India was passed in 1930 and received the assent of the Governor-General on 8th April, 1932. Under the Act protection was given to the industry for a period up to 31st March, 1946, by determining the extent of protection to be conferred up to 31st March, 1938 and by making provision for the determination of the extent of protection to be conferred for the remainder of the period in 1938. Power was given to the Governor-General to increase the duty imposed on sugar if the price at which sugar imported into India was such as would render inefficient the benefits intended to be conferred by this Act. A duty on sugar and sugarcandy was imposed at the rate of Rs. $7\frac{1}{4}$ per cwt. and a duty at the rate of 25% <i>ad valorem</i> was imposed on molasses.
28.	May 15, 1930.	<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Manufacture of certain railway materials made of Steel.	Board recommended imposition of a duty of Rs. $2\frac{1}{4}$ per cwt. on bolts and nuts, etc.	Government adopted the recommendations of the Board which were embodied in the Steel Industry (Protection) Act, 1931.
29.	Dec. 1, 1930.	<i>President:</i> A. E. Mathias. <i>Members:</i> J. Matthai.	Steel Rails.	The Tariff Board recommended additional payment to Tata Iron and Steel Co., Ltd., on certain kinds of steel.	Government accepted the recommendations of the Board so far as 90 lbs. rails were concerned and a resolution was passed in the Assembly for additional payment of Rs. 20 for each ton of rail supplied by Tata's over and above the price specified in the contract, viz., Rs. 110 per ton and additional payment at the rate of Rs. 10 for each ton of rails of 115 lbs. per yd. of scale over and above the price Rs. 120 per ton.

Serial No.	Date of Reference	Personnel	Subject of Enquiry	Recommendations by Tariff Board	Action taken by Government
1	2	3	4	5	6
30.	July, 1928.	<i>President:</i> P. P. Ginwalla. <i>Members:</i> A. E. Mathias, J. Matthai.	Magnesium Chloride Industry.	In their enquiry in 1924-25, the Tariff Board came to the conclusion that the claim to protection to this industry was not justified and the Government of India accepted the finding. The Board re-examined this application and came to the conclusion that the industry has substantially satisfied the condition of protection laid down by the Fiscal Commission and recommended that a protective duty of -/7/- per cwt. should be imposed on Magnesium Chloride, and that the period of protection should be fixed for 7 years.	Government accepted the finding of the Tariff Board.
31.			Methylated Spirit.	Tariff Board reported that they had no recommendation to make for the removal of tariff on methylated spirit.	Government accepted the findings of the Board.
32.	Mar. 8, 1931.	<i>President:</i> J. Matthai. <i>Members:</i> F. I. Rahimtoola, G. T. Boag.	Paper and Paper Pulp industry.	The duties imposed by the Bombay Paper Industry (Protection) Act, 1925, were due to expire in 1932. The Tariff Board held a further enquiry and recommended that further protection should be given and that the duty of Rs. 123/- per ton on paper should be imposed, and that the duty on imported pulp should be paid at Rs. 45 per ton on these duties to remain in force for a period of 7 years.	An Act was passed in March, 1932, to amend the law relating to the fostering and development of bamboo paper industry in British India. The date of protection to this industry was extended from 1932 to 1939 and a duty at the rate of Rs. 45 per ton was levied on wood paper.
33.		<i>President:</i> A. E. Mathias. <i>Member:</i> J. Matthai.	Gold and silver thread and allied industries.	Board reported that a case was made out for the protection of gold and silver and recommended that a duty should be imposed at 15% <i>ad valorem</i> .	Government accepted the recommendation of the Tariff Board and Gold Thread Industry (Protection) Act, 1931, came into force in 1931, under which 4% <i>ad valorem</i> duty on silver and 50% <i>ad valorem</i> on gold plate, gold leaf and gold manufactures.
34.		<i>President:</i> P. P. Ginwala. <i>Members:</i> F. I. Rahimtoola, G. T. Boag.	Revenue duty on Pig iron.	The Tariff Board reported in favour of removal of the revenue duty on pig iron. They opined that no serious harm would be done to any consumer by the retention of the duty until statutory enquiry into the Steel industry in 1923-24.	Government in their Resolution, dated 18th June, 1930, accepted this finding of the Tariff Board.
35.	May 9, 1931.	<i>President:</i> J. Matthai. <i>Members:</i> F. I. Rahimtoola, G. T. Boag.	Wire and wire nail industry.	In 1927-28 Tariff Board recommend that protective duty on wire nails should be discontinued. After re-examination of question the Board recommended a levy of a specific duty at the rate of Rs. 45/- per ton on wire as well as wire nails.	Government accepted the finding of the Tariff Board and imposed a duty of Rs. 45 per ton by the Wire and Wire Nail Industry (Protection) Act, 1932.
36.	May 11, 1931.	<i>President:</i> J. Mathias. <i>Members:</i> F. I. Rahimtoola, G. T. Boag.	Electric Wires and Cables (other than paper insulated cables) industry.	The Tariff Board recommended that the Industry does not satisfy the conditions laid down in the Fiscal Commission and need be given no protection.	Government have accepted this finding of the Tariff Board.
37.	1931.	<i>President:</i> J. Matthai. <i>Members:</i> F. I. Rahimtoola, G. T. Boag.	Glass Industry.	Recommendations submitted to Government. Not published till May, 1932.	
38.	April, 1932.	<i>President:</i> J. Mathai. <i>Members:</i> F. I. Rahimtoola, G. T. Boag.	Cotton Textile Industry.	Report of Tariff Board not yet published.	

Use 

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CALCUTTA



**INDUSTRIAL SECTION III :**

**THE INDIAN IRON & STEEL INDUSTRY**

Iron is by far the most important of the metals and to procure an adequate supply of it is as necessary a condition for the up-building of the industrial activity of a Nation as is an abundant supply of coal.

2. India is particularly rich in Iron Ore Deposits and the Iron ore fields in Behar and Orissa and the adjoining States are second only in the world to the Lake Superior deposits in North America.

3. India has also abundant supplies of limestone and dolomite, but her proved deposits of coking coal are not so rich as the deposits of iron ore and limestone.

4. For some years up to and including 1929 the production of iron ore in India had been steadily increasing. 1930 showed a slight setback. India is now the second largest producer of Iron Ore in the British Empire. The principal iron ore deposits are situated in the Singhbhum District in Behar and Orissa and the Keonjha and Mayurbhan States, approximately 200 miles from Calcutta.

Iron Ore Produced in India :—

1929 ...	13,90,000 Tons.
1930 ...	10,99,000 "
1931 ...	14,08,000 "

5. *Limestone.*—Ample deposits of Limestone and Dolomite are available within a short distance of the Ore Fields and proved deposits run into many million tons.

Limestone and Dolomite Production in India :—

1929 ...	4,60,000
1930 ...	3,76,000
1931 ...	3,58,000

6. *Manganese Ore*, which is required for the manufacture of pig iron and steel is also obtained from the Singhbhum District where deposits are adjacent to the Iron Ore Fields.

7. *Quality of Iron Ore.*—The iron ore in India is very rich and run on an average of 60 per cent. iron to every ton of ore mined. This compares favourably with the finest Lake Superior and Bilbao ores and is superior to the iron-stone mined in the United Kingdom.

8. To review the raw material situation, India has enormous deposits of iron ore, large deposits of coking coal, limestone and dolomite, all of which, are mined economically and without difficulty.

9. The Capital invested in the Iron & Steel Industry is no less than Rs. 27 Crores.

10. *Works.*—There are four Concerns interested in the production of Pig Iron and steel on a large scale.

They are :—

- (a) The Tata Iron & Steel Co., Ltd.,
- (b) The Indian Iron & Steel Co., Ltd.,
- (c) The Mysore Iron Works, and
- (d) The Bengal Iron Co., Ltd.

11. Of these Works those of the Tata Iron & Steel Co., Ltd., are the only Works producing steel on a large scale; neither the Indian Iron & Steel Co., Ltd., nor the Bengal Iron Co., Ltd., produce Steel, although the Bengal Iron Co. Ltd., did so some 25

years ago. The Mysore Iron Works produce alloy and special steels on a small scale.

12. We give a brief description of the various Works.—

THE TATA IRON & STEEL COMPANY, LIMITED.

The Works are situated at Jamshedpur (named after the Founder of the Company) about 155 miles from Calcutta and the Company have their own Railway System, about 65 miles in and around the Plant, of which a three-mile long Branch Line connects to the Bengal-Nagpur Railway Main Line running between Bombay and Calcutta.

The initial plant was put into operation early in 1911 and the manufacture of steel by modern processes was successfully demonstrated in 1912. Extensions to the original plant have since been carried out on a large scale.

The lay-out of the plant and the machinery installation is on the most modern lines and the existing plant consists of the following.—

5 Blast Furnaces ( 2 of 400 tons capacity daily )
( 1 of 850 " " " )
( 1 of 1,000 " " " )
( 1 of 1,200 " " " )

for the manufacture of pig iron.

Seven Stationary (Basic) Open Hearth Furnaces (4 of about 60 tons capacity per heat and 3 of about 75 tons per heat).

Two Furnaces for steel-making by Duplex Process comprising three 5 Ton Acid Bessemer Converters, three 200 ton Basic Open Hearth Tilting Furnaces and a 1,300 ton mixer.

Coke Ovens for the production of coke for the blast furnaces together with Bye-Product Plants for recovery of Coal Tar and Sulphate of Ammonia have been installed.

Various Steel Mills are in operation including 2 Blooming Mills, 2 Rail and Structural Mills, 2 Bar Mills, 1 Merchant Bar Mill, 1 Continuous Sheet Bar and Billet Mill, 1 Sheet Mill, 1 Plate Mill.

The Works is one of the largest units in the world and generates its own power and is complete with Engineering Shops, Laboratories, Water supply, Drainage Bungalows, Hospitals, Schools etc., etc.

The town and the Works at Jamshedpur occupy about 22 Square Miles.

Production :—

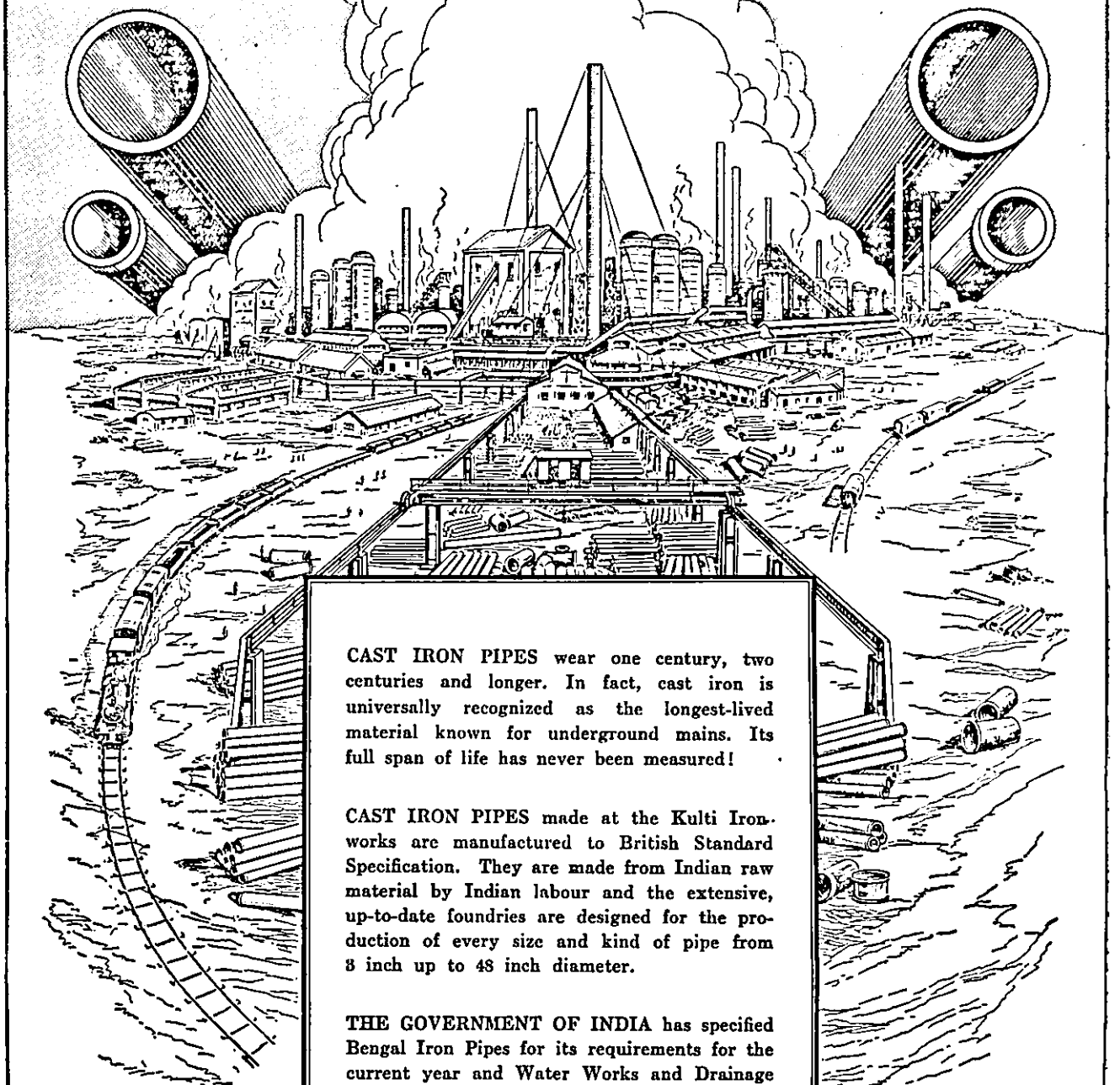
	1929-30	1930-31	1931-32	
Pig Iron	7,14,000	7,40,000	8,15,000	Tons.
Steel Ingots	6,24,000	5,80,000	6,03,000	"
Finished Steel	4,31,000	4,08,000	4,51,000	"

Sections, Bars, Plates, etc., are all manufactured to the usual test requirements and TATA-tested-Steel is accepted as being equal to British Standard Specification.

THE INDIAN IRON & STEEL COMPANY, LIMITED.

This Company was incorporated in 1918, commenced operation in 1923 and at present produces only pig iron.

# CAST IRON PIPES



CAST IRON PIPES wear one century, two centuries and longer. In fact, cast iron is universally recognized as the longest-lived material known for underground mains. Its full span of life has never been measured!

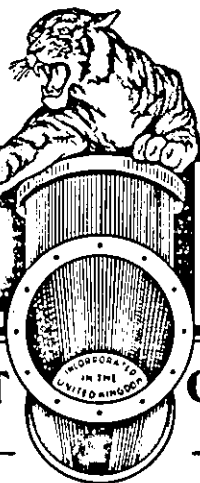
CAST IRON PIPES made at the Kulti Iron-works are manufactured to British Standard Specification. They are made from Indian raw material by Indian labour and the extensive, up-to-date foundries are designed for the production of every size and kind of pipe from 8 inch up to 48 inch diameter.

THE GOVERNMENT OF INDIA has specified Bengal Iron Pipes for its requirements for the current year and Water Works and Drainage Engineers will find that they can obtain all their needs from the same source.

- CAST IRON:
- Manhole Covers ;
  - Surface Boxes ;
  - Sluice Gates ;
  - Gully Traps ;
  - Bollards ;
  - Sleepers ;
  - Culverts ;
  - Water Cranes ;
  - Chairs ;
  - Spur Wheels ;
  - Bearing Plates ;
  - Firebar :

*The*

SUPPORT  
INDIAN  
INDUSTRY



INDIAN  
MATERIAL  
& LABOUR

- CAST IRON:
- Fencing Posts ;
  - Lamp Posts ;
  - Road Rollers ;
  - Mortar Mills ;
  - Floor Plates ;
  - Brake Blocks ;
  - Foot Valves ;
  - Columns
  - Pile Screws ;
  - Base Plates ;
  - Pile Cylinders ;
  - Kentledge Tanks, etc.

## BENGAL IRON CO. LTD.

WITH WHICH IS  
*The* EASTERN LIGHT  
4, LYONS RANGE

90, BOX 467 PHONE CAL. 5678

INCORPORATED  
CASTINGS CO. LTD.  
CALCUTTA

TELEGRAMS: "IRONWORKS"

The Company possesses its own ore mines, coal and limestone mines.

The Works are connected to the East Indian Railway Main Line at Barachuck Station and to the Bengal-Nagpur Railway at Burnpur Station by Broad Gauge Sidings, about 142 miles from Calcutta.

The Plant consists of 2 Blast Furnaces of the most modern design, each furnace having a capacity of 850 tons of pig iron daily.

*Coke Ovens*, for the production of Coke necessary for the furnaces together with Bye-Product Plant, have been installed.

Like the Tata Iron & Steel Co., Ltd., the Indian Iron & Steel Co., Ltd., have their own Town of Burnpur where the Company owns over 4,000 acres of land and to accommodate the Staff and labour, water-works, hospitals, bungalows, quarters, etc., have been built.

Production of Pig Iron :—

1929-30.	1930-31.	1931-32.
4,46,000	3,31,000	2,50,000

This Company specialises in the manufacture of pig iron, basic for steel-making and foundry iron for castings.

**MYSORE IRON WORKS.**

The Mysore Iron Works is owned by the Government of Mysore and is situated at Badravati.

The Plant occupies an area of about 50 acres and comprises a modern Charcoal Blast Furnace with a Wood Distillation and Bye-products Recovery Plant. A modern plant for the manufacture of cast iron pipes has also been installed.

The construction of the Works commenced in 1918, operation being started in 1923.

Output of Pig Iron :—

1929-30.	1930-31.	1931-32.
Tons.	Tons.	Tons.
21,000	20,000	15,149

The Mysore Iron Works produce Charcoal Iron which is especially suitable for the manufacture of chilled castings, malleable castings, special steels, etc.

The capacity of their Blast Furnace is approximately 80 tons of pig iron per day.

**THE BENGAL IRON COMPANY, LIMITED**

(Formerly The Bengal Iron & Steel Co., Ltd.), took over the old Barakar Iron Works Co., in 1889, when the whole Plant was remodelled and the production of pig iron was commenced.

The Works of the Company occupying an area of 2,300 acres of land are situated at Kulti, Bengal, on the East Indian Railway with a siding connecting with the Bengal-Nagpur Railway, about 144 miles from Calcutta.

The present Blast Furnace Plant comprises 5 Furnaces, two of which are modern mechanically charged Furnaces, capable of a combined output of 800 tons of pig iron per day.

The Works have their own *Coke Ovens* and Bye-product Plant.

*Foundries*.—The Bengal Iron Co., Ltd., specialise in the manufacture of cast iron pipes and cast iron sleepers.

Production :—

	Tons.	Tons.	Tons.
	1929-30.	1930-31.	1931-32.
Pig Iron	168,000	73,000	Nil.
Sleepers	8,133	5,068	29,969
C. I. Pipes	32,002	36,173	25,204

As with the other Iron Companies the town of Kulti is self-contained and equipped with its own power plant, water-works, hospitals, bungalows, etc.

GOVERNMENT OF MYSORE

**THE MYSORE IRON WORKS**

BHADRAVATI  
(MYSORE RAILWAYS)

*Manufacturers of*

**CHARCOAL PIG IRON**

Many practical foundrymen in India have by actual experience realised that the use of CHARCOAL IRON in the burden of cupola increases the strength of the resulting cast iron and helps to eliminate waste and defective castings and promotes economy and soundness

**CAST IRON PIPES**

*To British Standard Specifications*

3" to 16" lengths of 12 feet  
18" to 30" lengths of 16 feet

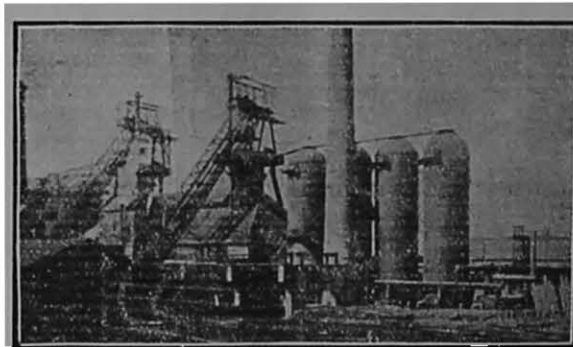
being made out of our own charcoal iron are stronger and more resistant to rust than those made out of coke iron and save weight and jointing charges on account of longer lengths

# The Indian Iron & Steel Co., LIMITED.

BURNPORE, B. N. Rly.

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**“ BURN ”**  
**PIG IRON**  
**:: COKE ::**  
**COAL TAR**  
**SULPHATE OF**  
**A M M O N I A**



*Apply to :*

**MANAGING AGENTS:**

**BURN & CO.**

**12, MISSION ROW,**

**CALCUTTA.**

GENERAL.

13. The Iron & Steel Industry is of considerable importance to the country both from a strategic and commercial point of view.

14. The Industry in normal times gives employment to over 100,000 labour, consumes over 2 million tons of coal and pays over a crore of rupees for Railway Freight on the carriage of raw materials and manufactured goods.

15. *Steel*.—The steel manufactured by the Tata Iron & Steel Co., Ltd., is consumed in India primarily by the Railways, no finished steel being exported to foreign countries.

With the fall in the demand on account of the Railways consequent on the reduction in the programme of railway expenditure, the Tata Iron and Steel Co., are making more sustained efforts to stimulate the consumption of their goods by the general public. The existing rates of railway and steamer freights are not helpful to such development; but prices are fixed with a view to replace foreign imports; and the success that has attended the recent efforts is by no means inconsiderable. Much would depend on the change in the habits of the people who are still unused to iron and steel goods; but even here a slow transformation is visible.

16. *Pig Iron*.—Amongst the uses to which pig iron is put perhaps the largest tonnage is consumed in the manufacture of Cast Iron Railway Sleepers. Next come the Pipe Foundries. The total tonnage of iron consumed in India as such is approximately 100,000 tons per annum.

17. Indian Iron is shipped practically to every country in the world; and the weight of Indian competition in the world market may be judged from the fact that recently imports of Indian iron into Britain were the subject of questions in the House of Commons.

18. The principal export market for Indian iron for many years past has been Japan. Japan, unlike India, has very little natural resources for the manufacture of iron, and since her modern civilisation began she has been compelled to import large quantities of iron and steel. Of the other markets for the Indian pig iron, next in the order of importance, are the United Kingdom and United States of America.

19. The following figures show the export of Indian iron during the last three years:

( In tons. )		
1929-30.	1930-31.	1931-32.
5,68,000	4,39,000	3,50,000

Imports of Pig Iron in India

(in tons)

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	12,471	2,754	6,578	999	4,068	2,873	2,697	3,082	380
Continent ...	82	9	3,880	628	1,036	787	564	1	∴
Other countries ...	878	3	86	...	...	...	1	...	...
<b>TOTAL</b> ...	<b>12,881</b>	<b>2,766</b>	<b>10,553</b>	<b>1,627</b>	<b>5,104</b>	<b>3,160</b>	<b>3,262</b>	<b>3,083</b>	<b>380</b>

Imports of manufactured Iron and Steel in India

(In Lakhs of Rupees)

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31
U. K. ...	753	550	13,16	10,36	14,49	13,03	10,16	5,67
Continent ...	291	56	4,14	5,36	6,28	6,51	6,42	4,62
U. S. A. ...	39	2,88	3,43	96	57	58	52	50
Other countries ...	20	68	11	2	8	7	7	7
<b>TOTAL</b> ...	<b>11,08</b>	<b>9,57</b>	<b>20,84</b>	<b>16,70</b>	<b>21,37</b>	<b>20,19</b>	<b>17,17</b>	<b>10,86</b>

## INDUSTRIAL SECTION IV :

# THE INDIAN JUTE MILL INDUSTRY

### MAINLY HISTORICAL

Though historical records of a comparatively distant past contain many references to fibres which were closely related to, if not identical with, jute, it was not till the middle of the last century that jute and jute manufacture attained a definite importance in world trade and commerce. Obviously, a variety of fibres were known to the ancients and were in active use ; and it would be difficult to determine their identity among those that we know today. But it is certain that about the beginning of the nineteenth century the word *pal*, which is so commonly heard in the bazars of Calcutta, had come to denote definitely the botanical species known as *Corchorus capsularis* and *Corchorus Olitorius*. The word jute, however, seems to have been used for the first time in official records by Dr. Roxburgh, the Founder and Director of the Botanical Gardens, Calcutta, who was also the first to see its possibilities as an article of export, in a letter to the Court of Directors of the East India Company, which he sent along with a bale of the fibre in 1805. More followed ; and by 1820 jute was being spun for use in carpets at Alington in Oxfordshire. But old prejudices die hard ; and in the light of the subsequent progress of jute it should seem strange that it was a standard condition of business in the flax trade in those times that goods for delivery should be "warranted free from Indian jute".

It is natural that jute should attempt its first entry abroad in places carrying on the spinning and weaving of flax and hemp. Dundee had, therefore, a consignment of jute in 1822 ; but the spinning of this fibre was found to be far from easy ; and it took some years before Dundee found how to use them for door mats. Progress, however, though slow, was steady. By 1828, raw jute came to have a separate heading in the Calcutta customs records ; and the shipments in that year amounted to 364 cwts. Then whale oil was found to have the property of softening the fibre and making it more easy to spin ; and with the spread of this device, the demand for the fibre increased. Exports swelled to 11,800 cwts. within a period of less than five years and the price had doubled itself by 1837. Coffee came to be transported from the Dutch East Indies in jute bags ; and with a foreign Government enlisted as a large-scale consumer, the jute industry was firmly established in Dundee.

The development of mechanical production in Dundee had its natural effects on conditions in Bengal. The handloom industry had shown a surpassing vitality ; and up to the middle of the last century India's exports of jute manufactures were more in value and volume than the exports of the raw material. But later on with a rapidly increasing demand for jute from abroad, it became more profitable for the agriculturist to concentrate on the cultivation of jute than to continue a competition in which the odds were against him.

