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LANCASHIRE AND THE FAR EAST

by

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PREFACE

My study of the cotton industry was begun whilst holding a Ratan Tata Research Studentship at the London School of Economics, and this book was written in 1930 on my return from a nine months' visit to Japan, where I was a special correspondent of the *Manchester Guardian Commercial*. Although it is only to be published now (1931), I have brought very little of my tabular matter beyond 1929 or the beginning of 1930. The world economic crisis, the effects of which were fully felt in 1930, still continues, and it is as yet too soon to say whether the further catastrophic fall in British cotton exports in 1930 and 1931 is permanent or not. It is therefore most satisfactory to follow developments down to the end of 1929 only, for purposes of comparison with the pre-war position.

In any case, what has occurred in 1930 is only an intensification of all the phenomena described in this book: British exports have declined further, Britain's percentage share of the Far Eastern markets has grown even smaller and that of Japan larger, the poverty of the Indian peasantry has grown yet more acute and their *per capita* consumption of cotton cloth has consequently declined further.

The British Economic Mission to the Far East has just returned, but the report of its Cotton Section throws little new light on Japanese competition or Japanese conditions of labour. In fact, the Report refers at the outset to the ban put by the Japan Cotton Spinners' Association on their visiting any of its members' mills and of the difficulties experienced in getting precise information during the few mill visits actually made.

The Report is interesting for the details it gives of British and Japanese marketing methods in China, but, since my book is primarily concerned with labour conditions and labour costs, the appearance of the Report has not necessitated any amendments or additions to it.

During my stay in Japan I saw all kinds of factories, read the newspapers with reference to anything concerning the industry,

studied the Government reports and spoke with employers, managers and technical staff, workers, social workers and Trade Union organisers. My investigations were more thorough than it is ever possible for those of official delegations to be, and I think that the account here given of Japanese labour conditions in the cotton factories is a more accurate and complete one than has yet been published.

Those with a specialised interest in the cotton industry will, I trust, find new material and a more comprehensive analysis of the root causes of the decline in the exports of British cotton yarn and goods than has yet appeared in book form. In particular it is hoped that the detailed calculations of Japanese and British labour costs made in Chapter VIII will throw light on the actual competitive position as between Japan and Lancashire, and will contribute towards the settlement of the long controversy about labour costs in the two countries. Although the data for these calculations were obtained in Japan in 1929, it will be shown that the comparative position of the two countries cannot have changed appreciably since then.

But this book is intended not only for those with a specialised interest in the cotton industry or for those directly engaged in it, but also for those concerned with the general position of British economic imperialism and for those interested in labour conditions all over the world.

Little or nothing has hitherto been published in England concerning that section of the Japanese cotton industry which is outside the Japan Spinners' Association and details of which are also given in this book.

In the earlier chapters dealing with British exports and the internal position of the British industry, just sufficient information is given to show the extent of British losses and the causes, other than the external ones, of those losses, and to give the general reader some idea of the conditions of labour of the Lancashire operatives. Primarily, however, this book is a study of labour conditions in Japan; of the British, Japanese and Indian competitive position; and of general Indian conditions and British Imperial policy in India in so far as they affect the Lancashire cotton industry.

I have to thank many friends in England and Japan who, while they may not agree with my point of view, have been generous in giving me information, and I am particularly indebted to Mr. C. M. Lloyd, who has read my MS. and assisted me during the whole course of my investigations with many valuable suggestions and criticisms. I make grateful acknowledgement to the Lancashire Cotton Corporation for data supplied concerning English yarn production.

FREDA UTLEY

LONDON, *May* 1931

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INTRODUCTION

OVER-CAPITALISATION and indebtedness, backward technique, subdivision of the industry into too many small sections and small units of production, excessively high finishing and merchanting charges, heavy taxation, middlemen's tolls at every stage from the buying of the raw material to the disposal of the finished goods, and last but not least high labour costs—all these are factors put forward as accounting for the depression of the post-war years in the Lancashire cotton industry.

Stress is laid upon one or other of these factors according to whether the speaker or writer is a cotton merchant, a spinner, a manufacturer, a finisher, a cloth merchant or a worker in the industry. All, in fact, play their part in the depression.

The student of the industry must look beyond these immediate causes to the deep-seated root of the trouble to discover whether the rot is a permanent one, and he cannot but perceive that the evils which afflict the cotton industry are but the same evils, in an accentuated form, which are afflicting the greater part of British industry. He cannot but perceive that Britain is surely losing her position in the markets of the world, that a position of predominance won and long held in consequence of her having developed machine manufacture before any other country can now no longer be maintained in a world where so many countries have become industrialised.

The fact that the cotton industry is suffering a more acute and sustained depression than any other British industry is easily explained. Since food, shelter and clothing are the three primary human wants, and since the initial capital required to set up a cotton mill is not large, textile production is one of the first industries to which power-driven machinery is applied in an undeveloped country. There are now few countries in the world where some textile mills do not exist and the total production of machine-made cotton goods by the newer manufacturing countries has increased enormously during the present century. The days when Britain supplied the greater part of mankind

with clothing have passed never to return, and the position of the Lancashire cotton industry illustrates even more clearly than that of the coal industry the loss of that monopoly position which made her the strongest imperial power in the world.

It was upon coal and cotton that the prosperity of modern Britain was first built up, and it is coal and cotton which are the first to feel the full effects of Britain's loss of her predominant position in the markets of the world.

In the early days of British industrialism it was yarn and textiles exported to Europe and to the vast populations of the Far East which first brought in the profits enabling Britain so rapidly to accumulate capital and develop machine manufacture and thus establish herself as "the workship of the world."

Up to the war of 1914 her exports of consumption goods (mainly textiles) continued to expand, and her export of capital goods to almost every part of the world enabled her to maintain and to extend her grip over those great areas East and West known as the British Empire. Coal, cotton and the metallurgical industries were the three bases of British exports and of British prosperity.

But since the middle of the nineteenth century other countries had begun to develop their industries and to challenge the British predominance.

During the Great War Britain hoped to retain that predominance by the defeat of her greatest trade rival—Germany. But although she emerged the victor, it was only to find that the destruction of the German menace to her supremacy had encouraged the emergence of a far greater one in the shape of the United States of America. Wall Street, not the City of London, had become the financial centre of the world; Japan, not Germany, was supplying the bazaars of India with cheap manufactured goods.

It does not come within the scope of this work to deal with the whole extent of the weakening of British economic imperialism, but it is necessary at the outset of a study of the cotton industry to emphasise it, for there is no class in Britain to-day who realise less clearly than the cotton spinners and manufacturers that the

whole world situation has changed. An industry which for more than a century found its position almost unchallenged, and which even to-day comprises 36 per cent. of the world's productive capacity, is not an industry the owners of which can easily reconcile themselves to the fact that they are no longer superior to everyone else.

It was the war which gave the great impetus to the increased manufacture of cotton goods by other countries, but even without the war Lancashire could not much longer have retained her unexampled position in the world cotton trade—a position unequalled as regards volume of production and exports by any other manufacturing industry in the world.

By the middle of the nineteenth century France, Belgium, Germany, Holland, Switzerland and some other countries were already spinning their yarn by machinery if they had not yet fully developed power loom weaving, and Britain turned to China and India as the principal markets for her yarns and cotton goods. By the end of the century even the Far Eastern countries had begun to set up mills and the European countries and the U.S.A. were sending their manufactures to India, China and to Britain's other markets, not yet in very large quantities, but sufficient to show that Britain was being seriously challenged.

Once other countries developed their textile manufacture, Britain could only retain her leading position by manufacturing more cheaply than anyone else. Far from being able to do so, she has since the war found herself with higher costs of production than those of the newer manufacturing countries, in particular higher than those of Japan, now her principal rival. Various factors have immensely raised her costs of production and retarded her technical progress. The most important of these factors are the increased charges on the industry since 1914 (heavy taxation and the greatly increased burden of fixed interest charges), the organisation of the industry, which preserves many of the features of an early stage of capitalist development, and the higher standard of life of British workers in comparison with that of the extremely low-paid workers of the East.

Many Lancashire people, believing that the efficiency of labour

is much greater in England and capital cost much lower than in the East, think that Britain can hope to regain her lost trade by cutting wages in Lancashire, improving technique and reorganising the industry on a modern basis.

That this is an illusion I shall endeavour to demonstrate in the following pages.

Britain's principal rival in her largest markets is Japan, but she is also very seriously affected by the growth of the Indian cotton industry and already to some extent by the increasing production of the Shanghai mills.

The development of the Indian mills since the war has been such that they now supply 40 per cent. of India's consumption. As yet the Indian mills are well behind Lancashire in efficiency, but the same can no longer be said of Japan, Britain's principal rival in her most important group of markets: India, China and the Dutch East Indies.

To explain the reasons for Japan's rapid rise to prominence in the world's cotton trade, it is necessary to examine the social background of the cotton industry there and endeavour to discover the true facts concerning the conditions of labour and its efficiency, about which such conflicting reports have been current in Lancashire. Consequently, not only is a full description given in Chapters VI and VII of labour conditions both in the small and large cotton mills and costs of production in Japan and Lancashire compared in Chapter VIII, but in Chapter V an account is given of the position of the Japanese peasantry and the close bearing this has on the cotton industry.

Regarding the Chinese mills, it has not been possible to give the same detailed analysis of the position as has been done in the case of Japan, but it is at least clear that the competition from mills in China may, at no very distant date, become as serious a menace to Lancashire manufacturers as that of Japan is to-day.

The writer began this study with the idea that just as in the ancient world free labour was crushed down by the competition of slave labour, so in the modern world the European workers, in some industries already, and in others possibly in the near future, are being thrown on to the "dole" by the slaves of to-day:

the workers in the colonies who economically at least are slaves (receiving wages barely sufficient to keep themselves alive and no more) and who have few personal and no political rights.

In so far as Japan is concerned, the extensive use of unprotected female labour is also in many respects analogous to the use of slave labour in a country where women have hardly emerged, politically, socially or economically, from the status of chattels.

Besides the above most important external causes of the depression in the Lancashire cotton industry there have to be considered the causes of the poverty of the peasant populations of India and China, still to-day Britain's most important customers for cotton goods. It is the American section of the cotton industry which has suffered a nine years' depression, that is to say the section which manufactures from American cotton the cheaper kinds of goods. The Egyptian section[1] has been relatively prosperous, catering as it does principally for such markets as Europe, South America and the Dominions, and producing a large range of specialised goods where mass production could not be applied and where Britain's long experience and skill, the excellent finish of her goods, and the attention of individual merchants still enable her to play a leading role.

It is therefore necessary to pay close attention to the position of the peasantry in the Far East in order to understand the depression in the Lancashire cotton industry. At the time of writing the primary producers all over the world are being ruined or impoverished by the heavy fall in the prices of foodstuffs and raw materials, which has brought about an agrarian crisis. This crisis has, during 1930, rendered the depression in the British cotton industry even more acute than it is shown to be in the following pages.

Nowhere has the agrarian crisis had more disastrous effects than in India, where the peasantry are at the best of times only on the verge of subsistence. India outweighs every other market in its importance to Lancashire, and a part of this book has therefore been devoted to an examination of the reasons for the poverty

[1] i.e. Using Egyptian cotton which is longer stapled than American and so used for spinning fine yarns.

of her people—poverty which the present agrarian crisis serves but to throw into sharper relief.

The facts given in the later chapters indicate how British Imperial policy, which benefits financial interests in Britain and which once benefited manufacturers in Lancashire, is having fatal consequences for the latter to-day.

The internal factors which weaken Lancashire in the continually growing competition in the world's cotton markets are described in Chapter II; but since even the complete reorganisation of the industry would not, in the writer's opinion, restore to Britain the volume of her pre-War cotton exports, nor prevent an even greater decline of those exports in the near future, this study is principally concerned with Japan, India and China, where is to be found the ultimate cause of the post-War depression in Lancashire.

The absurdity, or rather the tragedy, of the whole position to-day lies in the fact that the ability to produce more wealth leads inevitably to greater impoverishment. Society now suffers simultaneously from unemployment and from want, in a world where machinery stands idle and the primary producers can be ruined by the very abundance of Nature's harvests.

Hundreds of thousands of cotton workers are unemployed in various parts of the world, yet the millions of India and China, and even the cotton workers of the West themselves, have not enough clothing, whilst the producers of raw cotton are ruined because "too much" cotton has been produced and it cannot be sold. Poverty resulting from plenty is a state of affairs that cannot be imagined in a primitive society, but in the world under our system of private ownership of the means of production, which necessarily means production for profit, each new development of technique which lessens the amount of human labour needed to produce a given quantity of goods, each further increase of productive capacity in any country, leads to unemployment and to an effort everywhere on the part of employers to reduce wages in order to strengthen their position in the ever fiercer competition in the world market. The greater the quantity of goods produced, the more determinedly must the employers in each

country struggle to reduce their labour cost. It is not a question of the good will or the ill will of individual employers, but of the driving force of national and international competition.

Whether the capitalists reduce their labour cost by improving their technique, or by more rational use of labour, or by the simpler method of reducing wages, the result is the same—an ever greater volume of goods on the world market, and an ever smaller percentage paid out to the wage-earners. So long as there were vast areas of the world where the use of power-driven machinery was unknown, the advanced countries of the West could continue to expand their production of textiles and increase their sales through the elimination of the hand-loom weavers in those agrarian areas. But once the great populations of Asia began to manufacture for themselves, inevitably the market for cotton exports from the West first ceased to expand and then shrank. Again, if a higher standard of life had been attained by the peasant populations of the East, this would have counteracted the effects of the increased world production of textiles. But, as will be shown in this study, that has not been the case, and cannot be the case so long as Asia remains tributary to Europe and America.

The world's productive capacity in spinning increased 14 per cent. from 1913 to 1927.

Do the people who see in this fact merely an argument that wages in Britain should be reduced in order to compete with the newer cotton-manufacturing countries ever appreciate the implication of that argument? The implication is that as the world's productive forces increase, as the world's power to produce goods increases, the producers of those goods are to receive less of them. The cotton manufacturers and the mineowners fix their eyes only on their own industry. They do not see industry all over the world as a whole and when they want "to regain their markets" by pushing down wages or increasing the productivity of labour through improved machinery and scientific management, they do not realise the implications of the fact that exactly the same arguments are being used, and exactly the same steps are being taken by their rivals and by the employers in other industries.

In the world to-day the market cannot expand to keep pace with the increase in the world's productive capacity since the wage-earners who form the mass of consumers in the advanced countries, and the peasants in the more backward countries, receive a continually decreasing share of the total income. Hence under our system of production it is inevitable that the more wealth the world is able to produce, the more difficult it becomes to sell it, although the majority of mankind are without the first necessities of life.

LANCASHIRE AND THE FAR EAST

CHAPTER I

BRITAIN'S POSITION IN THE COTTON MARKETS OF THE WORLD NOW AND PRE-WAR[1]

FOR nine years now the Lancashire cotton industry has been suffering a severe depression. Since the end of the boom in 1920, with the exception of a few short intervals, short time has been worked or there has been under-employment in the American section of the industry. Until quite recently employers and Trade Union officials alike went on speaking of a temporary depression and hoping that better times would come along of themselves in due course. Lancashire having been for a hundred years the leading country in the world in cotton manufacturing, and exports having risen continually from 1840 to 1914, it has taken nearly a decade for it to dawn on her that that position is definitely lost. Even now most employers and most Trade Union leaders are still imagining that it can be regained if "everyone will pull together." Few have realised that the depression is almost certain to be greatly accentuated in the next few years.

Briefly stated, the present position is as follows: Four-fifths of the products of the Lancashire cotton industry are exported, and total exports of cloth had sunk to less than two-thirds of the pre-war figure before the effects of the world depression reduced them yet further in 1930. At the same time the home market has contracted and in 1924 took 33 per cent. less than

[1] The last figures given are those for 1929 as explained in the Preface, but the following 1930 figures are given here for reference. Total British cotton piece goods exported: 2,490 million linear yards. To India, 722 million; to China and Hong-Kong, 69 million. This is a percentage decline on 1913 of 56, 76, 90, respectively.

in pre-War days.[1] As against Britain's decline in exports the world's consumption of cotton has increased by 13 per cent. on the 1929–30 figures, and the world's spindleage by 14 per cent. (The exact increase in the number of looms cannot be ascertained.) At the same time the world's total trade in cotton goods and yarns is less than pre-War, largely in consequence of increased output in the great markets of India and China. In 1925 it was calculated that the world trade in piece goods had diminished by 16 per cent., according to calculations based on yardage and weight. To-day it has declined still further. Of this diminished trade Britain accounted for 57 per cent. as against 73 per cent. of the larger pre-War trade.[2]

In 1925 British cotton goods exports had declined 34 per cent. on the 1913 figure, but since then they have declined still further (viz. 47 per cent. on 1913 in 1929), so that her total share of the world's trade must now be well below 57 per cent.

In 1924–25, when world demand had regained its pre-War level, the United Kingdom produced only 5,500 million yards compared with 8,000 million yards before the War, and her exports had fallen from 6,900 to 4,500 million yards. About 1,000 million yards had been lost in India, and of the total loss (2,400 million yards) nearly two-thirds was due to the growth of national industries and one-third to foreign competitors in neutral markets.[3]

The principal feature of the change since pre-War days is the great increase in productive capacity and output of India, Japan and China and the declining importance of Europe. Whereas in 1913 Europe had 69 per cent. of the world's spindleage, she now has 63 per cent. These figures do not, however, show the full significance of the change, which can only be appreciated when it is remembered that Japan works most of her machinery 18 hours a day, 28 days a month, China hers 22 or 24 hours every day of the month and India hers 60 hours a week.

[1] Census of Production.

[2] These figures relate to the average for 1923–25 as against the average for 1909–13, and are taken from the Memorandum on Cotton compiled for the Geneva Economic Conference in 1927.

[3] Manchester Cotton Trade Statistical Bureau.

The following figures show the position:

WORLD'S SPINDLEAGE
(*In Millions*)

	1913	1929
EUROPE	99·5	104·3
of which Britain	55·6	55·9
ASIA	8·4	18·8
of which India	6·1	8·7
Japan	2·3	6·5
China	—	3·6
AMERICA	34·2	39·5
of which U.S.A.	31·5	34·8
World's Total	143·4	165·1

Of the European countries, France, Belgium, Holland and Italy account for most of the increase.

In most of the European cotton-manufacturing countries there have been periods of boom and slump throughout the period from 1921 to 1929, but on the whole production has been maintained and some countries, like Italy, France and Belgium, export more than before the War, Italy having become a serious rival to Britain in such markets as those of Northern Africa and South America.

The percentage shares of world exports of cotton piece goods according to value were as follows for the principal exporting countries in 1924 and 1929, according to the figures compiled by the Manchester Chamber of Commerce Cotton Trade Statistical Bureau:—1924: United Kingdom, 54·6; Japan, 10·8; France, 7·4; U.S.A., 6·3; Italy, 5·9; Czecho-Slovakia, 4·0.

1929: United Kingdom, 44·2; Japan, 17·5; France, 7·2; U.S.A., 7·0; Italy, 6·2; Czecho-Slovakia, 4·7.

On the whole it is from the Far East that the blow to Lancashire cotton spinners and manufacturers has fallen. Indeed, once textile machinery began to be exported to the great cotton-consuming and raw cotton-producing countries of Asia it was obvious that Lancashire must in time cease to be the supplier of clothing to those countries. It is Japan which has gone ahead most

rapidly since the War, for Japan has the same advantages in the way of cheap labour as India and China and, being independent, her capitalists are in a much stronger position than those of the latter countries. Moreover, she was able to make enormous profits during the War, in which she enjoyed all the advantages and none of the burdens of an ally of the victorious powers and was enabled both to develop her industries and to put by large reserves.

Although the War accelerated the process of industrial development in the Far East, the process had begun much earlier, in spite of the efforts of the British Government to hinder the development of Indian industry and keep India as a market for Lancashire goods. Up to the War British cotton-cloth exports were still increasing, but it is questionable how long they would have continued to do so. It is, indeed, surprising how many Lancashire spinners and manufacturers have continued to ascribe their difficulties to the post-War situation or to a temporary slump. Many of them even to-day are convinced that if they hold on long enough the good times will return; there have been slumps before—so they argue—and these have passed away just as this one will pass away in time. First there was the underlying assumption that the world is purchasing less cotton goods for the time being, but that the demand will eventually return, and to-day, having wakened up to the fact that the world is consuming more, not less, than before the war, they nevertheless believe that Britain has the inalienable ability and superiority to hold on to more than half the world trade.

Just because Britain was the first country to develop the spinning and weaving of cloth by machinery—enabled to accumulate capital for the "Industrial Revolution" by the plunder of India and the slave trade to America—Lancashire "cotton men" simply cannot realise that they no longer hold a monopoly of cotton manufacture, or ever can hold it again. They do not really believe that the Japanese, Indian and Chinese mills can produce ordinary cloth as well as the Lancashire mills, and still cling to the belief that with a little reorganisation and the elimination of some of the waste in Lancashire they can "win back" the trade lost. They never ask themselves why countries like India

and China which grow raw cotton and wear cotton clothes and which were weaving cotton cloth whilst our ancestors walked about in the skins of wild beasts, should continue to send the cotton over the seas to be manufactured into cloth or should buy from Europe cloth made of American cotton.

As I shall show later in this book, it is only the fact of British domination in India and the financial control of China by the Great Powers which have prevented a very much more rapid development of the cotton industry in the Far East.

Britain has 55·9 million spindles out of the world's total of 165 million, which is equivalent to 36 per cent. She has 800,000 looms. The value of her cotton yarn and cloth exports accounted for 25 per cent. of the total value of her exports of manufactured goods before the War, and her proportion of the world trade in cotton goods was a larger proportion than her share in any other export trade. The importance of the cotton industry to British Capitalism is as great as that of the coal industry, and the foundations of Britain's "national" prosperity have rested on coal and cotton. In the words of Professor Daniels:

> No other British industry, with the possible exception of the coal industry, can lay claim to such a predominance in the export trade of a staple manufactured commodity. An export trade in such a position is particularly subject to attack. . . . To maintain our pre-War position meant the maintaining of a superiority in efficiency over all other countries.

Britain has clearly not been able to maintain that efficiency, and, as I shall show in the next chapter, the enormous decline in her exports is due almost as much to the greed of the owners of Lancashire spindles and looms, and to the strangling grip of financial interests, as to increased production by other countries. The wonder is not so much that British cotton exports are down by 47 per cent., but that she still retains so large a proportion of world trade. It can only be because she has so large a share of the world's spindles and looms that the world has not yet been able to do without her goods; but now that the world's productive capacity is greater than the world's effective demand, it seems safe to prophesy that in a few years' time even the 1929 position will seem a happy dream of the past to Lancashire manufacturers,

just as the 1924 position, regarded as bad then, seems comparatively good to-day. Britain can, it is true, expect to retain the trade she has in fine goods and in various specialised products, but it seems inevitable that the production of all staple goods, such as grey sheetings, shirtings, drills, longcloths, etc., and of all the medium and coarse varieties of coloured goods, will pass away to her competitors, and principally to the industries of Japan, India and China.

To show how very much more important is the decline in British exports to Asia than the decline in her exports to other parts of the world, and in order to demonstrate which countries compete against her manufactures in every part of the world, I have made a somewhat detailed analysis of the position in the various large groups of markets and their relative importance.

Since the decline in yarn exports has been far less serious, and is anyhow of much less total value than the piece goods trade, it will be sufficient to note that it shows a 21 per cent. decline in quantity on the 1913 figures.[1] The yarn trade was already declining before the war. Yarn exports are principally to Europe, and consist mostly of fine yarns made of Egyptian cottons. The Egyptian section of the Lancashire industry did not begin to experience a depression till 1929, with the exception of the year 1921.

The decline in British cotton goods exports has been as follows:

TOTAL EXPORTS

(*In Millions of Linear Yards*)

Year	All kinds	Grey	Bleached	Printed	Dyed	Coloured woven
1913	7,075	2,357	2,045	1,231	1,151	290
1922	4,313	1,435	1,319	646	740	173
1923	4,324	1,219	1,292	758	821	234
1924	4,585	1,402	1,413	729	858	183
1925	4,637	1,303	1,522	777	832	203
1926	3,923	1,122	1,285	593	752	172
1927	4,189	1,198	1,337	657	824	174
1928	3,968	994	1,346	625	838	165
1929	3,765	955	1,288	552	826	144

[1] 1913 = 210 million lb., valued at £15 million. 1928 = 169 million lb., valued at £22·5 million. 1929 = 167 million lb., valued at £20·7 million.

TOTAL EXPORTS OF PIECE GOODS AS PERCENTAGES OF 1913

Year	All kinds	Grey	Bleached	Printed	Dyed	Coloured woven
1913	100	100	100	100	100	100
1922	61	61	65	52	64	60
1923*	61	51	63	60	71	79
1924	65	64	69	59	75	63
1925	66	55	74	63	72	70
1928	56	42	66	51	73	57
1929	53	41	63	45	72	50

It will be noted how much further the decline in all exports has gone since 1925, but that the loss in bleached and dyed goods is far less than in the others. It would seem that in bleached goods Britain is still able to turn out better cloths than other countries, and it will be shown that she has lost least in markets like South America, which take more bleached goods or dyed goods than other kinds.

It is in grey goods, absolutely the largest in 1913, that the decline has been most catastrophic, and grey goods are, of course, principally the cheaper qualities of cloth. Since 1923 Britain has exported a larger total quantity of bleached goods than of greys or any other kind.

These facts all show that it is Britain's poorest customers who have ceased to buy her goods, as does also the table on page 28 showing the percentage share of each market now and before the War.

The following table gives the quantities exported to each market in 1913, 1928 and 1929 in million linear yards:

	1913	1928	1929
British India	3,057	1,453	1,268
China, including Hong-Kong and Japan	773	217	221
South-East Asia	539	309	310
South America	582	396	412
Mexico, Central America and West Indies	168	78	86
U.S.A. and Canada	157	84	72
Australia and New Zealand	210	172	207
Europe except Balkans	388	383	340
Balkans, Near and Middle East	478	238	224
North Africa	357	244	263
West Africa	243	252	215
South and East Africa	121	114	120
Total	7,075	3,968	3,765

COTTON PIECE GOODS

MARKETS FOR UNITED KINGDOM EXPORTS IN 1913 ORDER OF IMPORTANCE, GIVING PERCENTAGE EACH GROUP HAS TAKEN OF OUR TOTAL EXPORTS IN 1913 AND 1923–29

	1913	1923	1924	1925	1926	1927	1928	1929
British India	43·2	31·0	34·0	28·9	37·5	37·4	36·9	34·0
China, Japan, etc.	10·9	6·4	7·5	4·4	5·3	3·1	5·5	5·9
South America	8·2	10·7	9·0	10·7	9·8	9·2	10·1	11·0
South-East Asia	7·6	7·1	6·6	8·8	7·7	8·0	7·8	8·3
Balkans—Near and Middle East	6·8	8·8	8·0	9·4	6·4	7·7	6·0	6·0
Europe (excepting Balkans)	5·5	8·8	10·9	12·0	9·7	10·9	9·7	9·1
North Africa	5·1	7·6	6·9	7·7	5·5	6·3	6·2	7·0
West Africa	3·4	4·5	3·9	6·2	5·4	5·6	6·4	5·8
Australia and New Zealand	3·0	4·9	4·0	4·4	5·4	5·2	4·4	5·5
Mexico, Central America and West Indies	2·4	2·3	2·1	2·1	2·1	1·6	2·0	2·3
U.S.A. and Canada	2·2	5·3	4·7	2·9	2·5	2·2	2·1	1·9
South and East Africa	1·7	2·6	2·4	2·5	2·7	2·8	2·9	3·2

It is on the whole those markets which take the better-quality goods which show the least decline and which have increased their percentage shares (South America, Europe, Australia and New Zealand). South America has now taken China's place as second on the list and China has sunk to the seventh or eighth place, and India, although still the most important market, now takes 34 per cent. instead of 43·2 per cent. of the total.