The normal progress of the jute industry was given a sudden and artificial stimulus by the Crimean War which shut out Russia's flax and

hemp from the world markets. In the same way, the American Civil War deprived the manufacturers of cheap cotton bags of their raw material. In both these cases jute was the most obvious substitute ; and it made most of these opportunities. Its place in world trade was assured. And from this time exports showed a steady and rapid rise. The peak year was 1908-09, when 897,000 tons were exported, with 1927-28 as a close second with exports of 892,000 tons.

The establishment of mills in India for the manufacture of jute with European machinery did not begin till after the middle of the nineteenth century. The first jute millowner is reported to be one of Mr. George Acland. His original intention was to push *rhea* ahead of flax and hemp and visited Dundee with this purpose in view. But with commendable quickness he appreciated the more useful qualities of jute ; and in 1855 he erected the first jute spinning mill at Rishra near Serampore on land which was afterwards the site of the Wellington Jute Mill. Two years later the first weaving factory was erected at Barnagore. With such a conclusive demonstration of the profitableness of jute spinning and jute weaving and with the trade showing such remarkable capacity for expansion, other factories followed in rapid succession.

The first power loom was erected by the Borneo Company of which Messrs. George Henderson & Co. were the agents. Its combination of spinning and weaving proved to be a very decisive factor in its success ; and within a few years the equipment and output of the Company were doubled. It was followed in 1862 by the Gourepore and the Seraj-gune Mills. The India Mills came on in 1866 ; and the result was an increase in loomage in the short period between 1869 and 1873 from 950 to 1250. In 1872-73 Budge Budge, Fort Gloster and Seepore (later changed to Fort William) were registered in Calcutta and Samnugger and Champdany in Scotland. Before two years were over, Oriental (now Union North), Howrah, Asiatic (now known as Soorah) Clive, Bengal (now Belliaghatta) New Central (formerly Rustomjee), Hastings and Ganges followed. Such rapid inrush of new mills took up the total loomage to 3,500 and apparently caused a state of temporary disequilibrium in the trade. Only Kamarhatty ventured into the field in 1877. And it was not till 1882 when the mills had over 5,000 looms that the next bout of new ventures started, lasting for about three years. At the end of this the loomage had increased to 6,700 of which 4,900 were sacking and the rest hessian.

Again production outstripped demand ; and the obvious need for restriction of output suggested the equally obvious expedient of forming the Indian Jute Mills' Association. Its function has been mainly to bring the producing units together for purposes of regulating the output as and when necessary. No new mills were built in the decade ending 1895. But it is a feature of the jute trade that existing mills had been regularly increasing their loomage and by 1895 the loomage had increased to 9,701 of which 3,117 were sacking. The next

quinquennium saw the advent of Gondolpara, Kharah, Alliance, Anglo-India, Standard, National, Delta, Kinnison and the present Lansdowne. The opening years of this century were not marked by any new floatations, but between 1905 and 1910 Dalhousie, Alexandra, Auckland and Northbrook Mills were started; and the loomage went up to 31,755 as against 15,213 ten years earlier. Albion, Angus and the Empire came into the field in time to reap the profits of the War period. And during the War, Caledonian, Lothian, Orient, Waverly, Craig and Bally were added and after the War, Nuddea and Megna, Cheviot, Benjamin (now Presidency). Birla and Hukumchand were the first Indian mills; and later followed the Adamjee, the Fremchand Mills, Hanuman, Agarpara and Mafatal Gagalbhai Mills. In 1921, Ludlow and the American Manufacturing Co. were added to the one American-owned mill, namely, the Angus.

The tables appearing in this volume, giving all the relevant statistics of acreage and crop, mills consumption and exports of raw jute and exports of jute goods will afford a more complete and more accurate story of the development and expansion of the jute mill industry. It should suffice here in this descriptive note to point out that, if we put out of mind the last two or three years which form the period of the present depression, the history of the jute mill industry during the War and post-War period is one of unbroken progress. The area under jute increased from 31.69 lakhs acres in 1913-14 to 34.85 lakhs in 1929-30. Production expanded from 87.59 lakhs bales in the pre-War year to 121.87 lakhs in 1926-27. The Indian mill consumption progressed with but few setbacks from 43.74 lakhs of bales to 62.46 lakhs in 1929-30. The export of jute and jute manufactures in 1925-26 amounted to Rs. 96.79 crores out of a total of Rs. 374.84 crores, from which there was a natural reaction. But so late as 1928-29 the figure stood at Rs. 89.25 crores. From that peak, it has come down to Rs. 33.11 crores for reasons which will be entered into in a later section of this article, but there can be no doubt about the vitality of this industry or its capacity to stand competition from rival goods. That the jute industry will be able to take the fullest advantage of the revival of world trade when it comes is one of the certainties of Indian economics.

#### THE CULTIVATION AND MARKETING OF JUTE.

Bengal holds a virtual monopoly of the production of raw jute. The two varieties of jute mentioned in the previous section are grown exclusively in the deltaic region common to the mighty river systems of the Ganges and the Brahmaputra. Thus the crop is confined to Bengal, Assam and Bihar and Orissa, as also the native state of Cooch Behar. Madras and Bombay possess little fragments of land suitable for cultivation of a fibre most akin to jute; and one or two mills are in existence there which utilise the product in manufacture. The normal area under jute is about 30 lakhs acres and three millions may be said to depend on its cultivation for their living.

Jute is most luxuriant in a loamy soil. The inundation of the Ganges and the Brahmaputra leave rich deposits of alluvial soil; and the cultivator is, therefore, spared the expense and trouble of providing manure. Once planted, the crop requires little attention for a long time. The finishing stages, however, entail hard and very irksome labour. For to separate the fibre from the wood, the crop has to be steeped in water for two or three weeks. Retting, as this process is called, requires the cultivator to stand in water for long hours. The fibre is separated by beating the stems with wood. Then it is washed and dried and made ready for disposal.

The marketing of jute, so far as the cultivator is concerned, is not different in essentials from the marketing of other agricultural produce in India, though it must be remembered that jute is what is called a money crop for which the individual cultivator has little or no need. Moreover, the bulk of the demand comes from the indigenous mills, who have a strong and powerful organisation and for whom the buying of jute at the best prices is not a seasonal or an intermittent operation. The organisation of the mill and other interests has wide ramifications in the jute areas. The cultivator is, as a rule, in debt and the creditor has *de facto* the first claim on the produce. It may reasonably be suggested that jute passes from the cultivators through the hands of those who represent a blend of the moneylender and the agent acting on behalf of the urban interests. A multiplicity of middlemen is detectable here. The cultivator sells his jute through a *faria* to the *bepari*, a small dealer who acts on behalf of his principal, the *araddar* or *mahajan*. The *mahajan* sells to the agent of a mill; or there is one more link in the chain, the broker or baler sitting in between the mill and the *mahajan*. Then the jute finds its way to Calcutta or Chittagong by rail, river or road to be consumed by the mills or exported abroad.

The place of the "futures" market in the organisation of the jute trade calls for special mention. Jute offers peculiar attractions to the speculator. Unlike cotton, for instance, which is grown in many parts of the world, jute is grown only in and about Bengal. Demand for the commodity is steady. But at the same time, uncertainties in regard to weather, conditions of the crop and extent of demand at any given time for jute products render it extremely fitted for speculative operation. There is more than one organisation in Calcutta which affords facilities for such operations. But the most important body is the East India Jute Association which has been formed mainly on the lines of the East India Cotton Association and it aims at discharging the same functions to the jute trade as the former renders to the cotton trade in the Western Presidency. The rules of the Association are so framed as to keep the business of its members as far removed from wager and gamble as possible. But the best futures markets of the world have not invented any infallible means of preserving the strictly *bona fide* character of the business; and in the case of the E. I. Jute Association also criticisms of an adverse kind have often appeared in the Press. It must be admitted, however, that the Association has succeeded in ensuring more of freer play for the forces of supply and demand.

#### PROBLEM OF RESTRICTION IN THE JUTE INDUSTRY.

As indicated already in the earlier sections of this article, the last two, three years have been a trying time for the jute mill industry and those who are connected with it. Our exports of jute and jute manufactures have fallen both in volume and value. The acreage and production of raw jute have been practically halved as compared with two years ago. Prices are every day digging new record lows. And the jute mills are obliged to devise new schemes of restriction in a vain endeavour to keep pace with the fall in demand. The world economic depression has undoubtedly, a large place in the troubles of the jute industry. The movement of the chief agricultural crops like cotton, wheat, coffee, etc., has been restricted by the state of the consuming markets; and this brings about a serious decline in the foreign consuming demand for jute. While this factor may be properly appraised without any attempt to underrate its importance, it must not be forgotten that the position of jute in Bengal enables the mills to acquire



a certain degree of immunity from world causes of an adverse kind. Possessed of a complete monopoly of the raw material and a virtual monopoly of those lines of jute manufactures in which the Calcutta mills are engaged, it should always be possible by the regulation of output to save the industry from severe losses or an altogether sterile working. Even in the early stages of the history of the jute industry temporary disequilibrium between supply and demand was not unknown. In fact, the Indian Jute Mills' Association was first formed to combat such a danger; and there is no conclusive reason why the Association should not be able to render the same service on subsequent occasions.

Recent developments have been such that one is sometimes left wondering whether restriction will not be the perennial problem of Bengal's foremost industry; for the need for restriction arose earlier than the present world depression and, for all that we can see to-day, may last even after the trade revival gets into stride. The reasons for the latter statement will be gone into in the proper place. As for the former, it is best to start with mentioning that restriction in the later history of the jute trade is the rule rather than the exception. We have shown in the first section of this article the vast expansion in the jute industry during the War period and the years immediately succeeding it. This expansion was due to the fact that the new entrants into the field did not see the place of the War in the economic demand for jute products during that period. When this was more clearly borne in on the jute mills they agreed to a scheme of restriction of output which lasted till June 30, 1929. The members of the Indian Jute Mills' Association had probably a variety of motives in abandoning restriction in that year. There was, first of all, the feeling that demand had expanded considerably since the agreement amongst the jute mills was first concluded. The clearest proof of this was to be found in the fact that the jute mills in Dundee and on the Continent of Europe had been increasing their loomage and their consumption of raw jute. Even at home new mills were being established; and the obvious result of the continuance of restriction was that other producing units were reaping the benefits of prices which were maintained at that level only by the action of the Association. In these circumstances, the abandonment of restriction was an act of bare common-sense.

But reference must also be made here to the feeling in certain circles that the motive of the jute mills at that time was to hit the Indian mills which had just ventured into a field, till then practically an exclusive preserve of the European mills. Though it is not for anyone, except those in charge of the mills to deny such allegations, yet it must be remembered that this contention has value and relevance only in a controversy in which the main issue is whether the Indian mills harmed in that way should avail of the earliest opportunity to return tit for tat. Be that as it may, after a somewhat prolonged consideration, the jute mills decided in November 1928 to increase the working hours from 54 to 60 hours per week. But the new arrangement was to begin from July 1, following. The change was not very old before it became apparent that it could not be persisted in except at the peril of the industry itself. The demand for short hours was widely made. The mills took time to recognise the position. And even after the recognition came, it was not easy to come to an agreement as to the remedies. Finally it was decided to revert to 54 hours. The inadequacy of this measure suggested the closure of the mills for three weeks in the latter half of 1930, the exact time to be determined by each mill and, of course, duly notified to the Association. It is curious how the need for restriction grew with every new measure designed towards that end. The reduction of working hours to 54 led to the closure of the mills for three weeks. And the

closure of the mills after it ceased, was followed by a further restriction of working to 40 hours per week. Then it was decided to seal up, 15 per cent. of the looms of every member of the Indian Jute Mills' Association. The remaining 85 per cent. of the looms running 40 hours per week is equivalent to the full complement of looms working 34 hours per week, a reduction of 43 per cent.

It may be thought that so drastic a restriction of working cannot fail to produce better conditions. But difficulties arose at this stage which but for their being a late and unexpected development, are the same as those on which all schemes of restriction have foundered. The very severity of the restriction was an inducement for those who are outside its scope to increase their production. The non-member mills which owned about 5 per cent. of the total loomage of the industry increased their equipment and working hours. Their overhead costs were lower and their margin of profits increased. The sight of this development tempted even members of the Association to desert its ranks. And so a position was reached in which the output of the non-restrictionists amounted to as much as 14 or 16 per cent. of the total production.

These developments brought matters to a head. While the need for restriction was becoming more and more urgent, the Association mills exhibited a decided reluctance to impose any more restrictions on themselves unless they had the whole industry with them. This was interpreted, and rightly, by the non-Association mills as a bid for their support. And attempts were made to raise the bid. Protracted negotiations and increasingly stiffened attitudes were the result. The markets all the time were going from bad to worse; and interest in the question spread to the general public as the ruin of the jute industry spelt the ruin of the whole province and even interests far transcending the province. A vigorous press agitation was in progress to induce the Government of Bengal to interfere in the public interest in the negotiations between the two sections and either bring about a settlement or impose one by legislative enactment. His Excellency the Governor took a keen personal interest in the negotiations, the more so, as he was opposed on principle to the interference of the State in the affairs of an industry. But the final outcome was not exactly a compromise, as may be seen from the points which were agreed on in the second conference of jute interests which was held at the Government House under the presidency of Sir John Anderson himself.

The main points settled were:

- (1) That the deposit money which the Adamjee mills forfeited on account of its secession from the Association should be refunded.
- (2) That the Association mills should work 40 hours a week, while the non-Association mills should be free to work 54 hours a week.
- (3) That the latter should be allowed to work their full complement of looms while the former are to have 15 per cent. of their looms sealed up.
- (4) That the Association should have the right of having the non-Association mills inspected by its own staff.

The agreement had to be ratified by a substantial majority of the Indian Jute Mills' Association; and though the first meeting is reported to have been somewhat stormy, the agreement was ratified by a 95 per cent. majority in the second meeting. The Association had reserved to itself the right to grant concessions similar to those of the non-Association mills to such of its members as could put forward convincing reasons for such special treatment. The whole arrangement is to run for a period of eleven months.

The settlement has naturally been subject to the criticism that it has set a premium on intransigent opposition to restriction; and that the experiences of this year would have the effect of setting up formid-



aid barriers to a similar regulation of output when it is called for in the future. While this criticism is almost obvious, it is difficult to suggest a way out. However, the different positions in respect of reserves, block, etc., of different companies, the circumstances relevant to a consideration of the differential treatment of the mills in a regime of restriction may perhaps, be clarified and determined, so that individual cases could be decided, not according to their capacity to hold out in a tussle, but according to certain well-defined and well-understood principles. But all the same the dangers which were experienced during 1932 cannot be eliminated

unless the industry itself outgrows the need for uncomfortably long and drastic restriction. Whether and when this will happen, the present is the most inopportune time to answer. But it will certainly be long before world demand for jute goods will grow up to the present productive capacity of the industry. And when it does, the possibility of the establishment of new mills is not a less serious danger than the obstacles in the way of restriction when that is the need. All these are circumstances which suggest that the Indian Jute Mill Industry is one in which State control is not advisable, but necessary.

Jute Raw

Season ending 30th June	Area sown 1,000 acres	Production in 1,000 bales of 400 lbs. each	Indian Mill consumption in 1,000 bales of 400 lbs. each	Export in 1,000 bales of 400 lbs. each
1913-14	81,69	87,59	43,74	41,92
1915-16	23,75	74,24	56,09	31,06
1920-21	25,08	59,79	54,67	23,43
1922-23	17,99	54,86	46,15	29,02
1925-26	29,26	90,00	53,44	35,16
1926-27	29,62	1,21,87	53,74	44,48
1927-28	31,44	99,16	56,33	44,86
1928-29	33,16	99,56	58,79	44,28
1929-30	34,85	1,12,31	62,46	44,52
1930-31	18,56	55,60	54,23	34,25
1931-32	*20,00	*60,00	x34,00	x27,50

\* Area and production figures for 1931-32 are only a rough estimate.

x Mill consumption and export figures for 1931-32 represent only 9 months, July 1, 1931 to March 31, 1932.

Export of Jute Cloth from India

( In Lakhs of yards ).

To	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	423	13,33	741	504	311	292	586	402	621
Canada ...	333	534	508	596	688	557	816	731	632
Australia ...	209	253	175	265	246	222	260	188	198
U. S. A. ...	66,39	69,85	89,38	97,54	102,30	102,18	107,19	85,38	69,17
Argentine ...	17,27	14,40	18,13	31,82	33,10	34,03	32,93	20,86	10,49
Other countries ...	369	10,16	523	730	743	791	881	770	787
<b>TOTAL</b> ...	<b>97,00</b>	<b>115,61</b>	<b>127,03</b>	<b>150,31</b>	<b>155,28</b>	<b>156,83</b>	<b>165,05</b>	<b>127,10</b>	<b>102,04</b>

Exports of Gunny Bags from India

In Lakhs of Bags.

To	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	305	22,65	418	388	461	446	530	501	475
Rest of Europe ...	206	688	299	194	191	186	279	287	275
Egypt ...	119	835	102	144	142	157	190	170	144
South Africa ...	119	243	177	163	189	203	208	200	132
East Africa ...	99	90	112	193	193	245	261	243	222
Australia ...	628	737	720	965	867	1,023	843	999	744
Java ...	130	206	205	270	258	421	373	416	296
Japan ...	35	118	186	249	187	88	157	54	46
Far East ...	393	436	584	693	810	780	954	519	635
South America ...	431	532	385	372	490	490	473	278	...
Central America ...	130	229	298	300	392	446	431	357	239
Other Countries ...	796	747	607	470	451	492	524	416	526
<b>TOTAL</b> ...	<b>33,91</b>	<b>66,76</b>	<b>40,43</b>	<b>44,91</b>	<b>46,81</b>	<b>49,77</b>	<b>52,23</b>	<b>43,40</b>	<b>38,84</b>

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## INDUSTRIAL SECTION V :

# THE COTTON TEXTILE INDUSTRY

The place of the cotton textile industry in the national economy of India is second only to that of agriculture. Alike in capital sunk, in the volume of employment which it creates and in the net addition to the total wealth and annual income of the country, it has hardly a rival among our industries. And what is as important, if not more, it has had, for various reasons, a peculiar hold on the affection and allegiance of the public. Its decline in the latter half of the seventeenth and eighteenth centuries was regarded as the symbol, as much as the result, of the country's political subjection; and from that time to this the progress of the cotton industry has been in the public mind equivalent to the progress of our political and economic emancipation.

This is only understandable, for India was the birthplace of the cotton industry. The best of our cotton manufactures are still unsurpassed in the fineness of their texture and their superb finish. Historians of various ages and climes are agreed that India enjoyed a glorious export trade in cotton fabrics. Its decline, which could have been brought about by the mechanical improvements of the West, actually followed a deliberate policy on the part of the British Government both here and in Great Britain to crush the Indian industry in the interests of Lancashire. It is unnecessary to dwell on this policy as it was the sole sustenance of the political movement during the earlier part of the last half century. But the unnatural end of the historic cotton industry of India did not, as indeed, it could not, affect our natural advantages for the development of a cotton mill industry on modern lines. In fact, the first cotton mill was started in Calcutta with English capital by persons who saw that the saving in freights to and fro would be sufficient to outweigh the other disadvantages that might arise from unskilled labour and the import of machinery from abroad. But nature had designed Bombay as the home of the Indian Cotton Mill Industry. The beginning was made by two Englishmen; and the first Indian mill was established in 1856 under the management of a Parsi gentleman. More followed in rapid succession; and the progress up to the year 1880, may be gauged from the following table:—

Year	No. of mills.	Spindles (In thousands)	Looms	Labour
1851	1	29	...	5
1866	13	309	3.4	7.7
1878	47	1,100	9.1	...
1877	51	1,244	10.3	...
1880	56	1,461	13.5	44.4

From the year 1879-80 more complete statistics are available and the table below shows the development of the industry for the quinquennial periods up to 1903-04 and for the two years thereafter.

Years	No. of Mills at work	Nominal capital (in lakhs of Rs.)	Personr employed in	Looms Thousands	Spindles
1879-80 to 1883-84	63	6,57.6	51.	14.5	1,610.6
1884-85 to 1888-89	93	8,87.9	75.7	18.2	2,296.8
1889-90 to 1893-94	127	11,61.1	1,16.1	25.3	3,263.8
1894-95 to 1898-99	156	1,419.5	1,50.	36.6	4,046.1
1899-00 to 1903-4	195	16,87.9	1,71.6	42.	5,000.9
1904-05	203	17,57.5	1,96.4	47.3	5,185.4
1905-6	204	17,19.7	2,12.7	52.3	5,293.8

At the beginning of the war the Indian mills were 241 in number with a spindlage of 6.3 million and a loomage of over 92,000. The total production of the industry, according to the estimates of the Tariff Board presided over by Sir Frank Noyce was 688 million lbs of yarn and 1,164 million yards of cloth exclusive of handspinning and handweaving; as against 353 million lbs. and 422 million yards in the beginning of the century.

Thus at the date at which it is usual to take a halt in any historical review of industries the cotton mill industry had shown a remarkable expansion. There was also a marked alteration in its character. It passed from an essentially spinning industry, exporting more than half its production, to a weaving industry using imported yarn in its products. And this, in spite of the fact that the number of spindles had increased by 39 per cent. and the number of looms by 142 per cent; the essence of the change referred to lay in the number of spindles per loom falling from 119 in 1898-99 to 68 in 1912-13.

The five war years witnessed the continued operation of the tendencies apparent in the earlier period. By August, 1918, the number of mills increased to 249, the number of spindles to 6.56 million and the looms to 115,818; the number of spindles per loom also fell to 56. Further expansion was retarded by the difficulty of obtaining machinery from Britain; but production was all the same increased. Other important features during this period were the loss of the export trade in yarn—which was due partly to the competition of Japan in the East and partly to the increase in the domestic demand and the increasing share of Japan in the home trade.

The three years immediately following the end of the War were a period of abounding prosperity for the cotton mill industry in India. The prosperity of the mills, together with the fact that owing to the high rate of sterling exchange for the rupee foreign machinery was cheap, orders for new machinery both for old and new mills were freely placed. But when the deliveries were made the rupee had fallen and importers met with severe losses. Conditions in the domestic market had undergone a marked change. A crisis of first magnitude developed in the imported piecegoods. Dealers looked at their burnt fingers and shunned all stocks, foreign and indigenous. The neglect of foreign markets for Indian yarn, of which mention has already been made, began to aggravate the troubles in the spinning section. And by 1926, it would be true to say that the cotton mill industry, at any rate in Bombay, showed all the characteristic features of a trade depression following an intensive boom period. And not the least of those features was the painful, almost calamitous, disillusionment of many who had partaken in the numerous conversions of the proprietary mills into joint stock concerns. With the depression came the question of reduction of wages which had been increased not exactly during the time of the boom, but in its closing stages. For the worst of wages is that they do not move in accord with the prosperity or the slump in the industry. The rise in wages was resisted by the mills; and later the fall was opposed by the labourers. The result was, more especially in Bombay, a series of strikes, from which no good flowed except a reduction in the swollen stocks.

These conditions led to the Tariff Board enquiry of 1926, and its terms of reference were:

(1) To investigate the condition of the cotton textile industry in India, with special reference to the industry in Bombay and Ahmedabad;

(2) To examine the causes of the depression in the industry and to report whether they are of a temporary or permanent character;

(3) In particular, to consider whether, and if so to what extent, the depression is due to the competition of other countries in the home and export trade;

(4) To report whether, having regard (i) to the fact that the industry has long been firmly established in India, and (ii) to the interests of the consumer and to all other interests affected,—

(a) the industry is in need of protection; and

(b) if so, in what form and for what period protection should be given; and

(5) to make any other recommendations that are germane to the subject.

The Tariff Board confirmed the impression conveyed by its terms of reference that the plea for protection was made with far greater importunity by Bombay and Ahmedabad than the mills outside. And even as between these two cities the former was in a worse position than the latter. In fact, Bombay has certain permanent disadvantages as compared with other centres *e.g.*, the higher wages of a highly urbanised area, the higher costs of fuel and power, remoteness from the sources of raw cotton and the chief markets for finished goods; and these can be offset by advantages in regard to cost of stores, of insurance and of office expenses only if the management makes the best of the latter and reduces the former to its irreducible minimum.

The other questions were necessarily of a more complicated kind, as the conditions of the mill industry had to be examined in relation to the piece-goods market which was itself subject to violent external forces. There was no doubt that the loss of the Chinese market was an important cause of the depression. There was no doubt, too, that there was some degree of unfair competition from Japan which was having longer hours of work and employing women labour to more than the legitimate extent. And so far as Bombay was concerned, it suffered as much from the competition of other Indian mills as from the factors mentioned above. The remedy which the Tariff Board suggested was the variation of products; and to this end they recommended a bounty for the spinning of higher counts.

It would be appropriate at this stage to give a short history of the tariffs on cotton goods in India, without going into the controversy that has always waged round it in apparent disregard of incontrovertible facts. The Indian Tariff Act of 1894 imposed a duty of 5 per cent. on all imported cotton yarns and fabrics; and at the same time an excise duty of 5 per cent. was levied on the production of yarn above 20s. Later in 1896 the Government, under pressure from Lancashire interests and on the pretext of free trade, removed the duty on cotton yarn and reduced the duty on cotton fabrics, imported and produced locally, to 3½ per cent. The injustice to the local industry continued till the financial necessities of the War time and the pressure of a growing public opinion forced Government to raise the import duty on cotton fabrics to 7½ per cent. In 1921, a similar need brought about a further enhancement of the duty to 11 per cent. the excise duty remaining unaltered all the time at the level of 3½ per cent. In 1922, imported cotton yarn was subject to a revenue duty of 5 per cent. And in 1926, the excise duty was finally abolished.

But the advantage derivable from the increased duty was neutralised largely by the eighteen pence ratio which was unquestionably a substantial aid to importers into India. The industry felt the disability very keenly; and to this were added the disastrous effects of strikes, with the result that the cotton mill

industry, especially of Bombay, had an unbroken tale of woe. Mr. G. S. Hardy, the Collector of Customs at Calcutta was deputed to enquire into the possibility of replacing the *ad valorem* duties on cotton piecegoods with specific duties, and to examine the condition of the trade since the report of the Tariff Board in 1926. Mr. Hardy's report was to the effect that the administrative difficulties involved in a system of specific duties were a conclusive argument against it and that, so far as the trade was concerned, Japanese imports were gaining ground, first at the expense of Lancashire and latterly to the detriment of the Indian mills.

The Budget for 1930-31, therefore, provided for an increase of the import duty on cotton piecegoods from 11 per cent. to 15 per cent. and the Government proposed to levy an additional 5 per cent. on all non-British cotton goods for three years. An amendment in the Assembly deprived Lancashire of the preference in respect of grey goods which constitute the bulk of the production of Indian mills. The Supplementary Budget of September 1931, imposed a surcharge of 25 per cent. on cotton piecegoods in common with all other imports.

What time the last mentioned changes were made, the Government of India made it clear that the protection was given purely as a temporary measure dictated by the necessities of the moment and not as the final decision of a considered policy. "The object in view", in the words of the Commerce Member, "is not the development of the industry but its preservation", the provision of a shelter behind which the industry could make genuine efforts for a reorganisation. It was also made clear that Government did not expect the mills to venture on new ground such as the production of finer yarn or the weaving of higher quality goods and that the whole question would be gone into again at the expiry of a period of three years dating from March 1930. But it is necessary to remember, and it is a matter for gratification, that the grudging and halting manner in which the Government were prepared to succour the industry was more than made up by the intense passion for *Swadeshi* which has seized the people since March 1930. The Congress had during this period, especially in the earlier part of it, thrown its full weight in favour of the indigenous manufactures; and in spite of the official displeasure and the opposition of foreign interests the Congress Executives all over the country succeeded in binding the mills to a policy of strict *Swadeshi* in their production. Thus with mills bound over to the use of Indian made yarn, and foreign cloth shops and dealers subjected to unintermittent picketing, and the masses themselves taking spontaneously to an unqualified patronage of Indian piecegoods, the cotton mill industry in India has come to furnish the sole instance in the whole world of an industry which has made headway during the present unprecedented depression.

Statistical data in regard to the cotton mill industry and the cotton piecegoods market in which the indigenous industry is only one of the principal competitors are given in part at the end of this article and in part in the trade tables. Taken together they show that the principal features of this trade are that the Indian mills have made tremendous headway; that the British cotton mill industry has lost its hold on the Indian market and that the Japanese are the most formidable competitors to the indigenous mills in a number of lines. The threat of Japanese competition becomes more serious with every fall in the value of the yen as against the rupee. During the period in which Japan remained on the gold standard after India's abandonment of it, the Japanese industry suffered to that extent a very considerable handicap. Afterwards the handicap was scratched when the yen went off gold. In the middle of 1932 Japan has shown clear signs of a desire to stabilise the yen at a very low value in terms of the pound. This increases the

dangers to which the indigenous industry and particularly Bombay, which is the least efficient part of it, are exposed. The Bombay mill industry grounded its appeal for an examination of its claims by the Tariff Board on a number of factors ; but the recent devaluation of the yen lends forcible point to Bombay's demand.

The Tariff Board has hardly got into stride in regard to the cotton enquiry. The questionnaire has already been issued. The questionnaire in a Tariff Board enquiry may be compared to the framing of issues in legal proceedings. It may therefore be deemed to offer a glimpse into the lines on which the Board's mind is working. The former Tariff Board enquiry laid great emphasis on the lack of efficiency in the management of Indian mills and the absence of the urge to effect the utmost economies in production. It is natural, therefore, that the questionnaire issued by the Tariff Board asks for the fullest information regarding this aspect ; and it may be regarded as certain that on this occasion the Board will be making a far more thorough investigation than ever before. One essential difference between the conditions of previous years and the conditions ruling to-day is the emergence of a definite, though not strong, feeling of discontent in the popular mind with the working of the cotton mill industry in India. For India is leaving behind the stage in which a sentimental support for the industry had to be secured by propaganda. Time was when buying Indian cloth was considered almost identical with casting a vote in favour of Swaraj. It is now recognised that the sentimental stage, essential no doubt at one time in the evolution of our economic autonomy, can easily be overdone. Care is necessary to see that the cotton mill interests do not abuse a support which in the conditions that were ruling till recently was undoubtedly necessary for its growth. Neither the protectionist policy of the State nor the spontaneous support of a politically-minded public should be allowed to shelter an inefficiency which with time must become a far graver threat to the economic well-being of the country than the worst dumping of foreign producers.

Keeping in mind the judicial analogy referred to earlier, the question of protection for the cotton mill industry is *sub judice*. No attempt to prejudice the issue would be fair or decent. And the foregoing remarks must not be interpreted in any sense other than that of providing a corrective to what has till now been the basic assumption of the attitude of Government and people alike to a vital department of national economy. Whatever the nature and extent of the danger of unfair and undue foreign competition, there is no gainsaying the fact that the Indian cotton mill industry calls for a thorough reorganisation. Both the industry as a whole and each unit of production thereof offer considerable scope for economy. But the latter would seem to all intents and purposes to typify the worst evils that are associated with the managing agency system. Some of the gravest leakages are reported to occur through the managing agents ; and it is to be hoped that when the Tariff Board publishes its report it will have made sound and valuable suggestions as to how each cotton mill company is to order its production. Considering that the cotton mill industry has enjoyed a unique form of protection, a protection that is afforded not so much by the coercive authority of the State as by the spontaneous will of a whole nation—though the former too is far from inconsiderable—it is reasonable to demand that if those who are in power in the cotton mill industry do not comply with the demands of economic production the State must devise measures of compelling them to do so. Schemes of rationalisation with which the industry tinkered in the most ignorant and half-hearted manner a year ago must be evolved and, if necessary, forced upon the interests concerned. During the last 30 years the Indian people have made a splendid effort in saving this country from the appalling wastage of exporting raw cotton abroad and consuming the cloth made of that same cotton. It is unthinkable that effort should be nullified through the cupidity of a small band of cotton mill-owners. It is time that the economic consumer should gain the upper hand over the *swadeshi* sentimentalist.

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**Statistical Statement of Mills in India (including Indian States and Foreign Territories)  
for the year ending 31st March**

Year	No. of Mills	No. of Looms	No. of Spindles	*Cotton consumed in bales of 400 lbs.	Yarn produced in pounds	Cloth Produced		
						In pounds	In yards	
1909-10	...	245	80,171	6,142,551	1,935,010	627,581,562	228,824,078	963,869,482
1910-11	...	254	84,627	6,346,675	1,905,866	609,927,141	245,814,873	1,042,741,653
1911-12	...	258	87,640	6,427,181	2,050,102	625,030,199	266,644,256	1,136,151,590
1912-13	...	266	91,535	6,495,012	2,096,016	688,455,490	285,467,804	1,220,414,529
1913-14	...	264	96,688	6,620,576	2,143,126	682,776,851	274,388,550	1,164,291,588
1914-15	...	255	103,311	6,598,108	2,102,632	651,984,657	277,205,900	1,135,707,952
1915-16	...	267	108,417	6,675,688	2,197,718	722,424,579	352,254,556	1,441,514,550
1916-17	...	267	110,812	6,670,162	2,198,164	681,107,231	377,728,816	1,578,132,789
1917-18	...	269	114,805	6,614,269	2,085,678	660,575,615	381,404,169	1,614,126,458
1918-19	...	284	116,094	6,590,918	2,044,238	615,040,464	349,580,450	1,450,726,160
1919-20	...	263	117,558	6,714,265	1,952,318	635,760,273	383,925,750	1,640,047,774
1920-21	...	255	117,953	6,652,474	2,120,230	660,002,597	367,481,791	1,580,449,746
1921-22	...	271	128,314	6,814,278	2,203,540	693,571,677	403,520,881	1,731,573,236
1922-23	...	289	137,238	7,245,119	2,151,698	705,893,599	405,253,739	1,725,284,187
1923-24	...	310	147,087	7,903,196	1,917,748	617,328,632	401,660,958	1,701,574,355
1924-25	...	305	150,680	8,286,206	2,226,310	719,389,994	453,839,645	1,970,999,238
1925-26	...	303	154,591	8,403,336	2,113,384	686,427,479	465,039,637	1,954,462,650
1926-27	...	306	158,124	8,412,817	2,417,412	807,116,133	538,769,353	2,258,716,065
1927-28	...	296	159,289	8,236,280	2,009,782	808,940,373	567,806,045	2,356,564,805
1928-29	...	292	165,384	8,493,310	2,161,166	648,295,956	445,656,573	1,893,268,655
1929-30	...	305	173,281	9,021,629	2,893,714	833,559,849	562,236,708	2,418,981,049
1930-31	...	...	...	...	...	867,044,558	590,336,923	2,561,133,035

\* Year ending 31st August.

**Estimated World's Consumption of Indian Cotton by Various Countries, 1912-13 and 1919-20 to 1930-31.**

(Year ending 31st July.)

(000's omitted.)

(International Cotton Federation)

Countries	1912-13	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Great Britain	53	58	39	55	107	201	183	168	82	121	183	188	252
% on 1913	...	105	74	104	201	380	345	317	155	228	345	355	475
France	95	57	69	119	170	198	160	163	159	180	217	224	224
Germany	231	79	205	215	193	203	214	204	172	212	252	271	208
Russia	6	†	...	...	...	...	...	1	...	...	...	113	*114
Poland	15	10	21	37	44	34	26	22	32	24	23	24	22
Italy	175	147	208	200	239	314	288	254	184	179	225	261	236
Czecho-Slovakia	(a)	8	43	50	61	129	117	99	66	78	90	109	83
Austria	154	†	36	25	41	62	46	48	25	34	40	35	25
Spain	34	40	59	46	65	111	71	73	53	64	74	92	85
Belgium	82	73	94	100	127	163	245	156	129	147	175	180	149
Switzerland	4	6	7	6	7	11	9	10	6	7	9	10	10
Other European	17	24	28	26	30	22	32	33	29	37	45	56	56
Total Continent	813	444	770	824	977	1,247	1,108	1,063	855	962	1,150	1,375	1,212
% on 1913	...	55	95	102	120	153	136	131	105	118	141	169	149
India	2,081	2,046	2,188	2,207	2,197	2,037	2,347	2,015	2,183	1,840	1,880	2,243	2,298
Japan	992	1,150	1,416	1,480	1,722	1,554	1,478	1,770	1,556	1,241	1,488	1,697	1,500
China	(b)	...	45	345	357	331	340	488	459	308	398	463	520
Total, Asia	3,073	3,196	3,749	4,032	4,276	3,922	4,165	4,273	4,203	3,389	3,766	4,403	4,318
% on 1913	...	104	122	131	139	128	135	139	137	110	123	143	140
U. S. A.	...	12	10	11	21	27	31	30	28	27	35	61	43
All Others	2	...	2	...	1	7	34	38	28	24	44	60	35
GRAND TOTAL	3,941	3,710	4,570	4,922	5,382	5,404	5,521	5,572	5,196	4,523	5,178	6,087	5,860
% on 1913	...	94	116	125	137	137	140	141	132	114	131	154	149

† No returns.

(a) Included in Austria.

(b) Included in Others.

\* Complete return not received; estimated from trade sources.

History of Cotton Prices, 1911-12 to 1930-31 (Todd's).

Season	LIVERPOOL PRICES, PENCE PER LB.						Alexandria Price	American Price of Upland
	American	Indian	Egyptian					
	Middling	No. 1 Fine Oomra	F.G.F. Brown	Dols. per Kantar	Cents. per lb.			
1911-12	6.09	5.63	9.56	17.25	9.69			
1912-13	6.76	6.16	9.79	18.28	12.20			
1913-14	7.27	5.88	9.45	19.02	13.49			
1914-15	5.22	4.46	7.34	12.01	7.94			
1915-16	7.51	6.09	10.42	19.28	11.99			
1916-17	12.33	10.32	21.56	37.81	18.41			
1917-18	21.68	18.78	*30.97	38.52	28.86			
1918-19	19.73	18.13	27.85	37.20	30.36			
1919-20	25.31	19.23	60.34	87.81	38.21			
1920-21	11.89	9.20	30.24	34.50	16.08			
1921-22	11.37	9.60	19.75	34.28	17.78			
1922-23	14.92	11.14	17.29	30.71	24.06			
1923-24	17.66	13.35	21.55	39.79	31.67			
1924-25	13.76	11.95	29.82	39.49	24.27			
1925-26	10.77	8.97	20.05	30.47	19.88			
1926-27	8.15	7.18	15.39	21.49	12.96			
1927-28	11.17	9.21	19.39	29.69	19.72			
1928-29	10.52	8.03	18.14	25.88	18.92			
1929-30	9.09	6.39	14.52	20.36	17.24			
1930-31	5.71	4.02	9.06	†12.42	9.57			

\* F.G.F. Sakel.

† Eight months only. These figures are F.G.F. Brown till 1914, since then composite figures embracing G.F. Sakel, G.F. Ashmuni, and G.P. Brown.

Progress of Japanese Cotton Mills

(Year ending 31st December.)

(Japan Cotton Spinners' Association.)

Year	No. of Mills	Total No. of Spindles	Average No. of working Spindles	No. of Looms	Average No. of Hands employed daily	Approximate quantity of cotton consumed (Bales of 500 lbs.)
1910	136	2,099,764	1,741,168	17,702	109,970	1,087,148
1920	198	3,813,580	3,191,753	50,588	190,801	1,704,633
1921	217	4,161,126	3,162,353	54,994	179,868	1,721,098
1922	235	4,517,612	3,967,265	60,765	219,410	2,095,760
1923	228	4,197,966	4,079,855	61,421	208,481	2,039,405
1924	232	4,870,232	4,115,692	64,225	204,557	1,938,027
1925	243	5,447,184	4,669,753	63,350	229,328	2,267,757
1926	247	5,679,852	5,016,467	77,043	238,662	2,454,250
1927	257	6,116,266	4,662,569	78,352	210,895	2,378,241
1928	259	6,467,174	4,983,089	81,209	198,468	2,280,361
1929	258	6,836,516	6,149,365	77,898	214,628	2,607,212
1930	263	7,214,001	5,628,030	79,466	154,683	2,342,134

**World's Cotton Crops (Todd's).**  
(In thousands of 500-lbs. Bales approx.)

	1914-15	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
<b>AMERICA</b>													
U.S.A. Lint. ...	16,135	11,421	13,440	7,954	9,762	10,140	13,628	16,104	17,977	12,956	14,478	14,825	13,932
Linters ...	857	608	440	397	608	668	897	1,115	1,158	1,016	1,252	1,241	1,000
<b>Total</b> ...	<b>16,992</b>	<b>12,029</b>	<b>13,880</b>	<b>8,351</b>	<b>10,370</b>	<b>10,808</b>	<b>14,525</b>	<b>17,219</b>	<b>19,135</b>	<b>13,972</b>	<b>15,760</b>	<b>16,066</b>	<b>14,932</b>
Mexico ...	125	200	194	145	191	160	221	199	351	175	272	240	169
Brazil ...	456	463	430	491	538	561	649	589	490	480	511	550	502
Peru ...	118	159	166	181	188	201	198	186	243	234	213	210	204
Argentine ...	3	15	28	18	29	62	75	136	65	103	129	150	135
Others ...	8	9	11	45	26	67	84	70	74	58	78	64	54
<b>ASIA</b>													
†India ...	5,209	5,796	3,600	4,485	5,073	5,161	6,088	6,215	5,024	5,963	5,782	5,125	4,820
China ...	2,333	2,470	1,829	1,488	2,249	1,931	2,104	2,044	1,707	1,821	1,790	1,884	2,400
Japan and Korea ...	37	92	103	89	106	113	122	122	141	131	148	136	152
East Indies, etc. ...	23	20	31	27	26	21	20	19	13	14	14	13	13
Russia ...	1,244	200	66	42	52	214	458	741	785	1,041	1,192	1,326	1,723
Persia ...	140	122	102	95	63	79	58	82	83	73	90	100	124
Iraq, Ceylon, etc. ...	‡	‡	‡	‡	‡	1	2	3	3	2	4	4	3
Asia Minor, etc. ...	140	114	106	45	39	78	110	151	134	209	131	161	180
<b>AFRICA</b>													
Egypt ...	1,298	1,114	1,206	972	1,243	1,306	1,455	1,593	1,727	1,219	1,602	1,697	1,603
Sudan ...	19	19	14	19	23	38	36	97	118	101	129	127	97
East Africa ...	34	43	75	49	80	119	180	168	128	128	196	135	175
South Africa ...	1	2	2	2	5	9	18	22	9	9	8	14	9
West Africa ...	12	13	24	12	13	21	32	39	22	17	26	35	20
Non-British ...	4	11	13	16	26	39	65	74	87	91	112	107	100
<b>WEST INDIES</b>													
British ...	5	5	5	4	3	4	3	3	5	5	3	4	5
Others ...	11	17	11	22	17	17	19	25	24	21	23	26	26
Australia, etc. ...	‡	‡	1	3	7	10	12	6	5	8	5	10	8
<b>GRAND TOTAL</b> ...	<b>28,212</b>	<b>22,913</b>	<b>21,907</b>	<b>16,601</b>	<b>20,367</b>	<b>21,020</b>	<b>26,514</b>	<b>29,803</b>	<b>30,373</b>	<b>25,975</b>	<b>28,218</b>	<b>28,184</b>	<b>27,454</b>

‡ Less than 500 bales.

† 400 lbs. bales.

**Estimated World's Consumption of All Kinds of Cotton by Various Countries.**

(Year ending 31st July)

(000's running bales.)

(International Cotton Federation.)

Countries	1912-13	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31
Great Britain ...	4,274	3,620	2,024	2,865	2,770	2,718	3,235	3,022	3,010	2,904	2,800	2,465	1,964
% on 1913 ...	...	84	47	67	65	64	76	71	70	67	66	58	46
France ...	1,010	819	725	1,035	1,185	1,063	1,122	1,179	1,182	1,180	1,227	1,171	1,122
Germany ...	1,728	519	898	1,168	918	945	1,211	1,148	1,478	1,585	1,378	1,322	1,086
Russia ...	2,070	†	926	624	509	597	1,084	1,752	1,737	1,864	2,152	2,109	1,821
Poland ...	414	48	134	220	228	179	209	190	319	360	251	225	*223
Finland ...	35	26	29	34	32	30	28	39	38	41	34	30	34
Italy ...	789	741	795	800	893	942	1,002	1,037	932	954	1,042	1,001	783
Czecho-Slovakia ...	(a)	98	260	372	254	417	484	477	503	546	495	461	397
Austria ...	837	‡	95	113	106	133	136	159	146	164	149	117	97
Spain ...	358	390	299	363	352	366	352	407	390	413	404	412	398
Belgium ...	257	235	211	243	272	296	305	353	363	424	452	461	358
Switzerland ...	99	84	82	88	96	101	108	114	108	116	105	101	92
Other European ...	317	311	295	281	313	260	322	355	356	409	423	478	450
<b>Total Continent</b> ...	<b>7,914</b>	<b>3,271</b>	<b>4,747</b>	<b>5,341</b>	<b>5,158</b>	<b>5,329</b>	<b>6,363</b>	<b>7,210</b>	<b>7,552</b>	<b>8,056</b>	<b>8,112</b>	<b>7,889</b>	<b>6,856</b>
% on 1913 ...	...	41	60	67	65	67	80	91	95	101	103	99	87
India ...	2,177	2,059	2,243	2,314	2,252	2,065	2,440	2,064	2,601	2,034	1,997	2,419	2,513
Japan ...	1,588	2,084	2,122	2,372	2,576	2,337	2,459	2,816	2,861	2,541	2,766	2,997	2,565
China ...	(b)	863	1,071	1,395	1,609	1,571	1,610	1,755	1,920	2,016	1,957	2,297	2,329
<b>Total, Asia</b> ...	<b>3,765</b>	<b>5,006</b>	<b>5,436</b>	<b>6,081</b>	<b>6,437</b>	<b>5,973</b>	<b>6,509</b>	<b>6,635</b>	<b>7,372</b>	<b>6,591</b>	<b>6,720</b>	<b>7,713</b>	<b>7,407</b>
% on 1913 ...	...	133	145	162	171	158	173	176	196	175	178	205	197
U. S. A. ...	5,719	6,733	5,376	6,528	7,253	6,144	6,127	6,395	7,134	6,770	7,833	6,060	5,246
% on 1913 ...	...	118	94	114	127	108	107	112	125	118	123	106	92
Canada ...	113	208	150	157	177	152	161	211	201	198	228	200	202
Mexico ...	158	116	121	133	136	149	193	222	184	189	164	215	146
Brazil ...	508	398	568	477	670	379	533	782	444	552	472	414	392
All Others ...	177	91	40	166	79	91	173	204	244	280	353	253	270
<b>GRAND TOTAL</b> ...	<b>22,628</b>	<b>19,453</b>	<b>18,462</b>	<b>21,748</b>	<b>22,680</b>	<b>20,935</b>	<b>23,294</b>	<b>24,681</b>	<b>26,141</b>	<b>25,540</b>	<b>25,882</b>	<b>25,209</b>	<b>22,483</b>
% on 1913 ...	...	86	82	96	109	92	103	109	115	112	114	111	99

† No returns.

(a) Included in Austria.

(b) Included in Others.

\* Complete return not received, estimated from trade sources.



Imports of Cotton Piecegoods in India

( In millions of Yards )

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
<b>Grey—</b>									
U. K. ...	1,315	815	568	588	651	581	520	143	59
Japan ...	2'5	81	96	154	214	241	393	218	185
U. S. A. ...	10'4	7'3	7'9	2'6	2'2	1'5	'9	.5	'4
Other Countries ...	2	1'1	3'2	2'0	7'3	13'7	10'4	.2'8	4
<b>TOTAL</b> ...	<b>1,331</b>	<b>904</b>	<b>676</b>	<b>748</b>	<b>875</b>	<b>838</b>	<b>925</b>	<b>365</b>	<b>249</b>
<b>Bleached—</b>									
U. K. ...	642	510	363	550	526	525	435	229	207
Netherlands ...	7'6	3'8	4'4	5'9	7'5	3'4	7'5	4'2	3'5
Switzerland ...	2'6	.7	1'7	3'6	12'1	3'7	3'5	5'4	5'9
Japan ...	.4	3'3	2'6	2'8	5'5	5'4	13'8	28'1	59'8
Other Countries ...	1'1	'9	1'3	3'1	1'4	6'1	7'6	3'8	3'8
<b>TOTAL</b> ...	<b>654</b>	<b>518</b>	<b>378</b>	<b>570</b>	<b>556</b>	<b>554</b>	<b>473</b>	<b>271</b>	<b>279</b>
<b>Coloured, etc.—</b>									
U. K. ...	500	350	254	318	352	335	278	147	110
Netherlands ...	15'2	8	7	13'6	12	11'2	14'1	8'5	3
Belgium ...	4	.5	.8	2'1	1'7	2'1	'9	'4	'2
Switzerland ...	2'6	1'7	1'5	3'1	2'5	2'2	1'5	.6	1'6
Italy ...	10'8	9'1	4'1	15'5	24'5	36'1	22'9	3'7	9'9
Straits Settlements ...	1'4	'6	1'3	3'2	3'1	2'1	1'4	'7	.4
Japan ...	'5	13	14	85	102	109	154	74	94
Other Countries ...	6'8	1'5	1'9	5'4	5'8	7'5	9'4	4'7	3
<b>TOTAL</b> ...	<b>631</b>	<b>386</b>	<b>285</b>	<b>447</b>	<b>504</b>	<b>506</b>	<b>483</b>	<b>245</b>	<b>223</b>
<b>Production in Indian Mills—</b>									
Grey and Bleached ...	854	1,065	1,209	1,577	1,675	1,409	1,814	2,003	
Coloured ...	251	378	466	681	681	483	604	557	
<b>TOTAL</b> ...	<b>1,105</b>	<b>1,444</b>	<b>1,675</b>	<b>2,258</b>	<b>2,356</b>	<b>*1,893</b>	<b>2,418</b>	<b>2,561</b>	

\* Mill strike in Bombay.

Imports of Cotton piecegoods in India

( In millions of Yards )

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	2,563'7	1,702	1,199	1,466'8	1,543	1,456	1,247	523	382
Aden & Dependencies ...	'1	'1	1'1	'1	'2	0	0	0	...
Straits Settlements ...	2	'9	1'5	3'5	3'3	2'5	1'7	'8	'4
Netherlands ...	23	12'7	11'4	19'7	19'5	19'6	21'6	12'8	6'5
Belgium ...	4'1	'5	'8	2'3	2	2'4	1'0	'4	'2
Switzerland ...	5'2	2'4	3'2	11'8	14'8	11'1	10'2	6'1	7'5
Italy ...	10'5	9'1	4'3	17'2	26'3	37'6	25'4	9'9	9
Japan ...	3'1	97'6	113'4	243'5	323	357'5	561	320	338'8
U. S. A. ...	10'6	12'7	12'8	15'6	28'2	29	33	9'4	16'7
China ...	'7	'8	2'3	...	7'4	13'5	6'4	2'9	3'9
Other Countries ...	3'2	2'5	4'5	6'0	5'2	6'4	10	3	10
<b>TOTAL</b> ...	<b>2,631</b>	<b>1,840</b>	<b>1,351</b>	<b>1,788</b>	<b>1,973</b>	<b>1,936</b>	<b>1,919</b>	<b>889</b>	<b>776</b>

## INDUSTRIAL SECTION VI :

# THE INDIAN TEA INDUSTRY

### EARLY HISTORY & LATER DEVELOPMENT.

Tea, like Jute, is an industry of comparatively late origin. It had, however, existed in China from the earliest times where it was in use as a beverage in the eighth century. It was mentioned in a letter which an Englishman in Surat wrote to his friend at home in 1617. In 1658 the *Mercurius Politicus* had a notice showing that a consignment of tea arrived in England, which is probably the earliest arrival. Pepys' reference to it in 1661 as a "Chinese drink of which I have never drunk before" suggests a more common usage of the new beverage. But it was not until 1720 that the East India Company imported a large volume of one million pound which was retailed at 30 sh. the lb. In 1773 the Company had such excess stocks, that it obtained permission to export them to Boston; and this, incidentally, led on to the famous Boston tea party. By the year of Trafalgar the imports came to 7½ million lbs.