The figures of average declared value per 1,000 square yards show that, generally speaking, the decline in exports, as given in the table above of percentage shares, must have been greatest in the markets to which the cheapest goods are exported. The exception is China, but in her case the total decline by 1924 was already so great that little except the finer-quality goods are still exported there.

VALUES PER 1,000 SQUARE YARDS OF BRITISH EXPORTS

	1924 £	1928 £
To all countries	34·5	27·8
U.S.A. and Canada	48·8	51·2
Australia and New Zealand	54·0	41·8
China, etc.	44·5	35·8
South and East Africa	42·4	33·8
South America	41·2	35·7
West Africa	39·1	32·2
Europe (except Balkans)	38·4	32·9
Mexico, etc.	38·9	33·5
Dutch East Indies, etc.	35·7	29·3
Balkans, etc.	33·2	26·9
North Africa	33·0	23·0
British India	24·9	19·7

The calculations made by Professor Daniels and Mr. Jewkes in a paper read before the Manchester Statistical Society in 1927 showed the much greater fall in exports to the countries taking the cheapest goods. They classified British exports to 53 markets according to the 1913 value per 1,000 yards with the following results:

Group of markets with 1913 values per 1,000 yards	1913	1922–24
Up to £14	100	50
£14 to £17	100	56
£17 and above	100	114

This table demonstrates clearly that it is Britain's poorest customers who have ceased to buy, and that it is only those who can afford to pay for somewhat better-quality clothing who still buy British goods.

Professor Daniels and Mr. Jewkes have further made an interesting calculation to discover exactly what changes in the *value* of cloth for export have occurred since 1913. They take each individual market and determine the 1913 value per 1,000 yards of the piece goods exported to them. Then they take the average yardage exported to each of the same markets in 1922–24, and apply the 1913 values to them, thereby obtaining the value of the exports to each in 1922–24 on the basis of the 1913 values. The result is to raise the average value of the exports from £13·8 per 1,000 yards in 1913 to £14·9 per 1,000 yards in 1922–24. This seems to prove that the average *quality* of British exports has risen as distinct from general rises in price of all goods. From returns furnished by several shipping merchants they have worked out the percentage increase in price of certain standard cloths whose quality is the same as pre-War. This is the table they give:

AVERAGE VALUE OF COTTON PIECE GOODS EXPORTED FROM THE UNITED KINGDOM (1913 = 100)

	Average value of standard cloths	Average value of total exports
1913	100	100
1922	200	239
1923	202	234
1924	215	241

They do not claim complete accuracy for their results and point out that figures from another set of merchants might show different results, and they also admit that, since the prices given by the shippers were for cloths in the grey, the accuracy of their results could not be affected "provided it could be assumed that the percentage increase in finishing charges and merchants' commissions was no greater than the percentage increase in grey cloth prices." They go on to say that in any case such charges only enter to a minor extent into the final selling prices, and they conclude that the above figures for standard cloths represent the changes in the average values of cloth exports which have not

changed in quality. I venture to doubt whether the effect of increased finishing charges and merchants' commissions can be disregarded since it is generally admitted that both finishers and merchants have continued to make good profits in the year's depression on a much smaller volume of trade. It is almost certain that the percentage increase in finishing charges and merchants' commissions is greater than the percentage increase in grey cloth prices.

On their figures, as given above, the price of standard cloths increased 106 per cent. between 1913 and 1922–24, whilst the average value of total exports increased 138 per cent. in the same period, and they obtain the following table:

EXPORTS OF COTTON PIECE GOODS FROM UNITED KINGDOM

Linear yardage (millions): 1913, 7,075; average 1922–24, 4,396; percentage which 1922–24 is of 1913, 62.

Value at 1913 *levels (£ millions):* 1913, 97·8; average 1922–24, 70·2; percentage which 1922–24 is of 1913, 72.

They finally conclude, therefore, that measured in real value British exports were 72 per cent. of the amount in 1913 as against the 64 per cent. in quantity.

It cannot, I think, be definitely proved that the actual quality of British goods has improved, and hence that a smaller quantity of exports gives employment to a relatively larger quantity of work-people, as Daniels and Jewkes conclude, though it can be agreed that the smaller quantity produces a greater relative profit. It may well be that Britain is able to go on charging very high prices for her best-quality goods since she has something of a monopoly of skill in their production and since her wealthy customers always can, and will, buy the best goods whatever their price. It does not necessarily mean that Britain is making a larger quantity of better-class goods than before the War, but may only mean that the total of better-class goods now forms a larger proportion of Britain's total production than in pre-War days because of the heavy decline in the total production of the coarser goods.

It is difficult to accept the argument that values obtained prove that quality has improved. Britain may be making exactly the

same quantity of fine-quality piece goods as before the War, and charging much more for them than is warranted by the general rise in the price level, being able to do this by the monopoly she still possesses in the production of the finest goods.

It has already been demonstrated that the decline in British exports is greatest to her poorest customers. It is therefore natural that the greater part of the decline in Britain's cloth exports is attributable to India and China, which in 1928 accounted together for 70 per cent. of the total decline on the 1913 figure.

The group of markets coming under the heading South-East Asia (Dutch East Indies, etc.) also accounts for a large part of the decline.

EXPORTS OF COTTON GOODS FROM GREAT BRITAIN
(In Million Linear Yards)

	1913	1928	1929	Percentage decline 1928 on 1913	Percentage decline 1929 on 1913
Total Exports, all countries ..	7,075	3,968	3,765	41	47
Exports to India	3,057	1,453	1,268	53	59
Exports to China, etc.	773	216	217	72	72
Exports to Dutch East Indies, etc.	539	309	310	43	43

The percentage of the total loss in British piece goods exports accounted for by India, China and Dutch East Indies, etc., was 77 per cent. in 1929.

Therefore, although I give some details in this chapter of the position in other markets, this book is mainly devoted to an analysis of the reasons for the decline in exports to the Far East. This has entailed a survey of both Japanese competition and Indian and Chinese production, and has also necessitated an attempt to analyse and describe the root causes for the poverty of the Indian people which prevents their being able to buy even their minimum requirements of clothing. The same causes which operate in India also operate in the Dutch East Indies, where the position of the natives is similar.

I will now proceed briefly to consider the position in each of the main groups of markets given in the table on page 27.

British India

The percentage decline on the 1913 figure in the quantity of

piece goods exported to India from Britain has been as follows: Annual average 1922–26, 48·5; 1927, 50·7; 1928, 52·5; 1929, 58·9.

The only two years in which India took a little over half the pre-War quantity were 1924 and 1926. The temporary rally in the latter year was partly due to the steep decline in the price of American cotton in the autumn of that year. This gave Lancashire manufacturers a temporary advantage over the Indian mill industry and over the Japanese, and enabled them to bring down prices within reach of a larger number of Indian consumers.

The steady further decline since 1927 has corresponded with a steadily increasing total from Japan.

Since it is clear that the decline in British exports to India is the most important single factor in the depression, the exact nature of the decline and the general position in India are dealt with in separate chapters and no further details need be given here. An estimate will there be made of how the decline affects each of the main classes of goods; of the exact competitive position of Britain and Japan, and of how far the decline in British exports to India is due to increased Indian production; of how far the decline is due to the increasing poverty of the Indian peasantry and consequent decreased consumption.

China [1]

China and Japan together before the War formed Britain's second largest market, taking between them in 1913 10·9 per cent. of her total exports of cotton piece goods. Japan's share of the total is extremely small—it is to-day about 10 million yards in all—so that China alone can be considered as having been the second most important market. From the table on p. 28 it can be seen that in 1923 and 1924 she (together with Japan) occupied the fifth place, and in 1925 was seventh, together with Australia and New Zealand, while since 1926 she dropped to eighth, with Australia and New Zealand and West Africa taking a fraction more or a fraction less of British exports than China. In 1929 she was again seventh. Yet China, with her millions who still wear

[1] For further details see Chapter IX.

hand-woven cloth, should have been considered as potentially the market for the greatest expansion.

The above figures alone would prove the seriousness of the decline, but the figures of actual exports to China show it yet more clearly:

EXPORTS TO CHINA AND HONG KONG

(*In Millions of Linear Yards*)

1913	Annual average 1922–26	1927	1928	1929
716	260	117	205	210
	(*Percentage Decline on* 1913)			
—	64	85	70	70

That the percentage loss on the 1913 figure is even more catastrophic than the loss in British exports to India is immediately apparent, although, China never having taken anything like the quantity of goods taken by India, the total loss does not entail quite such serious consequences in Lancashire. Yet it is serious enough, for the total annual average loss in cotton exports up to 1926 being 2,716 million linear yards, and the average annual loss to China being 457 million linear yards, China accounted up to 1926 for nearly 17 per cent. of Britain's total loss. 1927 was a specially bad year on account of the revolution and the boycott of British goods, but 1928 showed some recovery. In the latter year China accounted for 18 per cent. of the total decline in British exports.

Details of the decline under the different headings are given in Chapter IX, and also of the increase in Japanese exports to China. For the present the following figures indicate the position clearly enough:

PERCENTAGE OF CHINA'S IMPORTS OF PIECE GOODS SUPPLIED BY ENGLAND AND JAPAN, ACCORDING TO QUANTITY[1]

	1913	1925
Great Britain	68	26
Japan	23	74

Full figures of China's total imports are not available, but, although before the War the U.S.A. and Russia had supplied a certain

[1] Mr. Barnard Ellinger's estimate in his paper read before the Manchester Statistical Society.

quantity of cotton goods, by 1925 their exports to China had vanished. Although to-day there are again small quantities of American and Russian imports into China, the bulk of the trade is shared between Japan and Britain, with Japan taking the lion's share..

Comparing the total exports of both countries to China in 1928, the totals and percentages were as follows:

	1928
British exports to China in millions of square yards	217
Japanese exports to China in millions of square yards	653
Total	870
British percentage	24·7
Japanese percentage	75·3

SOUTH-EAST ASIA (DUTCH EAST INDIES, CEYLON, STRAITS SETTLEMENTS, ETC.)

In this last group of the Far Eastern markets the decline in exports has been far less than in the case of China or India, and South-East Asia now takes nearly a hundred million yards more of British cloth than China, whilst before the War it took something over two hundred million less. The type of British goods exported is on an average of much higher quality than those taken by India, viz. £29·3 per 1,000 square yards as against £19·7. (Cambrics predominate in the bleached trade.)

Even before the War the bulk of the British exports to the Dutch East Indies, etc., were bleached and printed or dyed goods, and to-day bleached goods form nearly half the total exports. The figures are as under:

BRITISH EXPORTS TO SOUTH-EAST ASIA

(In Millions of Yards)

	1913	1924	1928	1929
Total	539·2	300·8	309·1	309·6
Grey	82·9	27·4	24·3	25·5
Bleached	151·5	104·3	120·7	121·1
Printed	158·2	86·6	80·6	67·5
Dyed	99·1	69·2	72·8	79·3
Coloured woven	47·3	13·2	10·7	16·2

Here there has been no decline since 1924 as in India and China,

and the British position appeared until 1929 fairly stable. It may be, however, that the new Indian Tariff will force Japan in her search for new markets to make a stronger drive into Ceylon, Malaya and the Philippines, or the U.S.A., driven by the depression in her home market, may make a drive into these markets of the Pacific which are nearer to her than to Britain. At present she plays little part except in the Philippines. Japan is already the principal exporter to the Dutch East Indies, now the third largest market in the world for cotton goods. The trade to Java and Madura in 1929 was divided as follows:

In millions of yards: Total imports, 488·4; from United Kingdom, 108; from Holland, 129·6; from Japan, 193·2.

The trade in bleached goods is divided between Britain and Holland, but Holland now sends more than double the British quantity. In all other kinds Japan sends the largest quantities.

In the Philippines the position in 1929 was as follows:

In millions of yards: From United Kingdom, 9·84; from U.S.A., 78; from Japan, 26·52.

In Malaya, Britain still led with a total of 66 million yards in 1928 against Japan's 22·8 million, whilst in the smaller market of Ceylon she sent 24 million yards against Japan's 7·2 million and India's 18 million. In 1929 the total increased 32 per cent. and the British quantity 40 per cent.

Thus, although Japanese competition is not so severe as in China, increased Japanese exports are the principal cause for the 41 per cent. decline in British exports to South-East Asia and Japanese competition is continually growing more severe.

South and East Africa

Although these markets stand last in order of importance, it will be convenient to consider them here since the competition met with in East Africa is of a similar kind to that in the Far Eastern markets. Japan and India are the principal exporters. Britain's total exports in 1929 to East and South Africa were 120 million yards as against 121 million yards in 1913. This was an improvement on 1928 when only 114 million yards were exported.

Almost all the goods imported by British East Africa are British in origin, but they only amount to some 18 million yards.

In Kenya, Uganda and Tanganyika the trade was divided as follows in 1928:

In millions of yards: Total, 79; from United Kingdom, 17·16; from India, 15·24; from Japan, 23·64.

As might be expected, the bulk of the bleached goods and goods dyed in the piece are supplied by Britain, Holland only competing in the bleached.

The printed goods are about evenly divided between Britain and Japan, the coloured woven are mainly divided between India and Japan, Japan sending large quantities of striped drills. In grey goods British exports have disappeared; Japan leads and India comes second with less than half Japan's quantity, whilst the U.S.A. supplies a small amount.

India has suffered severely from Japanese competition in the East African markets, her large pre-War exports of grey sheetings having been almost completely supplanted by Japanese sheetings. Britain has no chance at all in the coarse trade. The U.S.A. with her mass production methods tries to compete although she has now been driven out of the grey drill market by Japan.

In East Africa it is only the comparatively wealthy customers who can buy British goods. The ordinary native's economic position is extremely weak, and British policy in East Africa is such that there can be little hope of a future increase in the purchasing power of the natives. On the contrary the heavy taxation to which he is subjected and the policy of expropriating his land cannot but lead to a progressive worsening of his economic position. The British settlers on the other hand, becoming richer as they are able to force the natives to work more, will be able to take an increasing quantity of the best-quality British goods.

South Africa, as can be seen from the above figures, is of less importance than East Africa.

WEST AFRICA need not be considered in detail. It now takes an average of 6 per cent. of Britain's total against 3·4 per cent. pre-War, and British total exports to this market are actually a little higher than in 1913. There is some competition from

Belgium, Italy and Germany, but Britain holds the bulk of the trade. However, the latest news from Japan states that a special bid is now to be made for this market, as yet almost untouched by Japanese exporters.

NORTH AFRICA now usually takes a little larger quantity of British goods than West Africa, but British exports are down nearly 100 million yards on the 1913 figure.

BALKANS, MIDDLE AND NEAR EAST

Egypt is the most important market under this heading, accounting for 132 million yards in 1928 of the total of 238 million sent from Britain to this group, which includes the Sudan, Persia, Greece, Turkey and Rumania.

In Egypt, British exports, which had been rising since 1922, began to fall after 1925, principally in consequence of Japanese competition, but with Italy also taking a large share of the total trade.

EGYPTIAN IMPORTS OF PIECE GOODS IN 1924, 1928 and 1929
(*In Millions of Yards*)

	1924	1928	1929
Total	230·4	241·2	265·3
From United Kingdom ..	183·6	133·2	139·1
From Italy	36·0	42·0	46·7
From Japan	9·6	42·0	49·8

The large Japanese increase has been in greys and coloured woven. Her exports of the latter, which were non-existent in 1928, were 25·3 million yards in 1929. The Italian exports are all coloured woven, dyed or printed, but principally dyed and coloured woven, of which kinds she supplies a larger total than either Japan or Britain. Although British exports increased slightly in 1929, the increase in quantity was less than for Japan. Britain still supplies more grey goods than Japan, probably on account of her exports of grey muslins (tanjibs, etc.).

SOUTH AMERICA

This market has become Britain's second most important one since the War The increase in South America's percentage of

Britain's total cotton cloth exports is from 8 per cent. in 1913 to 10 per cent., or slightly more, since 1923. In 1929 she took 11 per cent. This means that, although exports to this market have declined, they have not declined proportionately to the total decline. In fact, as can be seen from the following tables, British exports to this market are 71 per cent. of the 1913 figure, and she has maintained her exports at the 1924 figure.

EXPORTS TO SOUTH AMERICA

(*In Million Linear Yards*)

	Total	Greys	Bleached	Printed	Dyed	Coloured woven
1913	582	46	182	125	155	74
1921	201	11	71	39	53	27
1922	336	19	136	58	90	34
1923	461	30	146	97	134	52
1924	412	29	128	84	126	44
1925	492	24	182	80	154	51
1926	384	15	134	56	132	46
1927	381	15	116	62	150	38
1928	396	13	107	71	167	38
1929	412	14	120	77	172	29

AS PERCENTAGE OF 1913

	1913	1924	1928	1929
Total	100	71	68	71
Greys	100	63	30	30
Bleached	100	70	59	66
Printed	100	67	57	60
Dyed	100	81	108	111
Coloured woven	100	60	51	40

The decline is far the greatest in grey goods, and in dyed goods there is actually an increase on the 1913 figure. It is clearly the poorer-quality goods which cannot now be sold, and it is noteworthy that, although greys have declined most heavily, their rise in price is below the general increase.

Clearly in the better-class goods Lancashire still maintains a lead, and has been able to keep up her prices owing to lack of competition. The types of goods exported to this market are of a high average fineness and finish.

VALUE PER 1,000 LINEAR YARDS

	1913 £	1928 £	Percentage increase in 1928 on 1913 per cent.
Greys	11·1	21·3	92
Bleached	14·3	27	90
Printed	12·5	30·1	148
Dyed	17·1	33·6	100
Coloured woven ..	15·1	35·5	135
Total	14·6	31·0	112

[*South America is now clearly one of the brighter spots in the world cotton market for British exporters. Although trade has been lost, Britain is very much nearer her pre-War figure than in the Far Eastern markets.*]

U.S.A. AND CANADA

In these two markets imports from Britain in 1923 and 1924 were above those for 1913, but since then have fallen, and in 1929 were 46 per cent. below pre-War. Here, contrary to the case in most British markets, the takings of bleached goods have declined most, and those of printed next, whereas greys are still almost up to the pre-War level and coloured woven goods were above it in 1928. In fact, the position in every class of goods is just the reverse of that in other markets where greys and coloured woven have declined most and bleached, printed and dyed in the piece least.

EXPORTS TO U.S.A. AND CANADA

(*In Millions of Linear Yards*)

Year	Total	Greys	Bleached	Printed	Dyed	Coloured woven
1913	157	28	49	28	42	9
1921	76	17	13	9	25	12
1922	142	37	25	19	31	31
1923	229	114	25	22	30	37
1924	213	135	22	16	30	11
1925	136	74	20	11	24	7
1926	98	36	20	11	23	7
1927	93	36	19	11	20	7
1928	84	27	18	11	19	9
1929	72	21	18	11	14	7

The U.S.A. trade returns show considerable Swiss imports, which account for much of the decline in bleached goods.

In Canada itself, the U.S.A. now has a larger share of the trade

than Britain. The British exports to the U.S.A. and Canada are of greater value per yard than those sent to any other market, viz. £51·2 per 1,000 yards.

In the U.S.A., Britain in 1928 accounted for 36·24 million yards out of a total of 61·2 million yards imported, as against a total of 12·44 million yards from Switzerland, but in bleached goods alone Switzerland led with 7·08 million against Britain's 3·72 million.

This market is now of little importance as regards quantities, but it is of interest to see that in the finest bleached goods, which are those taken by the U.S.A., Switzerland is ahead of Britain.

Canada

Here the U.S.A. in 1928 sent 58·56 million yards against Britain's 39·12 million, half of the U.S.A.'s being grey goods whilst Britain sent principally dyed goods and about the same quantities of bleached and printed as the U.S.A.

This market is the first one in which we find competition from the U.S.A., not from Japan, accounting for the decline in British trade.

Mexico, Central America and West Indies

In Mexico, Britain still leads against American competition with 15·12 million yards against 10·32.

In Chili, Peru, Venezuela and Uruguay there is both Italian and American competition.

Australia and New Zealand

Here British exports are only a little below pre-War, and there is not yet severe Japanese competition. The Australian tariff has diminished the total imports of cotton goods, but the most expensive goods from Britain are still bought by Australia. The average declared value of British exports there was £40·7 per 1,000 square yards in 1929—a figure only second in value to those exported to Canada and the U.S.A.

The facts given in this chapter not only demonstrate the far greater importance of the Far Eastern markets than that of all the

rest of Britain's markets put together, but show how Japanese competition is now being met with in almost every important market, and how it is increasing everywhere. Japan is Britain's principal rival, not only in India, China and the Dutch East Indies, but also in East Africa and Egypt.

CHAPTER II

INTERNAL POSITION OF THE BRITISH COTTON INDUSTRY

THE position outlined in the last chapter has been reflected in Lancashire in unemployment and short-time working ever since the end of the boom period in the middle of 1920. The boom itself left behind it a legacy which has been one of the most important factors in lowering the efficiency of the cotton industry in Britain and preventing it from re-establishing itself in the markets of the world. This legacy is the indebtedness which has been weighing down the majority of the mills since 1920. Many people have attempted to prove that over-capitalisation has not affected and cannot affect costs of production. Partly true as this may be where the over-capitalisation is one concerning share capital only, it is manifestly a fallacy when it refers to fixed interest charges payment of which counts as part of the cost of production. This is the case in Lancashire, where a majority of mills in the section spinning American cotton have been paying out huge sums all these last nine years as interest on loans (principally to the banks), these sums being set down as part of the cost of production, and amounting in some cases to almost as much as the total wages cost per lb. of yarn.

To understand the present position in Lancashire one must go back and consider what occurred in 1919 and 1920, and also take into account the peculiar pre-War double capitalisation system in Lancashire. The usual system in Lancashire before the War was for about half the nominal capitalisation of a cotton-spinning company to be provided by the shareholders and the rest by short-term loans on a certain 4½ per cent. or 5 per cent. basis. That is to say, of a nominal capital of an average figure of 22s. 6d. or 25s. a spindle (in some cases lower still) the shareholders provided 10s. to 15s. per each £1 share, or £2 10s. to £3 per each £5 share, the rest to be available "on call." The loan-holders

—for the most part small men and quite frequently wage-earners in the industry—provided the remaining 10s. or 12s. 6d. per spindle on a short-term arrangement, whereby they could always demand their money back at short notice. These loans were, however, not mortgage loans, and to-day these loan-holders have only a secondary claim on the assets of the concerns which are in difficulties.

In the War years large profits were made on a restricted output and share prices soared, in the post-War boom profits rose still higher: 100 typical spinning companies paid an average dividend of 21¼ per cent. in 1919 and 150 companies an average dividend of 40⅝ per cent. in 1920.[1] These profits were made, not on increasing output, but on the enormous margins between the price of raw material (itself very dear) and prices. In April 1920 margins on medium yarns were more than 43d. per lb. as against 2·5d. per lb. in 1914.

These enormous profits did not lead to an expansion of the productive capacity of the industry or to improvement of technique; the colossal sums flowing into the hands of the shareholders led, on the contrary, to a terrible impoverishment of the industry consequent on the speculation which took place in those boom years during which hundreds of thousands of pounds were taken right out of the industry. The enormous profits having attracted speculators, a large number of mills were bought up and refloated at tremendously inflated capital values, with the assistance or active participation of the banks. Since, even in those days, it would not have been possible to float the mills at a share capital to represent the enormous purchase price—a figure on an average nearly seven times that of the original share capital—the shareholders found less than half and the banks were called in to provide most of the rest. In most cases the old loan capital was taken over as a desirable asset bearing what was then a low rate of interest, and there was accordingly no effort made to liquidate even these outstanding debts.

The position is shown by the following particulars relating to one hundred and nine limited companies which changed hands

[1] Figures from *Tattersall's Cloth Trade Review.*

during the boom, and of which details are known: Spindles, 10,511,792; amount of former share capital, £4,765,260; sale price, £31,711,958; new capital paid up, £14,847,000.

In some cases companies were recapitalised by the issue of bonus shares, and such recapitalisation, although it could not affect the "cost of production" in subsequent years, has given a fictitious valuation to mills and prevented any improvements in technique from profits made. It has also prevented the possibility of acquiring fresh capital from outside, and prevented the readjustment of the industry to the changed world conditions.

The following table was compiled by Professor G. W. Daniels and Mr. J. Jewkes from the data available to show the actual extent of financial reconstitution of spindles between March 1, 1919, and July 31, 1920.

	Number of Companies.	Number of Spindles (000's)
"Refloated" Companies (Spinning)	200	18,956
"Refloated" Companies (Spinning and Weaving) ..	17	1,490
"Recapitalised" Companies (Spinning)	32	2,962
"Recapitalised" Companies (Spinning and Weaving)	2	490
Reconstituted[1] Companies (Spinning)	42	1,956
Reconstituted Companies (Spinning and Weaving)	20	826
Combines, Spinning and Weaving	3	2,093
Total	316	28,773

Thus, concerns with a former share capital of about 9s. a spindle were sold at £3 a spindle with a new share capitalisation of 28s. 4d. a spindle. It may be assumed that the loan capital taken over by the new companies was about 10s. or 12s. a spindle, and this amount was probably used as security to the banks for the purpose of raising a part of the remainder of the purchase price, i.e. the difference between the new share capital of 28s. 4d. and the purchase price of £3. Something must also be allowed for the sale of realisable stocks. Where ample reserves had been accumulated these also were either used as security for bank loans or actually realised to provide the purchase price. But ample sums were also taken out of reserves to cover promotion expenses and to give large gifts to outgoing directors. In most

[1] Not known whether refloated or recapitalised.

cases the shareholders, paying up 10s. on each £1 share, provided an additional premium of 2s. 6d., which went to enrich the company promoters who were ruining the prospects of the British cotton industry by these insane reflotations.

The important fact for an understanding of the present position in Lancashire is that so large a portion of the purchase price was raised by loans and bank overdrafts. If the whole of the purchase price had been raised by the new companies by the issue of fully paid-up ordinary shares, the subsequent slump, although it would have entailed the loss of all interest to the shareholders, would not necessarily have meant the gradual ruin of the industry. The watered capital could eventually have been squeezed out. But since something like half the purchase price was, as shown above, provided by loan capital and cash advances from the banks, a large majority of the cotton spinning-companies were left weighed down by a burden of debt which they could never repay. They have been forced to go on working year after year, merely to pay their interest to banks and loan-holders; prevented from cutting their prices by the fact that their interest to the banks is a prior charge on the industry which has to be reckoned as part of the cost of production; and prevented from reconditioning their machinery or introducing improved machinery and methods of production by the fact that all the profit, in fact being made, has been drained away to the banks.

It was expected by those who bought the shares of the new companies during this period of mad speculation that the inflated profits of previous years would continue and that the indebtedness would be rapidly worked off. People really imagined that British cotton spinners would be able to continue to extort from an impoverished world the terrific prices which enabled them to pay dividends of 40 per cent. during the boom.

Instead of this, the slump came in the latter half of 1920; prices fell, profits dwindled, sales decreased; there was no longer any hope of paying off the bank loans, the huge interest on which was now the first charge on production.

There are some 55 million spindles in Lancashire, so that the above table shows that 46 per cent. of the spindleage was finan-

cially reconstituted, 37·5 per cent. being actually refloated. Since the large majority of the spindles affected are in the American section, which comprises about 38 million of Britain's total, it will be seen that well over half of these were reconstituted, the usual estimate being two-thirds. The position may be summarised thus:

Total number of spinning spindles, 56,351,000; total number of spindles in the American section, 36—37 million; total number of spindles known to have changed ownership, 23,832,000.

Percentage comparison of the old and new capitalisation of these 23 million spindles: Old capitalisation, 100; sale price, 665; new capitalisation, 312. The new capitalisation amounts to 47 per cent. of the sale price.

Even those companies which were recapitalised and not refloated have many of them got fixed interest charges, since, as already shown, it was the custom in Lancashire before the war to obtain a portion of capital by short-term loans from individuals instead of raising it all by paid-up shares. Such concerns did not use their profits in the boom to pay off these loans, but issued bonus shares besides paying out huge dividends. They did, of course, accumulate large reserve funds as well in most cases, but these soon dwindled away in the bad years. (There are still concerns, however, which were neither refloated nor recapitalised, able to pay out 10 per cent. dividends year after year, partly from profits and partly from reserves.)[1]

In the case of the refloated companies, the purchase price took into account the amount of loans held by the new company, since these loans carried only a low rate of interest and speculators were accordingly ready to offer higher prices for the shares of companies with a large amount of loan capital.

During the last nine years the refloated companies have not only had to go on paying out enormous sums in interest on their loans and overdrafts, but have in a majority of cases fallen further and further into debt. As long as it was possible they raised new ordinary loans and increased their bank overdraft, but as this became harder and harder to get they raised debenture loans,

[1] This was true up to 1929.

mortgaging in the last resort even their unpaid share capital. They have sunk into a position in which, although their machinery has been working entirely in the interest of the banks, the shareholders receiving no dividend at all, yet their sales have not sufficed to meet their fixed interest charges, and they have gone on as long as it was possible meeting their obligations by fresh debts until forced to resort to some moratorium scheme. Other concerns which did not start with huge debts have, during the nine years of depression, borrowed large sums to keep going, hoping from year to year for improved trade which never came, and meanwhile also coming more and more under the control of the banks as they have sought for greater accommodation.

Taking 171 companies refloated in the boom, of which details are known, and comprising close on 17 million spindles, their average amount of fixed interest capital (loans, overdrafts, and debentures) per 1,000 spindles amounted to £1,710 in 1927, which is equivalent to about £1 14s. per spindle. The loan capital of the old companies which had owned these mills before reflotation cannot have been more than 9s. or 10s. a spindle, so the debt increase is 25s. a spindle or more. As against this 62 original companies examined, controlling nearly 6 million spindles, had fixed interest capital of about 12s. per spindle.[1]

The above figures are average ones; actually the amount borne by different refloated companies varies from 10s. to over £4 per spindle. Set against this the fact that the old share capitalisation of a typical concern before reflotation was about 9s. per spindle, and the old loan capital roughly between 4 and 10s. a spindle, making a total pre-War capitalisation (share and loan) of between 13s. and £1 a spindle.

Hence to-day the average amount of fixed interest capital per spindle for refloated companies is £1 14s., as against an average *share and loan* capitalisation of less than £1 per spindle in pre-War days. As regards the actual cost of replacement it is somewhere around £2 10s. per spindle at the present time, but of course the

[1] Calculations on p. 47 are based on figures given in the *Oldham Chronicle Textile Trades Review*, December 31, 1920, and in *Tattersall's Cotton Trade Circular*. Those in this paragraph are from Professor Daniels and Mr. Jewkes' paper on the *Post-War Depression in the Lancashire Cotton Industry*.

older machinery could not be valued as high as this. The Lancashire Cotton Corporation's valuation per spindle of the mills it is now amalgamating is on an average 20s., and never more than 30s.

The above figures make it clear not only that the banks are in actual fact the owners of a large number of Lancashire mills, but also that the claims of the banks and other loan-holders exceed in many cases the estimated present value of the concerns. Even in the case of original companies with debt charges of 12s. a spindle the burden is a heavy one, and one which inevitably raises the price of British goods. In all cases the interest on these loans, overdrafts or debentures are a prior charge on the industry, forcing up the "cost of production" to an unreal figure.

How the debt charges have directly affected the cost of yarn is shown by the following figures put forward by the employers in wage negotiations in 1925.

COST OF SPINNING 1 LB. OF YARN 42's WEFT

	1914	1925	1925 increase over 1914 (per cent.)
Stores and repairs	0·304	0·570	87·5
Fuel, lighting and water ..	0·202	0·386	91·0
Insurance, rates and taxes ..	0·105	0·554	427·0
Carriage	0·082	0·134	64·0
Interest and Depreciation ..	0·439	2·000	355·0
Wages	1·142	2·365	107·0
Management	0·125	0·250	100·0
Total	2·339	6·259	161·0

In this case the interest and depreciation charge, amounting to 2d., is very nearly equal to the wages cost, and had risen 355 per cent. since 1914 as against a rise of only £107 per cent. in wages cost. With the reduction in wages in August 1929 the rise in wages cost must have been brought down well below 100 per cent.

Actually, in the case of the refloated mills to which these figures refer, abolishing the interest charge would be equivalent to wiping out wages cost altogether.

These figures are sufficient to confute those who have tried to prove that the over-capitalisation resulting from the boom has not affected Lancashire's competitive powers. Clearly, even when the shareholders receive no dividends and it is consequently maintained that no profits are being made, profits have in actual fact been made only they have been counted as cost of production and have been drained away to the banks.

Is it any wonder that Lancashire cannot compete with Japan and other countries in the world's cotton markets, when the price of the yarn from which her cloth is made is swollen by such interest charges?

That Lancashire was also herself responsible for the fact that her previous customers sought for alternative suppliers during the boom is shown by the following figures of margins, i.e. of the difference between the cost of the raw material and the price at which the yarn was sold. These margins accordingly show the value retained by the Master Spinners to cover working expenses, wages, interest and profits in different years.

Margin between price of American (middling) cotton and the price of yarn (32's twist) in pence per lb.[1]—1914, 2·58; 1915, 3·25; 1916, 4·88; 1917, 4·31; 1918, 19·80; 1919, 38·40; 1920 (July), 27·64; 1920 (Dec.), 16·54; 1921 (Jan.), 12·21; 1921 (April), 9·07.

Thus even when in April 1921 the industry was in the depths of the depression which had begun eight months before, margins were still nearly four times larger than in 1914.

How much has actually continued to be taken by capital out of sales during all the last nine years' depression can be seen from the following table worked out by Professor Daniels and Mr. Jewkes,[2] showing the increase in margins in the American section over the 1913 figure. The margins in pence per lb. were reduced to 1913 values by the use of the Statist index of wholesale prices, and then with 1913 as the basis (100) the margins since 1921 are given as percentages of 1913:

[1] *Cotton Year Book*, 1920, and *Tattersall's*, April 1921.

[2] This table and the other calculations of Professor Daniels and Mr. Jewkes referred to in this chapter are from a paper read by them to the Manchester Statistical Society.

MARGINS BETWEEN THE PRICES OF AMERICAN (MIDDLING) COTTON AND 32's COP TWIST YARN REDUCED TO 1913 VALUES

1913—100

	1921	1922	1923	1924	1925	1926
January	147·3	137·6	114·1	123·3	178·3	116·9
April	134·8	134·6	145·6	153·9	166·9	110·0
July	153·4	128·9	129·5	139·0	128·5	108·0
October	178·4	131·7	128·8	183·7	145·5	123·7

To the argument that increases in wages cost account for the big increase, one must reply that in the Egyptian section, which until 1929 was prosperous and is still comparatively so, the percentage increase in margins over 1913 is a good deal less, although the wage increases have been the same in both sections.

These wider margins mean the artificial raising of the cost of British yarn and are directly due to the over-capitalisation of a majority of the spinning companies. The falling demand consequent on high prices and the substitution of cheaper goods made in Japan and elsewhere for Lancashire goods has led to yet further increases in Lancashire production costs, since the method adopted up to now to meet the changed conditions has been curtailment of output by short-time working. Short-time working has meant higher overhead charges, and is clearly the most uneconomical way of curtailing output. It has been resorted to for so long, partly because any other scheme has been impracticable in an industry divided up into as many small competing units as the British cotton industry, and partly because Lancashire cotton spinners have gone on believing, until recently, that the depression was temporary, that Lancashire can produce cotton goods more efficiently than anyone else, and that soon they would "turn the corner." Their almost pathetic optimism, although one might designate it by a less polite epithet, has led them to retain their labour force as far as possible and to try and cling on somehow till the better times should come back. It should also be taken into account how many directors have sought at all costs to keep their mills going in order to retain their salaries or fees, and to this end

have put off the evil day of collapse by piling debt upon debt without scruple. It is difficult to decide whether it is stupidity or cupidity which has kept Lancashire for so long clinging to its old methods and its old individualism in face of continuous proof that British manufactures are no longer supreme in the world's markets and can never be so again.

It is only now, when everyone has been forced to recognise the desperate position of the industry, that schemes of amalgamation are beginning to be feasible, and even now it is only the most heavily indebted concerns which are practically owned by the banks which are being forced into the first big amalgamation—the Lancashire Cotton Corporation—by the pressure of the banks to which they are indebted.

Before going into some details concerning the Lancashire Cotton Corporation's scheme, its chances of success and how it is likely to affect the prospects of the British cotton industry, it is necessary to consider the present position in weaving.

It is far more difficult to estimate the financial position of the weaving section of the industry, since the majority of the looms are owned by private companies or individuals. Those which are owned by public companies are almost all in combined spinning and weaving enterprises, and such concerns are shown in the table on p. 45, showing a total of 42 companies either refloated or recapitalised. In addition to these, another 65 concerns which do weaving only are known to have been reconstituted. The total number of looms affected amounts to 110,000, 65,000 of which are in the combined spinning and weaving enterprises. Lancashire has a total of close on 800,000 looms, so that 14 per cent. of the looms were affected by financial reconstruction.

Actually, therefore, only a small portion of the concerns engaged in weaving solely were affected, but, as already noted, the majority of the looms are in private hands, and although details of their present financial position cannot be ascertained, it is well known that many of them are heavily indebted to the banks, and not only have no funds with which to install new machinery, but in some cases cannot buy their yarn without the permission of their bank. "Talk 'on Change,' silent looms, bankruptcies and impend-

ing failures, all go to prove the precarious position of the weaving section."[1]

Nevertheless it may with confidence be asserted that the weaving section of the industry is less indebted than the spinning, and that a larger number of concerns are in a position to install automatic looms and bring their methods of production up to date than in spinning.

Of course, quite apart from the tremendous sums now being taken out of the industry by the banks, there are the pickings of the various middlemen: cotton broker, yarn agent, cloth agent, packers, shippers, etc., the very high finishing charges, the speculation in raw cotton and the host of intermediaries between the spinner and the cotton-grower in America. An analysis of the incidence of cost of all the various brokers, agents and salesmen and the general waste entailed by the division of the industry into so many small units would require a separate study, but it has in any case been stressed by everyone during recent years. Useful light on the economies effected by the Japanese in bulk buying of raw cotton and marketing methods, by reason of the high state of organisation of the industry, is given in the Report of H.M. Consul at Osaka in 1927, and in Mr. A. Pearse's Report on the Cotton Industry of Japan and China.[2] In Lancashire, according to the late Cotton Yarn Association's costings, the cotton broker takes ½ per cent., the yarn agent 1 per cent., and the cloth agent 1½ per cent., whilst in Japan this combined 3 per cent. on prices is eliminated in the case of large combined spinning and weaving companies by direct dealings with the growers of raw material, by spinning and weaving being carried on by the same firm, and by direct dealing with the shippers. As regards shippers' charges they are very high for Lancashire, viz.: 1½ per cent. on greys, 5 per cent. on bleached goods, 6 per cent. on printed goods.

Not only do the various charges mentioned above very considerably enhance the cost of Lancashire goods, but there is the possibility of one section of the trade holding the other sections up to ransom.

[1] *Lancashire under the Hammer*, by B. Bowker.

[2] Published by the International Cotton Federation, 1929.

The following disadvantages inherent in the organisation of the Lancashire industry were pointed out in a paper read to the Athenaeum Textile Society in 1928.[1]

1. "There is the great disadvantage of a commodity passing through many hands. At each stage there are separate overheads and an attempt at separate profits.

2. In Lancashire's organisation there is the problem of certain key sections forming themselves into price rings and holding the other sections to ransom. Certain sections are more interested in a high rate of profit than in a large turnover.

3. The burdens of bad trade are very unequally distributed."

In so far as 2 is concerned it is well known that the percentage now taken by the exporting merchant is much higher than pre-War. The latter has been satisfied to export less and charge more. Finishers' charges and profits have been maintained at a very high figure owing to the monopoly position of a few very big firms.

It is, of course, true that the organisation of the Lancashire industry makes for great flexibility, and so renders possible the production of an enormous variety of different kinds of cloth. Lancashire does, in fact, produce a far larger range of fabrics than any other country in the world, and there are many special kinds of goods which can even now only be satisfactorily produced in Lancashire. But in the production of the "bread-and-butter goods" Lancashire inevitably falls behind her competitors who have the advantage of mass production. And the bulk of Lancashire's customers—or former customers—can only afford to buy the cheapest kinds of cloth. Even if Lancashire can retain the finer end of the trade, and maintain her supremacy when it comes to a large variety of special goods, her high costs of production of plain grey cloths and cheap coloured goods have inevitably led to catastrophic losses in almost every market now that textile manufacture has developed in so many other countries. Nor can Lancashire afford to lose the trade in the cheaper kinds of cloth, for the great bulk of her exports were necessarily of this class before the War, and her enormous productive capacity (55 million

[1] *Manchester Guardian Commercial*, January 26, 1928.

spindles and 800,000 looms) can never be fully employed in producing better-class goods, since only a small percentage of the world's population have the means to purchase them.

Since Mr. Keynes and the Cotton Yarn Association began in 1927 to awaken Lancashire spinners and manufacturers to the fact that their organisation and methods are out of date, and since Mr. Cunningham's[1] report on the superior organisation and efficiency of the Japanese cotton industry, there has been continual talk of amalgamation, mass-production methods and so forth in Lancashire. But the breakdown of the various attempts to secure co-operation amongst spinners has made it clear that only outside pressure is likely to bring about amalgamation in this individualistic industry in which the small "independent" capitalist has till now played so large a part.

Although it had previously seemed that the tremendous debt charges weighing down the spinning industry in particular since 1920 were hindering rationalisation because they prevented the majority of enterprises from improving their productive capacity, it is now precisely the most indebted mills which are being amalgamated by the Lancashire Cotton Corporation through the pressure brought to bear upon them by the banks to whom they owe enormous sums of money.

For some years the Association of Master Cotton Spinners tried to keep up prices by restricting production for definite periods, but this policy could not be worked because of the "disloyalty" of individual members of the Association.

Next, towards the end of 1927, the Cotton Yarn Association tried to form a cartel, but this scheme had also to be abandoned. In fact, all schemes broke down in face of the division of the industry into hundreds of small enterprises and the consequent impossibility of making them all remain loyal to a common policy. In view of the fact that Britain's competitors were all selling at prices far below hers, this policy of trying to keep up prices among British spinners was in any case an avowedly suicidal one, for it meant getting as much profit as possible for the moment and losing all trade when the rest of the world should have increased its

[1] Report of H.M. Consul at Osaka on *The Japanese Cotton Spinning and Weaving Industry*. D.O.T., 1927.

productive capacity sufficiently to dispense with the production of Britain's 55 million spindles and 800,000 looms.

The Cotton Yarn Association, although it failed, gave birth to the Lancashire Cotton Corporation, Ltd., which was registered in January 1929.

The Lancashire Cotton Corporation is the first amalgamation on a large scale attempted in the American section of the industry, but it is not confining itself to spinning only. The objects enumerated by the corporation include the purchase, cultivation and preparation of the raw material, the manufacture of dyeing and finishing materials, the production, finishing and sale of yarns and cloth, and even the manufacture and sale of textile machinery, the proprietorship of collieries, the businesses of brick-making, timber merchanting, joinering, building and contracting.

Whatever eventually materialises out of these ambitious projects, the Corporation in 1929 and 1930 examined and made offers for amalgamation to a large number of cotton spinning companies and to some spinning and weaving concerns. During 1929 nearly two hundred concerns, embracing 19,750,000 spindles (more than half the spindles engaged in spinning American cotton), and 24,358 looms were examined, and the Corporation announced its intention of acquiring between nine million and ten million equivalent spindles. Some companies refused the Corporation's terms, and some mills were refused, as being units which could not be made efficient, but by the beginning of 1931 the Corporation had acquired 72 mills, comprising the equivalent of 6,671,140 spindles, and was completing the purchase of another 1,244,436 spindles. In addition, it owned 15,000 looms.

The operations of the Corporation have been rendered possible by the Bank of England, which is financing it to the extent of £2,000,000. This direct participation in industry of the central organ of British Finance Capital is a new departure in policy, and is clearly due both to the tremendous importance of the cotton industry in British national economy and to the fact that a large number of mills have in actual fact been owned by the banks for a long time owing to their indebtedness. It is this

which partly explains the comparatively few liquidations which have occurred during the past nine years. Rather than see their property cease morking altogether the banks have thought it worth while to make an effort through their creation, the Lancashire Cotton Corporation, to improve the technique of the mills, effect various economies in buying and selling, intensify labour and so extract more profit out of cotton-spinning than during the last nine years, or at least avoid losing all that they have loaned to the industry since 1919. The Amalgamation would, of course, not be possible without the active participation of the banks concerned, which are agreeing to take income debenture stock in the Corporation in exchange for their secured loans to the mills which are being amalgamated.

As might be expected, the terms of amalgamation give little more than a fictitious interest to the shareholders. The latter have in many companies received no dividends for many years. Most of the share capital is only partly paid up. The shareholders are now called upon to pay up the remainder of the uncalled capital, and if they can do so (many of them are lower middle-class investors or even workers who are not in a position to meet the call) they will have allotted to them in ordinary shares and deferred shares half of the originally paid-up share capital. It is, however, more than doubtful whether the ordinary share capital of the Corporation will ever pay a dividend—certainly there will be no dividend for many years, in fact, not until almost all the concerns *not* in the amalgamation are wiped out by its competition. The scheme as already stated is, in fact, a bankers' scheme to secure themselves against the loss of the loans previously made by getting a monopoly in the British cotton industry. It is thus commonly referred to in Lancashire by the individuals outside who dread the cutting of prices which is expected when the Corporation starts operations on a large scale.

If the Lancashire Cotton Corporation is successful in its operations—as is highly probable—the result will, in fact, be the expropriation by finance capital of the small industrial capitalists who still play a fairly large part in the British cotton industry, and a large concentration of capital in this industry which has

up to now been a field where earlier forms of industrial organisation have played a very large role.

Taking the 200 mills examined, the position before and after amalgamation if they all joined the Corporation would be as follows:

PRESENT POSITION

	£
Share capital paid up	28,239,608
Creditors (secured and unsecured, the secured being the bankers)	28,890,933
Total	57,130,541

Uncalled capital = £10,000,000.

IF COMBINED IN THE LANCASHIRE COTTON CORPORATION

Liabilities	£
5½ per cent. income debentures	12,548,768
6 per cent. preference shares	383,311
Ordinary shares	13,212,923
Deferred shares	2,371,617
Total	£28,516,619

Assets	£
Mill valuations (fixed stock)	20,991,245
Stocks, etc. (other assets)	4,759,842
Cash (from called up capital[1])	2,765,532
Total	£28,516,619

The new capital is therefore about equivalent to the old paid-up share capital with all creditors wiped out, or to half the old share and fixed interest capital combined. The shareholders receive about 5s. 4d. in the £1 in the shape of shares in the Corporation. Hence nearly 75 per cent. of the new capital is held by the loan-holders (principally the banks), and moreover almost all the capital which is likely to pay a dividend—viz. the income debentures.

As regards the likelihood of any drastic cutting down of prices in the effort to regain markets, the following facts should be noted:

To pay the present interest due on loans the above 200 con-

[1] Part of the capital paid up on amalgamation is calculated as having gone to pay off some of the creditors.

cerns have to earn a profit of £1,733,456 per annum. At present they do not earn it and have therefore been sinking further into debt. If the Corporation, having amalgamated them, *did* earn this amount of profit, it could pay 6 per cent. on the ordinary shares as well as the interest on the income debentures, plus sinking fund at 2 per cent., and on the preference shares. If it earned profits amounting to about half this, viz. to £941,000 per annum, it could just pay interest on the income debentures, plus sinking fund, and this is likely to be the policy pursued at first since it will just secure their interest to the banks, and enable the Corporation to reduce prices well below the average level in Lancashire.

By various economies, such as concentration of all purchases and sales, standardisation of products and the allocation of single ranges of yarn to single *full-time running mills*, the Corporation expects to effect a saving of 7 per cent. or slightly more immediately, and more year by year. It can clearly be seen that, having acquired a large number of mills at a valuation of 20s. a spindle as against the much higher valuation of the non-amalgamated mills, and at a capitalisation of less than 30s. a spindle, and moreover, having 25 per cent. of the new capitalisation in the form of ordinary or deferred shares on which nothing need be paid for the present, the Lancashire Cotton Corporation is in a position to reduce selling prices of yarn and cloth well below the current Lancashire figure. By this means it will be enabled to concentrate in its hands most of the trade going, i.e., to smash the concerns outside the Corporation in so far as spinning at least is concerned. As already noted, there is already considerable apprehension in Lancashire on this score. As already stated, it is precisely the most indebted mills, those in the worst financial position, which are joining the corporation, for in these concerns the shareholders are helpless. In weaving again it will be the individual factory owner in the worst financial position who will be forced to join the Corporation. The financially better-placed concerns remain outside since the terms their shareholders would receive from the Corporation (though, of course, a good deal better than those received by the shareholders in the semi-bankrupt concerns) do not seem good enough to them. As long as they can continue

to pay their interest on loan capital they cannot be forced by the banks to join the Amalgamation, and they will not voluntarily "rationalise."[1] But they will not be able to pay the interest due on their loan capital once the Corporation starts underselling them in the market, and with ever-growing competition from other countries.[2]

It is therefore highly probable that the next year or two will see the elimination of many cotton enterprises and the concentration of more and more trade in the hands of the Lancashire Cotton Corporation. What is, however, not at all likely is any substantial expansion in the total volume of British trade in cotton goods, even if the Corporation could sell its production at as much as 20 per cent. below the current Lancashire prices; for the discrepancy in costs of production, and above all in labour costs as between Britain and Japan, is so great that even a 20 per cent. reduction in English costs would not give Lancashire an advantage. This will be clearly demonstrated in Chapter VIII.

The Corporation will no doubt overhaul old machinery and install new machinery, and in all probability introduce automatic

[1] Captain Ryan (Managing Director of the Lancashire Cotton Corporation) stated clearly at the discussion on rationalisation, which took place at the annual meeting of the Royal Economic Society on May 28, 1930, that rationalisation was strongly opposed by the individual cotton-spinners and that it was coming only in spite of them through the pressure of their creditors. "As far as we ourselves" (the Lancashire Cotton Corporation) "are concerned, as you know, the bulk of the units that belong to us were in very dire financial stress; they in effect belonged to their creditors, and their creditors decided that the state of things that then existed could no longer continue. If those creditors whom one could argue are the leaders of cotton-spinning—they are not cotton-spinners but the cotton mills belong to them—if their feeling that rationalisation was the only way out is what the opener means by the 'views of the leaders of the trade,' then I can say that the leaders of the trade are in favour, but the individual cotton-spinner definitely is not" (*Economic Journal*, September 1930).

[2] Some weaving concerns have the necessary capital to install automatic looms and a small increase in the number of automatic looms is actually taking place in Lancashire. But the majority of the small weaving employers have not got the necessary resources. Hence the attempt, long persisted in but so far unsuccessful, to get the operatives to agree to work eight looms instead of four. The "eight-loom system" is an attempt to intensify labour and so reduce labour costs without improving technique. It is an attempt made by the small capitalists and is not seriously backed by finance capital as represented by the Lancashire Cotton Corporation. It is, in fact, a last desperate attempt of the small capitalists to retrieve their position and save themselves from amalgamation or bankruptcy.

looms. It may even scrap a portion of the mule spindles now in use, and replace them by ring-spinning frames on which production is cheaper. The Corporation (or other similar large-scale amalgamations) will alone have the financial resources to do this, and the outside concerns will be driven either to join it or to go bankrupt. But, with all the possible improvement in technique and equipment, with all the intensification of labour which the Corporation will endeavour to introduce in its mills, with the substitution of Indian for American cotton, it will *not* be able to reduce its costs of production to the Eastern level. Moreover, it is unlikely that prices will be reduced more than enough to beat other British concerns since the banks which hold the debenture stock will not be willing to forgo interest for a term of years. The Japanese are already ahead of Lancashire in the matter of automatic looms and other improved machinery, and, moreover, the leading Japanese companies have ample reserves with which to install more. Moreover, most of the economies which the Corporation hopes to effect are already effected in Japan. The profits made by the Japanese cotton-spinning companies are so great that they can easily afford drastically to reduce their prices.

Nor should it be forgotten that in India and China "rationalisation" is already the order of the day. For instance, Indian and Chinese workers are being made to attend three looms instead of one or two, as heretofore, and Japanese capitalists in China have already discovered that, given a slightly higher wage than before, the Chinese worker can be made to work almost as intensively as the Japanese.