In the earlier stages China had a monopoly of the tea trade; and probably the tea industry would not have been established in India, but for the fact that the Charter Act of 1813 transferred the monopoly of the tea trade from the Company to the Crown. The Directors naturally looked about for another source of supply for this lucrative trade; and their determination in this matter was strengthened by the knowledge that the plant could thrive under such varying conditions of climate and soil as those of Brazil and Java, St. Helena and Sumatra. The Government of Lord William Bentinck appointed a Committee in 1834 to enquire into the possibility of importing plants from China and developing plantations in the hilly tracts. The lower hills and valleys of the Eastern Frontier and the Himalayan range and the Niligris were obviously fitted for the cultivation of tea. But for a long time, the pioneers of this enterprise were altogether ignorant of the fact that, far from being an exotic plant, tea was part of the flora of Assam. Scepticism in the value of the discovery persisted for a longer time than we might deem credible. But the supporters of the indigenous plant did not have to wait long for their success. For by the middle of 1838 they were able to announce that 8 chests containing 350 lbs. of tea had been shipped to England. Within a year Indian tea was definitely accepted to be a sound commercial proposition; for before that year was formed the Assam Tea Company which was the first and is even now about the largest tea company in India. The first auction in Mincing Lane was held in 1839; but the quality was adversely commented on by the brokers. Efforts to get the Chinese to teach the Indian cultivators failed, probably through the jealousy of the former. But the industry progressed despite these discouraging signs. But 1866, there were 39 gardens with about 10,000 acres, 8,000 operatives and 1.7 million lbs. of output. Before another decade was out there were three times as many gardens; the acreage increased by 80 per cent. and the production had multiplied ten times. By 1906, the acreage increased to 50,000 and the output and employment to 12.4 million lbs. and 64,000 operatives. The corresponding figures for 1915 are 53,178 acres, 17.99 million lbs. and 42,300.

The fall in the number of operatives which is in strange contrast to the increase in acreage and

output leads us to a mention of the patent devices of Mr. William Jackson and the planting reforms of Mr. Christison. The former invented the rolling machine which obviated the repugnant and dilatory processes of rolling the tea by hand and trampling it to dust with naked feet. The latter evolved the measures necessary for preventing the erosion of soil on steep hill surfaces and for resisting the effects of drought.

These inventions enabled the Indian tea industry to get far ahead of China. And the pace of the later development and expansion may be judged from the following figures:

#### TEA PRODUCTION IN INDIA.

	Acreage in 1,000 acres.	Production millions lbs.
1901	... 524	201
1921	... 709	274
1924	... 714	375
1927	... 756	390
1928	... 776	404
1929	... 788	432
1930	... 805	391

Space forbids any detailed sketch of the progress in South India or in other chief producing countries of the world. But it may be mentioned that the first experiments in tea planting in Ceylon were not encouraging. The greatest fillip was given by the disaster which overtook the coffee plantations through the appearance of a pest. Attempts were made to replace coffee with cinchona and then tea. The latter was an unqualified success. By 1880 the export was 162,000 lbs. Five years later it exceeded 4 million and in another five years it reached 45.8 million lbs.

The acreage increased from 406,000 in the beginning of the century to 450,000 in 1929; and the latter, it must be remembered does not include small holdings which are estimated to be about 20,000 acres.

In addition to the great production of India and Ceylon, Africa contributes an increasing amount. The figures for production in 1928-29 will be of interest:

	Area in acres.	Production in 1,000 lbs.
Union of S. Africa	... 2,000	800
Nyasaland	... 8,900	1,745
Kenya	... 5,600	150

Natal, too, has a tea industry of long standing, but as by far the greater part of it is taken up in domestic consumption its production is of little importance to other producers. Nyasaland exports practically the whole of its output; Kenya is understood to have expanded the acreage very largely since 1928-29. Its products are of medium quality which should be useful for blending purposes. Malaya has conducted some successful experiments in tea cultivation; and it is supposed that there are considerable possibilities.

China, as a producer of tea has been pushed more and more to the background. The unhygienic methods of production have allowed the change of taste in the foreign consumer; and Chinese tea is now principally a peasant production conducted for

the individual consumption of the cultivator. The following figures will show the deterioration :

EXPORTS OF TEA FROM CHINA, IN MILLION lbs.

		Black and Green.	Brick and Tablet.
1899	...	153.6	71.2
1913	...	109.2	82.2
1923	...	98.0	8.8
1927	...	77.6	38.6
1928	...	76.8	46.6

The principal rivals to India and China are Java and Sumatra. The origin of the industry in the Dutch East Indies was about the same time as in India or perhaps a little earlier. But production on a large scale had to await the import of plantlings from India. In 1911 Sumatra had 500 acres. By 1928 Java claimed 2,35,000 acres as against 2,07,000 acres in 1924 and Sumatra 53,000 as against 29,000 acres in 1924. In addition Java had 83,000 acres under native growers of which 66,000 acres were in bearing.

Total production from the world's principal sources is given below, as published in the annual *Calcutta Tea Market Report* of Messrs. J. Thomas & Co. :

	1927	1928	1929	1930	1931
	Million lbs.	Million lbs.	Million lbs.	Million lbs.	Million lbs.
Northern India (total season's crop) ...	336½	341	372	331	335½
Southern India (total exports) ...	47½	48½	52½	47½	49½
Ceylon (total exports)	227	236	251½	241½	247
Java (total exports)	126½	134	136½	135	145
Sumatra (total exports)	12½	19	22½	22½	26½
Total ...	755½	779½	834½	777½	803

CULTIVATION AND MANUFACTURE.

Tea seeds take about eighteen months to grow to the stage at which they are fit to be transplanted. The tender shoots are not interfered with during that period; and then they are transplanted at the commencement of the rainy season into holes three feet apart and two feet deep. An acre of land can grow about 2,900 plants. As the plants require copious rains and complete drainage, too, in order that the water may not be in contact with the roots for a long time, only hill slopes are suitable for tea cultivation. Manuring is applied heavily direct to the roots. Weeding and hoeing have to be frequent, and nitrogenous green crops are grown in between the rows immediately after and before the rains. The tea plant left to itself can grow to the height of an ordinary tree; but the plant is kept by pruning to the height of two to three feet, both to force more of tender foliage and to facilitate easy plucking. The picking commences in the third year; and the annual outturn per acre varies, according to the age of the plantation from two to four maunds. The various kinds of teas referred to in the markets indicate whether a particular kind is a tender leaf or a coarse shoot. The buds yield "orange pekoe" and "broken orange pekoe"; "pekoe" is derived from the tender leaves; and "pekoe souchong" is the product of the coarser leaves.

Picking has to be carried on by manual labour, particularly by women "who with quick eye and deft fingers rapidly choose and pluck the leaves, right and left hand operating simultaneously". The leaves are then taken with the minimum delay to the factory where it passes through several stages which are, in their order, withering, rolling, fermentation, firing, sorting and finally packing. The first stage consists in spreading out the leaves in thin layers for about 20 hours to develop and increase the enzyme. This process is so important as almost to

determine the quality of the final product. It has to be slow and even; and a free upward and downward movement of the air is necessary. The importance of this process and the details of the subsequent stages of the manufacture are best described by the Imperial Economic Committee:—

"The leaves are so spread as to allow of free upward and downward circulation of the air. Where climatic conditions allow, the sides of the building are open to the outside air. In some districts, owing to the humidity, it is necessary to wither the leaf in closed rooms, through which carefully controlled currents of air circulate, the object being not to raise the temperature, but to counteract the humidity of the atmosphere.

The process of rolling twists the leaf and breaks open the cells containing the properties that give strength and flavour to the final product. The juices liberated by rolling from, when dry, a soluble extract which is released when the tea is brewed. The rolling may be so carried out that a proportion of the leaf itself is broken and goes to form, without any subsequent cutting, part of the "broken" grades which are nowadays preferred for their superior liquoring quality.

After being rolled, the leaves are spread out and left to ferment. Here, again, it is important to arrest fermentation at the right moment, for if it goes too far, quality and flavour will be spoiled. The fermented leaves, still damp and sticky, are now spread on the perforated or wire trays of a firing machine, and submitted to a hot air current for a short period during which they assume the black appearance with which everyone is familiar. In the course of the processes enumerated, the leaf loses 75 per cent. of its weight.

The tea is now known as "made" tea, and is next vibrated through sieves of varying mesh and sorted into grades. It is important that the leaf in each grade should be even in size and true to type. Although there are no fixed standards for each grade, the differences between them are well-known on the market and any mixture is soon detected. The sorted tea is then packed by machinery into chests and half chests. These are lined with lead or aluminium foil to protect the tea from the atmosphere, to which it is highly sensitive. Even so, tea is sometimes affected by juxtaposition in ships' holds with cases of fruits such as oranges."

MARKETS FOR TEA.

Alike in point of production and consumption, the tea industry is an industry of the British Empire. It lends itself to treatment as an Empire industry, as no other industry does. For, though, as we have seen earlier, the production of tea is spread over various parts of the world, over 70 per cent. of that tea is produced and nearly 70 per cent. of it is consumed within the Empire. Over two-thirds of the entire capital in the industry is owned by its citizens. All the machinery employed in India and Ceylon is of Empire origin. Even the tea chests are imported from Empire countries.

But what is most important in this context is that the Empire is both the producer and the consumer of the greater part of the world's annual output. The world export position is summarised in the following table taken from the Report of the Imperial Economic Committee :

World exports of tea in 1928 and 1929 (calendar years)		in million lbs.	
		1928.	1929.
India	...	355.5	380.4
Ceylon	...	236.7	251.5
Nyasaland	...	1.4	1.7
South Africa	...	.1	.1
Total from British Empire	...	593.7	633.7

orders. The market man receives a salary from the selling broker, and is therefore his employee, but he also receives  $\frac{1}{2}$  per cent. commission on purchase, this  $\frac{1}{2}$  per cent. being additional to the 1 per cent. received by the selling broker. Although on the face of it, it may appear unlikely that these market men can act in a dual capacity without prejudice to the interests of either selling broker or buyer, we have received no evidence to the effect that the arrangement operates unfairly to either party.

"Generally, the selling broker acts in the interest of the producer, and his duty is to obtain the highest price for the teas placed on the market by producers in return for a remuneration of 1 per cent. on the selling price. We have received no complaints against selling brokers. They appear to carry out their duties with satisfaction to the trade and without detriment to the consumer. In fact, they form an essential part of the organisation for placing tea at the consumer's disposal.

"The immediate purchasers of most of the tea auctioned at Mincing Lane are the buying brokers. They number about a dozen and are members of the Tea Buying Brokers' Association of London. Six of these firms have been described to us as relatively big firms. Buying brokers do not normally buy tea to hold but resell later to dealers, blenders, and merchants at a commission of  $\frac{1}{2}$  per cent. In practice all purchasers of tea who do not give their orders to selling brokers' market men (a procedure which is described above), buy tea through buying brokers, except that occasionally as a convenience distributors' representatives will bid in the room if their buying broker is not present or is occupied, but the business is always put through the buying broker, and the buying broker is paid his commission of  $\frac{1}{2}$  per cent. We have been informed that during the last 40 years there has been a change in practice, and buying brokers now obtain a bigger proportion of the orders as compared with the selling broker than was once the case. Although the auctions are public, and nominally anyone is entitled to bid, it has been stated to us that if a bidder, not a recognised buying broker, were to enter the market, or, if one of the big distributors were to instruct his buyer to bid at the market, not through the intermediary of a buying broker, the buying brokers would 'run' the price with the object of securing that all sales of tea should pass through their own hands.

According to the evidence given to us by the Tea Buying Brokers' Association of London, buying brokers assist the trade (1) by selecting suitable teas in public sale for their clients and submitting samples and valuations to those clients, (2) by executing part orders for a parcel of tea and taking over the balance of the parcel, thus enabling the smaller dealer to obtain the tea he wants, (3) by executing confidentially orders for clients who very often have no time to attend the sale themselves, (4) by buying as cheaply as possible in the sale.

The bidding for tea is done in pence and farthings per lb., and the same price is frequently offered by many buyers, none of whom may be willing to raise his offer. The parcel then goes to the first bidder, and it will be of advantage to other buying

brokers who need supplies to repurchase the tea from him and divide the commission with him rather than to offer an extra  $\frac{1}{4}$ d. per lb. After purchase of a particular 'break' other buying brokers therefore frequently call to the successful bidder, and generally, if not invariably, the bidder divides up his consignment at the purchase price, sharing the commission of  $\frac{1}{2}$  per cent. with the other buying brokers. In effect, therefore, two sales are going on simultaneously in the same room.

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

We are informed that many firms rely entirely on the 'bought-over list' for their supplies, and it is claimed that this eliminates much competition from the auction room."

The system of marketing detailed above clearly suggests certain lines of adverse criticism. The buying broker seems to be, to all intents and purposes, an unnecessary middleman who tends only to increase the price of tea for the ultimate consumer. Secondly, it requires an uncommon effort of imagination to believe or realise that the selling brokers' "market men" can act in a dual capacity and be true to his duties both to the buyer and seller all at the same time and in the same transaction. Thirdly, though this is not a necessary result of the marketing system the buying brokers are only a dozen in number and this has led to the remarkable concentration of buying in a few hands. It is said that 70 per cent of the distributing trade in Britain is in the hands of four combinations and this is obviously a dangerous state of affairs. The defects which have been mentioned above have found able apologies at various times. Of the buying broker it is said that he is a specialised middleman whose expert service must be of great advantage to his principal.

The selling brokers' "market men" are given the shelter of the ingenious contention that complaints have rarely been made against them. It is probably overlooked that in a trade whose control has been concentrated in a very few hands—and it must be remembered that the buying brokers control also many companies owning large tea plantations—it is not to be expected that any serious charges will be made or satisfactorily substantiated. But, committees which have required organisation of the Tea trade have stressed the need for a producers' combination which can act as a counter-weight to the combine that actually obtains on the demand side. We must mention here with not a little regret that there has been so far no evidence of an anxiety on the part of the producing interests to improve a system of marketing which cannot commend itself to the ordinary man on grounds of commonsense.

## INDUSTRIAL SECTION VII :

# THE INDIAN COAL INDUSTRY

### COAL IN INDIA AND INDIAN COAL IN THE WORLD.

In importance, the coal industry in India can hardly compare with cotton, or jute, or with the pure agricultural staples. Our production of both raw cotton and cotton goods is a substantial portion of the world output; in jute we have a practical monopoly; and the agricultural staples have a significance in the national economy apart from, and independent of, their relation to the output and markets of the rest of the world. But in coal our annual production is an average of 20 million tons, out of a world production of about 1,250 million tons. The industry in India has comparatively less capital invested in it; and the chief collieries are confined to the provinces of Bengal and Bihar and Orissa. Withal, it is one of the most important industries, one in which the public can never afford to take a mere lukewarm interest. First, the welfare of the coal industry, though it fills a smaller place in the whole of India, is of vital importance to Bengal and Bihar and Orissa. Secondly, coal is by every criterion a key industry. A good supply of coal is one of the basic conditions of industrial progress. Our vast railway system would be unworkable without a well-worked coal industry. So would a coastal marine be when it is evolved by our nationals.

Before we examine the position of our coal industry, it would be well to delineate some of the peculiarities of the economics of coal production. Coal, like other minerals, does not possess the adaptability of agriculture. A coal mine cannot be turned, when the price is not adequate, to any alternative production as, for instance, many agricultural farms or some industrial plant may be. Secondly, there is a preponderance of fixed capital and labour charges in the coal industry; and this tends to make a state of idleness more costly than production at a loss. Thirdly, a coal mine is subject to the law of diminishing returns or increasing costs very much more than other industries. The complete extinction of the mine is not a remote possibility, but the definite end, and has to be taken into consideration in determining costs, prices and profits. Differential costs are both common and high; and prices may often be determined by the mine which is more advantageously situated. Another important point is that coal is not a simple product of uniform quality. One class is suitable for cooking, another as steam coal and a third for household purposes. But they do not fall into separate non-competitive categories; and prices move in sympathy. In other words, quality excepted, prices find their level. And lastly, demand for coal is more or less inelastic; a fall in price does not induce an increase in demand. All these show how difficult it is for the coal industry to devise a remedy when it is afflicted with over-production caused either by increased output or, for some reason, a fall in demand.

We may now turn to sketch briefly the features and changes in recent years of the world's coal industry. The remarkable feature of the coal industry of the world is that out of a production of 1,217 million metric tons in 1913, 517 million tons were produced in U.S.A. and 605 million tons in Europe. So that, so far as the position of the

world's industry is concerned, the rest of the world can hardly be said to count. Of the total European output, 292 million tons were produced in Great Britain, and 190 million tons in Germany. The other important producers were France 40 million tons, and Belgium 23 million tons. Between 1888 and 1913 world output had increased by nearly 200 per cent. This was the period of the most rapid progress in industrialisation, particularly, in U.S.A. and Germany. In U.S.A. the increase was approximately 300 per cent., in Germany 200 per cent. and Great Britain nearly 100 per cent. After 1913, there followed a decade of world chaos during which, coal like other industries suffered from disorganisation. By 1924, there was a fair recovery and a resumption of the onward march. In 1927, the output of coal exceeded the pre-war output.

At this time, there came two important developments which affected the position of the British coal industry in a very serious way. The Saar region was placed under the terms of the Peace Treaty under separate control and the greater part of the Eastern coalfield was transferred to the new Poland. At this stage Germany was no doubt obliged to import considerable quantities of coal from Britain; but later, she managed to do without them, partly by a reduction of her exports to Holland and Belgium and partly by an increase in the output of lignite and brown coal. The output of other European countries also increased. In 1925, Poland was deprived of her markets in Germany; and the countries of Western Europe offered her no prospect. So she availed of the "corridor" and the golden opportunity provided by the English coal stoppage of 1926, to capture the markets of the Baltic. All the four groups into which the foreign markets for British coal may be divided (namely, (1) the Baltic region, Sweden, Norway and Denmark, (2) the North Sea region comprising Germany, Belgium and France and (3) the Mediterranean region including Spain and Italy and South America) show a fall in the offtake of British coal. At the present time there are three countries which export more coal than they import—Great Britain, Germany and Poland. And their competition is intensified because world demand for coal has not kept pace with the world production. Not only has there been a big increase in production, but the need for coal has been reduced by the increased competition of lignite on the Continent, the growing use of oil in ocean and land transport, and of gas and electricity in the homes and factories and lastly the enhanced efficiency of steam-raising. The world market reveals the competition between coal produced under competitive conditions and coal that is indirectly subsidised by lower railway and ocean freights. Each country is exposed to the dangers of blind competitive forces which aim not at maximum profit but minimum loss. Selling organisation and selling agreements are tried and work with questionable success. And on the top of all this trial and tribulation, is the blight of the economic blizzard.

The bearing of the facts cited above on the position and prospects of the Indian coal industry should not be exaggerated. Indian coal is not affected by the British or the Polish product to the same extent as Indian cotton is by Egyptian cotton

or American cotton; but the fundamental facts are the same. The growing vogue of oil and electricity in railways and factories, has affected our coal in the same way as in foreign countries. The peculiarities of the economics of coal production which were pointed out at some length earlier also obtain in the coal industry. And it may also be suggested that the over-production and the consequent effects on coal in Europe have their natural effects in the depression in India. But of this more later.

### INDIA'S COAL FIELDS.

Raneegunge and Jharia are the best-known coal-fields in India. They account for about 90 per cent. of the total production and the rest are raised in other fields some of which lie not only outside the provinces of Bengal and Bihar and Orissa, but also in the Native States. Raneegunge which produced 6.5 million tons in 1930, is situated in Bengal and was opened up in 1820. Jharia which yielded 9.7 million tons in the same year was started in 1893. The other fields are of comparatively recent origin. Joint stock coal companies have invested more than Rs. 12 crores in the industry; and there is besides a small knot of coalfields owned by the railways for which details of capital are not available. Though Raneegunge and Jharia tower over all the rest of the coalfields in India, the progress made by the latter is by no means insignificant. It would be well, before we proceed to sketch the recent history and the present problems of the Indian coal trade, to have a short sketch of the distribution of the coal-fields and to afford some data for an estimate of their value and importance. The Raneegunge fields cover an area of about 500 square miles spread over the districts of Burdwan, Bankura, Manbhoom and the Central Pargannas. The Raneegunge fields are very favourably situated for the export trade, the freight in their case to Calcutta being very much less than from the other fields. The more important seams are Dishergarh, Poniati, and Sanctoria; the next class is represented by Ghusick, Koithi, Chanch, Salanpur "A" Samla, Kajora and Jambad. As the Raneegunge fields were opened up as early as 1820, the raising costs are distinctly higher.

The Jharia field comprises an area of 150 square miles. It contains 18 seams of coal. The trade distinguishes 18 classes of its output of which the last 9 are considered to be very poor. Operations were commenced in 1893. The Bokara field has an area of 200 square miles. It is worked chiefly by the various Indian railways and its output in 1930 was 1.6 million tons. The working is easy and cheap and the total resources of this field are estimated to be over 1,000 million tons of coal of first-rate quality.

The Karanpura field, which falls into divisions, North Karanpura and South Karanpura with areas respectively of 472 square miles and 72 square miles, contains thousands of million tons of coal, though of somewhat poor quality. This field may prove in the future to be more profitable as it is having increasing transport facilities and the actual working may be more easy and less costly than fields similiarly situated.

The Giridih field is controlled by the East Indian Railway for their own needs. It is seven square miles in area and the coal is accounted to be of the best quality. The coalfields in the Central Provinces have been spotted only recently. The quality, it is apprehended, may be found to be very poor and working on a commercial scale will have to await the development of more satisfactory railway communications.

The Pench Valley and Kanhan fields are fortunate in having a good transport service from the G. I. P. and the B. N. Rlys. In common with the

Chanda fields they find ready market for loco and mill use. The Central India fields lie to the East of the Katni-Bilaspur section of the B. N. Rly. and a railway line has been projected to facilitate the opening up of large deposits of coal in this region.

The Rewa State contains an area which has a convenient market near to it in the Lime and Cement factories in the Katni district. Burhar is situated in the same State and has an annual output of about a lakh of tons.

Korea which lies in the Native State of the same name contains high-class coal and is being developed.

The Talcher field is worked by the B. N. and M. S. M. Rlys. Its development will grow with the new port of Vizagapatam; and the future may show it to be advantageously situated both in regard to S. India as well as some of the ports of the South East of India.

The Assam field is practically marked out from the railways of Eastern Bengal, and Assam, the steamers navigating the rivers of that area and the tea gardens in neighbouring districts. The product is of high quality and the mines are worked by adits driven into the hillside.

### OUTPUT & MARKETS.

Independent of the fluctuations in the fortunes of coal companies, the output of coal in India has gone ahead, as may be seen from the following two tables giving the figures of production for the last ten years and for the last five decades:

#### *Production Year by Year.*

Year.			Tons.
1920	...	...	17,962,214
1921	...	...	19,303,947
1922	...	...	19,010,986
1923	...	...	19,656,883
1924	...	...	21,176,606
1925	...	...	20,900,088
1926	...	...	20,999,167
1927	...	...	21,082,336
1928	...	...	22,542,842
1929	...	...	23,418,734
1930	...	...	23,803,048

#### *Production at the end of each decade.*

Year.			Tons.
1880	...	...	1,019,793
1890	...	...	2,168,521
1900	...	...	6,118,692
1910	...	...	12,047,416
1920	...	...	17,962,214
1929	...	...	23,418,734
1930	...	...	23,803,048

The imports and exports of coal into and from India are given below:

#### Exports of Coal.

TWELVE MONTHS—APRIL 1 TO MARCH 31.

#### *Quantity (Tons).*

To	1929-30	1930-31	1931-32
United Kingdom	19,550	8,057	11,955
Ceylon	340,730	295,767	272,680
Straits Settlements	59,013	25,158	22,778
Hongkong	172,658	55,944	162,265
Phillipine Islands	57,868	32,985	37,007
Other countries	35,440	10,259	8,432
Total	685,259	428,170	515,117
Coke	2,372	1,520	1,870

Imports of Coal.

TWELVE MONTHS—APRIL 1 TO MARCH 31.

	Quantity (Tons).		
From	1929-30	1930-31	1931-32
United Kingdom ...	18,812	23,245	23,760
Union of South Africa ...	197,404	121,533	23,241
Portguese East Africa ...	150	5,061	...
Australia ...	1,840	1,455	3,805
Other countries ...	6,020	4,394	4,813
<b>Total ...</b>	<b>224,226</b>	<b>155,688</b>	<b>55,619</b>
<b>Coke ...</b>	<b>12,768</b>	<b>22,866</b>	<b>12,144</b>

The channels of consumption for this supply of coal are indicated in the following table which gives the figures for three years :

	(In Thousands of Tons).		
	1930	1929	1928
Railway (including work-shops) ...	7,531	7,583	7,440
Port Trust ...	197	198	206
Bunker coal ...	1,272	1,376	1,277
Admiralty and R. I. M. Shipping accounts ...	31	38	26
Inland steamers ...	702	674	653
Jute mills ...	867	962	925
Cotton mills ...	1,260	1,538	781
Iron and Brass foundries ...	5,606	5,231	4,294
Tea gardens ...	202	220	218
Consumption at collieries and wastage (estimated) ...	2,380	2,342	2,254
Brick and Tile manufacture ...	1,089	691	638
Paper mills ...	159	139	159
Other forms of industrial and domestic consumption ...	2,218	1,879	3,212
<b>Total ...</b>	<b>23,514</b>	<b>22,871</b>	<b>22,083</b>

It will be seen from the above that the chief consumers, not to speak of the collieries themselves, are, in their order, the Railways of India, the Iron and Brass Foundries, Cotton mills, Bunker coal, Brick and Tile manufacture. It is equally obvious that the fundamental condition of the growth of the coal industry, a vast and widespread industrialisation, is lacking. And even within the narrow limits indicated by the figures cited above, elements of unsettlement have been rife especially during the last one decade after the war. The railways who form the chief consumer of Indian coal have acquired and been working their own coal mines. Objection has been taken to this development on the ground that as the railways are owned by the State, the establishment of railway collieries would mean an unjustifiable and unwarranted encroachment of the State into the sphere of private industry. It is of course, contended in reply that as the railways are commercial enterprises, they must have freedom to develop their business interests and devise combination of a vertical nature, if they deem it profitable to do so. The railway collieries have been developed in the face of natural opposition; but with the increasing troubles of the coal industry the Government have shown themselves more sympathetic to the appeals of the trade regarding the working of the collieries.