To summarise the position in the British cotton industry: Rationalisation, involving the reduction of costs of production by new equipment and scientific management, in addition to increasing the intensity of labour, is only likely to be accomplished by large-scale amalgamations promoted by the banks or by the State, and involving the most indebted concerns. Amalgamation of the concerns not sufficiently indebted to be forced into such bankers' schemes as the Lancashire Cotton Corporation is unlikely to occur by voluntary agreement on account of the division of the industry into so many small units of production, its extreme

sectionalism, and the strong vested interests of directors and owners which stand against it.

The Graham Report indicates, however, that the State may play a direct part in the reorganisation of the industry. State assistance, direct or through the Bank of England, may be given to new amalgamations provided that schemes are formulated which look like giving sufficient profits to finance capital. It is clear that the State cannot see so important an industry as the cotton industry ruined without an attempt to revive it. In any case, future amalgamations must, like the Lancashire Cotton Corporation, result in eliminating the small capitalist owner and dispossessing the small investors. The cotton industry, like engineering and shipbuilding, will become more and more closely connected with banking and more and more concentrated under the control of large corporations.

Nevertheless no economies effected through large-scale amalgamation, and accompanied by lower wages forced on the workers in the industry, are likely to bring British costs of production down to a figure approaching the Eastern level. Consequently cotton markets cannot be regained by British capitalism, but the existing trade can be, and is likely to be, concentrated to a very large extent in the hands of the Corporation and of any other amalgamation formed in the future.

In a word, rationalisation in the British cotton industry is likely to lead to monopoly and restriction of output far beneath the productive capacity of the whole industry (by the liquidation of many concerns and the shutting down of mills and weaving sheds), *not* to any very substantial decrease in the price of British cotton yarn and cloth, and hence not to any substantial increase in British cotton exports.

Some increase in exports due to decreased cost of weaving owing to the introduction of automatic looms is possible, but since the labour cost of spinning yarn will not be very greatly reduced by reorganisation, no large reduction in cloth prices or large increase in exports is possible. Even such increase as may occur can be but temporary, since the Japanese, as will be shown, are already ahead of Britain in the use of automatic looms as in

almost everything else. Besides, there is likely soon to be increased competition from other countries, and in all probability a big expansion of American cotton exports consequent on the slump in the U.S.A.

CHAPTER III

WORKING CONDITIONS AND UNEMPLOYMENT IN LANCASHIRE

THE Lancashire workers, whose forefathers laid the foundation of the prosperity of British capitalism when they worked twelve and fourteen hours a day in the mills from early childhood, profited not at all from the enormous profits made during the Great War, for their wages only overtook the rise in the cost of living during the last year of swollen profits.

After this, unemployment and short time began, in 1921, to reduce their earnings to a bare subsistence.

Wages in the cotton industry were very low before the War. Although the ghastly horrors of the late eighteenth and earlier nineteenth centuries began to lessen in the fifties and sixties, wages still stayed so low that it remained a family industry: that is to say, an industry in which a man's wages on most processes for a full week's work were insufficient to maintain his family. Therefore his wife and children also worked in the mills.

The cotton industry is one in which there have always been more women than men employed, and one in which it has remained customary—because necessary—for women to continue work after marriage, leaving the loom only for a few weeks when bearing children, and sending their children into the mills at fourteen to start supplementing the meagre family wage.

At no time have the average wages of the individual workers in the cotton industry come anywhere near the standard required to keep a family above the Rowntree poverty line.

What, then, have been the amounts of wages paid in the cotton industry? What changes have there been since 1914? Which are the worst-paid and which the best-paid sections of the industry?

According to the Census of Production for 1924 women form 62 per cent. of the labour employed in the cotton industry. In 1906, 90 per cent. of these women were on piece rates, and the

same proportion probably holds good to-day. Of the men, 42 per cent. were on a standard wage and 58 per cent. on piece rates. The explanation of this discrepancy lies in the employment of men as grinders, big-piecers, slashers, etc., where a standard wage has to be paid; piece rates are paid to all the mule-spinners, who are men, and to the frame-tenters and ring-spinners, who are women—as also to all weavers, whether men or women. Altogether only 34 per cent. of the total number of workers were on time rates.

Wages rates for the piece-workers are based on the uniform price lists, which provide for every count of yarn spun and every type of cloth woven.

In 1906, piece rates for spinning were 5 per cent. above list prices for those on the spinning side, whilst weavers were receiving the standard list prices. Average earnings that year were £1 per week. Earnings then were 22 per cent. above 1886 for men, and 24 per cent. above for women. In 1913, piece rates for spinning were the same as in 1906 (5 per cent. above list prices); but rates of 5 per cent. above the standard list prices were by then being received by the weavers also. The average weekly earnings that year, as calculated on returns made to the Board of Trade covering 118,000 workers, were 20s. 7d.

In 1913, as in 1906, 55½ hours weekly were the hours of labour. These average figures of earnings do not, however, convey a true picture—since they include the highest-paid workers, who form but a small proportion of the total, and whose wages are double or more those of the majority. The following table shows the average full-time earnings of each of the main classes of operatives in 1886 and 1906:

BOARD OF TRADE INQUIRY INTO EARNINGS AND HOURS OF LABOUR IN THE TEXTILE TRADES, 1906 (CMD. 4445), ADULTS ONLY

	Average Full-time Earnings per week			
	1886		1906	
Men—	s.	d.	s.	d.
Grinders (time)	20	2	29	3
Spinners (piece)—				
Counts below 80's	30	8	40	6
Counts above 80's	35	6	46	0

	Average Full-time Earnings per week	
	1886	1906
Men—*continued*	s. d.	s. d.
Big-piecers (time)	14 2	17 9
Drawers-in (piece)	25 1	30 11
Twisters-in (piece)	20 9	25 7
Weavers—		
3 looms (piece)	16 6	19 6
4 looms (piece)	20 10	24 11
6 looms (piece)	26 7	32 10
Average for men	23 7	28 10
Women—		
Frame-tenters (piece)	15 3	19 6
Ring- or throstle-spinners (time) ..	12 0	15 0
Reelers (piece)	12 5	13 9
Winders (piece)	12 5	15 4
Beam-warpers	18 2	21 6
Weavers—		
3 looms	15 11	17 8
4 looms	19 11	23 5
6 looms	26 3	30 7
Average for women ..	15 0	18 8

The average rate for women workers before the War was accordingly well below £1 per week, and there are more women than men employed in the industry. The average figure of 28s. 10d. for men is as high as it is because of the inclusion of the highly paid mule spinners and the very rare weavers on six looms. Taking the weaving side, the usual number of looms worked in Lancashire is four, and on four looms men were earning only a little over 25s. and women just over 24s., allowing for the 5 per cent. increase in list prices.

The pre-War period in Lancashire was one of continuous prosperity during which fortunes were made with great rapidity. The period from the opening of the century till 1914 has been characterised as a period during which quite ordinary men could make a fortune in ten or fifteen years. In his *Lancashire Under the Hammer*, Mr. Bowker gives a graphic account of this period of easy money. I will quote one passage:

> Looking backwards, I remember most vividly the opulent years from 1900 to the beginning of the World War. Any man who could tell or be taught the difference between healds and reeds, who could rake together a few hundreds of capital and rent some room and power, and who could

also get a friend to show him the ropes "on 'change," was "made." With ordinary care for a dozen years, he would be able to retire to a mansion at Southport or a villa on the Blackpool coast. . . .

I knew a middle-aged man in 1903 who kept a small shop in a Lancashire village; when he cleared ninety pounds a year, he had a good year. If he knew anything more than a Patagonian about cotton, he learnt it from small talk with the weavers to whom he sold milk by the pint. His father had left him a hundred or two in the bank and a friend of his told him he ought to go with it into the trade. The difficulty was that when it came to discussion about the Manchester end, it was discovered that if he had ever learnt simple proportion he had forgotten all about it. After a struggle the village schoolmaster put that right. In six months he was the freshly made master of a hundred looms, and his friend had introduced him to "the boards" of the Royal Exchange and Commission Weaving. In 1910, he was the overlord of 400 looms and was credibly reputed to have a bank balance of £10,000. In 1920, then master of 600 looms, he began a leisured Indian Summer of retirement with £50,000 for a playmate.

It was the low wages and the skill of the Lancashire cotton workers which enabled these enormous profits to be made. The rate of profit, even before the War, was enormous; and even such rapid accumulation of capital as in the case cited above was to pale to insignificance before the profits of the post-War boom. Here was an industry where anyone with a small capital could make a fortune in a few years; since the worker who produced cloth to the value of scores of pounds in a week received a mere miserable wage of about £1—hardly enough to keep body and soul together, and totally inadequate for the maintenance of a family. The fact that the cotton industry has all along employed so many women has contributed greatly to the weakness of the workers in the struggle for better conditions and allowed the employers to prevent wages rising much above the sheer starvation level of the first half of the nineteenth century—when the supply of women's and children's labour was so abundant that the employers could afford to be extraordinarily wasteful of it (in exactly the same way as the Japanese employers at a later date), and to destroy whole generations by long hours and under-nourishment.

In 1886, in 1906, in 1914, and in 1920, as in 1850 and before, the women workers have not even been able to leave their looms for more than two weeks or three when bearing children, family

life has been practically non-existent and women have been worn out by the double labour of home and factory. Yet all the time their employers were making colossal profits; and their labour was sustaining, in addition, a whole host of middlemen.

There are still some people who imagine that during the War and the boom in 1919 and 1920 wages rose steeply and the cotton workers were prospering like the employers and the banks. A brief examination of the facts, however, shows that not only were the workers no better off in the War and boom, but that their wages did not even rise *equally* with the cost of living till just *after* the period of "prosperity"—viz. in 1921—and as an immediate prelude not only to a severe reduction in wages of 60 per cent. in June of that year, but also to a drastic fall in earnings consequent on the unemployment and under-employment which then began. The following table indicates the position in spinning:

Year (December)	Increase in Cost of Living 1914—100	Increase in Wages (Piece Rates) 1914—100
1915	135	100
1916	165	105
1917	185	133
1918	225	205
1919	225	202*
1920	269	259*
1921	199	202*

* Allowing for reduction of hours from 55½ to 48.

The following are the increases in spinning wages during the above period:

	Amount of Change per cent.	Total Increase on List per cent.
July 1915 ..	.. + 5	10
June 1916 ..	.. + 5	15
February 1917	.. + 10	25
December 1917	.. + 15	40
June 1918 ..	.. + 25	65
December 1918	.. + 50	115
July 1919 ..	.. + 30	145*
May 1920 ..	.. + 70	215
June 1921 ..	.. — 60	155
December 1921	.. — 10	145

+ = advance; — = reduction.

* Advance of 30 per cent. to correspond to reduction in hours to 48 per week.

It is noteworthy that the demand for a big wage increase was put forward and obtained in December 1918, immediately after the Armistice, showing clearly how the workers must have refrained from pushing forward their demands before from a misguided sense of patriotism which was piling millions of pounds into the hands of their masters. All through the War years, as shown by the above table, the cotton workers had their pre-War standards reduced for the benefit of the employers in the industry.

During the boom period, although wage advances were demanded and secured, and working hours reduced to 48 in July 1919, the workers were still earning less in real wages than before the War, and consequently enabling the employers and shareholders to make those fabulous profits—which, as shown in the last chapter, led to the impoverishment of the industry and were one of the direct causes of the last nine years of unemployment and under-employment in Lancashire.

Only a year after their wages had caught up with the cost of living they were again drastically reduced. In 1922, wages were brought down to 95 per cent. above price lists; and the short-time working, which from that date has continued for short or long periods in each year and is now almost general, reduced the earnings of most workers far below even the miserable pre-War standard.

In August 1929, when the disastrous gambling of 1919 and 1920, and the consequent enormous sums paid out year after year in interest to the banks, had reduced the American section of the industry to an almost bankrupt condition, the workers' standards were again attacked and reduced by 6¼ per cent., bringing real wages below the pre-War level. They have been made to pay for disaster as they paid for prosperity.

The position of the cotton workers during the last thirty years may be summarised thus: very low wages during the long, prosperous period before the War; lower wages still during the War profiteering period and during the 20 per cent. to 40 per cent. dividend period (1919 and 1920); a brief period in 1921 when real wages were slightly above pre-War; and a long period since 1922 up to date when real wages were below pre-War or about

equivalent, but during which average real earnings, on account of short-time working, were far below the 1913 standard. Moreover, unemployment has, since 1921, been extremely widespread, and in 1929 and 1930 has reached a figure so high that in most parts of Lancashire a third or a quarter of the workers are unemployed.

The following table is an estimate of the average full-time earnings to-day of adult workers employed on the different processes of spinning and weaving. These estimates are partly based on 1906 earnings plus 61 per cent. less 6¼ per cent., and partly on Trade Union figures. The increase on price lists before August 1929 came to 95 per cent., but the 30 per cent. increase in July 1919, which is part of this 95 per cent., was given when hours were reduced to 48 at that date. Since for the spinning section wages were already 5 per cent. above list prices in 1906, the total increase before August 1929, if allowance is made for the reduction in hours, is about 61 per cent.

The figures below cannot claim to be exact for all workers, but may be taken as fairly correct—and, in the case of the weavers, the ring-spinners and the mule-spinners, have been checked by enquiries made of employers and workers in the industry.

In the case of calculations based only on 1906 earnings it has not been possible to take into account the increased output per hour consequent on the reduction of hours to 48 in 1919—since no exact estimate of this is possible. Consequently the present earnings of certain workers may be put a little too low:

ESTIMATED AVERAGE FULL-TIME EARNINGS

MEN

	s.	d.
Grinders (time rate)	44	0
Spinners—		
American section (piece rates)	61	0
Egyptian section (piece rates)	69	0
Big-piecers (time rate)	26	6
Weavers (all piece rates)—		
4 looms	38s. to 40	0
6 looms (a few)	50	0
Slashers	1s. 10d. per hour	

WOMEN AND GIRLS

All preparatory processes in spinning

	s.	d.
Average for various frames calculated as 61 per cent. above 1906, less 6¼ per cent.	29	6

From the Universal List (standard rates for medium work)*—

Drawing frames	31s. 3d. to 36	0
Slubbers in pairs	34	0
Single slubbers	31	4
Back-tenter	15	11
Intermediates in pairs	33	4
Single intermediates	28	7
Back-tenter	15	7
Rovers in pairs	30	0
Single rovers	23	0
Back-tenter	15	0

Ring-spinners (piece rates): from about 25s. to 30s., according to the count and number of spindles attended to. A few earn 32s. to 34s.

Doffers	18	0
Weaving—		
3 looms	26	8
4 looms	36	4
Warping	32	6
Winding	23	6
Reeling	21	4

* The lowest-paid workers are for the most part young girls, not adults.

Actual earnings, owing to short-time working or waiting for beams, are, of course, much less than the above figures. Very few workers in the American section have continuously worked full time; and since 1929 there has also been short time in the Egyptian section. It has been usual for spinning mills to shut down two or three days a week; whilst in the weaving sheds, four-loom weavers have only been supplied with beams for two or three looms, or have been kept waiting for hours or days for their beams. It has been possible for the workers on the spinning side to go on to unemployment benefit whilst the mills were shut, but weavers have had to go to the factory each day, but only been able to earn half or a third of the 38s. or 40s. they would get on four looms. In some places weavers have been allowed to arrange with their fellow-workers for the minding of their two looms whilst they left the mill, but even this has not been universal.

Where a man with a family would be getting more on unemployment benefit than if employed each day on two looms, he has been able in some factories to arrange to give over his looms temporarily to a single man.

Earnings are now so low in Lancashire that many workers are no better off than "on the dole." This is specially true of the wretchedly paid women on the spinning side, who are the worst sweated workers in the industry. A woman weaver or spinner with children, whom she has to pay to have looked after while at work, will find herself earning only a few shillings more than if unemployed; but needing better food to keep up her strength, "wearing out shoe leather" and unable to attend to her home or children.

The standard of living amongst Lancashire cotton workers is terribly low. Their wages have always been at such a level that they have no reserves to fall back upon. Very many families in Lancashire weaving towns have no sheets; the clothing of both men and women is terribly poor. There are Lancashire workers, themselves weaving shirtings, who have hardly a shirt to their backs. Their homes are bare of the first necessities of life. Their food is inadequate, hastily prepared and hastily eaten. It must be true to say that no other workers in England, not even excluding the miners and agricultural labourers, live under worse conditions than the majority of the Lancashire cotton workers. The few well-paid exceptions only make the contrast darker.

The British cotton industry, which, for a hundred and fifty years has yielded fabulous profits in supplying the world with clothing, has *never* paid a living wage to the majority of workers employed. It was built up in the first place on the slave labour of pauper children; it flourished in the early nineteenth century on the unregulated exploitation of women and small children; and even to-day it is the poorly organised and sweated women workers whose labour makes it still maintain tens of thousands of shareholders, brokers, merchants and financiers.

To-day many of the employers, faced with the competition of the even worse-paid Eastern workers, want to bring wages in Lancashire down to the early nineteenth-century level, to lengthen

hours and introduce double-shift working. They want to speed up and speed up again, to do away with the old price lists and conditions won by the workers' struggles in the past; in a word, they want, in the sacred name of rationalisation, to render labour in the mills more intense than it has ever been before.

There is no hope that, by reducing wages and intensifying labour by introducing the eight-loom system, the Lancashire cotton capitalists can win back trade from Japan; for wages are lower there than it is physically possible to make them in England, and efficiency, as I shall subsequently show, is not so very much below the English standard. Nothing but a revolutionary change in political and economic conditions in the Far East, coupled with the lifting of the dead-weight of debt off the British industry, can bring employment back to the Lancashire workers. But the latter have not yet realised how closely connected their interests are with those of the Eastern workers and peasantry.

UNEMPLOYMENT IN THE LANCASHIRE COTTON TRADE

NUMBER OF INSURED WORKERS WHOLLY OR TEMPORARILY UNEMPLOYED

(Based on monthly returns of 33 employment exchanges)

(*In Thousands*)

	Wholly Unemployed	Temporarily Stopped	Total
Monthly average—			
2nd quarter, 1927 ..	6·5	17·6	24·1
3rd quarter, 1927 ..	7·3	25·7	33·0
4th quarter, 1927 ..	8·8	32·9	41·8
1st quarter, 1928 ..	9·9	21·3	21·2
2nd quarter, 1928 ..	12·4	27·5	39·9
3rd quarter, 1928 ..	17·6	36·8	54·4
4th quarter, 1928 ..	19·7	23·4	43·4
1st quarter, 1929 ..	15·7	23·4	39·1
2nd quarter, 1929 ..	19·7	31·0	50·7
July 1929	21·7	31·3	53·0
August 1929	25·5	28·7	54·2
September 1929	24·3	21·5	45·8
October 1929	24·0	20·6	44·6
November 1929	24·7	24·0	48·7
December 1929	26·4	44·4	70·8
January 1930	28·7	43·6	72·3
February 1930	32·8	57·6	90·4
March 1930	39·5	60·2	99·7
December 1930	100·2	88·1	188·3

Unemployment and short time have been increasing rapidly since 1927, when exports began to decline faster, and at the end of 1929 the increase had become catastrophic. In 1930, according to the official figures, more than one in three of the workers in the industry were unemployed or on short time. (See table, p. 73.)

On the 1924 census of production figures there are 517,232 workers employed in cotton spinning and weaving. The total number of insured persons in the Cotton Trade in Great Britain and North Ireland was 554·8 thousand in 1929. The percentage wholly or temporarily stopped was 13·7 in June 1929; 14·4 in December 1929; 41·5 in June 1930 and 47·4 in December 1930.

The following figures show the distribution of unemployment between the spinning and weaving sections in March 1930:

	Wholly Stopped	Temporarily
SPINNING—		
Card- and blow-room operatives ..	7·27	10·65
Spinners	10·73	18·42
WEAVING—		
Beamers, warpers and winders ..	5·58	13·67
Weavers	15·94	17·47

There are somewhat more workers employed on the weaving side of the industry than in spinning, the number of women being greater than the number of men in both spinning and weaving. Although the mule-spinners and piece s are men, most of the work on the preparatory processes is done by women; and in ring-spinning all the tenters are women.

The following figures show the distribution of labour in 1924:

	SPINNING		
	Males	Females	Total
Under 18 years ..	18,180	29,508	47,688
Over 18 years ..	79,580	111,170	190,750
Total	97,760	140,678	238,438
	WEAVING		
	Males	Females	Total
Under 18 years ..	8,905	23,754	32,659
Over 18 years ..	74,325	156,399	230,724
Total	83,230	180,153	263,383

The numbers employed showed a decrease of 10 per cent. since 1907.

Lancashire to-day suffers from the fact that the greater part of her spindles are mule, whilst her younger rivals of the Far East use ring-frames almost exclusively. Although a softer yarn can be produced on the mule, the cost of production is higher—partly because male labour has to be employed. It will be noted from the table on page 70 that mule-spinners are the best-paid workers in the industry and received twice as much as the women ring-spinners, though, of course, output per individual is higher. In Japan, 80 per cent. of the labour in the cotton industry is female as against 62 per cent. in Lancashire, and this is made possible by the fact that almost all Japan's spindles are ring and few of her weavers men.

If the Lancashire Cotton Corporation or any similar amalgamation gets control of Lancashire's mills, they are sure to substitute ring-frames for the old mules in many places, and so increase the proportion of women to men in the cotton industry. The women ring-spinners and those on the preparatory frames are paid extremely low wages, which are, indeed, hardly double Japanese wages, against a much greater discrepancy on other processes; so that their cheap labour will be found an additional inducement for the displacement of mules by ring-frames.

The whole tendency of development in the cotton industry is now towards greater mechanisation and less skilled labour, and this means an ever-growing disadvantage to the advanced countries of the West with their comparatively well-paid labour force. In weaving, skill counts for much less than formerly with such devices as the warpstop motion, automatic looms, etc. In spinning the skilled mule-spinner must give place to the unskilled labour of women and young persons on ring-frames.

The brief account of Lancashire conditions given in this chapter will at least be sufficient for comparison with Japan and India in subsequent chapters.

CHAPTER IV

DEVELOPMENT AND PRESENT POSITION OF THE JAPANESE COTTON INDUSTRY

IT is sometimes thought in Lancashire that if it had not been for the War Japan would never have become an important competitor in the world's cotton market. It would, of course, be foolish to deny what an impetus the War gave to the development of Japan's industries and, in particular, to that of her cotton industry, but nevertheless even before the War signs were not wanting that her production of cotton yarns and piece goods would soon affect Lancashire. The cloud which has become a thunderstorm above the Lancashire horizon was already as big as a man's hand in 1914.

The amazing thing really is that business men should have imagined that other countries would not soon catch up with Britain, but the British feeling of proud superiority is a consequence of the fact that machine production first began in this country, and that in consequence of this Britain was for nearly a century the foremost manufacturing country in the world.

In this chapter I shall give an account of the history of the Japanese cotton industry, its present position, and its prospects as regards further development, leaving the question of working conditions and comparative labour costs to subsequent chapters. I shall, however, in this chapter also be concerned to show the changes in the cotton trade as between Japan, China and India during the last half-century. At the outset it must be stated that cotton cloth and yarn now constitute about a quarter of the value of Japan's total exports and are her most important manufactured products.

Japan's present importance in the world's cotton trade can be gauged from the fact that she consumes as large a quantity of raw cotton as Great Britain, although of course, since much of Great Britain's production is of much finer quality than the Japanese,

this does not signify that either in yardage or in values Japan's production is yet nearly so great as Britain's. In 1928 Japan is calculated to have exported 1,418 million square yards of cotton cloth as against 3,866 million exported by Great Britain.

Some confusion frequently arises in England owing to the fact that Japan's production for export and her production for home consumption are manufactured on different kinds of looms; wide looms for cloth made mainly for export and narrow looms to weave the 12- or 14-inch cloth for kimonos. It is frequently stated in the British Press that Japan has 80,000 looms, whereas in fact she has 171,000 wide power-looms and a further 106,000 narrow power-looms and 86,000 hand-looms. The information usually given about the Japanese industry refers only to the spindles and looms owned by the members of the Japan Cotton Spinners' Association, who do, in fact, control nearly all the spindles in the country, but less than half of even the wide power-looms. Japan has, in fact, a far larger productive capacity in weaving than is generally realised, and, moreover, the percentage increase in the number of her looms has been greater of recent years than the increase in spindleage.

The development of the cotton industries in India, Japan and China has been closely interconnected, and the way in which production and exports have changed in the past half-century is very interesting. In the early Meiji era Japan imported yarn from India. In the last decade of the nineteenth century she had begun to export yarn to China in competition with India, from whom she herself was by then taking very little. A few years before the Great War this export became important, amounting to 389,297 bales in 1913 against India's exports to China of 405,359 bales. India's exports to China had, in fact, been falling since 1908, and since the War they have dwindled to nothing, whilst she in her turn has been importing increasing quantities of yarn from Japan.

China in her turn became the producer of her own yarn. Japanese yarn exports to India have fallen steadily since 1916, and the latest development appears to be the substitution of Chinese yarns for Japanese yarns in the Indian market. In 1927–28,

China supplied India with 25 per cent. of her yarn imports (quantities) and in 1929–30 with 26 per cent.; in the latter year she supplied a larger quantity than Japan. Yet in 1926 her yarn exports to India had been negligible. However, it must be noted that the major part of this export is of yarns produced by Japanese mills in China so that the profit still goes to Japan.

What is the reason for these changes? Why is it that twenty years ago India was exporting yarns to China and forty years ago to Japan as well, whereas now she buys yarns herself from both Japan and China?

The explanation lies in the fact that each of these countries has in turn had the advantage of cheaper labour costs at the beginning of her industrial development, and that each country in turn has turned to develop the weaving side of the industry and consequently has retained more of its yarn production for its own use.

When machine spinning was introduced into India it enabled her to produce yarn more cheaply than Japan or China. When Japan began to set up spinning-mills she no longer required Indian yarns in the same quantities, and, moreover, erected a tariff wall to protect her infant industry. Soon her labour cost became even less than India's.

Next China, for long a consumer of imported machine-spun yarns, began during the War, and in particular immediately afterwards to develop her machine-spinning industry at a rapid pace, and since wages are lower in China than in either Japan or India she has now begun to export yarns to India. In all three countries, although to a much less extent in Japan than in China and India, machine weaving has not kept pace with the development of machine spinning, and a great deal of hand-loom weaving is still carried on.

The above details showing the changes in the flow of trade in yarns between the three great Eastern countries only apply to the coarse yarns, where skill counts for little and low wages for much. In the finest qualities Lancashire still leads, whilst in medium yarns India and Japan both compete with Lancashire

in the Indian market, and even China has begun to compete. As compared with Lancashire, three facts have enabled Japan to become so severe a competitor: the War in its repercussions on Lancashire and the stimulus it gave to Japan, her cheaper labour costs, the better organisation of the Japanese industry.

A comparison of the position of Japan and Lancashire in the Indian and Chinese markets is given in Chapters IX and X. I now come to a description of the rise of the Japanese cotton industry.

All industries in Japan have been assisted, if they were not actually started, by the Government, and the cotton industry is no exception, although it is about the only industry which on the basis of that assistance has built up a position which is now assured and independent, and no longer in need of Government assistance.

The first machinery for cotton spinning was actually set up a few years before the Meiji Restoration—with which Japan's period of industrial development begins—when the feudal lord of Satsuma imported the first spinning-frame. Before this, cotton materials had for centuries been made by hand, and raw cotton had been cultivated in Japan itself. It was not till after the Restoration (1868) that the industry began to develop, and even then only a few mills were set up, and these all by the Government or with Government assistance. Up to 1885 Japan was still importing far more yarn than she produced.

It was after the Sino-Japanese War that great progress was made, for the indemnity of £20,000,000 extorted from China stimulated the whole of Japan's industrial development. During the industrial boom which followed the end of the War (1895) the cotton-spinning industry expanded enormously. In 1896 the import duty on raw cotton was abolished and Japan began to export coarse yarns at the same time as she abandoned the attempt to protect the growers of raw cotton and allowed the fibre to go out of cultivation in her own islands. From this date also she began to obtain her principal supplies of raw cotton from India instead of from China.

By 1898 Japan was exporting 20 million *yens* worth of cotton

yarns, besides the increasingly large quantities she was making for her own use.

The Russo-Japanese War stimulated the development of the industry on the weaving side as the Sino-Japanese War had stimulated the importation of spinning machinery. The vast amount of foreign capital flowing into Japan after the war enabled the industry to expand rapidly, and this expansion continued up to 1913. The number of spindles increased 5½ times between 1893 and 1913, and the production of cloth more than double between 1908 and 1913. At the same time production of cloth on hand-looms continued, as it does to this day.

The following table gives the figures available for the pre-War period:[1]

INCREASE OF PRODUCTIVE CAPACITY AND OUTPUT

	Number of Spindles	Output of Yarn (Bales)	Used in Japan
1885	65,420	15,881	87,206
1893	414,758	214,758	278,389
1908	1,381,306	878,570	715,279
1913	2,414,400	1,517,982	—

EXPORTS

In 1,000 *yen*

	Yarn	Cloth
1893	1,109	59
1898	2,597	20,116
1903	6,875	31,418
1908	14,611	20,723
1913	33,605	70,997

With the increasing production of yarns, imports began to dwindle away, and these sank from 1·8 million lb. in 1907 to 0·5 million in 1911. There had accordingly been steady progress up to the War. Although Japan in 1913 did not yet count for much in the world's cotton trade, and it was not yet realised how serious a competitor she was going to be, her development since the beginning of the century had been sufficiently rapid for one to be able to assert positively that even without the Great War she would have taken an increasingly large share of the world's cotton trade.

[1] See Uyehara, *The Industry and Trade of Japan*, Part V, Chap. II.

Exports of yarn worth over £3 million and of cloth worth £7 million might seem a drop in the ocean compared with Lancashire's £112 million of yarn and cloth exports, but nevertheless the fact that Japan had sent 9,000,000 yards to India in 1913 against a mere 20,000 yards in 1900 might have been sufficient warning of the way things were bound to go.

As it was, the War gave Japan an unequalled opportunity which she was not slow to seize. Lancashire, occupied to a large extent in producing War supplies for the Allied armies, and with her supplies of cotton from overseas limited on account of shortage of freight, cut down her exports, and in particular her exports of the lowest quality goods, which were those supplied to the East, since the cheaper goods gave the least profit. Throughout the War years India alone was left bare of an average of 1,500,000,000 yards of cloth by Lancashire. Thus China, India, and the rest of the Far East were no longer receiving their former supplies from England or other European countries, and, moreover, the goods which did come mounted steadily in price so that it became impossible for the mass of the people to buy European or Lancashire goods at all. Japan was able to step in and supply the Indian and Chinese markets with such portion of their consumption which they no longer imported, and which they did not supply by the development of their own industry.

The progress of the Japanese industry during and immediately after the War was accordingly unprecedented, although it was hindered from increasing its productive capacity to the full extent warranted by the demand for cotton goods by the difficulty of obtaining machinery, Japan's own heavy industry being only in its infancy. Nevertheless some textile machinery was obtained from the U.S.A., and Japan began to make looms for herself. For the rest, the existing machinery was "sweated" night and day for all it was worth. The Japanese workers in the cotton mills being for the most part young girls unable to offer resistance, they were mercilessly driven to work their eleven-hour shifts for a wage of about 1s. 6d. a day (or night), and when they broke down there were always plentiful supplies of fresh labour to be obtained from the overpopulated countryside.

IMPORTS OF SPINNING AND WEAVING MACHINERY

(*In Million Yen*)

	Spinning	Weaving	Total
1913	5·1	0·8	5·9
1914	5·3	0·7	6·0
1915	1·3	0·3	1·6
1916	2·4	0·1	2·4
1917	4·7	0·5	5·3
1918	8·5	0·6	9·2
Total 1914 to 1918 inclusive ..	22·4	2·3	25·7
1919	13·8	1·4	15·2
1920	18·1	1·3	19·5
1921	29·1	1·9	30·1
1922	30·5	1·3	31·9
1923	22·6	1·3	24·0
Total 1919 to 1923 inclusive ..	114·5	7·4	120·9
1926	8·1	—	—
1927	10·2	—	—
1928	10·4	—	—
1929	14·5	—	—

Immediately after the War large quantities of textile machinery were imported. The number of spindles increased 40 per cent. in the four years from 1918 to 1922, against an increase of 33½ per cent. in the five years from 1913 to 1918. Figures of the total number of looms at these dates are not available, but those belonging to the Japan Cotton Spinners' Association (which means roughly half the wide power-looms in the country) increased 67 per cent. between 1913 and 1918, and 50 per cent. between 1918 and 1922. This clearly indicates that the War period encouraged Japan to begin making her own looms to supply the big demand for cloth in India and China. Looms are, of course, much easier to manufacture than spinning machinery, and so Japan was not held back from expanding her productive capacity in weaving to the same extent as she was in spinning, by the impossibility of obtaining textile machinery from Europe. To-day one has the impression that the majority of looms in the mills visited in Japan are of Japanese make,[1] and some three or four years ago

[1] The principal textile machinery-makers are the Toyoda—not, however, the same Toyoda as the inventor of Japan's new automatic loom.

an automatic loom invented by a Japanese was put on the market, which now bids fair to rival all others (see Chapter VIII).

The figures of textile-machinery imports show not only the continuous expansion of the industry, but also the large purchases made abroad immediately the War was over and textile machinery could once more be bought from England and Germany. (See table, p. 82.)

Thus the value of the total textile machinery imported in the five years immediately following the War was nearly four times that imported during the five War years, and this in spite of the lower cost of textile machinery up to 1916. This proves the enormously greater expansion of productive capacity immediately after the War Further, these figures show that the greater relative expansion in weaving than in spinning referred to previously has to a very large extent been met by home manufacture of looms whilst all the spinning machinery is imported. The continuous expansion of productive capacity both in spinning and weaving from year to year, not only in the first five post-War years, but continuously from year to year, has resulted in Japan now possessing 6,836,516 spindles against 2,414,000 in 1913, and a total of 171,000 wide power-looms and 106,000 narrow power-looms, as against 96,081 wide and 122,380 narrow in 1922.

The following table shows the position:

	Number of Spindles (In 000)	Number of Looms belonging to I.C. Sp. Assoc.		Total Number* of Wide Power-looms	Total Number* of Narrow Power-looms
1903	1,381	5,043	—	—	—
1913	2,414	24,224	—	—	—
1918	3,227	40,391	—	—	—
1919	3,488	44,401	—	—	—
1920	3,813	50,583	—	—	—
1921	4,161	54,994	—	—	—
1922	4,517	60,765	1922	96,081	122,380
1923	4,198	61,421	1923	112,786	133,512
1924	4,870	64,235	1924	116,909	123,890
1925	5,186	68,160	1925	129,187	109,812
1926	5,714	77,043	1926	145,825	115,507
1927	6,170	79,274	1927	154,909	114,479
1928	6,467	81,209	1928	162,000	110,000
1929	6,837	77,898	1929	171,000	106,000

N.B.—The spindleage figures do not include doubling spindles. Including these, Japan now has over 7½ million spindles.

* Figures of the Department of Commerce and Industry.

Meanwhile the number of hand-looms has declined from 165,117 in 1922 to 99,684 in 1927, and to about 86,000 to-day. Even so the number of hand-looms still in use is not negligible in so far as home consumption of cotton cloth is concerned (they are all narrow-width looms for making kimono cloth). There is still room for the expansion of the machine industry in the home market. The hand-looms only survive because of the extreme poverty of the peasantry, who in some places keep alive by the small amount their women can earn on the hand-looms, in addition to the meagre return from their tiny plot of land.

As regards automatic looms the total number in Japan is not known, but an approximate calculation gives 20 per cent. of the looms belonging to members of the Japan Cotton Spinners' Association as automatic, viz. nearly 16,000. Japan now manufactures her own automatic loom, the Toyoda (see Chapter VIII).

Since 1913 total output has of course enormously increased, but this is not all, for both production per spindle and per loom have increased, and the number of operatives on a given number of spindles or looms has decreased rapidly so that the total numbers employed in the industry have sunk in spite of the great increase in the number of looms and spindles.

The following figures convey a clear idea of the increased production of yarn, but only give a partial account of the increased production of cloth, since complete figures for the concerns outside the Japan Cotton Spinners' Association are not available in quantities.

The average yearly production of yarn from 1921–25 showed an increase in quantity of 47 per cent. over the yearly average for 1911–15. The figures for 1929 show an increase of 80 per cent. over 1913, but this figure does not indicate the greater value of the yarns now produced due to the increased production of finer counts (see below).

As already stated, more than half the cloth exported from Japan is made by members of the Japan Cotton Spinners' Association, so their figures of output over the past twenty years give a fairly clear indication of the progress of the industry, though they do

not show the total increase in production. The average yearly production of the Association mills from 1911 to 1915 was 411 million yards, and that for 1916–20 663 million yards, an increase of 61 per cent. The yearly average from 1921–25 rose to 956 million yards, an increase of 44 per cent. over the previous five years. Thus the yearly average from 1921–25 was more than double the average for the five years ending 1915. By 1929 the output had increased to 1,538 million yards, so that their production had by then risen to 270 per cent. above pre-War. The following table gives the half-yearly figures:

CLOTH PRODUCTION IN FACTORIES BELONGING TO THE JAPAN COTTON SPINNERS' ASSOCIATION

Half-Years Ending December	Active Looms	Actual Number of Looms	Production (in millions of yards)	Average Production per Loom (yards)	Average Number of Operatives per 100 Looms (Male and Female)
1912	20,635	—	177	54·58	100
1913	23,623	—	212	55·14	—
1916	29,962	—	284	59·14	—
1918	37,430	—	330	50·79	—
1919	45,483	—	380	48·96	—
1920	44,040	—	362	46·01	—
1921	43,771	—	358	47·34	—
1922	52,219	—	444	48·25	—
1923	52,626	—	497	53·23	—
1924	58,252	—	518	55·26	—
1925	63,350	—	597	59·24	90
1926	66,492	77,043	636	61·55	90
1927	65,658	78,352	635	59·56	72
1928	72,611	81,209	714	64·97	60

The above table shows that whereas the average production per loom was 55·14 yards in 1913, it was 64·97 in 1928, but these figures are not absolutely conclusive, since it cannot be ascertained what proportion of looms were working double shifts in the two periods.

Some figures are available of the total value of cloth production in all factories in Japan from 1922 to 1927, and although these can be only a partial estimate and do not, on account of the fall

in prices during most of the period, convey an idea of the full increase, they are cited here:

VALUE OF GRAND TOTAL OF COTTON FABRICS PRODUCED IN JAPAN BOTH WIDE AND NARROW

(PRODUCTION FIGURES OF THE DEPARTMENT OF COMMERCE AND INDUSTRY)

(*In Millions of Yen*)

	Production	Exports
1911	140	—
1922	639	222
1923	694	232
1924	746	326
1925	774	433
1926	743	416
1927	725	383
1928	—	352
1929	—	413

The whole process of development since the War is for the weaving side of the industry to expand more than spinning and hence for a larger proportion of yarn to be used in Japan either by the Spinners or for sale to manufacturers outside the Association, and hence for yarn exports practically to disappear. I am of the opinion that this process will now be even more marked in view of the increased production of yarns in China, both for Chinese consumption and for export to India, and on account of the fact that the weaving side of the Japanese industry is still far less developed than spinning. The process should also be quickened by the elimination of many small weaving enterprises in Japan which has been going on since 1927 and is likely to have been much accelerated by the removal of the gold embargo in January 1930 and the general world depression.

The great change that has occurred since the War is shown by the fact that in 1913 yarn exports formed 63 per cent. of the value of total exports of yarn and cloth from Japan, whilst in 1927 they formed only 9 per cent.

The following table shows the changed proportions of the total quantities of yarn produced and used at home for weaving by manufacturers inside and outside the Japan Cotton Spinners' Association and of that exported.

Year	Total Quantity Produced in Thousands of Bales (Bale =400 lb.)	Quantity Used by Spinners Themselves for Weaving (Thousands of Bales)	Proportion of Total Spun Used by Spinners	Total Consumption of Yarns in Japan by non-Members of the Spinners' Association	Total Exports (Thousands of Bales)	Proportion of Japan's Production Exported	Proportion of Total Spun in Japan, Consumed in Japan
1900	645	—	—	—	208·0	40·7	59·3
1912	1,352	—	—	—	374·9	27·4	72·6
1913	1,518	—	—	—	469·0	30·8	69·2
1917	1,924	—	—	1,453	470·8	24·5	75·5
1920	1,817	474	26·0	1,512	305·0	16·8	83·2
1921	1,811	466	25·7	1,519	292·3	16·1	83·9
1922	2,228	536	24·0	1,834	394·1	17·7	82·3
1923	2,171	602	27·7	1,923	248·3	11·4	88·6
1924	2,073	603	29·1	1,803	270·4	13·0	87·0
1925	2,437	686	28·0	2,126	310·8	12·8	87·2
1926	2,608	741	28·4	1,664	204·0	7·8	92·2
1927	2,531	733	29·0	1,682	115·2	4·5	95·5
1928	2,452	758	30·0	1,695	70·3	2·8	97·2
1929	2,793	841	30·0	1,884	66·0	2·3	97·7

The above table shows that Japan is now using the bulk of her yarn production for weaving cloth and that the spinning companies are gradually, though slowly, beginning to use more of their yarn in their own mills. The proportion sold to small manufacturers is still very great. Nevertheless the uncertain financial position in recent years has been putting the small man out of business to a considerable extent, and both the financial panic of 1927 and the depression following on the removal of the gold embargo in January 1930 have led to a greater concentration of capital in the weaving section of the industry consequent on the elimination of many small and weak concerns. In spinning, the concentration has already taken place in particular in 1921 and 1922, when the number of mills decreased from 337 to 178, apart from the amalgamation of many mills into one company. In weaving the number of factories had fallen from 116,869 in 1922 to 75,535 in 1927 and Press reports now show an increasing number of failures of small concerns.

Nevertheless, weaving is still carried on to a very large extent in small establishments, and not only weaving for home consumption. It is true that sheeting and shirtings for export are mainly produced as sub-work by the spinners, but large quantities of striped goods, twills, crêpes, flannelettes, velvets, etc., are manu-

factured in smaller sheds for export and in increasingly large quantities.

These small establishments are very much at the mercy of the large spinning and weaving companies, which are closely knit together in their Association and have a monopoly of the home market for yarns in consequence of the high tariff wall.

It is probably true that the curtailment of yarn production in 1928 and the first part of 1929, and the curtailment reported in 1930, has been a temporary expedient to keep up the price of yarns in the home market. This must be specially true since the removal of the gold embargo in January 1930 and the consequent fall in the general price level. Now that yarn exports from Japan are rapidly decreasing and exports from the Japanese mills in China rapidly increasing, it has paid the Association members better in their monopoly position to keep up prices rather than sell cheaper to the small manufacturers and to the hand-loom weavers in Japan. There has long been, and there is now, ample margin for the reduction of prices, as I shall show in Chapter VIII, but the members of the Association have been in a position to co-operate successfully in measures designed to keep up yarn prices in Japan. They are restricting yarn production by sealing a certain percentage of their spindles and, or, giving four rest-days a month instead of two, thus maintaining yarn prices at a high level, and in doing so driving many small manufacturers into bankruptcy and preparing the way for increasing their own cloth production at the expense of the small weaving concerns. In these circumstances it is not surprising to find frequent references in the Japanese Press to the difficulties experienced by small manufacturers (there have even been reports in 1930 of weaving plants closing down because of inability to obtain yarn), and it seems very probable that the next few years will see the disappearance, not only of the hand-loom weavers, but also of many small power-weaving concerns and an expansion of weaving capacity on the part of the big spinners and manufacturers. These big concerns may soon have enough looms to absorb almost all their own yarn production. In particular, the installation of automatic looms—now that Japan produces an automatic loom of

her own costing only about £60 (the Toyoda)—is likely to proceed apace and the manufacture of cotton cloth in Japan will then become as highly organised, as up to date and as concentrated as spinning is at present. Possibly in the near future Japan will not only be using all her own yarn, but also importing coarse yarns from the Japanese mills in China.[1] I come later to examine the expansion of the Japanese mills in China. It is of interest to note how the very small weaving sheds in Japan, which still exist in large numbers, are now decreasing. Their existence can be ascribed to the widespread use of electricity in Japan. This makes the running of ten or twelve looms an economic proposition, especially in view of the fact that such tiny establishments are not counted as factories for the purpose of the Factory Acts, so that the workers employed can be made to work any number of hours. What has been pushing them out of existence is high taxation and the recent financial instability in Japan, the many failures of the smaller banks and the difficulty, if not the impossibility, which the "small man" has in getting credit from the larger town institutions which are supplanting a number of small rural banks, and finally the artificial restriction of yarn production and the big prices maintained by the spinners. The small manufacturer frequently gets his yarn on credit from a merchant or from the agent of a spinning company, and sinks into the position of working on commission for the latter. Some get into such a position of debt that they find themselves working almost entirely for the profit of their creditors. Though the small manufacturer usually works his labour force longer hours than the big mills, his methods are less efficient and his machinery older, and obviously he is completely at the mercy of the closely associated spinning companies from whom he buys his yarns directly or indirectly.

[1] Since these lines were written there has come news from Japan in 1931 that Chinese yarns are being imported in large quantities in spite of the import duties, and that the manufacturers have made an unsuccessful application to the Government to be allowed to weave "in bond" in order to be able to import Chinese yarn and re-export it in the form of piece-goods. In spite of the strong political influence of the Spinners' Association, the Federation of Cotton Weavers has launched a campaign for the abolition of the import duties on yarns.

The following figures show the changes since 1922:

NUMBER OF FACTORIES FOR COTTON WEAVING*

Year	Less than 10 Looms	More than 10 and less than 50 Looms	More than 50 Looms	Total
1922	111,159	4,712	998	116,869
1923	112,453	4,506	1,020	117,979
1924	102,137	4,091	1,015	107,243
1925	91,789	4,149	945	96,886
1926	71,140	4,051	1,057	76,248
1927	70,304	4,189	1,042	75,535

* From the statistics of the Department of Commerce and Industry (Tokio, 1929).

These figures clearly show the increasing proportion of the larger establishments with fifty looms or more, though they do not unfortunately indicate the increasing number of really big concerns, nor show how many small concerns have become grouped under the control of one company. It is, of course, also impossible to calculate how big a proportion of the small sheds are in fact, though not in name, owned by merchants or by spinning companies to whom they have mortgaged their fixed capital in order to receive credit for their yarn purchases. According to the statement of an employee of one of the big spinning and weaving companies a fairly large number of small manufacturers have mortgages on their establishments, held by yarn merchants or spinners, and their position somewhat resembles that of the hand-loom weaver in the later days of the "Domestic System" in this country just before the "Industrial Revolution."

It is important that Lancashire should realise that when it is reported that the Japanese spinners are restricting production this does not mean that they are experiencing a depression similar to the depression in Lancashire, but merely that they are taking advantage of their monopoly position to keep up prices to the Japanese manufacturers and hand-loom weavers.[1] Since this

[1] The curtailment of night work for women in July 1929 did not decrease total yarn production—there was, on the contrary, an increase in the monthly production. But in December 1929 it was found that the increased output of yarn (which reached 256,000 bales that month) could not be consumed. Restriction of output was then reimposed by the Japan Spinners' Association by a net amount of 12 to 13 per cent., reducing the monthly output to 220,000 from 225,000. See *Economic Conditions in Japan* to June 1930, by G. B. Sansom,

artificial maintenance of yarn prices in Japan is hindering her from capturing a yet larger part of the Indian cloth trade, it will be surprising if it does not soon cease or if the spinning-mills do not rapidly increase their productive capacity in weaving.

It will be noted that, although Japan has restricted her yarn production at various times in 1929 and in 1930, her piece-goods exports were higher in 1929 than ever before.

I now come to consider Japanese yarn and cloth production in some detail, in order to ascertain what progress is being made in the production of the finer materials and on what lines of cloth production she is concentrating.

YARNS

An analysis of the different counts produced now and at the end of the War will give some indication as to the types of cloth being produced. Since yarn imports are negligible on account of the high tariff, the production figures of the Japan Cotton Spinners' Association must show what proportion of Japan's total cloth production is of medium counts. It must, however, be borne in mind, in considering the figures given below, that it is not possible to know how much of the coarser and how much of the finer counts are sold to the hand-loom weavers and to those manufacturers who weave kimono cloth on narrow power-looms for the home market, and how much is used by those who work for export. It is sometimes hoped in Lancashire that, although Japan has pushed Britain out of the Indian and Chinese markets for coarse yarns and the coarser materials, and is in process of pushing her out of that for medium yarns and somewhat finer materials, yet that Lancashire has a real superiority in the production of better-class goods. Although it is true that Lancashire can still produce the finest materials better than almost any other country, and certainly better than any Eastern country, nevertheless the whole tendency in Japan at present is towards the production of finer and finer goods, and there is nothing to prevent her

C.M.G., Commercial Counsellor, Tokio (Department of Overseas Trade). Later, in 1930, the output of yarn was further curtailed; it is reported in the Press that 25 per cent. of the spindles are being sealed.

YARN PRODUCTION IN COUNTS (000 *bales**)

	Weft—principally 16's and hardly any over 16's	Twist under 20's	Twist 20's	Twist 21's to 36's†	Twist 40's	Twist above 40's	Total Twist	Total Doubling	Total gassed (mainly 60's and 80's)	Grand Total
1900	—	—	—	—	—	—	—	—	—	—
1913	682	150	372	99	21	39	681	110	45	1,518
1917	685	219	529	180	55	51	1,034	165	42	1,924
1920	442	278	491	271	83	62	1,191	146	38	1,817
1921	489	342	436	237	75	51	1,141	141	40	1,811
1922	457	341	747	294	95	60	1,537	185	49	2,228
1923	397	395	681	268	108	75	1,547	178	49	2,171
1924	313	364	631	320	137	68	1,520	185	55	2,073
1925	353	400	779	366	162	87	1,794	228	62	2,437
1927 **	352	583	785	419	171	—	1,998	—	—	2,531
1928 **	235	593	701	495	178	—	2,009	—	—	2,452
1929 **	—	—	878	—	—	—	—	—	82	2,793

* 1 bale = 400 lb.

† Principally 30's and 32's.

**Full details not available.

JAPANESE YARN EXPORTS TO FAR EAST

(*In Million lb.*)

Year	To China	Hong-Kong	D.E. Indies	Philippines	British India	Total Exports to all Countries
1913	155·7	11·5	—	—	—	187·0
1916	176·1	20·1	—	0·76	4·6	218·8
1917	142·6	23·3	—	1·32	3·7	188·3
1918	92·5	25·0	—	2·28	31·7	168·6
1919	62·4	14·2	—	0·28	1·8	92·1
1920	66·6	23·3	—	1·04	19·0	122·0
1921	69·8	22·4	—	0·68	14·8	116·6
1922	85·1	33·3	—	1·16	27·3	157·6
1923	48·6	16·0	1·8	0·92	23·5	99·3
1924	38·6	24·5	2·8	0·72	32·3	108·1
1925	53·1	23·4	3·4	1·28	34·8	124·3
1926	28·9	11·6	—	1·30	28·2	81·0
1927	11·4	5·1	—	0·76	22·6	46·0
1928	9·0	6·3	—	0·48	6·7	29·0

producing large quantities of at any rate the medium fine goods if she finds it profitable. As already stated, the really coarse yarns are now being produced in larger and larger quantities in China, in particular 16's. But this is not all for in the Indian market, where the fiercest competition has been between the Indian and Japanese mills for the market of counts 32's and for medium-quality goods, China is now contributing the largest share of counts[1] 31's to 40's. This must stimulate Japan to increase her productions of yarns above 40's.

The two preceding tables show Japan's total yarn production of the various classes of counts and her yarn exports to her principal markets since 1913.

Cloth

As regards the production and export of cotton cloth it is unfortunately not possible to give complete details for the different years. What figures are available from the various sources are given in the following table. The value figures are complete, but the

[1] By a "count" is indicated the number of hanks (of 840 yards in length) which weigh 1 lb. avoirdupois. For instance, "count 20" indicates that 20 hanks weigh 1 lb. Usually one speaks of 20's, 30's and so forth without the word "count."

total yardage production figures are not, and moreover these (and the export figures before 1928) comprise cloth of varying widths.

TOTAL PRODUCTION AND EXPORTS OF JAPANESE COTTON GOODS OVER 15 INCHES WIDE

Year	Production				Exports*	
	Value million *yen* (Government figures for whole country)		*Quantity*† Million yards	*Quantity* Million yards Weaving statistics Japan Cotton Spinners' Association	*Value* Million *yen* (Excluding towels, knitwear, etc.) Government figures	*Quantity* Million yards (square yards last 2 years only)
	Both wide and narrow	Wide cloth only	Wide cloth only			
1913	—	—	—	417	43	211
1914	—	—	—	505	—	—
1916	—	—	—	561	73	—
1922	639	—	—	889	222	—
1923	694	—	—	1,001	234	—
1924	746	—	1,587	1,031	326	960
1925	774	—	1,765	1,179	432	1,213
1926	743	539	2,408	1,278	416	1,348
1927	725	511	2,279	1,295	384	1,394
1928	785	589	2,534	1,400	352	1,419
1929	—	—	2,790	1,538	413	1,791

* Figures of the Department of Commerce and Industry.