Apart from the existence of railway collieries there are other factors which affect the welfare of the coal industry in India. The most important of these is the electrification of the suburban railways of Bombay, as also the railway between that City and Poona. With the completion of the schemes of electrical development in S. India, the South Indian and the M. & S. M. Railways are also bound to follow suit. But while these factors may create a temporary disturbance to the market and some

concern to the collieries, they are no permanent threat to the coal industry as a whole. For railway development, though it may now be held up owing to financial stringency, is by no means at an end. There is still vast scope; and there need be no fear that so far as least as the railways are concerned, they will fail to contribute to the total demand for Indian coal.

The Bombay cotton mill industry is the next channel of consumption which offers a frequent threat of silting up. In this market, too, there appears on a somewhat larger scale the danger which was mentioned in regard to the railways. Mills and factories are worked more and more by oil or electricity; and to the extent this vogue is on the increase, the prospects of coal consumption in Bombay must be less. But it is not, of course, to be expected that the change from coal to oil or electricity will be sudden or on a large scale. And in the worst circumstances Bombay must be a market which Bengal or other Indian coal can hardly afford to despise.

But in Bombay, Indian coal has to meet with the powerful competition of South African coal. In that country the coal trade and the Government work in closest co-operation. The Railways are State-owned; and bounties are best given in the shape of railway freights which have no relation to the economic rates. It has become almost the established custom in South Africa to have one rate for the internal movement of coal, another for coal intended to the bunkered and a third, which is the lowest, for coal exported to foreign countries like India, Ceylon, Sumatra, etc. In consideration of this fact the Indian Coal Committee of 1925, recommended an increase of 50 per cent. in the rebate on railway freights for coal for shipment; and the acceptance of this recommendation meant a reduction of annas eleven in the cost of transporting coal to Bombay and Karachi. But there is one important circumstance, which it is difficult to provide against. And it is that coal from the United Kingdom or South Africa is carried practically in ballast. Steamers expect, and do get, valuable cargo from Calcutta, Bombay and Karachi; and while proceeding to pick up such cargo they can afford to take cargo at rates which by themselves would seem to be uneconomic. Such advantages are for the same reason denied to coal going from Calcutta; and in this sense the export of our precious raw materials may be said to inflict a double injury.

Recently, attempts have been made on grounds of patriotism and Swadeshi to induce Bombay to patronise Indian coal to the exclusion of the imported commodity. The request of the coal owners of Bengal in this behalf is only a request for reciprocity in matters of trade. For the duties on cotton piecegoods and the sentimental preference for the indigenous products undoubtedly mean a very considerable sacrifice on the part of Bengal; and it would be an act of mutual goodwill if Bombay agreed not to utilise foreign coal in her mills and factories. The proposal was made by the Indian Mining Federation but was rejected by the Bombay millowners on the ground that Bengal coal is not an economic proposition. But for the interests involved, the reply of the millowners could be treated as a huge joke. The agitation in favour of Indian coal, unlike the agitation in favour of the cotton mills, has never been vigorous; and the coal interests have not been stung to action even by the supercilious reply of the Bombay cotton millowners. But lately there have been reports that Bombay mills have begun to use more of Indian coal; but as the figures for this period are not available it would be difficult to estimate the actual results.

The other Indian ports offer no considerable demand for Indian coal. The industrial needs of the interior of the country are being met from the coal fields near at hand. This development has been helped by the fact that the growing technique



of industry has enabled the use of low grade coal where formerly only the best coals were suitable. And the Government of India increased the freights on coal other than those intended for export or bunkering by 15 per cent. as from January, 15, 1932. The cumulative effect of all these developments is that Bengal coal will be cut off more and more from the interior and thrown on the so-called export markets.

The foreign markets have for long been the weakest spot of the Indian coal trade. It is here that the trade has suffered the worst vicissitudes, though the surplus of production over internal consumption is not very high, the disposal of this surplus at remunerative rates is of vital importance to the whole industry. Disturbance in the foreign markets deepens into depression at home and the export trade has, therefore, been the concern of the collieries and the Government. It is necessary in an examination of this subject to realise that all the coal passing through the port of Calcutta is not intended for the foreign markets, a part of it is for bunkering, a part for the Indian ports and only the remainder goes to the foreign markets. The exports of Indian coal began to be of importance only in the five years ending 1900 when they averaged 30,500 tons annually. For the pre-war period the peak was reached in 1906 with an export of a little over a million tons, and for the decade ending with 1915, the annual average was slightly about three quarters of a million ton. It was only two years after the war in 1917, that exports began to be effected through the shortage of shipping which obtained at that time throughout the world. In 1918, the lowest point was reached with 74,000 tons. The end of the war helped a rapid recovery and 1920 saw exports mounting up to so high as 1.2 million tons. The rapid expansion of the demand for coal after the war involved a very heavy strain on the railways in the years 1919-20. The coal trade came to have a virtual monopoly of the wagon supply with the result that other commodities and trades were held up. In July, 1920, the Government of India following the example of the United Kingdom and South Africa, decided to prohibit the export of coal from India except under license with effect from July 24, and from September 1, to refuse the preference which had till then be accorded by the railways to bunker coal for Indian ports. It was hoped at the time these restrictions were imposed that the bunker coal intended for the ports of Bombay, Madras and Karachi which were then taking an all-rail route would be diverted to the port of Calcutta and would then reach their destination by coastal steamers. At a later stage, it was deemed advisable to restrict the free export of coal and to allow the exports to the former foreign markets only on the basis of a rationing scheme. Within a half year, it was found, on account among others, of a fall in the raisings to the extent of  $4\frac{1}{2}$  million tons, that the provisions were not drastic enough. From the end of January 21, exports to Sabung and Singapore were altogether prohibited. Colombo was allowed a diminished supply till the end of March and thereafter only to the Ceylon Government railways and a few public utility concerns. Even bunkering coal was reduced to the minimum necessary for enabling the steamers to reach the next nearest source of bunker coal. In July 22, all restrictions on the export of cargo and bunker coal by sea to ports in India were removed. The embargo was not entirely removed till January 1, 1923.

The inevitable result of this interference with the flow of coal to foreign markets was that Indian coal was ousted from its place and that South Africa which is the chief rival to India fully established herself in those markets; and it is easy to understand that once business relationships are established, it is difficult to terminate them in favour of even an older customer. It has been remarked already in an earlier section of this article, that, the

Government and the trade in South Africa work in the closest co-operation and that among the many measures introduced for strengthening the export trade in South African coal was the action that had been taken to prevent the use of any but the best coal for export and bunkering and to ensure the satisfactory condition of any coal so used. By 1924, the situation resulting from the loss of the foreign markets had become serious. The coal trade applied to the Government of India for protection; and as the questions involved were deemed to be of a highly technical nature, the Government decided to appoint the Indian Coal Committee, which would go thoroughly into the question and submit a report which might possibly be regarded as the basis for the Tariff Board to work on. The findings of the Indian Coal Committee are naturally various and varied. Their most important finding was that the problems of the Indian coal trade may be summed up in two words "quality" and "price". In regard to the former, they inclined to the view that, though the restriction placed on exports during the period after the War had much to do with the ultimate loss of the foreign markets, there have been even from earlier times a decided dissatisfaction amongst the foreign consumers with the quality of the Indian coal and that, even if the restrictions on exports had not been imposed, India would, in any case, have been superceded by her rivals in Colombo, Singapore and other ports. As regards price, they went elaborately into the factors entering into the price of coal at the various consuming centres. Naturally, these factors fell into four divisions: (1) cost of raising; (2) railway freights; (3) port charges and, in the case of coal for foreign markets and Indian ports (4) shipping freights. The Committee after a careful examination gave their finding that Indian coal, by all the accepted criteria in this regard, is, if anything, superior to the rival product from South Africa; and that if greater care were expended in the raising, handling and selection for foreign markets of Indian coal, our products can very well stand the competition from abroad and slowly find it possible to regain the lost markets. For this purpose, the common methods of pooling and grading were suggested in the evidence before the Committee and were considered by them. The Committee decided that no pooling was essential for this purpose. They accordingly recommended the appointment of an Indian Coal Grading Board to classify the different seams at Indian collieries, to prepare a grading list and grant certificates of shipment. The recommendation was given legislative effect in 1925; collieries included in the grading list receive a special rebate on railway freight and a reduction of port dues and of shipment of cargo coal approved by the Grading Board. With the institution of the Board, foreign markets have been enabled to ascertain beyond doubt the origin and quality of the coal consigned to them. The quality of the coal shipped under the supervision of the Board has helped Indian coal to regain the footing it had lost in the markets of the East owing to the indiscriminate shipments of earlier years. The exports of Bengal coal for Calcutta during 1930 amounted to 2.05 million tons as against 2.61 million tons in the previous years and 2.28 million tons in 1928.

Apart from the prospects of Indian coal as such, Bengal coal would seem to have problems of its own. We have already mentioned that there will be an increasing tendency on the part of the industrial consumers in the heart and farther ends of the country to have their needs supplied by the collieries near at hand. This has been possible as the technique of steam raising enables the use of inferior coal in place where formerly there was no alternative to the use of best qualities. In these circumstances Bengal coal will have to fall back entirely on

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## THE INDUSTRIAL SECTION VIII :

# THE SUGAR INDUSTRY

During the last one year, the foremost thought in the mind of every capitalist in India acquainted with the conduct of industrial production is the establishment of a sugar factory. The obvious reason is that the protective policy of the Government and the exigencies of the financial situation in India have combined to give Indian sugar a protection of roughly Rs. 18 per bag; and in these circumstances, it is natural that there is talk of a considerable number of sugar factories springing into existence.

Before detailing the position and prospects of the Indian sugar industry it were well to follow the plan adopted in this Year Book to give a short exposition of the history of the sugar industry of the world. As a staple industry, sugar is comparatively modern. And its course during this period has been none too smooth. Imports from Brazil and the Antilles first familiarised Europe to the use of sugar, but the sacking of San Domingo reduced it again to a rarity and it was only after the Napoleonic Wars that the imports from colonial possessions of European nations and from India again increased European consumption of sugar. But at this stage, the extraction of sugar from beet developed on an increasing scale and from then, up to the beginning of the present century, beet and cane had vicissitudes not quite unlike those of the precious metals in the days of bimetallism. 1820 to 1840 was the period of the initial development of the beet sugar industry. It gained in strength with the growing success of the movement for the abolition of slave labour in the sugar plantations of European colonies. The last decades of the 19th century were marked by the attempts on the part of European nations to develop, chiefly by means of bounties, a sugar industry of their own. The absurdity of all-round bounty and all-round reprisals was recognised by the Brussels Convention, in pursuance of which the duties were all cancelled. As a result the cane sugar industry had an opportunity to develop itself. While cane sugar expanded, beet did not suffer any setback. In 1902, there was a sudden increase of production owing to the fact that Cuba became independent and Formosa passed under Japanese control.

A slump in 1911 was avoided by the appearance of a drought in the succeeding year. The next threat to the balance of production and demand was in 1914 when the world War more than reversed the position. The War had far-reaching effects on the sugar industry of the world. Immediately after the outbreak the belligerents placed large orders for sugar; and later owing to the destruction of beet cultivation in Europe the cane producers increased their output; and even after the War owing to a tendency to exaggerate the difficulties the revival of beet cultivation in Europe cane producers persisted in a policy of expansion. The state of production which obtains in the sugar market to-day is due, almost solely, to the vast increase in output following the causes mentioned above. The most notable of recent events in the history of the world sugar industry is the Chadbourne Plan which embodied an understanding as to the quota exportable by each producing country.

While the world sugar industry was thus expand-

ing by leaps and bounds, the industry in India showed itself singularly unresponsive to the scientific developments abroad. The principal features of the relation of India to the world in regard to sugar are easily stated. Though the area under sugar cane was 30 lakhs in 1926-27, which is about half the world acreage, the output of Indian sugar is barely 20 per cent of the world output. The yield per acre in India is less than 1/3 that of Cuba, 1/6 that of Java and 1/7 that of Hawaii. Not only is the yield per acre low, but there is an appalling wastage at every stage and process of production. Cane crushing is done in the most primitive manner; and it is estimated that 11 lakhs of sucrose are lost owing to the backwardness of the technique. Figures of imports of sugar for the last 10 years will be found at the end of this article. The earlier history may, therefore, briefly be indicated. The fortunes of India's sugar trade and industry are not quite dissimilar to those of the cotton industry. At one time, India was an exporter of large quantities of sugar. Till 1863-64, the exports from India exceeded the imports and from that year the position has been quite the reverse. Mauritius was responsible for the first attack on this market; and later the bounty-fed beet sugar of Europe also joined. In 1897-98, the imports of sugar into India was 46 lakhs cwts. as against the average of 18.4 lakhs in the period 1886-1890 and an average of 5.5 lakhs during the 5 years of 1874-79. The duties on German and Austrian beet sugar which were levied in 1902 had to be abandoned in 1904 in pursuance of the decisions of the Brussels Conference of 1901-02. The result was not that Indian sugar had any advantage as against the imported commodity but that in place of Germany and Austria, stepped in the British planters of Mauritius. But the most complete success was reserved for Java whose attention was diverted from the American market to the Indian by America's grant of preference to Cuban sugar under the Reciprocity Convention of February, 1904. As mentioned already, Japanese development of the sugar resources of Formosa meant that Java could not sell much of her produce in the Far Eastern island. Java, therefore, was obliged by circumstances to concentrate her attack on the Indian market and the result is that out of 1,011,345 sugar imported into India in 1929-30 806,661 came from Java. The check to the import trade has come only slowly. The figures of sugar imports during the last three fiscal years show that the recent tide of foreign sugar in India has been stemmed.

			(In tons).
1929-30	...	...	1,011,345
1930-31	...	...	1,003,177
1931-32	...	...	556,274

But it is necessary to recognise that the decline in the imports of sugar is the result of a number of factors. The most important of them are, firstly, the reduced purchasing power of the Indian masses owing to exceptional severity of the trade depression in this country; and secondly, the higher import tariffs which in their turn are due to two different causes: (1) the recommendations of the Tariff Board after an enquiry held in the pursuit of the policy of discriminating

protection and (2) the exigencies of the financial situation in India which during the last two years have been responsible for successive increases in duties on our staple imports. A brief history of the import duty on sugar will be found to be very appropriate in this context. Up to 1916, the duty was 5 per cent. *ad valorem*. In that year a rise of 5 per cent. was effected. 1921 saw the level of 15 per cent. and in 1922 a duty of 25 per cent. was imposed. In 1925, the fall in prices rendered the *ad valorem* duties innocuous and a specific duty of Rs. 4-8 a cwt. was substituted. This was increased first to Rs. 6 in 1930; and in March, 1931, a rate of Rs. 7-4 per cwt. was put on the schedule. In common with other imported articles, a temporary surcharge of 25 per cent. was effected by the Supplementary Budget as from September 30 1931. Thus the import duty on sugar is Rs. 9-1 per cwt.

At this stage the recommendations of the Tariff Board in regard to the sugar industry may be indicated. The Board envisaged a scheme of protection for the sugar industry for a period of 15 years. They abandoned any system of bounties as impracticable. To determine the amount of protection which will have to be awarded to the Indian industry the Tariff Board calculated that Java could import its sugar in Calcutta at Rs. 3-15 per maund without, of course, making any profit. And as for the Indian industry they assumed that Rs. 8-13-1 would be a fair selling price. On these bases, the Tariff Board recommended that the duty of Rs. 6 per cwt. should be increased to Rs. 7-4 for the first 7 years of protection and that thereafter when the market price of imported sugar falls below Rs. 4 in Calcutta the Government should increase the duty by Rs. 8 a cwt. and that for such purpose legislative sanction should be obtained. The Board also made suggestions in regard to safeguarding the interest of the farmer. In his budget proposals of 1931-32, the Finance Member increased the duty to Rs. 7-4.

Only a vague and scrappy idea of the trade in India can be conveyed in this short sketch.

Bihar forms the most fruitful field for the operation of sugar companies. U. P. also has two or three big-sized sugar factories. In Madras, Messrs. Parry & Co., have exploited the possibilities on the widest scale and in the most scientific manner. So far as Northern India is concerned, Messrs. Begg Suther-

land & Co., have the largest number of concerns under their agency. Between them and Parrys, over  $\frac{3}{4}$  of the total sugar production in India is controlled. Andrew Yules and Bradys are also connected with sugar propositions; but sugar is only one side of their activities—and not the main activity as is the case with Begg Sutherlands. In the last twelve months, a number of new enterprises have been started, with a view to take advantage of the heavy protective duties on the imports of sugar. Birlas are responsible for two important ventures in Bihar. Other Indian capitalists are also in the field. Altogether, nearly a dozen companies were started in recent months for the manufacture of sugar.

Most of the sugar factories in India deal with *gur* derived from sugar cane. It is only in the extreme Southern Districts of Madras that *gur* derived from palm has been utilised for sugar manufacture.

Subsidiary industries connected with sugar have been rather slow to develop. Good many of the Indian sugar companies have distilleries attached thereto. Molasses is thus utilised in the manufacture of spirits. For the production of spirits of finer quality, Begg Sutherlands have installed a first-class distillery. This firm, as well as Parrys, has also a sweets-manufacturing department as an adjunct to their sugar manufacture.

Though the sugar cane supplies in Bihar and some parts of the U. P. and Madras have been adequate for purposes of the existing factories, the Indian sugar companies have suffered from the absence of big-sized fields growing sugar cane in the immediate vicinity of the factories. The fields are scattered all over the surrounding tracts; and there is, inevitably, considerable wastage. Between the cutting of the sugar cane and its reaching the factory, there is great delay. No sugar manufacturing concern in India is in the same advantageous position as regards the proximity and ready availability of raw material as the large sugar concerns of Java or Cuba. In fact, no attempt has so far been made to combine growing of sugar cane with the manufacture of sugar. Enterprises, with such a twin object, are possible in Mysore, where the soil and climate are most suited for sugar cane, the size of crop per acre and the sugar content in cane are the highest; and so far no attempt has been made to make full use of the natural resources and advantages.



Sugar

Year	Area sown in 1,000 acres	QUANTITY PRODUCED IN 1,000 TONS		Average price per maund. Java white fine Calcutta		IMPORTS	
		Sugar Raw (gur)	Refined Sugar	Rs. As.		Quantity 1,000 tons	Value Rs. 1,000
1920-21	27,05	25,22	27'5	29	14	843	18,50,30
1925-26	28,05	29,77	52'3	10	18	803	15,58,41
1926-27	80,40	82,67	59'5	11	13	922	18,89,06
1927-28	80,46	82,17	67'9	10	6	822	14,90,55
1928-29	26,74	27,04	68'6	9	12	987	16,08,95
1929-30	25,82	27,52	89'8	9	0	1,011	15,77,65
1930-31	...	...	119'8	8	8	1,008	10,96,47
1931-32	...	...	...	10	8	556	6,16,53

Imports of Sugar (excluding Molasses and Confectionary)

(In hundreds of Tons)

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	7	4	7	...	...	4,8	59,8	8,4	22,8
Straits Settlements ...	1,7	28,5	7,5	1,1	1,8	9	6	5	3
Hongkong ...	4,4	5,7	6,5	3,0	3,1	2,1	59	42	41
Egypt ...	...	1,6	1,9	...	...	...	...	...	...
Hungary ...	...	...	11,8	...	...	2,1	86,5	18,8	5
Mauritius ...	128,8	56,7	25,9	1	...	...	...	809,7	...
Java ...	453,0	367,2	382,8	611,7	692,2	850,8	781,1	...	366,5
Japan ...	2	5,7	4	...	1	8	5	...	...
Netherlands ...	...	...	1,4	3,7	7	...	...	...	4
Belgium ...	1	...	4	13,8	4	3	18	3	1
Russia ...	...	...	...	...	...	...	...	42,5	68,4
Other Countries ...	45,3	6,9	12,7	193,5	28,0	7,5	53,9	21,8	52,5
<b>TOTAL</b>	<b>683,5</b>	<b>472,3</b>	<b>443,5</b>	<b>826,9</b>	<b>725,8</b>	<b>868,8</b>	<b>989,6</b>	<b>901,2</b>	<b>516,0</b>

(Continued from page 250.)

the export markets ; and this is a prospect which it need not fear as Bengal coal is of the highest quality and well appreciated by foreign consumers. But the internal coal market has been during recent times in a state which the producers can by no means regard as wholesome. Coal prices are determined by the rates obtained at the railway tenders ; and the fact that the railways themselves are owners and managers of collieries tends to undue depression of the market. It has naturally been the insistent demand of the coal trade that the railways should cease to work their collieries. While this desideratum has not been fully secured the coal owners of all sections attempted for their part to reduce undue competition amongst the producers. In 1929, the representatives of the principal coal owners formed the Calcutta Coal Conference and thus got fixed minimum selling prices for the various qualities.

During the short period in which it has worked it has shown evidence of a capacity to reconcile the interests of each producer with the larger interests of the industry as a whole. As a result of the activities of the Conference, coal prices are at higher levels than would have obtained otherwise. The particulars of the tenders for the supply of coal to the State Railways during 1932-33 are given below :

	1931-32 Rs A.	1932-33 Rs. A.
Dishergarh ...	5 12	4 12
Poniati ...	5 4	4 8
Super Jharia ...	5 0	4 12
Selected Jharia ...	4 12	4 8

It will be seen that prices are distinctly lower ; but the future is yet hopeful.

## INDUSTRIAL SECTION IX

# THE INDIAN SALT INDUSTRY.

The problem of the salt industry in India is the problem of displacing the imported salt in the markets of Bengal and Burma with the indigenous manufacture. While other parts of India are content with the products of their own local sources of supply, Bengal has for various reasons passed into the grip of the exporter from Liverpool. The foreign salt is not only available at a price which makes it difficult for the Indian producer to compete, but its quality is also of such a high standard as the indigenous manufacturer will take some time to reach. The principal sources of indigenous salt are (1) the sea-coasts of Madras, with Tuticorin as the principal centre of production. (2) The sea-coast of Bombay which abounds in salt factories which are worked under the control of the Government (In this region are situate the works at Darsana which have become famous through the raids conducted during the Civil Disobedience Movement of Mahatma Gandhi) and (3) The salt mines of Northern India at Khewra and Warcha in the Punjab Salt Range and salt works at Smabhar, Pachbadra and Didwana in Rajputana. In Madras, the production is in the hands of private individuals and under the control of the Government. The Salt Department has a voice in the quality and in the quantity to be manufactured. With 60 factories working along the coast there is sufficient competition to ensure reasonable prices.

In Bombay, the works at Darsana are under the direct charge of the Salt Department. Government agency manufactures large quantities at Kharaghoda. But Karachi is the premier centre of Indian salt. Private companies work under an excise system and the attacks on the foreign importers have been made from time to time by the salt producers of Karachi. Roughly speaking, Bombay, Madras and Northern India accounts each for 1/3 of the indigenous production.

As for Bengal, it is certain that in the early years of the last century, salt was derived from local manufacture by boiling or by solar evaporation along the sea-coast from Chittagong to Puri. With the advent of the East India Company, the Company's Governors and principally, Warren Hastings introduced a system of Government monopoly by which manufacturers were induced, by advances of money, to sell their entire production to Government. The Government once assured of a total control over the supply, were able to manipulate prices in order that they might make a fair profit for the Company. About the middle of the century, competition of imported salt was increasingly felt and later the indigenous industry disappeared more or less totally. The consumption of Bengal during the present times may be put at an average of 5 lakhs tons a year. The claim of the indigenous manufacturer to Bengal's custom in regard to salt needs no elaborate substantiation. For once the whole country is committed to a policy of discriminating protection it is natural that Karachi, Tuticorin, the salt mines of Northern India and even Aden, which for purposes of the salt industry is considered as part of India, should cast longing eyes on the lucrative markets in Bengal. An enquiry by the Tariff Board is suggested by the fact that the repeated efforts of the Karachi salt manufacturers to enter the Bengal market had been met on every occasion by the Salt Importers' Association of Bengal with a drastic reduction in prices. These

measures of cut-throat competition have been adopted so repeatedly that there can be no question that the foreign importers were retaining their hold on Bengal mainly, if not solely, through the tactics they have adopted in regard to prices in the Bengal market.

The Government when they ordered the Tariff Board enquiry, framed the terms of reference as "whether it is desirable in the national interest that steps should be taken to encourage the production of salt in India suitable for consumption in those markets which are at present largely supplied from abroad and if so what measures they recommend." The essence of the Board's findings is that even if the markets which are now served by the importer were to be reserved for the indigenous producer, the national gain in employment and profits is not commensurate with the privation of the consumer; that the threat of shortage in time of war which was one of the reasons advanced for securing the Bengal market for indigenous manufacturers, would still continue as in the event of a war Bengal will have to be supplied from Aden and Karachi; and that, therefore, the best way of tackling the problem is to provide conditions in which Bengal would be served to an increasing extent by rail borne salt. So far as the possibilities of the indigenous manufacture are concerned, the Tariff Board has estimated that salt of superior quality could be produced within a few years; and they therefore recommended that Government should undertake a thorough survey of the possible sources with a view to determine the extent to which the Bengal market may be supplied by rail with fine, white crushed salt. The Tariff Board also addressed itself to the question of protecting the indigenous manufacturer from the vagaries of the importer. They had clear evidence before them as to the questionable methods adopted by the importers to keep the indigenous manufacturers out of Bengal. But at the same time, they were impressed with the fact that domestic production could not grow all of a sudden to the extent of meeting of the whole of the demand. They, therefore, formulated a scheme of a Salt Marketing Board which was to be in constitution like that of a public utility company. The function of the Marketing Board is to buy the entire output of indigenous salt both from the Government and from private manufacturers and then meet the excess requirements over indigenous production by purchases from the foreign importer. It should be the aim of the Board to maintain stability of prices at a level at which they would be fair to the consumer and which will allow the indigenous industry scope for economic expansion.