† Figures of the Cotton Trade Statistical Bureau—comprising 85 per cent. of the total value produced.

Varieties of Cloth

Under the heading of *hirohabamono*, which means cloth woven on wide power-looms, the principal kinds of goods produced are in order of importance: shirtings, twills, sheetings, T-cloths, flannelettes and sateens. On p. 95 is a list of wide fabrics manufactured in 1927 under the various headings.

In the returns of the Japan Cotton Spinners' Association some twilled fabrics and some striped fabrics are included in the shirtings, whereas in the Government figures they are not. Under twills in the Government statistics are included drills and jeans and other twilled goods such as duck, whereas the Association figure includes only drills and jeans. But although these discrepancies make an exact calculation of the amounts produced by the members of the Association and the small concerns outside impossible, the

FIGURES OF COTTON CLOTH PRODUCED AND EXPORTED* RELATING ONLY TO THE PRODUCTION AND EXPORT OF WIDE MATERIALS

Kinds of Cloth	Production in Japan Quantities (1,000 yards)	Production in Japan Values (1,000 *yen*)	Exports in Quantities (1,000 yards)	Exports Values (1,000 *yen*)	Production of Mills affiliated to Japan Cotton Spinners' Association (million yards)
Shirtings, grey	680,323	112,912	314,439	64,786	695·00‡
„ bleached	—	—	71,261	—	—
Sheetings, grey	253,249	45,091	167,253	—	199·20
„ bleached	—	—	1,234	—	—
Twills (which includes drills, jeans and others)	614,923	115,143	—	83,458 (total)	—
	—	—	131,496 drills	*41,311 drills*	168·36
	—	—	175,606 jeans	*42,147 jeans*	
T-cloths	238,883	34,182	59,894	13,205	25·00
Cotton crêpes	85,719	14,677	39,433	8,343	12·96
Flannelette	200,663	38,485	64,901	19,339	52·24
Sateen†	201,607	49,061	166,946†	60,574†	41·64
Velvets	20,831	8,891	—	—	—
Canvas	24,050	9,559	—	—	—
Kokura	71,104	20,962	14,390	5,566	—
Others, white and plain	100,702	18,718	—	—	—
Others, striped and plain	67,292	12,410	—	—	—
Totals (in millions)	2,559	511	1,394	382	—

* First four columns are Japanese Government figures.

† Includes 7,693 thousands yards of poplin valued at 4,143 thousand *yen*.

‡ Must include twilled shirtings and most probably certain striped shirtings included elsewhere in the Government returns.

table makes it quite clear that there are some goods manufactured in only small quantities by the spinners, and in large quantities outside, which nevertheless are exported in large quantities.

Thus, while shirtings are almost a monopoly of the Associated mills, and sheetings, drills and jeans are principally made by them, the small manufacturers produce by far the largest quantities of the T-cloths, crêpes, flannelettes, sateens, coloured wovens, and the last of which are such important articles of export to China.

The facts shown in the statistics are borne out by my investigations in Japan, for whereas I did not see these latter goods being woven in the big mills, I visited a number of small weaving-sheds making flannelette, crêpe, sateens, sheetings and T-cloths, and also velveteens, striped drills and other coloured wovens.

As against the total value of 511·2 million *yen* for materials produced on wide power-looms the total produced on narrow looms amounted to 178·9 million *yen* in 1927, and these figures, plus an additional 35 million *yen* of "special fabrics,"[1] brought Japan's yearly production of cotton goods to 725·4 million *yen* viz. about £70 million.

The above table shows that, both from the point of view of yardage and of total value, shirtings and twilled fabrics are the most important goods produced, but also that sheetings, T-cloths, flannelettes and sateens are of considerable importance. Japanese shirtings, sheetings, T-cloths and drills and jeans are well known in Lancashire as the staple goods of Japanese export which have been ousting British goods from the Far Eastern markets and East Africa for the last fifteen years, but the increased production and export of such goods as sateens, flannelettes, crêpes and coloured wovens have not received so much attention because these goods are made principally by the small manufacturers whose production is not included in the returns of the Japan Cotton Spinners' Association.

Since I was able to obtain some information concerning the production of these important classes of goods and also of the less important production of cotton velvet, I give some details

[1] Tapes, belts, hoses and special kinds of towels, sheetings, etc., entirely for Japanese consumption.

below, seeing that little is known in Lancashire concerning the Japanese production of these fabrics. The visitor who only sees the big show mills will not realise they are made in Japan, or, at the most, will see some finishing of the sateens and certainly not either crêpe or flannelette weaving. Such figures of production costs of these materials as I was able to obtain are given at the end of Chapter VIII.

Sateens.—These are among the goods whose production has grown most rapidly during the last few years. In 1922 Japan only produced some 29 million yards as against the 201·6 million in 1927—a sevenfold increase. The usual type is "5-shaft," but the manufacture of "8-shaft" has begun. These sateens are made specially to meet the growing demand of the Chinese market, which trebled its total imports of "5-shaft" coatings (sateen drills) between 1923 and 1925. Japanese exports of sateens increased by 100 per cent. in each of the three years 1923 to 1925,[1] but were substantially the same in 1927 as in 1926. Almost the whole of the exports go to China, and the bulk of it is dyed black, though some is dyed other colours.

In one of the few large-scale bleaching and dyeing factories which as yet exist in Japan, at Sakai near Osaka, I saw sateens of various kinds being finished and packed ready for export to China. Most of the cloth was 5-shaft sateen which was not bleached but only lime-boiled, then mercerised before being dyed black. After being dyed the cloth is put through the Schreiner calendering machines, which are of Japanese make. There were also some super-sateens of various colours being put through a 9-bole calendering machine just arrived from Platts. This was twenty-eight inches wide and made up in parcels of thirty yards for export also to China.

These cloths were being finished for the Toyo Menka Company, the largest of the cotton export companies in Japan, which buys the material in the grey from the small weaving masters of the district who work to their orders.

All these materials are inspected on the spot by a Government

[1] 1923 = 24·77 million yards; 1924 = 51·15 million yards; 1925 = 110·82 million yards; 1926 = 164·10 million yards; 1927 = 166·94 million yards.

inspector on request of the Exporters' Association, and once stamped they are packed up with the label of the makers and sent direct to the port of embarkation.

Thus in Japan the waste of labour and time entailed in sending goods from merchant house to finisher to packer is eliminated, the cloth being sent direct from the manufacturer to the finisher and thence to the port of embarkation.

Finishing.—I was not able to ascertain definitely whether the arrangement for the dyeing or printing of the coloured flannelettes, now exported in increasing quantities to China and India, is made by the middleman who collects the cloth from the manufacturer or by the export merchant himself. In any case, the dyeing is done for the most part in very small establishments with little assistance from machinery and by rather primitive methods. All along the line from Sakai to Kishiwada my Japanese companion, who was the representative of a big agency for machinery, pointed out small bleaching or dyeing establishments to me. These small places, he said, did most of the finishing of the various goods produced, there being only one large modern establishment in the district (the one mentioned above, where I saw sateens being finished) and altogether only five in Japan. For the most part the bleaching is done at a charge for a merchant or a manufacturer, and is done mainly by hand. What is called bleaching is really just enough whitening to improve the appearance of the cloth, and sun and air perform part of the process.

I may mention here that all over the weaving districts in Japan it is a common sight to see yards and yards of cloth hanging up in the sun on tall sticks.

Although bleaching, dyeing and printing are still done in Japan for the most part in very small establishments, and although the cheaper goods may be poorly finished, the exquisite printed silks worn by Japanese ladies show that the Japanese are capable of the finest work. It is probable that Japan will now increase her exports of "coloured printed or dyed" goods to India and other markets, and larger finishing establishments are likely to be set up.

Velvets.—Here also production is on a very small scale, and none is made by the big spinning and weaving companies. Production

first started in Japan about 1915. There is a fairly large home demand for velvet for the manufacture of "tabbies" for winter wear; tabbies are the short digitated socks worn at home and with the native outdoor footgear, the *geta*—a wooden clog or sandal attached to the foot by means of a double cord passing between the big toe and the next and attached to each side of the wooden sole.

Most of the twenty-one million yards produced in 1927 must have been used in Japan, but there is also an expanding demand for velvet in China for the manufacture of shoes, hats, etc. This demand is said to be reviving the Japanese velvet industry, which has not been too prosperous of recent years. One manufacturer whose small weaving-shed I visited maintained that, although British and German velvet-makers used much better yarn and though their cloth was much better finished, it was neither as strong nor as cheap as the Japanese product, and that consequently the latter was beginning to oust it from the Chinese market. One may doubt whether the claim to superior strength is justified, and in respect of quality and appearance the Japanese velvet I saw was distinctly inferior to any Lancashire product, though it was certainly cheaper.

A typical Japanese velvet is of 2/60's gassed yarn for warp and 40's single for weft weighing 4 oz. a yard. The width as sold was 22-inch for the Chinese market and 36-inch for Japan, length per piece 38 yards.

Flannelette.—These cloths are made in large quantities in the Wakayama district on the coast east of Osaka, where production is for the most part controlled by a few big merchant houses, but where the actual production goes on in numerous small weaving-sheds. Very coarse counts are used, from 10's to 20's. Types of flannelette which I saw being made were blanket cloth for China and the South Sea markets, 36-inch wide of 20's warp and 10's weft, 40 picks and 42 warp ends per inch. The typical sized factory has about fifty looms and the manufacturers work up the yarn at a charge for a middleman, who collects the cloth and sells it to the exporter at Wakayama, who has it dyed or printed.

Cotton Crêpes.—This is also an expanding industry, and one of far greater importance than velvet manufacture since the total production came to 85·7 million yards in 1927. Almost the whole of this large total was made by the small manufacturers, a bare 13 million yards being woven as sub-work by the members of the Spinners' Association (see table on p. 95). In 1922 the total production was only 65 million yards, and to-day it is likely to have increased well beyond the 1927 figure of 85·7 million yards. A little more than half the total is exported in yardage, but there is also a rapidly expanding export trade in cotton crêpe underwear and household goods. This Japanese crêpe is, in fact, best known to English people in the form of T-cloths and bed-spreads, which come over very attractively printed and extremely cheap. Striped dress materials are now also being made, and one small weaving master was very anxious that I should select patterns for him suitable for the English market.

The principal markets at present for export of crêpes are India and the South Seas, but some is also sent to Australia and a little to China. The figure of total export is now somewhat below the figure for 1927, viz. 39 million yards. It amounted to 34 million yards in 1928 and to 31 million yards in 1929.

I found this industry organised on a sort of co-operative basis, which I did not meet in the manufacture of any other material in Japan. The district I visited was a small village west of Tokio, where there were 360 looms divided up among seven "factories," all grouped together in an Association. The weaving masters buy their own warp and prepare their own beams, but send the latter to the Association for sizing and receive their double weft and their orders through the Association. The latter buys yarn direct from a spinning-mill, and doubles it in a small one-roomed factory where the sizing of the beams is also done.

The members of the Association send their finished cloth to the Association to sell, and the profits are subsequently divided amongst the seven members according to the amount of cloth woven by each. The finished goods are sold by the Association to a merchant, who connects them with the export merchant and

is himself really a broker. He also supplies the Association with part of their capital.

Although this Association was only a small affair, I have given these details as possibly casting some light on the organisation of production generally outside the big associated spinning- and weaving-mills. (Details of one of the crêpes woven are given in the chapter on Japanese and Lancashire costs of production.)

I was given to understand that in most of the surrounding districts crêpe manufacture was carried on, and that everywhere the export merchant had his agents either for buying from the manufacturers or from the associations of small weaving masters similar to the one I have described.

Markets

Having considered Japan's total production of wide fabrics in some detail and also given figures of her total exports of the principal classes of goods, it remains to be seen which are her principal markets, which of them are expanding and which of them contracting.

China is by far the most important market for Japanese cotton goods, but there is already a tendency for her exports to China to decline, or at least not to expand any further with the development of the native industry.

India, her second best market, continues to take larger quantities of goods each year, but it is probable that the new tariff of 20 per cent. as from April 1930 will decrease the large quantities of grey longcloths and shirtings she now exports to India, and also to a considerable extent those of drills and jeans and coloured goods.

Her third largest market is the Dutch East Indies, which takes more than half of the total value of Japanese exports to India. Already during the last few years Japan has been seeking out new markets, and difficulties in India and China must inevitably accelerate the process and bring Japanese goods into far distant markets such as South America and Europe and the Near and Middle East, where up to now they have not been very conspicuous.

East Africa is already an important market for Japanese goods,

which increase yearly. The report of the Deputy Trade Commissioner at Nairobi as early as 1928 showed that in grey sheetings Japan's hold is so complete that weights from 8½ lb. to 10 lb. of Japanese manufacture enjoy three-quarters of the demand.

The big increase in East Africa has been largely at the expense of India. Some details have already been given of the Japanese exports to this market in Chapter I.

EXPORTS OF COTTON PIECE GOODS FROM JAPAN
(*In Millions of Yen*)

Destination	1925	1926	1927	1928	1929
China, including Hong Kong	215·0	205·0	153·0	176·0	136·0
Dairen	19·5	16·0	13·0	15·0	15·0
India	70·0	70·0	86·0	70·0	109·0
Straits Settlements	14·5	12·0	10·0	3·5	5·7
Dutch East Indies	49·0	44·5	49·0	39·0	42·0
Siberia	0·4	0·7	0·5	—	—
Philippines	11·0	9·5	11·0	6·7	5·6
Siam	32·9	3·3	4·0	1·3	3·8
U.S.A.	1·9	0·6	0·4	0·2	0·1
Argentine	2·7	2·2	4·7	2·1	4·1
Africa	22·0	28·0	33·0	20·5*	27·4*
Australia	8·0	7·0	5·0	2·3	2·9
New Zealand	0·7	0·7	0·5	0·2	0·1
Hawaii	0·2	0·2	0·3	0·2	0·1
Others	14·6	16·0	12·3	7·2	28·6
Totals	462·0	416·0	382·0	352·0	413·0

* Egypt and South Africa only.

EXPORTS OF COTTON PIECE GOODS FROM JAPAN TO HER PRINCIPAL MARKETS
(*In Million Yards*)*

Destination	1925	1926	1927	1928	1929
China	606·8	674·5	—	531·4	560·6
Kwantung				53·7	56·2
Hong Kong	55·6	67·9	—	68·5	84·5
Total to China, Kwantung and Hong Kong	662·4	742·4	—	653·5	672·7
India	204·9	235·2	—	357·7	581·1
Dutch East Indies	114·5	117·2	—	172·7	193·4
Egypt	—	—	—	77·5	107·4
Total all countries	1,213	1,348	1,394	1,419	1,791

* These figures cannot be accurately compared with British exports since they take no account of width. The totals for 1928 and 1929 are square yards.

The first table on p. 102 shows the relative importance of Japan's various markets. Since exact figures of yardage exported are not available, values only are given in the first table. The second table gives the quantities exported to her principal markets, in so far as they are recorded, viz. about 91 per cent. of her total exports according to the values.

These figures show that the Far Eastern markets still take the great bulk of Japanese exports of cotton goods, viz. 80·8 per cent. of the total quantity of her exports in 1929. Egypt is by far the most important remaining market for Japan and one where her exports are increasing most rapidly, viz. 40 per cent. between 1928 and 1929. Egypt is not the only Middle Eastern market where Japan is making a strong drive forward. In 1929 a new steamship line between Japan and the Black Sea was started for the main purpose of carrying cotton goods to Turkey and the Balkans, markets where Japanese goods have as yet hardly penetrated at all.

The Argentine is another market where Japanese exports are likely to increase, though as yet they are not large.

In 1929 Japan secured almost the whole increased trade of East Africa, increased her exports of grey goods to Egypt by 50 per cent. and doubled her share of the imports in the Sudan; she also increased her exports to Iraq and Persia at the expense of Britain and India and advanced in the Argentine market at the expense of Italy.

The following are the figures of Japanese exports to markets other than the Far East as compiled by the Manchester Cotton Trade Statistical Bureau. The figures are not quite complete, but they represent about 91 per cent. of the total value of Japan's exports to these markets.

JAPANESE PIECE GOODS EXPORTS IN 1924, 1928, and 1929
(In Million Square Yards)

Destination	1924	1928	1929
Egypt	9·60	42·00	49·80
Sudan	15·60*	20·88*	32·63*
Kenya and Uganda ..	10·28	14·40	16·86
Tanganyika	6·72	9·24	9·23
Argentine	—	11·04	17·62
Australia	—	12·24	13·59

* In thousand quintals.

It is quite safe to prophesy that the principal effect of the discrimination against Japanese goods in the new Indian tariff will be to bring Japanese goods more and more into competition with British in such markets as Egypt and the Argentine, East Africa and South-East Asia, and to give an impetus to Japanese exports to the Near and Middle East, which exports are still very small with the exception of those to Egypt. In the latter market her 42 million yards in 1928 stands against Britain's 133·2 million yards.

Financial Position of the Big Spinning and Weaving Companies

Throughout the War, and for most of the twelve years since, the Japanese spinners have been making very big profits, and in spite of paying high rates of dividend and greatly increasing their productive capacity they have been able to put huge sums to reserve. The largest companies, such as Kanegefuchi, Dai Nippon, Toyo and Godo, are, as might be expected, in the strongest financial position, but even the smaller ones have good reserves.

Even in 1913 the average profit made by the industry was 14 per cent. In 1917 the average dividend being paid was 37 per cent., in spite of the large increase in productive capacity and in reserve funds. Since the end of 1920, the average dividend paid out up to 1925 was 20 per cent., and this during a period when productive capacity, as shown earlier in this chapter, was expanding enormously. In fact, not only the War and post-War boom period, but the whole of the last fifteen years, has been a period of excessive prosperity for the Japanese spinning and weaving companies, during which they have paid out large dividends, increased productive capacity and gone on increasing their reserve funds every year.

The following table shows the position and reveals the fact that, in spite of the large dividends paid and in spite of the fact that since 1927 the industry is supposed to have been going through a period of depression, the reserve funds in 1928 came to 59 per cent. of the paid-up capital and the paid-up capital was only 80 per cent. of the value of the fixed assets.

FINANCIAL POSITION OF THE MEMBERS OF THE JAPAN COTTON SPINNERS' ASSOCIATION

(*Amounts in Million Yen*)

Year End	Number of Companies	Paid-up Capital	Reserves	Fixed Assets	Gross Earnings	Loans	Net Profits (Gross Earnings, less Depreciation)	Amount paid in Dividends	Annual Rate of Dividend on Paid-up Capital
1913	25	75·3	31·1	—	—	20·5	—	—	—
1916	32	96·8	41·0	110·8	50·9	23·6	35·8	19·7	20·40
1917	33	111·6	62·2	103·4	90·0	25·7	72·7	40·7	36·40
1918	35	135·6	80·2	123·0	117·5	29·2	99·0	66·5	49·00
1919	46	162·9	120·0	143·0	149·2	28·5	149·6	76·0	46·60
1920	51	273·2	156·7	187·3	159·5	26·0	141·6	95·7	35·80
1921	57	294·9	173·7	246·3	108·0	31·2	92·9	70·5	23·90
1922	60	313·8	195·2	296·1	115·4	21·5	100·9	76·4	24·30
1923	55	319·1	207·9	352·7	69·4	31·0	60·3	59·4	18·60
1924	52	344·6	206·4	391·0	82·0	38·0	69·6	54·9	15·90
1925	51	349·1	218·8	425·1	79·3	57·2	63·5	57·9	16·60
1926*	—	356·6	221·0	457·0	—	73·2	—	—	15·05
1927*	—	342·2	227·3	434·0	—	71·8	—	—	14·60
1928	56	384·7	226·5	499·3	82·4	102·0	66·5	52·5	13·60
1929†	—	386·8	252·7	527·1	—	—	61·9	†	†

* Taken from Arno Pearse's Report on the Japanese Cotton Industry. His totals are all slightly smaller, probably through the omission of one company. But the difference is very slight. Figures of gross earnings and dividends not available,

† Full details for 1929 have not been obtained, but according to the Department of Overseas Trade, 1930, *Report on Economic Conditions in Japan*, net profits in 1929 were 61,897,000 *yen*; the number of companies paying over 20 per cent. in dividend was five, the number paying from 10 per cent. to 20 per cent. was fourteen, the number paying less than 10 per cent. was twenty-four; thirteen companies made a loss.

The enormous reserves held by the companies, in spite of the great increase in productive capacity since the War, show the very strong position of the Japanese spinners, and this and the large dividends paid out annually should dispel the idea that when a "depression" is talked about in Japan it means anything but what would now be thought in Lancashire a year of excellent trade.

The leading Japanese companies are, moreover, in a very much stronger position than is shown in these general figures. The 1928 figures relating to the nine leading companies which control 66 per cent. of the total spindles in Japan, but whose capitalisation is barely more than half that of all the cotton-spinning companies, are given below. The Kishiwada and the Fukushima have been included in this table because, although they are much smaller than the rest, their profits are particularly high.

FINANCIAL POSITION OF LEADING COTTON-SPINNING COMPANIES IN 1928

(*Amounts in Million Yen*)

	Paid-up Capital	Gross Profit for the Year	Percentage of Gross Profit to Paid-up Capital	Dividend paid out Percentage on Paid-up Capital	Reserves	Value of Fixed Assets
Kanegefuchi ..	28·6	14·0	48·8	35	—	60·3
Dai Nippon ..	52·0	12·5	23·8	16	49·4	39·3
Toyo	36·8	13·9	40·4	25	49·5	44·8
Fuji	34·0	4·7	13·8	8	9·2	50·1
Godo	18·7	5·4	29·0	20	22·1	15·5
Nisshin.. ..	16·1	4·5	33·7	—	5·3	25·2
Kurashiki ..	12·3	3·6	29·0	—	7·2	15·6
Kishiwada ..	6·1	2·1	34·7	28	13·8	5·7
Fukushima ..	5·6	2·4	43·0	30	16·0	14·0

These companies are sometimes called the big nine in Japan, but the first five are the biggest of all and those whose model factories are usually shown to the foreign visitor.[1] The Fuji is in the weakest position of the five, having suffered very severe losses in the earthquake of 1923. It may also be noted here that the wages

[1] The Toyo and Godo companies were amalgamated in 1930. They, together with the Dai Nippon and Kanegefuchi now control three million spindles and 33,000 looms.

are lower and the efficiency less in the mill I visited belonging to this company than in those of the other four leading companies.

These tables show that the strong position of the Japanese spinners cannot be overstated, and it is well to realise that they could easily afford to sell both their yarn and their cloth at figures well below the present ones and still have a very considerable margin for the payment of dividends and accumulation of further reserves. In fact, their financial position alone makes it clear that, even if Lancashire could reduce her prices 10 per cent. through economies in production and marketing, the Japanese companies could still undercut her and would only have to reduce their dividends to a figure which would still be the envy of British capitalists.

The present curtailment of production in Japan is almost certainly due to the fact that the monopoly position of the spinners enables them to keep up yarn prices to the manufacturers and hand-loom weavers, now that the general price level in Japan has fallen consequent to the removal of the gold embargo in January 1930 and the world economic crisis.

The above table also makes it clear that the Japanese cotton companies pursued a far wiser and more cautious policy during the War and boom period than the British, since they accumulated such very large reserves and did not go in for the mad speculative sales which have done so much to ruin the British cotton industry. Capitalisation per spindle, instead of being increased threefold as in England, is now less than in 1920.

The 1927 figure of capitalisation per spindle if one loom is taken as the equivalent of 12½ spindles is 48·74 *yen*[1] as against the figure of 52–55 *yen* given in Japan as the present capital cost per spindle for the erection of a new mill (see Chapter VIII). These figures include land and buildings (including dormitories).

It must, however, be realised that, although these big companies are in so strong a position, many small concerns started during the War or just after were subsequently absorbed by the big companies, against whom they were unable to compete, and that many of the spindles belonging to members of the Japan Cotton

[1] Figure calculated by the Dutch consul, W. H. de Roos.

Spinners' Association were bought up at a figure well below their replacement value when small concerns went out of business. There were wholesale amalgamations and reduction of capital during 1920–22.

Between 1916 and 1921, 160 new firms are said to have been established with an aggregate capital of 369,600,000 *yen*.[1] To-day there are hardly any spinning concerns outside the Association and those which are outside only account for about 5 per cent. of Japan's cotton-yarn output.

It is to be expected that the marked depression in Japan following on the removal of the gold embargo and the world economic crisis will lead to a further concentration of capital in the cotton industry. Not only are many small weaving concerns likely to become insolvent, but some of the smaller spinning and weaving companies within the Association, which are unable to make up for the curtailment of hours by installing more and better machinery and making labour more intense, may be absorbed by the larger companies. But it is the small weaving masters who buy their yarn on credit from the agent of a spinner or yarn merchant, and who have to give land or house or weaving-shed as security, who will have suffered most in the recent period of falling prices.

[1] Uyehara, *Industry and Trade of Japan.*

CHAPTER V

THE JAPANESE PEASANTRY

SOMETHING is already known in England of the manner of contracting girls to the factories for a period of years, and of the abuses of that system. What has not, I believe, been dealt with or explained is the reason why farmers in Japan send their daughters to the mills to have their health ruined in a few years.

To say that the farmer is ignorant of the conditions in the mills is not enough. That was, indeed, to some extent the case in the earlier years of Japan's industrial development, but it is no longer the case to-day. Nor is it an explanation to say that the girls go to the mills for a few years to amass a dowry. The basic reason is poverty. The same grinding poverty which makes the Japanese father sell his daughter to the brothels of the *Yoshiwara* or the other licensed quarters[1] forces him to sell his daughter to the factory.

In the former case, it is usually for life. The girl is rarely seen again by her parents.

In the latter case she may return home after her two or three years' contract is up—or she may drift into some other occupation in the town.

In both cases it is the extreme poverty of the Japanese peasantry which accounts for the supply of cheap labour and consequently for the flourishing condition of both these "industries"—for money invested in the licensed houses yields as high a dividend as that invested in the big cotton mills. Moreover, the owner of such houses, or shares in them, is as honoured a member of society as the owner of a mill or cotton shares.

Money invested in the licensed quarters and in the cotton

[1] According to official statistics there are 55,000 prostitutes, 80,000 geisha and 50,000 waitresses in Japan—the latter always being classed together with prostitutes and geisha. The figures for prostitutes only takes account of those in licensed houses.

industry, in fact, probably yields the highest return of any investment in Japan, and for the same reason: the supply of peasant girls either bought for a sum down or paid an extremely low "wage." In the case of the brothels, the father receives £30 or £40 down: and the girl is, in actual fact, a prisoner until she has paid it back, which is hardly ever possible. In the case of the big cotton mills the practice is no longer to advance a large sum before the girl starts—since the mill-owners say they can now obtain girls easily enough without this—but, instead, to pay a proportion of her wages each month to her father. In the case of the smaller cotton concerns, especially in weaving and in the silk filatures, it is still usual to advance about 100 *yen* in the Eastern prefectures and 50 *yen* in the Western.

Such loans are sometimes paid direct by the factory owner, but more frequently by the recruiting agents, who do a large business with big sums of money "invested" in this way. What it amounts to is the mortgaging of the peasants' daughters. These are compelled to work in the factory till they have earned enough to pay off the debt—the recruiting agent money-lender receiving so much per head yearly from the factory for girls supplied. It is quite probable that, although the big companies no longer make large loans to the peasants themselves, the agents who supply the girls to them do it independently, collecting their interest from what the girls have sent home out of their wages.

Besides the pernicious nature of this recruitment system there has to be considered the fact that the wages earned by the girls in the silk filatures and smaller cotton factories are usually paid direct to the parents, even when no loan has been made by the employer. These wages may be paid half-yearly or, as in the case of the silk filatures, at the end of the year's labour, after the girl has returned home for the New Year holiday. This last feature is most pernicious, as it precludes any possibility of the girl transferring to another factory where conditions might be better.

The contracts between the girls' parents and the recruiting agent or the factory owner are usually signed by the girls' fathers

and also by guarantors, so that if the money advanced is not repaid owing to the girl breaking the contract by running away, payment can be demanded from them if the father cannot pay. For many of the peasants are so poor that if their "property" is distrained it will not suffice to pay the debt.

Even a brief examination of the position of the Japanese peasantry will rapidly dissipate the pleasant illusion, so cleverly conjured up for the foreign visitor, that the peasant girls go to work in the factory in order to acquire their dowry. Some few there may be who can save a substantial portion of their earnings for this purpose, but the great majority are forced into the factories simply on account of the lack of food at home and the need to save their parents from starvation. Since an understanding of the position of labour in the Japanese cotton industry is not possible without some appreciation of the agrarian question, this chapter is devoted to a short survey of the conditions of the Japanese peasantry.

The poverty of the peasantry is extreme and grows continually worse. Riots and disturbances—sometimes so widespread and severe as to amount to minor rebellions against the Government —frequently occur, and discontent also finds expression in the Tenant-Farmers' Unions and in political activity. The main support of the revolutionary Labour Party, the old *Ronoto*, suppressed by the Government in March 1928, came from the farming population.

At first sight this may seem strange to anyone who, at the word "peasant," thinks of France's great conservative agricultural population, or of England's conservative rural constituencies. In England, of course, there is no peasantry: the Industrial Revolution drove the peasant from the land and established capitalist methods of production in agriculture—so that to-day we have farmers, agricultural labourers and the use of machinery in farming. France affords the best comparison: the French Revolution meant the overthrow of the feudal classes and the triumph of the bourgeoisie; it left a peasantry freed from its feudal obligations and freed of rent, to become the pillar of capitalist France. Japan had her "revolution" which is supposed to have brought her at

one step from feudalism to a modern state: this is in one sense true—but the "revolution" of 1868 was not a social revolution: it did not destroy the feudal classes nor free the peasant, it merely transformed a feudal nobility into a bourgeoisie. It was, in fact, the conscious transformation of a feudal State into a capitalist State by the feudal aristocracy, which gave up ancient privileges for cash. The aristocracy became the bankers, the merchants and the manufacturers of the new Japan. The *Samurai* were given State bonds in exchange for their former hereditary pensions. Banking regulations were made which allowed of bank-notes being issued against deposits of these bonds with the Treasury. Thus these pension bonds became the first capital of the new banks of Japan.

The peasantry were not freed of the burden of rent by the "revolution," but gained only in so far as their burdens were now fixed instead of being arbitrarily exacted. Where they no longer paid rent they paid heavy taxes. Most of them, however, soon began to bear the double burden, either directly or indirectly. Indeed, since the very rapid industrialisation of Japan was carried through by the State out of taxation, direct and indirect, the burden fell on the peasantry—the product of whose labour was, in the early days, the only source of accumulation.

With the introduction of capitalist relationships and the development of "machinofacture" in Japan and the building of railways and roads, the usual class-differentiation took place in the village. Some peasants grew rich, many grew poorer. Some drew profit from the change and became either landowners or capitalists, who left the village for the town or saw a town grow up around them. Others found their economic position steadily deteriorating; as in Russia, when her industrial development began in the latter half of the nineteenth century, so in Japan many of the peasants were pauperised, many became hopelessly indebted and unable to live on their small plots of land.

Government taxation grew very severe to finance the new industries in their development, railways and industry made markets, but began to destroy the handicrafts which had been the peasants' subsidiary source of income. This process is still

going on to-day, and is not yet completed. Handicraft production is still fighting out its losing battle against machine production in the weaving of cotton and silk, and there are other domestic industries, such as the making of paper boxes which are the basis of lacquer goods, and the making of matting, baskets and so forth. But, although handicraft production persists, the prices obtained are set by machine production, so that the hand-loom weaver and other handicraft workers have to work excessively long hours for a few pence.

Whilst high direct and indirect taxes have oppressed the peasant, the revenue derived from them has been used to finance industrial enterprise or to wage wars for the enrichment of Japan's governing classes, just as the rent extracted from the tenant-farmers has been used to finance industry, and not for the development of the country-side. No revolution in the methods of production has occurred in agriculture. The productivity of Japanese agriculture is nearly double what it was before the Restoration, and this is in large part due to the use of chemical manures; but the same primitive methods of ploughing, sowing, reaping and threshing are in use as in feudal times, and even animal power is little used.

Although the productivity per acre is so very high in Japan, the amount of human labour expended in cultivation is also extremely high. Hence the real cost of production in agriculture in Japan is almost as high as before she started on her period of industrial development, and this discrepancy between the cost of production of agricultural and industrial goods is further aggravated by the Government's policy. High tariff walls shut out or enormously enhance the price of all foreign goods which the peasant wants and so the price of the cotton garments and of the fertilisers he requires is kept up in the home market.

The full weight of Japan's expenditure as a Great Power, the burden of the innumerable Government subsidies given to industry, aids given to insolvent business houses and banks, the burden of the tariff, the full weight of the vast burden of corruption amongst the governing class which entails enormous wastage of

public funds—all this falls on the shoulders of the peasantry.[1] Even the policy of putting an import duty on foreign rice benefits not the peasant but the landowner, and above all the merchant, for the tenant-farmer pays rent in kind. Even the peasant-proprietor derives no benefit, for he is usually in debt and consequently in the hands of the rice-dealer. Moreover, both classes of peasant are so poor that many of them consume the inferior foreign rice in addition to their own sweet potatoes and some barley, and sell their own rice production for consumption by the city dweller.

The peasantry is the most depressed class in Japan, and the peasants' position is becoming continually worse as the pressure on the land in Japan increases and the size of the average plot diminishes. A closer examination of the economic position of the peasantry is now necessary, and I will start with some figures relating to the average size of holdings, the relative numbers of the peasant proprietors and the tenant-farmers, and the productivity of the land.

The total land available for cultivation in Japan is about 15½ million acres. There are about 5½ million peasant households of which tenants form 27·68 per cent., part-tenants and part-proprietors 41·13 per cent. and those cultivating exclusively their own land 31·19 per cent. The majority of the landowners are small owners, and the number of absentee owners has been calculated as 909,192.

As shown, most of the peasantry are either tenants of all the land they cultivate or of part of it. The large majority cultivate between 1½ and 2½ acres. The tenants rent land under the *métayer* system, paying over 50 per cent. of the harvest to their landlords in kind. The figures on p. 115 show the position, and also the changes which occurred between 1913 and 1925.

Thus 90 per cent. of the peasantry, whether tenants or owners, or part-owners and part-tenants, have five acres or less, whilst 69 per cent. cultivate less than two and a half acres.

[1] In spite of all the talk there is in Japan about "patriotism," the Government is riddled with corruption, and there are constant scandals involving the highest officials. See footnote, page 179.

	1913	1925
Total number of peasant families ..	5,443,719	5,548,599
Under 1·225 acres	2,002,524	1,951,156
Per cent. of total	35·54	35·17
1·225 to 2·45 acres	1,816,257	1,877,185
Per cent. of total	33·30	33·84
2·45 to 5 acres	1,079,468	1,185,369
Per cent. of total	20·70	21·36
5 to 7·45 acres	328,529	322,850
Per cent. of total	6·33	5·81
7·45 to 12·25 acres	149,808	137,084
Per cent. of total	2·82	2·47
Over 12·25 acres	67,133	94,960
Per cent. of total	1·31	1·35

These figures clearly show the desperate plight of the tenant-farmers, who have to pay over half of the produce of these little plots to the landowners. Even the peasant-proprietors are often unable to subsist on their tiny holdings since taxation is extremely heavy.

It will also be seen how the pressure on the land is continually increasing, for the increase in the number of peasant households cannot be provided for by increasing the area sown; every inch of land suitable for rice cultivation in Japan is already being cultivated. The position has grown even worse since 1925, for the pace of Japan's industrial development has been slowing down, and there has been industrial depression since 1927. There is less absorption of workers into industry in the towns, and yet the population continues to increase at the rate of about three-quarters of a million a year.

This is not to be taken as an argument that Japan is over-populated and must have colonies for expansion. Her own Northern island, the Hokkaido, is sparsely populated still, and her colonies do not provide an outlet for the surplus population on the land, seeing that the industry of the Korean or of the Chinese is as great as that of the Japanese, and his standard of living still lower. There is practically no Japanese peasant immigration to Korea, nor to Manchuria. The acquisition of new colonies would not help the Japanese peasant in the least. Actually small as is his average holding at present, the amount of produce obtained from it is so great that he would be able to provide for

his family if it were not for the fact that he has to pay heavy rent and taxes, and if the prices of industrial goods were not maintained at an artificially high figure; moreover, half what the landlord receives goes in taxes, and the burden on the peasant-proprietor is correspondingly high.

Most of this taxation goes to sustain Japan's armament burdens as a "Great Power" and in subsidies to business concerns.[1] It is, above all, the armament expenditure of Japan as a Great Power and the waste of her resources in this way—coupled with the corruption found in almost every sphere of public life—which renders the position of the peasant one of desperate poverty. Moreover, the hills and mountains of Japan could probably be used for pasturing flocks and herds if the peasants were ever able to accumulate any resources to purchase them, instead of paying away everything in rent and taxes.

Japan's industries could absorb her growing population if the State used the accumulated wealth of the country for industrial development instead of armaments (in large part purchased from abroad), and if so much of the country's wealth, now in private hands, were not used in purchasing luxuries (as must inevitably be the case when the ownership of the means of production is in private hands). Nor would the free importation of foreign rice harm the Japanese peasant if the State controlled foreign trade; under the present semi-feudal, semi-capitalist system, as already stated, it is not the peasantry who benefit by the customs duties on foreign rice. The ridiculous position in Japan to-day is that a country whose Government is continually crying out that she is over-populated and cannot produce enough food for her population should try to shut out foreign rice by a tariff wall. This policy keeps up the cost of living, and therefore enhances the prices of Japanese manufactured goods which the peasant buys. It benefits no one but the landowners and the rice merchants.[2]

[1] See footnotes, pages 133 and 179.

[2] Japan always maintains that she wants to industrialise herself, but the fusion of landowning and capitalist class is so complete (or perhaps one should say the feudal elements in her economic structure are still so important) that the industrialisation of the country is hindered by such facts as the artificial keeping up of the cost of living through the rice duties.

The solution of the agrarian problem in Japan lies in the first place in freeing the tenant-farmer from his burden of rent and the peasant-proprietor from the heavy taxation he has to pay, whilst providing for future increase of population by the development of industry: but this cannot be accomplished without a social revolution. As things are, the tendency of development, as might be expected, is to decrease the numbers of the poorest cultivators and to increase the numbers of "big" landowners. The poorest peasants are being completely dispossessed as a result of their indebtedness, and the land is being gradually accumulated in the hands of the richer proprietors. Even when it is not taken possession of by the usurer, the peasant becomes in fact, if not in name, a labourer, since all he gets out of the land beyond a bare subsistence goes to the money-lender. At the same time the number of medium-sized holdings of five to twelve and a quarter acres is decreasing, showing the continual splitting up of holdings and gradual elimination of the "middle class" of peasant-proprietors, while the still comparatively few large-sized farms are becoming larger and the number of tenant-farmers is increasing.

Many peasant-proprietors are only on the margin of subsistence, but the condition of the tenant-farmers as a whole is truly desperate. According to the report of the Department of Agriculture and Forestry in July 1925, the farm rent for a one-crop paddy field was 50·2 per cent. of the actual crop, and 54 per cent. for a two-crop paddy field. (In some parts of the country, where the land is fertile enough and the water supply is sufficient, two rice crops are raised each year.)

An investigation made by the Japanese Hypothetic Bank in 1925 showed that the average farm rent for paddy fields was 27·5 bushels per acre for good farm land, 16·9 bushels for poor farm land, and that the average was 22·3 bushels. Farm rent for dry land was paid in money; that for good land being 26·15 *yen* per acre, and that for poor land 12·60 *yen*.[1] Dry land is important in peasant economy in so far as silk production is concerned. These figures show what a large proportion of the peasant's

[1] *The Labour Year Book of Japan.*

supplementary earnings from the care of silkworms goes to the landlord.

Harada, in his book on *Labour Conditions in Japan*, shows that tenant-farmers get, on the average, 100 bushels of rice from their small plots of 1 *chobu*,[1] of which 54 bushels have to be paid to the landlord as rent.

In the Japanese Press one finds it stated that about 16·66 per cent. of the tenant's share of the produce goes to buy fertilisers, implements, etc. This reduces the net income of the farmer to 32 bushels, which works out at 17·5 *go* per diem[2] (I am here using the Japanese measurements in order to estimate what the farmer receives and what is the amount of rice per person required for living in Japan).

From enquiries at the International Labour Office, and from personal enquiries of workers and their wives, I found that the usual amount of rice which a manual worker requires per day is 5 *go*, whilst a woman requires 4 *go*. These were also the quantities specified by a mill director with whom I discussed the matter. A middle-class family consume about 3 *go* a day each; but they, of course, eat fairly large quantities of fish and also some meat; moreover, they do not require so much nourishment as a manual worker.

Take it that the average peasant family is one of five (though this, in Japan, is probably below the average) and that the children require only 2½ *go* each. This brings the total requirements of the family to $5 + 4 + 7\frac{1}{2} = 16\frac{1}{2}$ *go* per diem.

The typical peasant family accordingly would have 1 *go* per diem, or 1½ bushels a year, to sell in order to buy all the other requirements of life; clothing, an occasional piece of fish and so forth —and nothing has been deducted in this calculation for seed. Moreover, in years of bad harvest he has not even enough to feed his family, falls into debt to the money-lender, and consequently has to pay yearly a high interest on such loans out of his miserable 32 bushels.

[1] Two and a half acres.

[2] 1 *go* = a cup; 10 *go* = 1 *sho*; 10 *sho* = 1 *to*; 10 *to* = 1 *koku*; 1 *koku* = 5 bushels.

Perhaps the following extract from a Japanese paper[1] pictures the position of the average tenant-farmer most clearly:

> The statement of our farmer's daily expenditure, however, requires amplification: that is, 46 *sen*[2] is expended by a farmer who is considered fairly well off in his community, to feed and clothe not only himself but his whole family for one hard working day.
>
> Of the 60 bales of rice a *chobu* of paddy field yields a year, 35 bales generally go to the landowner and another 10 disappear in the cost of fertiliser and implements. Supposing a bale brings our agriculturalist 11 *yen*,[3] what he gets for himself for his twelve months' drudgery would be something like 164 *yen*: in other words, 46 *sen* a day.

This means that the Japanese peasant "who is considered fairly well off in his community," for all his intensely arduous, long, unpleasant and unhealthy labour, can barely produce enough to feed his family, and has almost nothing over for clothing. Actually the above income figures are much too high for the peasantry as a whole, whose average income has been calculated at about £7 a year. In this connection it must be noted that the price of cotton cloth in Japan—which is a primary necessity to the peasant—is no cheaper, if as cheap, as in England; and the same is true of most other manufactured products.

Where the land is very fertile, the peasant grows a second crop, such as barley, part of which he keeps for himself.[4] Over large parts of Japan the peasants are so desperately poor that they have to sell *all* their own share of the rice they produce and live on sweet potatoes and imported rice mixed with barley.

Nor do even the above average figures convey an idea of the desperate plight of the smallest tenant-farmers in the most overpopulated districts, where the average size of the plot cultivated is nearer 1 than 2½ acres. The figures given in the table include all parts of Japan; even the comparatively sparsely populated Hokkaido. There are in Japan districts like Kagawa prefecture, for instance, where 85 per cent. of the "farmers" have less than one acre of land apiece to farm. In this district, and in the provinces

[1] *The Japan Times*, June 12, 1929.
[2] About 10d.
[3] One *yen* at that time equalled 22d. (at par, 2s.).
[4] In feudal times the peasant was not allowed rice at all for his own consumption.

facing the Japan Sea, Akita, Yamagata and Aomori, as also in Samido, Tottori and Shimane Ken in Central Japan, Ishikawa, Toyama, Fukui and Gifu in Eastern Kyushu, and in Tokushima, poverty is most acute, and the death-rate is higher even than the figure for all Japan—which itself is terribly high and always increasing. Infant mortality two years ago was 161 per thousand as against 89 per thousand in 1886.

The tenant-farmers, as might be expected, are in a chronic state of debt, and interest payments reduce their scanty incomes to an even lower figure than half the produce of their farms. The debt of the peasant class in 1920 was found to be 2,120,000,000 *yen*.

Since the tenant-farmer with 2½ acres producing 100 bushels a year can barely subsist, it is obvious that those with from 1 to 2 acres cannot possibly subsist on their share of the produce of the soil. Thus, although the average per acre production of rice in Japan[1] is higher than in any other country, both the size of their plots and the excessive rents paid keep the peasantry as a whole continually on the poverty line, making it impossible for those at the bottom of the scale to exist without some supplementary income. Moreover, the extending use of chemical manures to supplement the old night soil, although it has increased the productivity of the land, has necessitated the peasants obtaining the money to buy it by some other labour than that expended in the growing of cereals. It is significant that in some parts of the country the wages due to the girls in the silk filatures or cotton weaving-sheds are paid over to the parents at the season when fertilisers have to be bought. Thus does the labour of these girls in industry directly enrich the soil and make it possible for their parents to exist.

It is, in fact, the nature of the labour required in Japan's foremost industries—silk and cotton—which keeps in existence the small-holding peasant. If it were not for the daughters' earnings in the silk filatures and cotton mills, or for the wife's and daughters' cultivation of silkworms, the small peasant would be completely dispossessed, since his income from his land

[1] About 40 bushels per acre.

cannot keep him. This and the fact that capitalist methods of production have not been applied in Japanese agriculture—hence when the peasant is in debt it pays the creditor best not to dispossess him, but to force him to work harder to pay yearly interest—retard the disappearance of the small-holder and small tenant-farmer. This is not to say that large numbers of peasants are not driven to seek work in the towns, but it shows why the small peasantry has not been driven off the land altogether and converted into a proletariat.

It is significant that the first signs of the use of machinery on the land come now that some of the landowners are taking to the cultivation of their own lands by hired labour because of constant disputes with their tenants.

Before coming to a consideration of the flow of labour from country to town and of the subsidiary occupations of the peasantry in the villages, notice must be taken of the way in which the productivity of the land has been increased during the last sixty years or so—not by the use of machine or even animal power, but by more intensive methods; that is to say by the application of more labour and more manure. Whereas the area under rice—consisting in 1922 of nearly three-fifths of the total cultivated area—had increased by only 22 per cent. during the previous fifty years, production had almost doubled in the same period.[1]

Year	Average Total Annual Production of Rice	Average Annual Production of Rice per *tan**	Average Annual Production of Rice per head of Population
	Koku	*Koku*	*Koku*
1894–1898	39,683,000	1·40	0·92
1919–1922	59,963,000	1·92	1·06

* 1 *tan* = 0·245 acre.

But in 1919–22 or thereabouts the limit appears to have been reached in the progressively increasing returns secured from the land. Since 1918 the price of rice has risen more than the general price level; but the growing unrest and poverty of the farming population indicate an increasing cost of production which the peasantry has been able to shift only in part to the general body

[1] See *Modern Japan and its Problems*, by G. C. Allen (chap. viii).

of consumers. The pressure on the land is now growing heavier and heavier with the slackening in the rate of industrial development of recent years, and it is evidently no longer possible to increase the productivity of the land.

Everything in Japan points to an agrarian crisis which cannot be solved within the limits of the existing social structure. Far more people are supported on the land to-day than a generation ago, and the industrialisation of the country has not turned the majority of the peasantry into an industrial proletariat. But, although the system of individual cultivation persists, large numbers of the peasantry have, in fact, become agricultural labourers, since, although working on what is technically still their own land, they are so indebted that they pay away all the produce beyond a minimum for subsistence.

Most agricultural operations are still carried on by hand with the same primitive implements and by the same methods as in feudal times. Large-scale methods of production, which, in a grain-producing country under capitalism, would have largely superseded the tiny farms, have not, so far, been found suitable for rice cultivation, where it is the close care and unremitting labour of the individual peasant which increase productivity rather than the use of machinery. Practically no use is made of either machine or animal power in the cultivation of rice, and the real cost of production—the labour cost—is extremely high.

It is, in fact, only the degradation of the peasantry, forced to labour long hours for a bare subsistence, and the supplementary earnings of their families, which enable rice to be produced and sold for the prices prevailing in Japan. Actually the price of rice—according to its cost of production—is far too low; but the Government policy of assisting the manufacturers by high tariffs and subsidies forces the peasant to part with such part of his harvest as remains to him after rent is paid for a price below its value. As already shown, it is customary for the peasantry not to eat the rice they themselves produce; hence in Japan the urban inhabitants eat Japanese rice, but the peasantry—who grow it—cannot afford to eat much of it themselves.

It should not, I think, be considered that machinery could not be applied to rice cultivation, but rather the failure to apply it must be regarded as a consequence of historical circumstances in Japan, and of the fact that the class in power has up to now been content to force the peasantry to work more and more intensely. So long as the land could be made more productive by "sweating" the peasant more, there has been no stimulus to the development of capitalist methods of production in Japanese agriculture. The *métayer* system of paying half the produce of the land in kind as rent has ensured that the landlord always received his share of the increased harvest due to the peasant's increased labour and to the increased use of chemical fertilisers. There has been no incentive to expropriate the small cultivator and establish large plantations.

To some extent also one must reckon with the fact that in this matter of rice cultivation the Japanese have no Western model to go upon—and the whole of their industrial development has consisted of copying the inventions of Western nations.

That machinery could be applied to rice cultivation is obvious even to the tourist, who, from the train and on his walks, sees the peasants irrigating their paddy fields by a tread-wheel pump, or breaking off the ears of barley by hand, or winnowing rice. Indeed, rice cultivation with some assistance from machinery is already beginning in Manchuria and exists in California. In this connection I will quote the following extract from an account of a new rice farm begun this year in Manchuria:

> The new cultivation is to be carried on on a typical modern method by mechanising all works: starting with ploughing and including sowing, harvesting, threshing and purification. The new farming experiment may perform a revolution in rice farming in Manchuria. The S.M.R. Company's Agricultural Experimental Station has laid down a sort of motto, crystallised out of the year's experiments, which says: "As wages are bound to rise year after year, labour is advantageous till the wages rise up to 75 *sen* a day; should the wages rise still higher, the use of machinery will be preferable."[1]

This last quotation affords the key to the whole situation. So long as labour in rice cultivation can be paid an excessively low

[1] *The Japan Chronicle Commercial Supplement*, March 6, 1930.

figure, as it is in Japan to-day, there is no stimulus to large-scale methods of rice cultivation with the use of machinery, and hence no stimulus to the rapid expropriation of the peasant on the soil.[1] However, further tenant disputes in some parts of the country are now leading to landowners taking over the cultivation of their land by hired labour and with the use of machinery.

It is, of course, true that some unremitting care given to each blade of rice, and its transplanting by hand, must continue to be necessary in order to secure the highest returns from the land, and that this fact accounts to a considerable extent for the survival of *petite culture* in Japan. But the fact remains that the land has been a sort of colonial area to the Japanese industrialists and merchants in the same way as India, for instance, is to Britain.

In Japan the machine-made products of industry have been sold at a price above their value to the peasants—who in exchange sell their hand-produced foods and raw materials (rice, silk-cocoons, etc.) at a price below their value.

Moreover, the industrialisation of the country has not been proceeding at a pace rapid enough to absorb even the annual increase in population, so that the pressure on the land has grown continually more severe. Now that the production per acre has probably reached almost its limit (and is kept up only by the purchase of fertilisers with money obtained by subsidiary labour), the position of the peasantry is becoming worse and worse as the numbers of those trying to live on the land grow ever greater. If the seven thousand odd non-cultivating landowners were expropriated, the tenant-farmer's position would be considerably improved—but taxation would still take half the amount he at present pays in rent.[2]

In any case, such expropriation of landowners is, of course, impossible without a social revolution. The Governments of to-day are content to tinker at the problem with totally inadequate schemes designed to enable the increase in the number of peasant-proprietors at one end to keep pace with the decline in the numbers

[1] In Manchuria, where there are large tracts of virgin soil, the position is, of course, different.

[2] The return on capital invested in land in Japan, after payment of taxes, is reckoned as only 3 per cent.

at the other end. Even the peasant-proprietors are extremely poor owing to the small acreage they own and the heavy taxes they pay; and they, like the tenant-farmers, have to find some additional source of income in order to buy fertilisers and the necessities of life.

It is generally recognised in Japan that, in spite of the increased yield of the land, the peasant's standard of life has for some years been sinking rather than improving. This is witnessed not only by the figures relating to his income as compared with the minimum required for subsistence, but also by the rapidly increasing death rate,[1] the increasing unrest, the enormous number of tenant disputes in recent years, and occasional riots which have been serious and widespread enough to be regarded as minor rebellions. The examination just made of the position of the average Japanese peasant shows unmistakably that his income from cereal cultivation is insufficient to maintain him, and that even the chemical fertilisers required to keep production at its present level cannot be obtained by the peasant without resort to some extraordinary means. Hence the "contracts" whereby the father sells his daughter to the brothel or to the factory.

Many peasant families depend in large part for their living on the earnings from their daughters, sent monthly from the mill. Others who are desperately indebted sell a daughter to the brothels for £30 or £40. Others again, as already noted, rely on their daughters' earnings in the silk filatures or the cotton weaving sheds to buy the necessary fertilisers, clothing and other necessities of life.

The net effect is that a subsidy is paid to agriculture; not a subsidy taken by taxation on the profits of capital, but a subsidy paid direct to farming by the girls and women who toil long hours for low wages in silk filatures and cotton mills, and by the slaves of the licensed quarters.