In pursuance of the suggestion of the Tariff Board that a fuller investigation into the possibilities of expanding the existing sources of supply and the effect of such expansion on prices should be undertaken, the Government of India appointed the Salt Survey Committee consisting of Sir Chunilal Mehta and Mr. C. H. Pitt, General Manager of the Northern Salt Range Division. The report of this Committee was submitted in February, 1931. After a detailed examination, the Committee came to the conclusion that "there is no ground for assuming that with imports from Aden India cannot be made easily self-supporting in the matter of salt supply, and that even the continent itself can, when areas suitable for salt manufacture but at present lying idle are develop-

ed, supply all the crushed salt that India needs." It is interesting that this conclusion was arrived at by the Salt Survey Committee, though they were asked to examine only the possibilities of Karachi, Okha and Morvi and Northern India Salt range and not the possibilities either on the east coast or on the south coast. The Salt Survey Committee went into the question in detail and reinforced the recommendation of the Tariff Board that higher prices should be charged locally and should be utilised for a reduction in the price in Bengal markets since prices not fully commensurate with the higher cost of freight for a distant market are a well-known and accepted commercial practice. The Committee also obtained from the Railway Board reduction in the rate from Khewra.

Throughout the period in which the question of protection for salt industry was being considered by successive committees, there was a somewhat acrimonious controversy conducted ostensibly on behalf of the interests of the Bengal consumer and against the selfish greed of the salt manufacturers of the Western Presidency. Though it is unquestionable that protection for the salt industry would mean something of a sacrifice on the part of the Bengal consumer and a new opportunity for profit for capitalists in Bombay, it would undoubtedly be unreasonable for any section to oppose the only means open to us of developing the indigenous salt industry and of securing for it the fullest scope in the internal market. When the time for considering the recommendations of the Tariff Board came the Legislative Assembly decided, both in view of the controversy referred to above and in view of the complicated nature of the institution of a marketing board, as suggested by the Tariff Board, to refer the question to a Committee of the Assembly in which Bengal interests were adequately represented. The recom-

mendations of the Committee, including Bengal representatives were in substantial agreement with the recommendations of the Tariff Board; and they may be summarised as follows:—

"(1) That an additional duty of 4½ as. per maund on salt imported by sea into British India should be imposed without delay.

(2) In order to ensure to the Indian producer a fair selling price recommended by the Tariff Board, the executive should be empowered to increase this duty by one anna per maund if the price of foreign salt falls below its present level.

(3) The imported Indian salt should get a rebate equal to the additional duty if the producer undertook to sell to the Government quantities of salt up to a fixed maximum at the fair selling price recommended by the Tariff Board.

(4) The fair selling price recommended by the Tariff Board was Rs. 63-11 per 100 maunds ex-ship. Taking the present price of imported salt at Rs. 36 per 100 maunds a duty of 4½ annas per maund would mean a duty of Rs. 28-2 per 100 maunds and the price would, therefore, be Rs. 64-2 per 100 maunds ex-ship, which is very near the figure suggested by the Tariff Board.

The Bill for the temporary additional duty of 4½ annas per maund on imported salt was introduced in the budget of 1931 and in spite of the strenuous opposition the bill was passed by the legislature. The opposition of Bengal was, however, placated by an express provision that ⅓ of the additional revenue should be distributed among the provinces where the salt liable to the new duty is likely to be consumed; for it is important in this context that not all the salt imported into Calcutta is consumed by Bengal, and Assam and Bihar and Orissa have an appreciable offtake of the total imports.

## SALT

Year	PRODUCTION		IMPORT	
	Quantity in 1,000 tons	Value Rs. 1,000	Quantity 1,000 tons	Value Rs. 1,000
1915-16	1,745	99,03	548	1,89,61
1917-18	1,427	1,49,04	336	2,20,08
1919-20	1,891	1,82,35	446	2,09,52
1921-22	1,533	1,11,32	472	1,51,68
1923-24	1,781	1,12,40	474	1,10,28
1925-26	1,205	76,42	560	1,04,20
1927-28	1,611	1,13,80	590	1,74,84
1929-30	1,709	1,13,14	643	1,80,89
1931-32	...	...	451	71,98

Production figures relate to Calendar year, and are inclusive of Indian States.  
Value figures prior to 1922, are inclusive of duty.

## INDUSTRIAL SECTION X :

# THE PAPER INDUSTRY

The manufacture of paper by hand existed in India from quite early times; but it has very little relation to the modern paper industry. In Europe, paper used to be made out of rags. But now their use is confined to only certain special kinds, the bulk of the output being made out of Esparto grass, during the latter half of the last century and wood fibre at the end of the century. Conifer trees which are quite suitable for yielding raw material for the manufacture of paper have one serious disability, namely, that they took nearly 60 years to be replaced. Though Esparto grass is also suitable, there is still the problem of a shortage of cheap raw material; and among the substitutes that are thought of bamboo is the most suitable. In Northern India, Samba grass is used for making paper. No attempt has been made so far to manufacture paper from Indian wood though Indian paper is made of wood fibre. The essential operations of paper manufacture, according to the Tariff Board, are:

"(1) The removal by chemical means from the fibre of the elements which are not required, so as to isolate the cellulose. It is this process which converts the fibre into chemical pulp.

(2) The bleaching of the pulp with chloride of lime."

(3) The treatment of the pulp in the heaters. It is here that the experience of the trained paper-maker comes chiefly into play, and the quality of the paper made depends mainly on his skill and experience.

(4) The conversion of pulp into paper on the paper machine. Here the essential point is the interlacing of the fibres on the wire cloth and the ingenuity of the craftsman has had ample scope in devising the apparatus by which this is accomplished."

The normal consumption of paper in India comprising both local production and foreign imports is 99,000 tons; but that part of it which the Indian industry can produce is very limited. The Indian industry cannot engage profitably either in the very low grade papers which are extremely cheap or the high-class glazed papers for which the demand is so limited as not to warrant any large outlay of capital. Deducting the imports on this account, the amount of imports which compete with Indian paper and which Indian industry can well produce by itself is 200,000 tons. The trade has been subject to a certain amount of dumping from countries like the United Kingdom and Germany which export only a small part of their production. Such a charge would not lie against Norway or Sweden; but all the same

the dumping that has been present has affected the Indian industry.

From the foregoing, it will be seen that there are three important considerations for giving protection to the paper industry; first, that the paper industry itself is subject to dumping from abroad; second, that no less than 20,000 tons of the foreign imports can be produced at home economically; and and third, that in view of the possibility of the paper industry of the world coming to rely on Indian bamboo pulp, the manufacture of pulp from bamboo must be kept alive. And protective measure accorded to bamboo pulp would automatically increase the cost of the manufacture of paper and the manufacturer would, therefore, be entitled to a corresponding protection. It is in this manner that the country has been led on to afford protection to the two industries. The Tariff Board estimated for purposes of determining the protective duty on paper a fair selling price for Indian mills of Rs. 464 per ton. As the price which the Indian paper would realise on a free market is only Rs. 341, the measure of protection required would be Rs. 123 per ton. The import duty on pulp which the bamboo pulp manufacturing industry would require is Rs. 45 per ton. The consequent increase in the cost of manufacture is Rs. 45 per ton. The consequent increase in the cost of paper is Rs. 19 per ton. Thus, taking together the need of the paper industry of Rs. 123 per ton and the increase in the cost of production due to the protection of bamboo pulp of Rs. 19 per ton the total amount of protection for the industry would be Rs. 140 per ton or one anna per lb. The recommendations of the Board have been embodied in the Bamboo Paper Industry (Protection) Act, 1932. Newsprint, however, containing 70 per cent of wood pulp is allowed to be imported free.

The most important producer of paper in India is the Titaghur Paper Mills Co., Ltd., under the Managing Agency of Messrs. F. W. Heilgers & Co. The Company took over the machinery of the Bally mills which was first established in 1870 and which was liquidated in 1905. The Titaghur also took over the Imperial Paper Mills which was started in 1824 and was not able to continue. The estimated production of the Titaghur Company is about 20,000 tons per year. The next important concern is the Bengal Paper Mill Co., which took over the Gwalior Mill and removed its machinery to Ranigunge in 1922. The capacity of this Company is 8,400 tons per year. The other important mills are the Upper India Paper Mills at Lucknow with a capacity of 4,000 tons, the Deccan Paper Mill Company with an output of 1,700 tons and a few small concerns in Madras and the Punjab and the other provinces.

## INDUSTRIAL SECTION XI :

# THE CEMENT INDUSTRY

Cement is something of an oasis in the desert of India's troubled and depressed industries. It has, in the first place, shown a steady increase of production, though in the last few months, the extraordinary prolongation and intensity of the depression may have affected it in some ways. The sudden and drastic curtailment of railway construction is also a serious factor. But the industry's organisation is compact, self-reliant, and efficient, with a market which is sure to show a vast expansion; and when trade improves, cement will be among the first to take advantage of the improved conditions. Like most other industries of India, cement, too, tried to taste the forbidden fruit of protection; but on a careful enquiry the Tariff Board decided that what the industry suffered from, was a state of overproduction, the effects of which had been intensified by unduly competitive marketing. The rebuff had the most desirable effect; as in 1930 the industry succeeded in forming a Cement Marketing Board comprising the Indian Cement Co., Ltd., Bundi Portland Cement Ltd., Gwalior Cement Co., Ltd., C. P. Cement Co., Ltd., Katni Cement & Industrial Co., Ltd., Okha Cement Co., Ltd., United Cement Co. of India, Ltd., Punjab Portland Cement, Ltd. Those who have stood aloof are the Sone Valley Portland Cement Co., Ltd. and Shahabad Cement Co., Ltd., which together have an annual output of 250,000 tons as against the output of 722,000 tons of the companies in the selling combine.

The importance of this industry may be gathered from the following data. The capital invested in this industry by the Companies is about Rs. 5 crores, of which Rs. 3½ crores are of the companies forming the Marketing Board. The industry consumes about 250,000 tons of coal, which is more than the consumption of the tea gardens or the Port Trusts. The jute industry gains from cement to the extent that the latter is responsible for an annual demand of 12 million jute bags. Nearly Rs. ½ crore is paid to railways in the shape of freights by the Marketing Board alone. The output during 1930 was 564,000 tons as against 560,000 tons in 1929; and the output for 1931 is probably slightly less than that of the previous year. Imports of foreign cement into India during 1931 show a drop of nearly 50 per cent. on the 1930 figures *i.e.*, 10,407 tons against 19,440 tons.

The progress of the last few years must be credited to the Cement Marketing Company. During this period improvements of various kinds have been effected. Coloured cements, which were formerly left for the consumers themselves to manipulate as best as they could, are now manufactured with the proper scientific processes. The product compares with the best manufactures of the world. Another improvement is the evolution of that quality which takes far less time to harden. Works which circumstances required to be carried out at great speed, have found these rapid-hardening cements of great value. In the despatch of cement, too, closely woven jute bags with waxed crepe paper lining have enabled the

cement companies to send their products to countries like Bengal and Assam without fear of their being spoiled by the rains or the wetness of those parts. Altogether the cement industry is the best instance of enlightened co-operation amongst the producers.

A short review of the working of the important Cement companies referred to earlier in this article, will be of use as showing the present position and the future prospects of their industry. For, after all, the prospects of the industry depend as much upon the conduct of those who are in charge of it as on the state of its production and the prospects of its demand. The Bundi Portland Cement Co., Ltd., first started business under a different name and the present title was assumed in 1916. Its factory is situated at Lakheri about 600 miles north of Bombay on the B. B. & C.I. Rly. Lines. It has a capacity of 160,000 tons per annum and its equipment is up-to-date. Its principal product is the brand commonly known as the "BBB." The Company has a paid-up capital of Rs. 40 lakhs with reserve and other funds amounting to Rs. 55 lakhs. The gross block account shows Rs. 79.71 lakhs and during the last few years since 1927, it has declared an uniform dividend of 12½ per cent.

The Gwalior Cement Company have their works located at Banmore, 12 miles north of Gwalior. Its output is 45,000 tons per annum and it is so designed that the output can be doubled at an expenditure of Rs. 20 lakhs. The processes are appropriate to the limestone and argillaceous clay which are the raw materials near at hand. The Company's capital is Rs. 26 lakhs and the block is valued in the books at Rs. 37 lakhs. The reserve and other funds amount to Rs. 14.24 lakhs. The dividend during the last three years has shown a falling off.

The Indian Cement Company works are situated in the well-known Porbander limestone quarries. The ordinary paid capital of the Company is Rs. 27.96 lakhs and the Company has also a debenture of Rs. 1 lakh. The block account is at Rs. 33.12 lakhs and the reserve and other funds amount to Rs. 25.73 lakhs.

The Shahabad Cement Company which like the Indian Cement Company, is under the managing agency of Tata Sons Ltd., has a capital of Rs. 35 lakhs and the block is valued in the books at Rs. 61.21 lakhs. It has built up reserve and other funds amounting to Rs. 25.68 lakhs and the dividend has increased from 7 per cent. in 1927-28 to 10 per cent., 12 per cent. and 15 per cent. in the succeeding years. The shares at the end of the first half-year of 1932 are quoted at Rs. 195 for a paid-up value of Rs. 100.

The Punjab Portland Cement Co., has an ordinary capital of Rs. 30 lakhs and also debentures to the value of Rs. 20.25 lakhs. The block value is put down at Rs. 64.37 lakhs and the Company has reserve and other funds amounting to Rs. 25.73 lakhs. The dividends have been maintained during the last three years at 5 per cent.

(Continued on page 259.)



## INDUSTRIAL SECTION XII:

# HIDES AND SKINS

"They dress in this country great numbers of skins of various kinds, goat skins, ox skins, buffalo and wild ox skins as well as those of unicorn and other animals. In fact, so many are dressed every year as to load a number of ships for Arabia and other quarters."

So wrote Marco Polo, a Venetian traveller, in his book on Travels, about the volume, prosperity and excellence of workmanship of the Leather Industry of India in the 13th century A.D., the importance of which is no whit less to-day in our national economy, in spite of the vicissitudes through which it has passed during the last several hundred years. But the same praise cannot be bestowed on the quality of its products, which now suffer in comparison and competition with the manufactures of other nations of the world.

During recent centuries, we find, from old records, that Japan (which, by the way, has again appeared as a buyer of our tanned skins for the past few years) was one of the countries to which the Dutch merchants exported Indian skins regularly in the 17th century from the Coromandal Coast, the quality of the skins being most fancied by the Japanese importers.

From the fragmentary records of the East India Company, it is evident that a definite export trade in raw hides and skins was established in Calcutta about hundred years ago, and hides and skins were being exported to North America, Great Britain and France. In 1850, since when reliable figures of the export trade from the port of Calcutta are available, we find that hides and skins occupied the eighth place in importance from the point of view of value. To-day hides and skins are many places below.

A few spasmodic efforts were made here and there to organise the tanning, and boot and shoe making industry in the last century on modern and scientific lines. Machinery was imported and factories were built up, several of which proved utter failures. But nothing effective was done as regards the improvement of the raw material itself, which continued to be exported as usual under most wasteful and uneconomic methods of collection and preservation of hides and skins. The starting of the Government Ordnance Factory at Cawnpore did raise the standard of tanning in upper India; and several important tanneries grew up in Cawnpore, Agra, and Bombay as a direct result of the Government enterprise; but as the Government factory was situated at a centre where they could obtain and select the best hides available in this country, the seriousness and disadvantage of the losses resulting from the want of employment of proper methods in the collection and curing of hides were never realised by the Government, and hence no efforts were directed towards its improvements. The Great War brought the importance of the industry into great prominence and forced its recognition as one of the key industries of this country.

Large profits were made in the leather trade during the War time in India and although they had no experience of this business, several important English firms of Calcutta started large factories in haste, which had to be closed soon after, with serious losses to shareholders or proprietors. The sentiment was in favour of helping the tanning industry of India and the Empire. The world was

hungry of stocks of every kind; and raw hides were in great demand in the tan-yards of America and Europe. So it was decided to impose an export duty of 15 per cent. *ad valorem* on raw hides and skins as from September 11, 1919, allowing a rebate of 10 per cent. on shipments made to countries within the Empire.

But the utter incapacity and want of knowledge of the trade which they had displayed, they were not prepared to acknowledge. The Indian tanners who had set up modern tanneries, with few exceptions, had done no better, especially with regard to running the industry on profitable basis. This much must, however, be acknowledged with regard to the tanneries that were run by Mr. N. S. T. Chari who is considered the Doyen of Indian chrome tanning, that he did produce leathers for shoes which compared in quality most favourably with the best foreign manufactures of its class and proved thereby that leathers of best quality can be produced in this country from our raw materials.

The opposition of the exporters to the continuance of the export duty gathered strength and the duty was reduced to 5 per cent. in 1923. The Empire tanners, too, could not take good advantage of the preferential treatment accorded to them by the Indian Government; and the raw hide trade continues to flow more or less in the old channels again to-day. The exporters were not fully satisfied and the agitation against the remaining 5 per cent. of export duty continued; and in the Indian Finance Bill of 1927 the Government had to provide for the removal of the export duty of 5 per cent. *ad valorem* on raw hides. The proposal was thrown out by the Legislative Assembly by the casting vote of the President in favour of *status quo*. The Government of India, taking into consideration the well-balanced strength of the conflicting interests, seemed to prefer the replacement of the export duty by an export cess that would be administered by a committee on the lines of Indian Central Cotton Committee and that would be expended for the benefit of the industry as a whole. A Hide Cess Enquiry Committee was appointed for the purpose which submitted a long and useful report more than two years ago. But, apparently, no step has been taken on the report so far as we are aware. The trade is suffering acutely from many ills. The fall in the prices of hides and skins has been no less steep than in many other commodities, which are selling to-day at pre-War figures. The tanning industry also has suffered heavy losses both in Madras and upper India; and the value of exports, has dwindled to an enormous extent. The total value for the year 1931 for the exports of both raw and tanned varieties came down to about Rs. 11½ crores only. The depression in the internal trade is no less acute.

India is one of the largest producers of hides and skins. Although no regular statistics are available, expert opinion estimates that we produce 30 million cow hides yearly, while in goat skins we are the largest producers in the world. According to Arnold's calculation, we produce nearly one-third of the world's total supply of goat skins. Our production of reptile and fancy skins, such as lizard, snake and crocodile, has not been negligible; and we established quite a large business in these skins



during recent years with foreign countries. These being luxury articles, the demand for these has also fallen very heavily during the last two years.

The total value, as estimated by competent authorities, of the production of hides and skins of all kinds is Rs. 20 crores yearly. It is rather surprising that considering the importance both as regards its utility and value, not enough interest has been taken in the fortunes of this trade.

The system of collection and curing of the hides is so primitive that a heavy national waste is the resultant thereof. From enquiries that we have independently made in this matter, and from the information supplied to us by most competent authorities, we may safely put the national loss at anything like

Rs. 5 crores per annum. This much is due to faulty methods employed in flaying, curing and collection of raw hides; we have not taken into account the loss sustained for want of better organisation for marketing our goods in foreign countries.

We would suggest that a combined effort should be made by the Government leather institutes now existing in Calcutta, Cawnpore and Madras, in conjunction with the proposed Hide Cess Committee, to find proper preservatives for the hides and skins and popularise their use, together with the teaching of improved methods of collection and flaying of the hides in the far-flung villages. This huge national waste that is recurring year after year in this trade must be stopped.

(Continued from page 257.)

### Imports of Cement in India

(In 100 tons)

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	108,0	69,7	94,2	71,5	90,6	91,0	81,6	63,2	45,2
Japan ...	...	14,8	6,6	9,3	9,4	14,4	18,7	36,8	28,9
Hongkong ...	2,2	7,3	3,6	2,5	2	...	...	...	...
Italy ...	1,3	7	9	4,5	20	4,4	3,3	1,2	...
Other countries ...	18,8	2,9	13,6	13,2	10,1	17,5	17,7	10,8	13,7
<b>TOTAL ...</b>	<b>130,3</b>	<b>95,4</b>	<b>118,9</b>	<b>101,0</b>	<b>112,3</b>	<b>127,3</b>	<b>121,3</b>	<b>112,0</b>	<b>87,5</b>



## ENGINEERING IN INDIA—1931-32

A marvellous feat of engineering accomplished during the year was the successful tunnelling under the Hooghly between the Southern Station and the right bank of the river. The actual bore was completed in August, 1931 and although the tunnel has had its full share of teething troubles the Calcutta Electric Supply Corporation is now putting its cables through it, and thus solving the grave problem of an efficient supply of current to the southern area of Howrah.

At this point the river is about one-third of a mile wide, the vertical shafts of the tunnel being 1,735 feet apart. Nowhere east of Suez has such an undertaking previously been attempted. Engineers worked entirely without that accumulation of data such as is ordinarily available to the builders of bridges, and in a manner the venture may be said to have been somewhat of the nature of an important experiment watched with no common interest by the engineering world.

### HEADQUARTERS FOR INDIAN ENGINEERS.

Another notable engineering event of the year was the opening of the headquarters building of the Institution of Engineers (India) by H. E. Lord Willingdon in Calcutta, on December 29, 1931. With the increasing activities of the Institution, the need for a house comprising at least a lecture hall, a library and a set of offices, began to be felt. Through the generosity of the Government of Bengal, a suitable plot of land was secured on a long lease on favourable terms, and engineering firms and members of the Institution willingly came forward to help the good cause with money. With the funds collected so far, only such portion of the building has been constructed as was immediately required. The building has been constructed entirely of concrete.

The Institution of Engineers, it should be noted here, insists on a very high standard for corporate membership, which has increased at a more rapid rate than that of any similar Institution in the world. From 138 in 1921 to 1,289 in 1931 is a proud achievement considering that not a single corporate member of the Institution can attain this distinction unless he be a fully qualified engineer, both in theory and in practice.

### BALLY BRIDGE.

A third notable event was the opening a day later *i.e.*, on December 30, 1931, by the Viceroy of the Bally Bridge, a superb engineering achievement which stands put pre-eminently in the annals of railway development in India. The work entailed in constructing this bridge has been long and arduous and has been attended with serious difficulties and numerous set-backs, but all those who took part in its construction may regard its successful completion a personal triumph. It is one of the most ambitious and, at the same time, important projects undertaken of recent years and its value as a means of faster rail and road travel is enormous. One feature which is prominent amongst the many in connection with this successful undertaking is the fact that the bridge has been almost wholly constructed with Indian material and Indian personnel or by men

who have acquired a goodly percentage of their technical knowledge on Indian railways. It is only part of a project, the new Chord Railway connecting the E. I. and E. B. Railways, on which there are many bridges and in the working out of which many problems besides the Hooghly have had to be mastered. It is to carry heavy mineral traffic from the coal-fields to Calcutta and the docks, though presumably it will be found a convenience for other traffic between this city of Calcutta and the plain of the Ganges in general. It has been constructed to meet a specific need, not as a vague contribution to possible developments. It is the materialization of a plan that has long been in railwaymen's minds, and might have been carried out years ago had not the War prevented it. It is finally an expression of faith in Calcutta's commercial future, and so must be regarded as falling into line with recent dock extensions. It will obviously lighten the strain on Howrah Bridge, and enable Calcutta's motorists to avoid Howrah's painful streets when wishing to join the Grand Trunk Road.

### THE LLOYD BARRAGE.

A fourth memorable event in the engineering history of India took place on January 13, 1932, when H. E. the Viceroy, Lord Willingdon, opened the world's largest irrigation system, the Lloyd Barrage at Sukkur in Sind and the network of seven huge canals which will turn a sun-parched and backward area as large as England into land, where the agriculturist will be certain to reap what he has sown. The whole Province of Sind is practically rainless, so that the supply of water from the river Indus, which flows through its length, is absolutely vital to most of its 3½ millions of inhabitants. The present scheme has occupied eight years and has cost 20 crores of rupees. The work involved the excavation of 6,166 miles of canals, earth-work of 5,690 million cubic feet and 1,970 bridges and regulators had to be constructed. The barrage is about a mile long and has 66 arches, each 60 feet wide. The waters of the Indus flowing from the Himalayas into the Arabian Sea will be harnessed to irrigate the rich soil of the thinly-populated Province by 7,000 miles of canals, some of them wider than the Suez Canal with private channels measuring 35,000 miles. The scheme makes possible the cultivation of 6 million acres, a larger area than the whole of arable Egypt and the estimated value of the crops produced from it will approach £30 millions annually. All the works will be completed by 1934-35, thus accomplishing what is a remarkable engineering feat in a decade.

### HYDRO-ELECTRIC SCHEMES.

Considerable progress was made during the year in pushing forward the gigantic hydro-electric irrigation schemes in the Punjab, U. P. and Madras. In the Punjab the opening, in March, 1932, of the main tunnel of the scheme, which is three miles in length, by the Governor of the Punjab, marked the end of four strenuous years of struggle against innumerable obstacles. A supply of electric power sufficient to meet the needs of consumers in the Punjab and paving the way for anticipated industrial

development, will be available in about a year's time when the final touches are put to the Mandi hydro-electric scheme on which expenditure up to the 31st March, 1931, amounted to approximately Rs. 258 lakhs. During the past year about Rs. 129 lakhs was spent and for the year 1932-33 expenditure is estimated at Rs. 118 lakhs. The tunnel is expected to be ready for the admission of water by the beginning of next cold weather, and if the Chief Engineer's hopes materialize, portions of the transmission system will be alive in December, 1932, and the supply of energy to the public will begin in the early months of 1933.

On the Sutlej Valley Scheme, the only large individual work in progress had been the construction of the Panjnad Headworks. In December, 1931, the diversion of the five rivers of the Punjab over the weir was successfully completed. This operation involved apart from the construction of the weir itself, the building of an embankment, about a mile in length and over thirty-six feet high, across the old bed of the Chenab. The completion of these headworks will enable the Panjnad canal to be opened for irrigation shortly. Up to the end of March, 1931, the total expenditure on the British portion of the project had been Rs. 892 lakhs. During the year 1931-32 expenditure from Provincial revenues was only 34 lakhs, and for the current year the budget estimate is only Rs. 16 lakhs, so that by the end of March, 1933, the total capital expenditure will be Rs. 942 lakhs. The sanctioned project estimate is Rs. 987 lakhs.

#### HOSHIARPUR POWER HOUSE.

The power house of the Hoshiarpur Electric Supply Company in the Punjab was also opened in March, 1932, a month which saw the fruition of a number of important projects. For some years past there has been considerable activity in the Punjab both on the part of the Government and on the part of private firms and companies in developing the supply of electricity. Within a comparatively short space of time licenses have been issued for the electrification of Jullundur, Multan, Gujranwalla, Ambala Cantonment, Sialkot, Jhelum, Kasauli, Hoshiarpur, Shahdara, Sargodha, Montgomery, Campbellpore and Gujrat, and we may add these other towns and cantonments having electrical installations such as Simla, Amritsar, Lahore, Lyallpur, Sheikhpur, Dhariwal, the Lahore Model Town, Mega and Ferozepore Cantonment. No less than 24 cities and towns have already been electrified in this province, and with the completion of the Mundi scheme electric energy will be available not only to the towns and cities but, let us hope, to the rural areas also, and bring light and cheer to the humblest homestead in the village and provide power for the modest village industries, as also for lifting water for agricultural purposes.

#### GANGES CANAL GRID SCHEME.

The opening, also in March, 1932, of the Bahadurabad Power Station in the United Provinces marked a big advance in the Ganges Canal hydro-electric grid scheme. Briefly, as it now stands, the main transmission system consists of a triangle from Bahadurabad to Moradabad, thence to Bholal and back to Roorkee with a southern extension from Hapur to Dayalbagh near Agra, totalling 600 miles of single circuit line at 37,000 volts. There is also a secondary system of 11,000 volt single circuit lines totalling 450 miles for supplying groups of towns from the transformer points of the main system. The conductors are mainly of steel-cored aluminium and the structures are fabricated from 90 lb. Tata rails. The whole of the transmission system as now energised aggregating over 900 miles and spread over 10,000 square miles of country together with thirty switching and over 100 transformer stations, including fifty

railway and river crossings, was completed in eighteen months or at the rate of  $1\frac{1}{2}$  miles of line per day.

Not less than 3,000 horse power of small industrial motors had already been installed in over sixty towns in addition to 300 horse power of railway motors. On a moderate load factor 30 million units will be available annually at an average low tension cost of about ten pies at the sub-station yielding a nett return of 7.6 per cent. on the capital. It is computed that at the present rate of expansion, the first stage will be loaded up in four years and that it will thereafter be necessary to electrify one of the remaining falls each year. It is expected that not less than 15,000 horse power will then be absorbed in rural load. The total cost of the ultimate development including 600 miles of rural lines is estimated at 280 lakhs. The average cost per unit will then be seven pies low tension at the sub-stations yielding a nett return of 11 per cent.

#### ROADS.

The condition and extent of a country's public works and utility services are an index of its prosperity. Roads form the first link in these: There come railways followed by tramways and motor vehicles. There are in British India some 60,000 miles of metalled roads and 140,000 miles of unmetalled roads in charge of provincial or local authorities, and an unknown mileage of village tracks. There are also some 200,000 (more or less) motor vehicles playing Old Harry with road surfaces which were never intended to be subjected to the stress which result from modern tendencies in the speed and weight of traffic. And, to make matters worse, the bogey of "financial stringency" is encountered on every hand.

#### RAILWAYS.

During the past few years, the motor omnibus has become a serious competitor to the railways of India, and there are indications from the railway point of view, that the situation will become worse in the course of the next decade. Construction and rehabilitation were necessarily slow during the year owing to financial stringency. Apart from a great volume of diversified work which represented the clearing-up process in connexion with some of the big extension schemes started in more prosperous times, the annual report on the Indian Railways disclose the undertaking of an important investigation into the impact factor on small girder spans. The East Coast (Vizagapatam) combined port and railway scheme continued to make very satisfactory progress.

As regards expenditure on locomotives, boilers, carriages and wagons the original programme submitted by Agents provided for a total expenditure of Rs. 603.82 lakhs, of which Rs. 176.78 lakhs represented capital expenditure and Rs. 427.04 lakhs were proposed to be met from the depreciation fund. In view of the fall in traffic and the high cost of raising money in the present conditions, it has been necessary to curtail drastically the original proposals of the railway administrations.

As in the current year, arrangements were made to meet the requirements of certain railways for locomotives and, to a smaller extent, for coaching and goods stock by transfers of surplus stock from other railways. No provision is being at present made for additions to, or renewals of, the stock of broad gauge general service wagons as the traffic prospects in sight at present do not justify it. The position will, however, be carefully watched and if during the course of the year there is a sufficient revival of traffic to suggest that the present stock will be insufficient for requirements, fresh proposals for the purchase of new stock in addition to, or in replacement of, existing stock will be placed before the Railway Finance Committee of the Legislative Assembly.

## ELECTRIC RAILWAY PROGRESS.

Bombay has already had an extended experience of electrified railway services, and the conclusion of the testing period possibly might have justified the issue of a detailed review of the great volume of civil, mechanical and electrical engineering involved in bringing to completion the vast schemes which were undertaken about ten years ago. No report on such a scale has yet appeared, but even the necessarily brief summaries in the Railway Board report contain remarks which may remind readers of the magnitude of the tasks which have been successfully accomplished in the field of railway electrification in India within the past few years.

For instance, the latest report in summarizing progress on the combined G. I. P. electrification system observes that "the electrification of the Main Line and Suburban sections of this railway is the second largest railway electrification in the British Empire, and is well placed in importance amongst similar schemes throughout the world."

The review for the past year contains no report of progress on the electrified section of the South Indian Railway, a scheme in reference to which the report of the Electrical Inspector to the Government of Madras for the year 1930-31 states:—

"An important development during the year has been the electrification of the suburban services of the South Indian Railway Company for 18 miles from Madras to Tambaram, which is the first metre gauge line in India to be electrified. A pressure of 1,500 volts direct current is employed and it is of interest to note the rail and not the trolley line is the positive conductor."

There is no reference in the Railway report to prospective electrification developments in Calcutta which some time ago promised to provide the first example in India of a tube railway, though it was admitted that the construction of such a line would be a matter of great difficulty. The scheme, which was estimated to cost about £4,000,000, was put forward in connection with the project for the electrification of the suburban lines of the Eastern Bengal and East Indian systems.

As regards the investigation of the original scheme for suburban railway electrification in Calcutta, the view of the Railway authorities was that "it appears from this examination that the electrification will not be financially successful unless the railway can deposit passengers nearer their place of business in Calcutta. In view of the difficulties in regard to the land required for this scheme and its high cost generally, it has been decided to re-examine the old proposal to connect the suburban systems of the E. I. R. and E. B. R. by means of a tube railway and investigations are being carried out to ascertain whether a tube scheme is a practical proposition from the engineering and traffic points of view."

## HOPEFUL CONDITIONS.

The year 1931-32 was one of consolidation rather than of construction; of provision rather than of production. In every industry relating to agricultural, aeronautical, automobile, chemical, electrical, hydro-electrical, marine, mechanical, metallurgical, municipal, structural and textile engineering, the year witnessed a slow process of arduous evolution bereft of the least vestige of rapid or revolutionary progress, due, no doubt, to the dire depression experienced—deeper than in the preceding year; but whereas the closing months were the darkest in the history of the engineering industry, the end of the year brought with it a new hopefulness and a fairly general belief, based on increasing orders and enquiries, that while normal trade might yet be a long way off, there would be steady improvement in the indigenous industries of the country ere long.

Imports of machinery into India in the year 1931-32 showed a great decline compared with the previous two years. The total value amounted to Rs. 11 crores as against Rs. 14 crores in 1930-31 and Rs. 18 crores in 1929-30.

Cotton machinery showed some increase, and amounted to Rs. 192 lakhs, out of which Rs. 110 lakhs represented spinning machinery and Rs. 68 lakhs weaving machinery. It is interesting that imports of weaving machinery showed a satisfactory increase. There was also some increase in the imports of bleaching and dyeing machinery. Of the total imports of cotton mill machinery amounting in value to Rs. 192 lakhs, Rs. 167 lakhs worth came from the United Kingdom.

There was a very heavy decline in the imports of jute machinery which fell from Rs. 81 lakhs in value in 1930-31 to Rs. 32 lakhs in value in 1931-32.

Electrical machinery fell in value from Rs. 238 lakhs to Rs. 216 lakhs. Prime movers other than electrical also showed a considerable decline from Rs. 273 lakhs to Rs. 156 lakhs. The decline in the imports of oil engines is noteworthy. There was also a severe decline in the imports of boilers from Rs. 95 lakhs to Rs. 56 lakhs, of which Rs. 47 lakhs worth came from the United Kingdom.

Agricultural machinery declined from Rs. 8 to Rs. 5 lakhs. The imports of mining machinery fell from Rs. 74 lakhs to Rs. 65 lakhs and metal working machinery fell from Rs. 29 lakhs to Rs. 19 lakhs. The decline in the imports of oil machinery was small and its total imports amounted to Rs. 35 lakhs.

There was decline in the imports of most other kinds of machinery, rice and flour mill machinery falling Rs. 21 to Rs. 10 lakhs, sewing and knitting machines from Rs. 53 lakhs to Rs. 46 lakhs, and tea machinery from Rs. 16 lakhs to Rs. 10 lakhs, but sugar machinery increased from Rs. 13 lakhs to Rs. 30 lakhs.

## Imports of Machinery and Mill Work in India

(In Lakhs of Rupees)

From	Pre-war average	War average	Post-war average	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32
U. K. ...	4,97	4,20	17,60	10,65	12,53	14,09	13,68	10,72	7,78
U. S. A. ...	24	66	8,10	1,89	1,57	2,06	1,75	1,64	1,22
Japan ...	68	13	6	8	2	4,5	6,3	4,8	8,74
Italy ...	1,4	2,3	4	6	12	16	15	...	...
Germany ...	80	2,4	38	94	1,04	1,18	1,73	1,18	1,12
Other countries	6	8,8	44	54	68	84	82	60	81
TOTAL ...	5,61	5,18	21,64	18,63	15,98	18,86	18,21	14,34	10,92

# INDIA AND THE LEAGUE OF NATIONS

BY SIR J. C. COYAJEE

Looking back far into the pages of history we can see how the world has been preparing through the centuries for the advent of the League of Nations. In particular we note a great psychological paradox and curiosity—that the very periods and countries which witnessed cycles of great wars were those which saw the rise of important movements for securing the peace of the world. Thus the period of the wars of Louis XIV was the same in which Fendon and others put forward proposals for establishing world councils to decide on and to terminate the quarrels of nations. Similarly the Napoleonic wars were followed by the labours of the Holy Alliance and of the Congress of Verona. But the inauguration of the League (after the Great War) marked an immense advance on those earlier efforts at once as regards the scope, the lines and the methods of work. The world has learned the lesson that it was not enough to attempt to stabilise the existing political conditions—and that the scope of international co-operation was to be something much wider as well as something based upon the best and many-sided interests of nations. Economic co-operation, health organisation and intellectual co-ordination were to be all employed and utilised as planks in the platform of peace. The idea of Comte and his school—that there was the closest possible inter-connection between the various political, economic and sociological aspects of the human problem—was never better realised and utilised. But not only has the League realised the full scope of the work for Peace and Progress, but it has developed the proper methods for carrying on the work—the methods of co-operative conferences meeting periodically, of which the activities are supplemented by the steady work of permanent committees. This method is the true and appropriate instrument at once of the spirit of Democracy and that of Internationalism. It is the merging of these two tendencies which is the key to the success of the League. That method alone can solve the problem of controlling the excesses of Nationalism and of erecting a form of super-national control—a control of which the present system of mandates forms an early and experimental form.

It is a very interesting task to study the motives which attracted various nations to the Membership of the League. In the interests of brevity let us select representative publicists of America and Japan and see how they appraise the value of the membership of the League. In his excellent work upon *Japan and the League of Nations* Dr. Matsushita points to three reasons which in his opinion justify Japan's membership of the League. He thus summarises these reasons—"the publicity value of the League, the desire of Japan for more complete recognition as a great power, and racial equality". He believes that these advantages justify Japan's membership in spite of counter-balancing disadvantages like the financial obligation, and, above all, the abandonment by Japan under the Covenant of a large portion of her freedom of action as regards the making of wars or alliances. Let us now take the views of a publicist from America—a country at the other extreme, racially and geographically. Prof. Manby O. Hudson has argued recently that "there is only one purpose for which the United

States or any other nation should engage in international co-operation, and that is the purpose of serving one's own interest". Obviously the interests of America are not served while she is kept out of co-operation as regards the formation of international programmes and policies.

What then is, or should be, the proper attitude of the patriotic Indian in the matter? Like the publicist from Japan, he can appreciate the high value of securing both the racial equality and the more complete recognition of his country as a political power. In the latter respect indeed India has gained far more than Japan through her membership. Japan was already recognised as a great power when the League started its career. On the other hand, India has greatly improved her international status through her membership of the League—for that membership has given her a quasi-independence in her external relationship. At the time when the League was started India was far from having attained anything like the Dominion Status; and yet her membership of the League put her fairly on the same level as the Dominions so far as external relations were concerned—nor can we fail to see that her interests as a nation are advanced by her sharing in the tasks and fruits of international co-operation in its aspects regarding economic work, health organisation or intellectual co-ordination.

Such are the undoubted advantages of International Co-operation; and verily those who value the membership of the League in the name of self-interest have their reward. But there are other links—historical, ethical and intellectual—which tie India to the League. For at every step of his study of the work of the League the Indian enquirer is reminded of the old idea and the venerable traditions of his own country. Thus the efforts of the League in the cause of Peace will remind him not only of the traditional Pacifism of his country, but of the age when Buddhism started on its pilgrimage from India to perform its task of giving peace to the races of Central and Eastern Asia. The last and most notable achievement of Buddhism in this direction being the transformation of Mongolia from a nursery of ruthless invaders into a land of peace. When he learns of the work of the League for intellectual co-operation he will have a vision of the day when India was the focus of the intellectual life of Asia. Indeed it might be asserted that while other countries were not yet prepared for the advent of the League until the present century, India would have been a willing adherent of the League at any time within the last thousand years or more. In fact the spirit of India has a close affinity to that of the League of Nations.

That being so, let us proceed to examine the nature, extent and value of the co-operation of India with the League. It is well to be proud of those ideals which we have in common with the League—indeed which we upheld before the League was started upon its career; but we must also show results. For faith without works is void, and we must show fruits worthy of those who hold high ideals. Fortunately there is no lack of the evidence of such achievement on the part of India.

Let us examine first the work that India has done in the field of social and humanitarian work

and how she has supported the League in its activities there. We know that the League has done very valuable work in bringing about the control of the production and distribution of Dangerous Drugs. But we also know that India was the pioneer country in this matter and had devised an admirable system of regulating the production, distribution and export of opium. The most definite criteria of production and consumption could be appealed to in the matter; and few countries can show such great financial sacrifices incurred in the cause. In this matter India has only to maintain and to keep up her efforts. But two new aspects of the problem of dangerous drugs have made their appearance during the last decade; and the energies of India must be put forward to deal with them. For one thing, India has to see to it that the sacrifices which she has made are not made useless to the world and of no effect through other countries producing more of opium or other drugs. Of what avail indeed would the great efforts and sacrifices of India be if after her voluntary withdrawal from the field of such production she is only to witness the occupation of that field by some other country or countries? Another aspect of the drug problem is also proving of great importance to India. That new problem is now to protect herself against the flood of new deleterious drugs which are being put on the market by a sinister combination of scientific skill and unscrupulous commercial greed. Her defence against that danger can succeed only with the co-operation of the League, and here again no steps can be taken which are too drastic from the point of view of India.

There are other aspects of the Social and Humanitarian work of the League in which it has received and welcomed the co-operation of India. In the matter of the extension of the enquiry regarding the traffic in women and children the League has received the support of India. The very fact that the League's enquiry has been so well received by the East is a very great proof that the League has won the confidence of that part of the world. Nor is it a less striking proof of the desire of India—and of the East generally—for social uplift and of the exertions that have been put forward in that direction. The efforts put forward by the League in the way of the improvement of Penal administration and for the abolition of slavery might be noticed in this connection. While the Penal administration in India is of an advanced and progressive character, the effects for liberating slaves on the borders of Burma, Baluchistan and of Chitral are such as to form important phases of the world's anti-slavery campaign of the day.

From the Social and Humanitarian work of the League we come by an easy transition to the functions of its Health Organisation. Here we can have no hesitation in acknowledging the benefits received by India. We have benefited by the Epidemiological Service of the League as well as by the interchanges or study tours of health officials. The co-operative study of diseases has been of high value to all countries—and to India amongst them. We should also acknowledge the suggestions which we received from the Malaria Commission of the League which visited us recently. We also hope to benefit by the splendid and comprehensive studies of the League's Health Organisation on the topics of Infant Mortality and of Rural Hygiene—studies which will no doubt prove of special advantage to a country in which the rate of infant mortality is so high, and in which the problems of rural hygiene remain yet to be solved. But even as regards the work done for the progress of hygiene, public health and medicine the debt is not all on one side; and India has co-operated with the world in the best sense of the term—by doing path-breaking work of the most valuable character in various fields. Starting with the subject of malaria we note the important part taken by India in the early botanical and other works connected with

the cultivation of chinchona. It is scarcely necessary to refer to Sir Ronald Ross's discovery of the mosquito cycle. The investigations of the Plague Commission in India have formed the starting point of world-wide co-operation in the matter of plague research. Another field of work in which there has been very fruitful co-operation not only as between research workers in India but also as between India and foreign experts is that of the study of *Kala-azar* both on its causal and remedial side. The same proposition might be asserted as regards cholera, hook-worm and goitre.

The same conditions and potentialities are to be found in the sphere of the League's work as regards intellectual co-operation—India being in the position of giving as well as of receiving. The part played by India in the history of intellectual work as well as of education and the great cultural influences which emanated from India in the past and which helped the intellectual progress of so many countries afford well-founded hopes of the important share which she can give in the intellectual progress of the world. India is at present going through an epoch of literary and scientific Renaissance and her work in art, literature and science gives promise that her share in the task of intellectual progress of the world will correspond with her past achievements in the field. Meanwhile the work of the League in the direction of intellectual co-operation will no doubt facilitate and expedite this intellectual Renaissance of India. The study of university relations and problems by the League will help to hasten the progress of Indian education; so also will be the work of the League relating to bibliography and translations from the classics—not to mention the activities of that body in the formation of what has been well-styled the "international mind" and the common point of view in politics, sociology and religion.

We have still to envisage the economic aspect of the work of the League—an aspect which is bound

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to grow steadily and continuously in importance. It would be difficult to exaggerate the importance of the work of the League either in striving to stabilise the post-war economic situation or in attempting to avert the advance of the world economic depression. The first part of the task was attempted at the Brussels and Genoa Conferences. The consultations and recommendations of the world economic conferences were meant to meet the menace of the great depression. Had the recommendations of that conference regarding the lowering of the tariffs, the policy of international industrial agreements and the progress of international co-operation been followed up, the atmosphere would have been improved and the depression would have been far less catastrophic. The second part of the League's economic task has consisted in studying the various aspects of the depression and in resisting the present tide of Protectionist reaction. Here, too, India has co-operated systematically with the League. If the League has been trying to emphasise the utility of the most-favoured-nation policy and of putting a liberal interpretation on that clause, the Indian Delegation has consistently supported this liberal policy and has worked for the League's proper aims. So also it was an Indian delegate who moved the resolution for a scientific and authoritative study of the course and phases of the depression—a resolution which was carried unanimously and which led to the publication

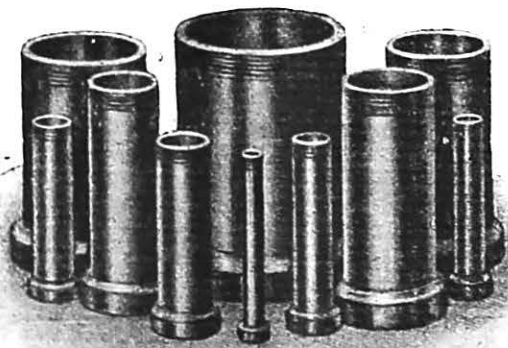
of the meritorious report of Prof. Ohlin on the subject.

Another aspect of the co-operation of India with the League on the economic side is the campaign carried on by the Indian Delegation for over a decade in order to watch the finances of the League and to improve its financial administration. The supervisory commission feels that the Indian Delegation is its true ally; and the position of that Delegation as the champion of economy has become a well-recognised one. This is no mean service rendered by India to the League, though the role of the advocate of economy is by no means always a popular one.

Such have been the main lines of co-operation between India and the League—and the scope of that co-operation must be constantly enlarged, as the Economic, Social and Humanitarian aspects of the work of the League increase in importance and come into their own. The value of such co-operation on the part of India will also increase as India's political and economic importance is realised by the world and as India is in a position to exert her influence further—by being elected to the Council of the League and otherwise. The world might be sure that India will employ that greater influence which she might come to command only to realise her traditional ideals and to champion the cause of political and economic Liberalism.

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# INDIA AND THE INTERNATIONAL LABOUR CONFERENCE

BY MR. K. E. MATTHEW, M.A.,

*Deputy Director,*

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To assess correctly the gains that have accrued to India by the country's participation in the sixteen sessions of the International Labour Conference held during the years 1919-32, it is necessary to have some idea, first, of the structure and functions of the International Labour Organisation, under whose auspices the Conference is held, and secondly, to have a clear picture of Indian labour conditions prior to and after India's membership of the I. L. Organisation. It was a unique event when the Treaty of peace, signed at Versailles on June 28, 1919, embodied in its terms, a great Labour Charter. For the first time in history, the awakened conscience of humanity led the signatories to the Treaty to pledge themselves to "endeavour to secure and maintain fair and humane conditions of labour for men, women and children in their own countries and in all countries to which their commercial and industrial relations extend". This pledge was taken because it was recognised that the establishment of universal peace, which was the object of the League of Nations, could only be achieved if it were broad-based upon social justice. To subserve this purpose of the ensurance of social justice and, its necessary corollary, distributive equity, the International Labour Organisation was set up by Part XIII of the Peace Treaty. It thus became the avowed purpose of the I. L. O. to improve the conditions of workers by carrying out impartial investigations into existing conditions of labour in the different countries, by bringing them to the notice of the public, by seeking measures to remedy suffering and injustice and to make the position of the worker accord more closely with his standing as a human being, and, finally, by embodying these measures in a system of international legislation, that is to say, in International Conventions, intended to ensure, in all countries willing to accept them, the same standards of protection for the workers and thus a lightening of the competition incurred by States which independently carry out necessary and far-reaching reforms. It need not be reiterated that as the final aim of all this work, the Peace Treaty had in view the securing of peace by the development of social justice through the growth of international legislation as a basis for the establishment of common rules to which all countries submit, which are recognised, interpreted and applied by international courts, and for the application of which certain sanctions are provided.

The International Labour Organisation consists of:—

- (1) A General Conference of Representatives of the Member States, and
- (2) An International Labour Office controlled by
- (3) A Governing Body.

The General Conference, with which we are more immediately concerned in this article, meets at least once a year. Each Member State is expected to send four representatives, of whom two are Government delegates and the other two are representatives of the employers and workpeople respectively. Each

delegate may be accompanied by advisers, of whom "one at least should be a woman when questions specially affecting women are under discussion". The Conference is free to regulate its own procedure, and to elect its own president annually. After discussion of the items on the Agenda the Conference has to determine whether the proposals should take the form of a Recommendation, or of a draft international Convention. In either case, the Member States are bound to bring the recommendation or the Convention within the period of one year before the appropriate authority for consideration, with a view to giving effect to it by national legislation. In the case of a Recommendation, the Member States have to inform the Secretary-General of the League of the action taken; in the case of a draft Convention, it has been found possible to pass legislation or to accept the Convention without any alteration in its terms, the formal ratification of the Convention is communicated to the Secretary-General. Every year a report has to be submitted to the International Labour Office stating the measures which have been taken to give effect to the Conventions which have thus been ratified, and a summary of these reports has to be laid before the Annual Conference. On receipt of a complaint that any Member State has failed to carry out its obligations with regard to any Convention that it has ratified, the Governing Body is empowered to invite the Government in question for an explanation. Should a satisfactory explanation not be forthcoming, certain economic penalties may be imposed.

The Governing Body of the I.L.O. consists of twenty-four persons, of whom twelve represent Governments, six are representatives of employers and six of workers. Of the Government representatives, eight are nominees of the Governments of countries of "chief industrial importance" (at present Great Britain, France, Italy, Germany, Belgium, Japan, India and Canada) and the remaining four are elected every three years by the Government delegates of the other Member States. The functions of the International Labour Office include the collection and distribution of information on all subjects relating to labour conditions. The Director is responsible for the report of progress presented annually to the General Conference. The Office is also charged with the duty, under the directions of the Governing Body, of preparing the Agenda and making all arrangements for the Annual Conference. These functions have, in the course of time, given rise to many activities. Thus, the Office, in the pursuit of its investigations, has built up the largest library in the world of books dealing with social, labour and industrial questions. Again, in its efforts to ensure a smooth and gradual evolution of social policy, the I.L.O. has established contact with all important labour organisations. It may be noted here in passing that the I.L.O., through the Office of its National Correspondent at New Delhi, which was started in 1928 with the object of keeping the Central Office at Geneva informed of all develop-



ments and tendencies in the industrial and labour spheres in India, is in close and constant touch with the various Departments of the Government, as also with the principal employers' and workers' organisations and public bodies in this country.

Such in brief is the composition of the I.L.O. which attempts to visualise labour problems and social policy generally along a new perspective and which is uncompromising in its advocacy of the establishment of fairer and more humane ideals of distributive justice. Let us see how far, as far as India is concerned, and bearing in mind such factors as the nearness of cessation of war between nations, the suspicions and antagonisms aroused by the war, the varying national outlooks and economic policies, the distances separating countries, the language difficulty and the different degrees of industrial development attained by the different Member States, the I.L.O. has earned a place for itself in the estimation of the Indian public. A tree is judged by its fruits; in like manner, the fairest test of the I.L. Conference is its record of achievements during the decade since its setting up. In this connection, therefore, a brief review of the important decisions arrived at by the Conference from its inception up to the present becomes necessary.

During the 16 sessions of the International Labour Conference held during the years 1919-1932 no less than 33 Draft Conventions and 38 Recommendations have been adopted, and a great many of them have already found their way to the Statute Books of the 55 Member States of the I.L.O. The labour problems on which the Conference has taken legislative decision may be divided into three main categories: first, problems affecting industry and commerce; second, problems relating to migration and maritime work; and lastly, problems dealing with agriculture. Of these, the most important group is certainly the first; and the proposals of the Conference under this head deal with uniform standards of working hours, the employment of women after child-birth; minimum age of children for industrial employment; night work of women and young persons; workmen's compensation; weekly rest in commercial establishments; developments and facilities for the utilisation of worker's spare time; general principles of sickness insurance and other matters affecting the welfare of labour. Under the second head, the Conference has made definite proposals for the protection of seamen against unemployment caused by the loss or foundering of the ship; for regulation of child labour on board ship; for medical examination of children and young persons employed at sea; for the limitation of hours of work in the fishing industry and in inland navigation; and the simplification of inspection of emigrants on board ship. As regards regulation of labour conditions in agriculture, the effort of the Conference has chiefly been to secure for the agricultural worker the same rights and protection as have been accorded to workers in other countries.

It remains for us to see to what extent labour legislation and social policy in India have been affected by the decisions of the Conference. Up to March, 1932, India has ratified, in addition to the Berne Convention on White Phosphorus the following 12 Conventions:—Convention limiting hours of work in industrial undertakings (1919\*); Convention concerning unemployment (1919); Convention concerning employment of women during the night (1919); Convention concerning the night work of young persons (1919); Convention concerning the workers (1921); Convention concerning the application of the weekly rest period in industrial undertakings (1921); Convention fixing the minimum age for the admission of young persons to employment as trimmers and stokers (1921); Convention concerning the compulsory medical examination of children

\*The figures within brackets refer to the year in which the Convention was adopted by the I. L. Conference.

and young persons employed at sea (1921); Convention concerning workmen's compensation for occupational diseases (1925); Convention concerning equality of treatment for national and foreign workers as regards workmen's compensation for accidents (1925); Convention concerning the simplification of the inspecting of emigrants on board ship (1926); and the Convention concerning the protection against accidents of workers employed in loading or unloading ships (1929). In a large number of cases where India has not found it possible to register formal ratifications with the Secretary General of the League of Nations in token of her unreserved adoption of the Geneva proposals, action has been or is being taken in the spirit of the Convention. A list of such unratified Conventions which have led to legislative or other action of some kind to introduce improvements in existing conditions will include the Conventions on the employment of women before and after child-birth (1919); on the minimum age for admission of children to industrial employment (1919); on the minimum age for admission of children to employment at sea (1920); on unemployment indemnity in case of loss or foundering of the ship (1920); on facilities for finding employment for seamen (1920); on white lead in painting (1921); on workmen's compensation for accidents (1925); on seamen's articles of agreement (1926); on repatriation of seamen (1926); etc.

But fallacy lurks in any attempt to judge the results achieved by the International Labour Conference by a test confined solely to quantitative measurement of registered ratifications. There are some results of the working of the I.L.O. which are visible and capable, to a certain extent, of statistical measurement; to this category belong the positive advances in labour legislation entailed in each country by the ratification of I.L. Conventions. There are, at the same time, results which, though their immediate causal connection with the I.L.O. takes an effort of the mind to establish, are nonetheless real and of the highest importance. Considerations of space, however, make only a tabloid treatment of such results possible in this article.

It has been already pointed out that for a right appreciation of the benefits, direct and indirect, that have accrued to India as the result of the country's participation with the I.L.O., it is necessary to have a clear perception of Indian labour conditions prior to 1919, in which year the first I.L. Conference was held. The year 1880 may be taken as the starting-point of the emergence of industrial labour as such in his country. For purposes of broad generalisation, its growth and development since that date may be divided into four main periods: from 1880 to 1915—the period marked by the gradual growth of factory development and a slow but steady decline of cottage industries; from 1916 to 1921—the period of the War dominated by the industrial boom, when labour took the first halting steps towards self-assertion; from 1922 to 1927—the period of deflation, depression and falling credits and of growing labour discontent; and from 1928 to the present—the period which has witnessed the advent alike of rationalisation and the Communists on the Indian stage and which has been characterised by more virulent labour action than ever before. Till the outbreak of the Great War, a policy of laissez faire dominated the Government as regards all labour matters. Labour was unorganised and no mentionable attempts were made to instil into the workers a consciousness, either of working class solidarity or of the important place they occupied in the national economy. The supineness of labour and its lack of combination, the powerful hostility of the employing classes, and the general indifference of the public—all conspired to retard the pace of ameliorative labour legislation. On the other hand, the early attempts at labour legislation in this country were designed to protect employers against labour rather than to protect

labour against employers, as evidenced by the Planters' Acts in Assam and Madras, the Employers' and Workmen's (Disputes) Act of 1860, etc. It was under these conditions that India began to participate in the International Labour Conference and one cannot help commenting on the remarkable change which has since taken place in the country's attitude towards labour and labour problems. No more convincing testimony to this marvellous change, induced as if by a magician's wand, can there be than the sincere tribute paid to the I.L.O. by Mr. C. F. Andrews in the course of an article which he contributed to the *Hindu* of Madras in 1928. Mr. Andrews writes:

"If advantage is taken of the world position of immense importance which the I.L.O. has, there can be no doubt whatever that labour conditions in India will be improved in the most rapid manner possible. I have said more than once in public, and I would again repeat the fact, that the amelioration of labour conditions in India by direct legislation has gone forward more quickly in the last ten years since the I.L.O. was established than was possible in the fifty years before the establishment of the I.L.O. Every one of the great land-marks in Indian labour legislation has been put up since the establishment of the I.L.O. While up to the year 1919 it seemed quite impossible to obtain any more humane conditions with regard to labour in mines, factories and mills, after 1919 every door seemed to be suddenly thrown wide open, and we have been pressing forward from one Act of factory legislation to another, and all these have been on the whole in the right direction."

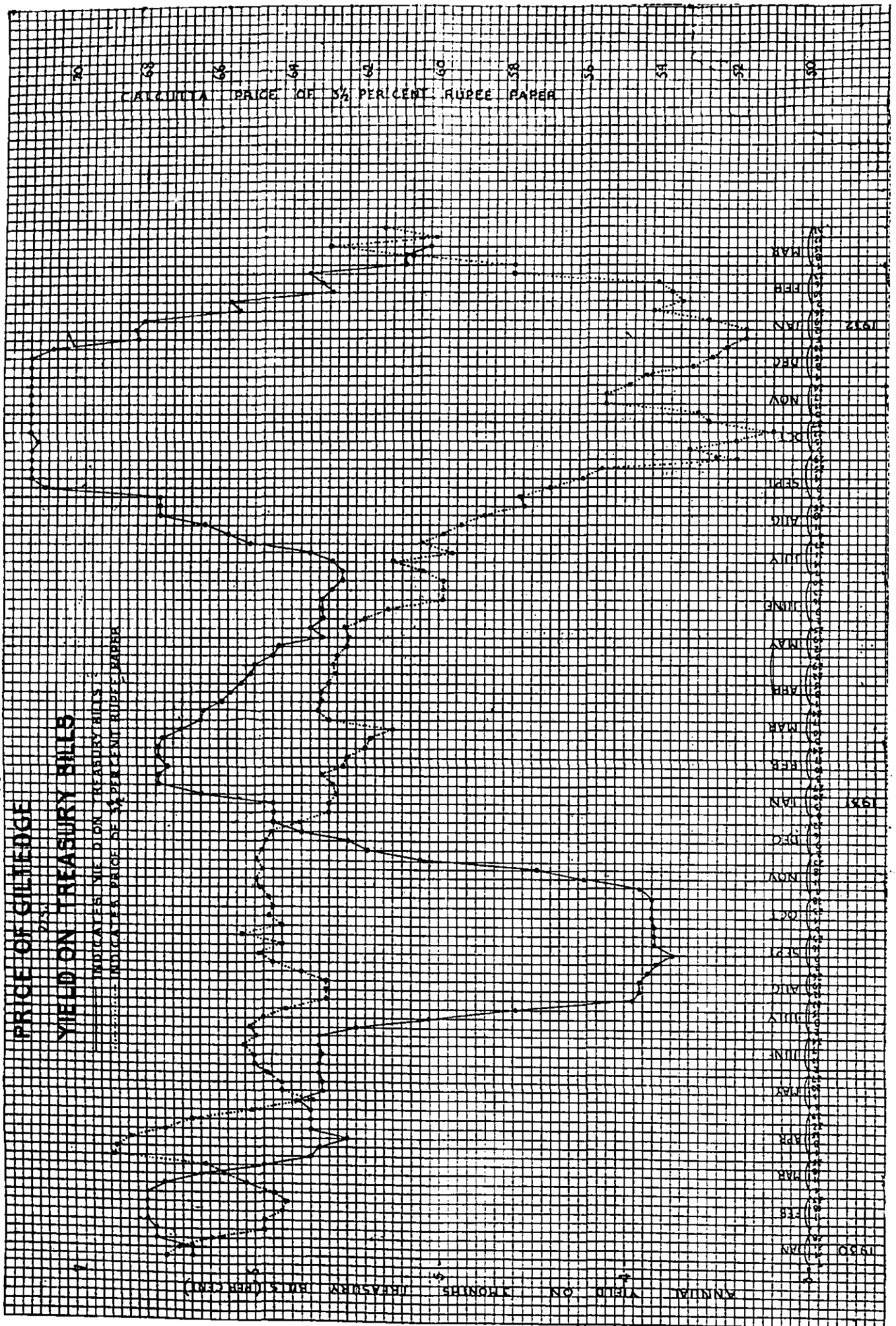
The regular participation of India in the International Labour Conference and scrupulous adherence by the country to the procedure in respect of Conventions laid down for Member States have, apart from the sphere of ratifications, been responsible for a quickening of the public consciousness with regard to its responsibilities to the workers—the real producers of national wealth. Unimpeachable confirmation of this comes from Mr. A. G. Clow of the Government of India, who, commenting on this aspect of the I.L.O.'s influence, in his recent publication "State and Industry" writes:

"The International Labour Conference cannot compel countries to accept its conclusions, but its procedure and the fact that its Conventions and Recommendations have ordinarily to be submitted to the legislature in each country ensures the regular examination, both by the executive Government and by popular representatives, of numerous schemes for the amelioration of labour conditions. . . . The submission, at intervals, of conclusions reached by the Conference to the Legislative Assembly and the Council of State has been instrumental in stimulating public interest in labour questions and at times in initiating measures which might not otherwise have been adopted."

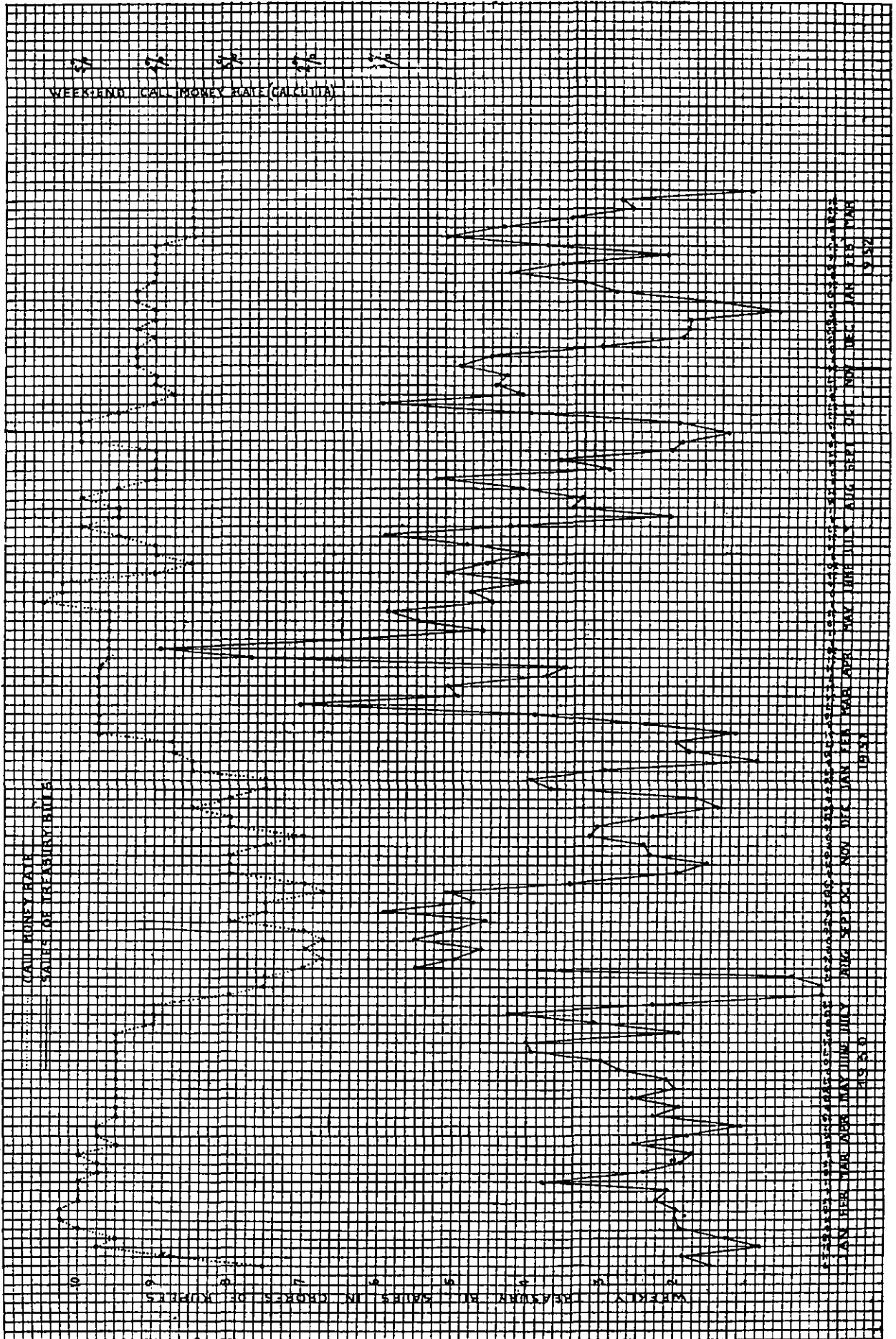
Remarkable though the above tributes are, they deal with but two aspects of Geneva's contribution to Indian industrial advancement. The advantages derived by India's association with the I. L. O. are so numerous and many-sided that I can only attempt a bald enumeration of them here. First, it is indisputable that the obligation entailed by India's membership of the I. L. O. that the Government, in nominating the representatives and advisers of Indian employers' and workers' groups to the Conference, should be guided by the advice of the most representative organisations of these groups has greatly stimulated industrial organisation in India. The fact that both the Federation of Indian Chambers of Commerce and Industry and the Indian Trade Union Congress were set up after this country began to participate in the International Labour Conference fully substantiates this

contention. Secondly, in addition to stimulating national industrial organisation, the annual participation of chosen representatives of Indian employers and workers at the Conference session in Geneva has been instrumental in establishing useful and healthy contacts for this country with international bodies of employers and workers and, in this manner, in bringing India into the wider orbit of international industrial economy. Thirdly, the experience of the past sessions of the Conference has shown that Geneva, besides furnishing an ideal forum for the ventilation of India's labour grievances, acts also as a good sounding board for directing the consciousness of civilised humanity to the many disabilities under which India is suffering. The spirit of international accountability which Geneva is steadily fostering cannot but be of the greatest help to India in the difficult years ahead. Fourthly, India's regular participation in the Conference and the distinct and valuable contribution that succeeding Indian delegations have made, have been instrumental in raising the prestige of India in the international sphere. India's role at the Conference has by no means been that of an apologetic back-bencher; signal proof of the esteem in which India is held at Geneva was given when at the Conference of 1927 Sir Atul Chatterjee was unanimously elected as President of the Conference. Further, in virtue of the recognition accorded to India as one of the eight countries of "chief industrial importance", this country is entitled to a permanent seat on the Governing Body of the I. L. O. Fifthly, Geneva, which stands for gradualness instead of precipitancy, for evolution instead of revolution, furnishes for India a sure bulwark against the onslaughts of Communism under the shelter of which and, benefiting by the collective wisdom and funded experience of experts assembled at the Conference, this country may keep at bay the twin spectres of communism and unemployment.

It is gratifying to find that India has not been niggardly in its appreciation of the real and valuable help which she is deriving from Geneva in respect of adjusting labour conditions and co-ordinating social policy in the present difficult period of industrial transition. Remarkable evidence of such appreciation was given at the 16th session of the International Labour Conference held at Geneva from 12th to 30th May 1932, when Sir B. N. Mitra, the chief representative of the Government of India, and Mr. R. K. Shanmukham Chetty and Diwan Chaman Lall, the Indian employers' and workers' delegates respectively to the Conference, paid spontaneous tributes to the great humanitarian mission of the I. L. O. and to the effective supplementary contribution that was being made in this sphere by the newly established Indian Branch of the I. L. O. at New Delhi under the direction of Dr. P. P. Pillai. Neither should we ignore in this connection the significant reiteration of faith in the I. L. O. made in the report of the Trade Union Unity Committee published so recently as April, 1932. It is a convincing endorsement of the usefulness of Geneva to Indian workers that, one of the main planks of Trade Union Unity as announced by the Committee, is the adoption of a policy of continued whole-hearted participation in the annual session of the International Labour Conference, instead of the sterile course of dissociation from Geneva advocated by the extremist wing of Indian labour.



CALL MONEY RATES AND  
WEEKLY TOTAL OF SALES OF TREASURY BILLS

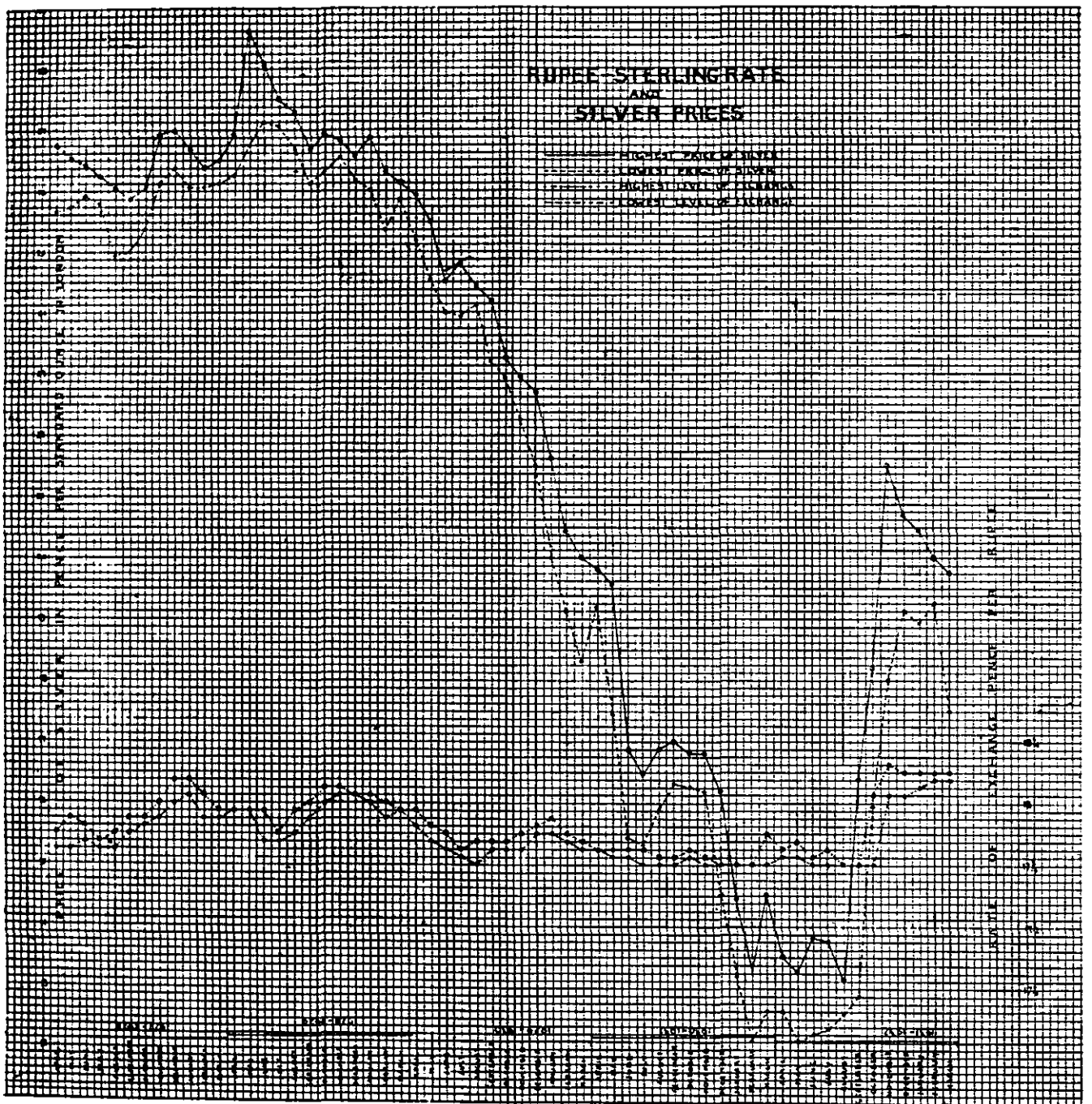


WEEKEND CALL MONEY RATE (CALCUTTA)

CALL MONEY RATE  
SALES OF TREASURY BILLS

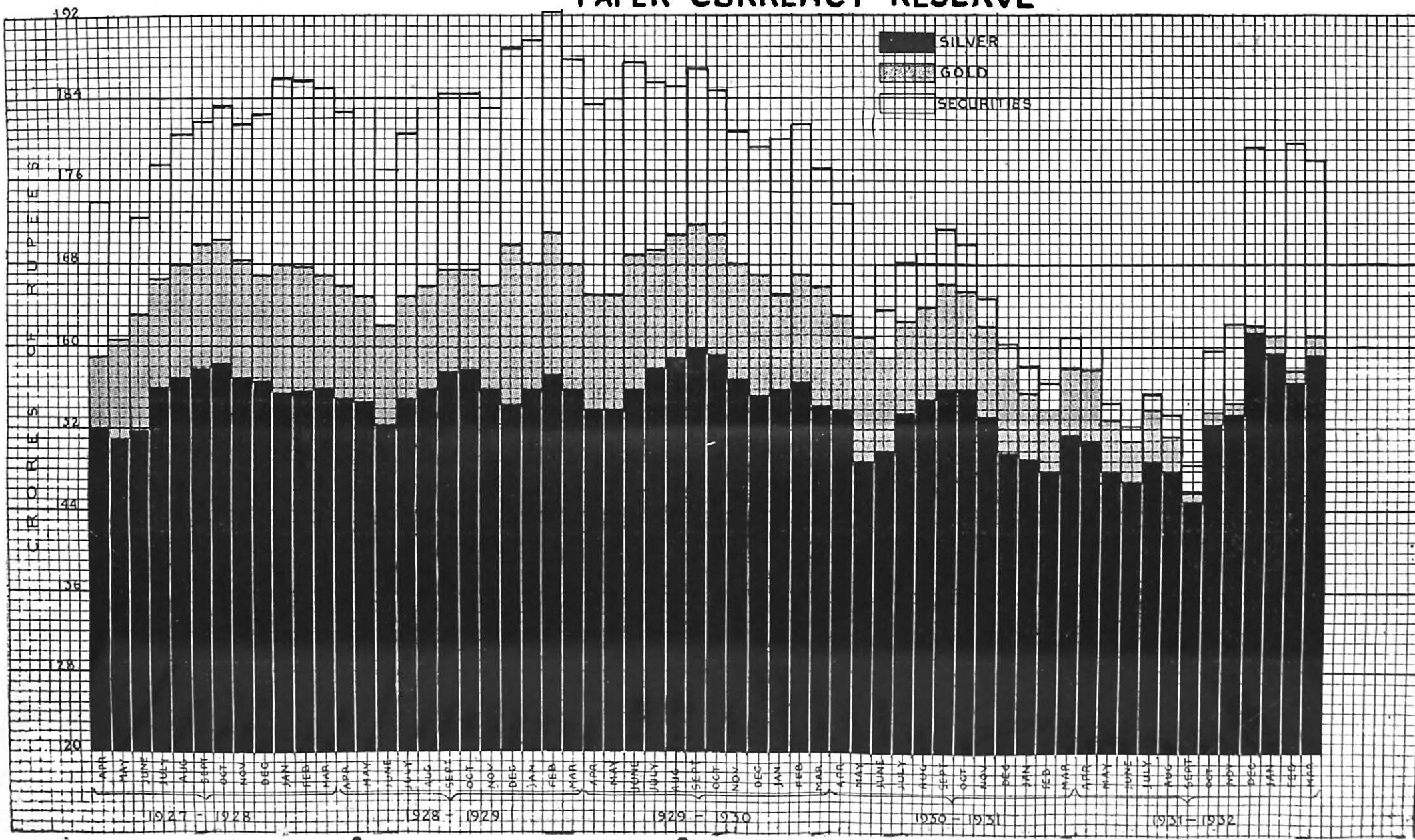
WEEKLY TREASURY BILL SALES IN CRORES OF RUPEES

REMARKS: 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