[1] Infant mortality in 1927 was 161 per 1,000 as against 89 per 1,000 in 1886. In Osaka it is 250 per 1,000, and in the slums of Kobe 600 per 1,000 according to T. Kagawa. The latter also states that 1 in 70 persons in Japan is tubercular mainly on account of underfeeding, and that 2 out of every 100 persons have trachoma or a sexual disease. *Weekly Japan Chronicle*, March 1, 1928. Government figures give the number of lepers as about 30,000.

The type of contract varies, and is now not so binding in the eyes of the law as previously. But the position has not greatly changed. Girl labour for the factories is still obtained through recruiting agents, who induce the father to sign a contract promising that his daughter shall work for one, two or three years at a certain factory. Up to five or six years ago, it was usual for a sum as large as £20, £30, or even more to be paid in advance and written down in the contract, even for girls going to work in the big cotton mills. To-day it is no longer usual for the big factories to pay out large sums in advance to the parents; they can get girls without this, partly because of the industrial depression which has lessened the demand for labour, and partly because they have found it worth while to make conditions a little better and so retain their labour force. For, although the police brought the girls back if they ran away, many did escape—and it was frequently extremely difficult, if not impossible, to recover the money advanced by distraining their fathers' goods.

But in the silk filatures and cotton weaving-sheds where conditions have not changed much the old system goes on and is only slowly changing. In some places the girl's labour is contracted for in advance, but on a yearly basis; in others, as already mentioned, half her year's wages are paid in advance and the other half later in the year, at the season when the farmer needs cash to buy fertilisers. In any case—although, technically, these girls are now supposed to be free and the contract not legally binding —girls who do try to leave their work before their contract is up are always brought back by the police, and they are kept closely within the precincts of the factory to prevent their escape.

In the two subsequent chapters I shall describe in some detail the conditions prevailing both in the big spinning and weaving mills and in the small weaving-sheds. Here I am concerned with pointing out the very close connection between the impoverished condition of the peasant—itself due to the Government being in the hands of the big capitalist and larger land-holding classes—and the supply of cheap labour to industry. The tenant-farmer, having to pay an enormous rent to a landlord, and the peasant-proprietor, paying heavy taxes, have to buy even the fertilisers

essential to them if rent and taxes are to be paid, at the price fixed by the monopolists who control the trade, and so is forced to supply cheap indentured female labour to the factories in order to keep himself from starvation and in order to buy those fertilisers.

The oppression of the peasant for the benefit of Japanese manufacturing industry leads to further benefits being given to that same manufacturing industry in the form of cheap labour.

Capitalism in Japan has not aimed at expropriating the small cultivator and creating a large proletariat, having found it more profitable to continue the feudal exploitation of the peasantry and, at the same time, exploit their daughters in industry. The explanation of this position lies not only in the peculiar nature of rice cultivation, *petite culture* as it has been called, but in the fact, already stressed, that the capitalist class and the landowning class are one—there having never been a social revolution in Japan, only the transformation of a military aristocracy into a capitalist class.

It is true that the landowners are heavily taxed, but since most of them have also got investments in industry, they benefit either directly or indirectly by the Government's expenditure on subsidies, armaments, etc., and by the high import duties. There has accordingly never been that cleavage between the two classes which might have led to some improvement in the lot of the peasantry.

Hand in hand with economic oppression goes political oppression. Forced by their miserable position to form unions of tenant-farmers, the Japanese peasants for a time were strong enough in many places to force their landlords to lower their rents. In some villages they succeeded in getting them lowered from 50 per cent. of the rice harvest to 30 per cent., and it is not remarkable that the largest number of tenant disputes occur in precisely those specially poverty-stricken districts referred to earlier in this chapter. Nor is it surprising that Government oppression is most heavy-handed in these districts; it is here that the police take exceedingly severe measures against the peasants in ordinary times, and even severer ones at election time, when many get

arrested and Labour meetings are invariably broken up. Nor is the cotton industry the only capitalist interest which reaps a rich harvest from the poverty of the peasants. Raw silk is Japan's principal export: 40 per cent. of her total exports. Her production of raw silk forms 65 per cent. of the world's total, and this dominating position in the world market is based on peasant exploitation.

Hence the principal subsidiary occupation of the Japanese peasantry is the breeding and care of silkworms. Thirty-seven per cent. of the total of peasant households—over 2,000,000—are occupied in silk production; and out of the value of the raw silk, a quarter to a third goes in payment of rent. (Dry land, of course, pays rent as well as paddy fields and other cereal cultivation—see above.) Thus, in many parts of the country the peasantry depend as much on the sale of their cocoons as on the rice crop. The silkworms require unremitting labour and attention at the seasons when they are hatching, in spring, summer and autumn; whilst there is also the work involved in the cultivation of the mulberry plants, on the leaves of which they are fed. After the worms come out of the cocoons they need to be constantly fed on chopped mulberry leaves; and the women of the household have little rest from attending on the "honourable silkworms" night and day.

The cocoons are sold to the reelers either at special markets or through agents, who collect them from the farmhouses. Reeling is performed mainly in very small establishments scattered over the principal silk districts, and hand-reeling is still carried on to a fairly large extent. Machine-reeling is, however, becoming more and more widespread, and there is also in some places an intermediate stage, reeling being carried on in out-houses attached to country cottages, where use is made of water-power supplied by streams. As must inevitably be the case, small concerns and domestic industry are being gradually eliminated by the competition of factories using electric power; but even the factories are usually very small.

The reelers sell the silk to the big merchant houses in Yokohama, who control the market and are able to take advantage of the

great fluctuations in price[1] at the expense of the reelers and the peasants. For the reelers are dependent on the big merchant houses for the capital to finance the purchase of the cocoons and the reeling operations; and the peasants in their turn rely on the reelers for advances with which to purchase the egg cards and rear the silkworms. The weak position of the reelers and the peasants, therefore, enables the big merchant houses to take advantage of both rises and falls in the demand from America and the consequent rise and fall in price.

The demand for raw silk is a highly fluctuating one, and a considerable time must elapse before a fall or an increase in demand on the part of America can filter through the various intermediaries down to the Japanese peasants. Thus the latter frequently find that they have produced a crop of cocoons for which no sale is possible at profitable prices; while a sudden rise in price, brought about by some unexpected increase in demand, too often benefits only the export merchants who are in a sufficiently strong position to see that all the advantage accrues to them. The violent and frequent price fluctuations which are associated with this trade naturally encourage the speculator, and are responsible for the fact that a great deal of the skill which might otherwise be directed towards improving the organisation and technique of the industry is employed merely in anticipating price movements.[2]

It should also be noted that Mitsuis are the largest silk exporters in Japan, and also, through a subsidiary company, the largest buyers of raw cotton in America. An American merchant told me that at times, when they want currency for the purchase of raw cotton in America, they force down the price of silk by large future sales at a figure below the current one.

Hence the extremely exacting and careful labour required for the cultivation of silkworms brings an exceedingly small return to the peasant families who spend the whole year either labouring

[1] FLUCTUATION IN PRICE OF SILK IN DIFFERENT YEARS

Year	Highest	Lowest	Difference between Highest and Lowest
	Yen	*Yen*	*Yen*
1913	1,025	840	185
1917	1,750	1,125	625
1919	3,280	1,300	1,980
1920	4,360	1,100	3,260
1921	2,020	1,390	630

[1] G. C. Allen, *Modern Japan and its Problems* (London: George Allen & Unwin), p. 128.

in the paddy fields, ploughing, planting and transplanting the rice, standing in the irrigated fields ankle-deep in water, or, men and women together, working the tread-wheel pumps, harvesting, winnowing or seeing to the wants of the silkworms —and yet cannot earn enough for their subsistence. A daughter or two must go to reel silk in the stifling atmosphere of the filatures, or leave her parents to go and work far away in the cotton mills, or be sold to the brothels.

Silk, which is the country's staple export, is produced by the labour of the peasants' wives and daughters; and the development of machine reeling has rendered the peasants' economic position worse than in the days before it was introduced, since he used to supplement his income by hand-reeling at home in the season between harvest-time and seed-time.

The increase in raw-silk production of recent years has been no less remarkable than that of cotton yarn and cloth, but the peasant has derived no advantage from it.

Besides silk culture the Japanese peasant has a few other possible subsidiary occupations. There is the making of paper boxes to form the basis of lacquer-ware; the manufacture of straw hats and baskets, even the mixing up of chemical drugs and medicines paid for at piece rates by the agents of the wholesale chemist.

But all these domestic occupations are exceedingly badly paid, and the sums earned *in toto* are very small. Silk culture remains the most important domestic industry, and next to it comes the manufacture of cotton, silk and even wool fabrics on hand-looms.

These textiles are woven on narrow hand-looms, the material being about fifteen inches wide, and are for home consumption. In all, there are still 86,000 hand-looms in Japan for cotton weaving and 112,364 hand-looms for silk weaving (nearly half the total looms in Japan for silk weaving), besides 2,420 for woollen weaving and 23,110 for the manufacture of hemp, jute and flax fabrics.

These figures give some idea as to how far even the textile industry in Japan is from having adopted modern methods of production and how great a part the peasantry play in it. In some cases the manufacture of silk, cotton or woollen fabrics is a sub-

sidiary occupation of the peasant—or, more usually, of his wife. In some cases, the peasant, if he is rich enough, sets up a few hand-looms and employs some apprentices or hired labour, in time abandoning the cultivation of his fields to become a small manufacturer. Even where the use of electricity and a small motor comes in, domestic industry of this type can survive. In the case of the woollen industry in the Ichinomiya district, for instance, I found a system reminiscent of the domestic system which prevailed in the Yorkshire woollen industry before the Industrial Revolution (see Chapter VII). It is quite common for a merchant or small manufacturer to give out yarn to be woven into cloth at a fixed price per piece, either to peasants in small villages who may possess only one or two hand- or power-looms each, or to peasants who have developed into small master weavers with from seven to ten power-looms. Such small producers are, of course, piece-wage earners, but they usually own their own means of production: their own looms.

The peasants with one or two looms supplement their meagre earnings from the land by weaving in the slack winter months, as they used to do all over the country before the introduction of power-driven machinery into Japan. On the one hand, it enables the merchant, unhindered by factory legislation, to take advantage of the peasants' extreme poverty; on the other hand, the outlook of such a peasant is that of a small shopkeeper or artisan, working, as he imagines, independently, and therefore ready to work himself and his family fifteen hours a day in order to try to accumulate enough money to become a little capitalist with several looms and employing hired labour.

This persistence of small-scale production is rendered possible only by cheap electricity and its widespread use in Japan. This, to some extent, has made it possible for the machine to come to the peasant instead of the peasant leaving the land to become a factory worker in the town.

Later, in the chapter on conditions in small weaving-sheds, I shall give more details of domestic industry in cotton in particular. Here it should, however, be stated that the peasant acquires the capital to buy his loom or looms by sending a son or daughter

to work for a few years in a factory, during which time most of his or her wages are "saved" and eventually handed over to the father. It is clear, however, that only the peasant-proprietor or tenant-farmer who can keep clear of debt is in a position to "advance himself" in the world in this way and become a small manufacturer. The mass of the peasantry are too poor and too indebted.

Although various factors contribute to a yearly increase in the country population, the proportion of Japan's total inhabitants living in towns also increases year by year. Not only is there a yearly stream of young men and girls to the towns for temporary employment, but there is a large flow of permanent emigration from village to town. Amongst the temporary occupations mention must be made of the fishing industry. Some 40,000 men leave their villages each year to work the fishing fleets which leave for the Kamchatkan coast in April and return in September. For the whole period they receive only 100 *yen*—and this money also goes for the most part to purchase fertilisers for the little farms from which they come.

Taking all those who emigrate from village to town, the numbers each year are about 780,000 men and women, of whom about 100,000 are reported to remain permanently in the towns and cities. Of these 780,000, more than 330,000, are girls going into textile and match factories. Some of the 330,000 return home at the end of two or three years, frequently with their health ruined, to spread consumption and other diseases in the country-side, and send the death-rate in the village higher even than before. Others remain in the factories or become café waitresses or unlicensed prostitutes.

Emigration is greatest from the districts, mentioned earlier in this chapter, where the death-rate is highest, the size of the average farm especially small or the land least fertile.

The figures of the total number of factory workers and how they are divided up among the various industries indicate the real backwardness of Japanese industrial development. Not only is the total less than 2 million, but there are actually more women factory workers than men, and the majority of these women are,

as has been clearly shown, not part of an industrial proletariat since they do not, most of them, remain long in the factories.

TOTAL NUMBER OF FACTORY WORKERS IN JAPAN IN 1927

	Men	Women	Total
Textile industry	187,965	803,358	991,323
Metal industry	101,438	8,279	109,717
Manufacture of machines, tools and implements, including ship-building	232,799	13,164	245,963
Ceramic industry	53,363	11,951	65,314
Chemical industry	75,933	41,380	117,313
Foodstuffs	123,663	42,113	165,776
Paper industry	21,160	9,108	30,268
Woodwork and sawing	49,006	5,453	54,459
Printing and bookbinding	44,971	8,151	53,122
Totals	923,201	975,671	1,898,873

These figures do not, of course, include the large numbers of artisans working in little workshops with their apprentices very much after the fashion of their ancestors before the days of "Modern Japan."

The present population of Japan is about 60 million. According to the Census Bureau the total number of working people in all occupations in 1920 was 15,970,000, and in that year the total number of factory workers was 1,742,591. In 1927 there were 295,629 miners, 411,000 transport and railway workers and 1,836,046 described as "casual workers and others."[1]

[1] An explanation of the causes of Japan's arrested industrial development would require a separate chapter. Here one can only point out that heavy industry is only slightly developed in Japan, and that, although so much of her manufacture is still carried on by masters and apprentices in small workshops by hand or with only the aid of a small motor in much the same way as a century ago, the pace of Japan's industrial development has slackened for some years past. In the writer's opinion this arrested development is due in large part to Japan having become an Imperialist power too soon. Japanese capitalism, which enjoyed such enormous profits in the War, naturally prefers the super-profit derived from colonial undertakings to the more modest profits attainable in Japan. Japan is, of course, not the only country where investors find it more profitable to invest abroad than at home, but in Japan this period has arrived too soon—i.e. before the primary tasks of capitalism have been carried out. Japan is being pushed along the path of an Imperialist Power too soon with insufficient resources, and in opposition to foreign interests which are too strong for her. The absence of a developed heavy industry means that she is not independent

Enough has, I think, been said to show how dependent the peasantry are on the earnings of their children in the factories, fishing fleets, etc. Now that industrial development is slackening and unemployment in the towns is assuming large proportions, it is becoming less and less possible for the peasant to avoid starvation by contracting his daughters to the mills and the agrarian crisis is consequently growing more and more acute. 1930, with the removal of the gold embargo and the deepening business depression, is likely to have shown a revival of the tenant disputes and rural disturbances, which were less widespread during 1928 and 1929 than previously owing to the repressive measures taken by the Government.

The number of disputes between landowners and tenants increased from 85 in 1917 to 2,206 in 1925, involving 33,001 landowners and 134,646 tenants, 85 per cent. of these being over the question of rent. Of the 2,206 disputes:

1,444 concerned a demand for a reduction in rent that year;
451 were demands for permanent reduction in rent;
20 were protests against increase of rent;
232 were protests against the landlord's refusal to let land to the tenant any longer.

Harada[1] summarises the position thus:

In former days the demand of the tenant was simply for a reduction of rent for a particular year in which crops failed. Of late the nature of disputes has become more fundamental. The demand for permanent reduction of rent (usually 30 per cent., but in some cases 50 per cent. to 70 per cent.), or the establishment of the right of tillage, etc., is increas-

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even so far as her armaments are concerned, and since so much of the material has to be imported, the burden is an even greater one than in other countries. The armaments which her foreign colonial investments necessitate themselves narrow down the internal market on account of the heavy burden of taxation they put upon the peasantry and small bourgeoisie. This again further stimulates the desire of Japanese capitalists for more profitable spheres of investment than in Japan herself, and so keeps Japan moving along the path of Imperialist expansion with all that this entails in the way of large armaments and heavy taxation. What is important for this study of the cotton industry is the fact that the backwardness of other industries, and in particular the backwardness of heavy industry, leads to a concentration of capital and energy in the further development of the cotton industry, which is one of Japan's few up-to-date and well-established industries. In Japan as in India, though for different reasons, the cotton industry is the industry to develop on the largest scale.

[1] *Labour Conditions in Japan*, p. 88.

ing. In former days the method of enforcing the demands was concentrated mostly on the cessation of tillage or a demonstration against the landowner in the form of direct action. In many cases, however, this resulted in failure because the law forbade direct action. Lately such tactics have been replaced by the formation of an alliance for the non-return of tenured land, or the withholding of one-half of the rent in the hands of tenants until disputes are settled. In some cases the tenants took more drastic measures involving their children in the disputes. They withdrew their children from the public schools and placed them in schools especially established and supported by the tenants.

How economic conditions are revolutionising the Japanese peasants and rendering them more hostile to the whole social and economic system is witnessed not only by the strong support they gave to the revolutionary Farmer Labour Party, the *Ronoto*, before its suppression by the Government, but by such facts as school strikes in the villages for the following reasons: (1) Economic difficulties due to the prohibition of cultivation by the owners; (2) objection to the educational system based upon capitalism; (3) as a means of political protest. Such strikes involved 11,837 children in 1926.

The number of peasants belonging to the various Tenant-Farmers' Unions has diminished since the beginning of 1928 owing to the severe police repression which has made all militant activity almost impossible since then, and to the wholesale arrest of all "Radicals" known to have influence with the masses and not ready to assist the Government.[1] In August 1928 there were 4,418 Tenant-Farmers' Unions of various shades politically, with a total membership of 338,221, and the number of disputes settled by compulsory arbitration rose from 35 per cent. of total in 1926 to 75 per cent. in 1927.

Of these Tenant-Farmers' Unions the Left Wing Peasant

[1] "Radical" is the general term used in Japan for all militant labour leaders and socialists. Since 1928 the penalty laid down by law for belonging to a society which wants to change the Constitution or abolish the private property system is ten years' imprisonment, whilst the death penalty is prescribed for Communists. The police arrest all those who lead the peasants in their struggles to get rents reduced, just as they normally arrest strike leaders or anyone whom they suspect of "Marxian tendencies." The General Confederation of Labour (Benji Suzuki, etc.), which is officially recognised by the Government and sends its representatives to I.L.O. Conferences, is, of course, entirely capitalist in outlook and non-militant.

Union of Japan, which began the National Union Movement in 1922, is still by far the strongest, although its membership has sunk sharply since 1926. In 1926 it had 3,926 branches with a membership of 346,693, and was affiliated to the old *Ronoto*, which was under Communist influence. In 1928 this Union had 70,000 members left. Nevertheless, since the peasants position is growing worse, not better, their sentiments are probably but little changed; it is only Government repression and the imprisonment of their leaders, or their leaders' abandonment of the struggle, which has for the time being weakened the revolutionary movement among them.

From the point of view of the future development of the cotton industry in Japan it seems clear that the first period which ended about 1923, when forced labour had to be obtained and kept somehow or other, has already passed. There is no labour shortage now in Japan; on the contrary, there is a growing mass of unemployment. The factory owners evidently still prefer youthful girl labour from the villages, living in dormitories—since it is more helpless and submissive. But there is plenty of labour available in the towns as well as in the villages.

I will conclude this chapter by giving a short extract from a speech made recently by Kagawa San. Kagawa is a Japanese Christian who was once a leader of the workers and an organiser of Tenant-Farmers' Unions, but is now a warm ally of the Government, doing his utmost to convert the masses to Christianity and, by so doing, to "save Japan from Marxism," to use his own words. He was recently given a post under the Tokio Municipality, and is regarded by the authorities as a most valuable ally against the rising discontent of the workers in the towns and the peasants in the villages. The following extract is useful as it gives a vivid account of the misery of the peasantry from a man who is anything but a revolutionary. It expresses the fear of revolution, which is very acute in Japan, for the agricultural position is one realised by the authorities to be fraught with extreme danger which might lead to revolution at any moment of increased tension.

THE MARXIAN INVASION VERSUS CHRISTIANITY IN JAPAN

By TOYOHIKO KAGAWA

Given at the Conference on Applied Christianity at Karuizawa on August 23, 1928, and at Nojiri on August 27, 1928, and now for the first time released to the Press.

ABOUT a week ago I was in Tokio, organising the Pan-Japan Anti-War League. The initiative in this movement came from the labourers, who saw a great quantity of munitions being manufactured and feared war with China. When they learned that Premier Tanaka had changed his policy, their anxiety diminished; but the organisation of the League is in response to a long-cherished desire on their part and will be permanent.

While engaged in this effort my friends in Tokio surprised me by the news that reinforced concrete barracks were being built to house hundreds of extra prisoners to be arrested and confined during the month of the enthronement. That could not have happened ten or twenty years ago. The reason that it can happen now is that Marxism has come to Japan. We are passing through a period such as we have never known before. The books of Marx, Lenin, Stalin and Bukharin have all been translated and published in Japanese. Many books against Christianity and against all religion have been published. The young men are red Communists in colour and thirst for them.

1. *Why was it Necessary for Marxism to Come to Japan?*

Why was it necessary for Marxism to come to Japan? Because of the actual situation in regard to land, capital and labour—the three main facts of social economics. Social conditions are ripe for Bolshevism. The people are suffering acutely. It is only necessary to refer to the great month-long moratorium of a year ago to illustrate my meaning.

The death rate is piling up alarmingly. We have seventeen big medical colleges with forty-six thousand doctors and sixty thousand nurses in the country; yet the death rate does not decrease! I often ask my doctor friends why, when the number of doctors increases, the death rate does not decrease; they cannot answer me—for the real reason is that the slums are on the increase. The poor people are increasing in number. They need milk, good food, sanitary waterworks and other things which must be bought with money—not more doctors! Infant mortality was 89 per thousand in Japan in 1886—and now it is 161 per thousand.

Last spring I was appointed by the Home Department as one of its commissioners, to investigate another problem, that of rural emigration. Seven hundred and eighty thousand rural dwellers leave the country every year and migrate to the cities, and 330,000 of this appalling total number are young girls entering the factories for the first time. Knowing

something of the conditions which obtain among them, the Government asked me to study them further.

There are five bad districts in Japan in which abnormal death rates, high migration rates and another serious problem — that of tenant disputes—all occur in unusually high numbers. These districts are:

(1) The provinces facing the Japan Sea: Akita, Yamagata and Aomori;
(2) Sanindo, Tottori and Shimane Ken;
(3) Central Japan: Ishikawa, Toyama, Fukui and Gifu;
(4) Eastern Kyushu;
(5) Tokushima and Kagawa Ken.[1]

Japan has always been an agricultural nation, and two years ago the rural population was still greater than that in the cities; but, beginning last year, the town population now exceeds that of the villages. Villages are disappearing in Japan. The farmers cannot afford to live in small villages, and every year thousands upon thousands of them desert the rural districts and go to the cities. The rate of urban increase is so great that probably 70 per cent. of the total population of Japan will be urban inside of thirty years.

That rural land disputes occur in greatest numbers in the same sections noted for death and emigration—a fact which I discovered while engaged in this special investigation for the Government—is deeply significant. Take Kagawa Prefecture, for instance, where 85 per cent. of the farmers have less than 1 acre of land apiece to farm, and suffering and poverty are acute: naturally it is this district which has more land disputes than any other Prefecture in Japan; and, of course, it was Kagawa Ken which lent a ready ear to the voices of the Radicals who have been leading the farmers to believe in the quick and easy gospel of revolution! "The few rich will oppress the many poor," they say, "until we rise up and crush them! There is no other way."

So the President of the Farmer Labour Party, the Radical proletarians, Ikuo Oyama, naturally chose the place in which oppression is felt most keenly—Kagawa Ken—from which to stand for the Diet; and one is not surprised to hear that the police are especially oppressive in this same Kagawa Ken and that they oppressed the political efforts of his followers there. Such oppression leads to worse radicalism: and the angry acts of his oppressed followers in Kagawa Ken led to the utter suppression of the entire National Farmer Labour Party by the Government. The sequel, of course, has been its breaking out in more virulent form—but of that more later.

We need to face the facts in a situation which is terrible beyond our imagination. If land disputes, emigration and high death rates do not mean much to us, consider also the crushing of the middle classes! In both rural and urban districts this is occurring. The amount of land owned by small farmers is decreasing yearly, while the few big farms

[1] *Ken* means Prefecture.

are getting bigger and the number of tenant-farmers is mounting higher and higher. There are thirty-five business corporations in Japan with a net invested capital of 17,000,000,000,000 *yen*, but the net profit is abnormally small: only 700,000,000 *yen*; and since the panics of seven years ago and of last year more and more small capitalists are being crushed and the few big owners are increasing their wealth.

Unemployment has doubled since 1925, and intellectuals suffer from it more than labourers. The amount of suicide is terrific and the cause is economic. There are 15,000 suicides every year between the ages of nineteen and thirty-five; the best ages for living! Last year there were about 230 family-pact suicides, including 600 individuals. Wages have decreased rapidly so that many men who were earning 2 *yen* a day during the War years can get only 80 *sen* now. You cannot support a family on 80 *sen* a day: therefore you and your whole family commit suicide. Of every 100 unemployed, 35 are intellectuals.

It was during the European War that Japan first fully experienced the system of capitalism: and last year, during the panic, we discovered that this new and interesting system is really a horrible mistake in Japan! The actual facts in this country are now illustrating Karl Marx's statements about the accumulation of land and the accumulation of capital under the capitalistic system, and millions are suffering acutely from the resulting dislocation. It is no wonder that they are turning to the philosophy which describes their actual plight, and which offers such a plausible way of escape from the system of capitalism which more and more they are determined to disestablish.

CHAPTER VI

LABOUR CONDITIONS IN THE BIG COTTON MILLS IN JAPAN

HAVING shown in some detail what drives the peasants to supply indentured female labour to the factories—thus supplying the cotton industry with a cheap labour force which has enabled it to capture a large portion of the Chinese, Indian and other markets—I come to a consideration of the actual conditions of labour in the factories.

I deal with the big concerns first, and with the small weaving-sheds in a separate chapter on account of the diversity of conditions prevailing. Since the greater part—though by no means all—of the goods manufactured for export, in addition to all the yarn, are made in the large mills which combine spinning and weaving, the conditions prevailing in them are of more interest to Lancashire than conditions in the small sheds. At the same time the contrast between the two kinds of factory affords a striking example of what is now termed rationalisation.

In the big mills labour has been rendered far more intense of recent years, while hours have been shortened. The net result has been a cheapening of labour cost. In the small enterprises which have insufficient capital to institute mass-production methods and speeding up on better machinery with better arranged work, labour continues to work very long hours, but is less productive. In fact, the big spinning and weaving mills have become, in comparison with the general level in the East and the rest of Japan, the "Fords" of the East, and their labour cost—in spite of improved conditions in the dormitories, better food and so forth—is astonishingly low.

All this does not imply that labour conditions in even the model factories are ideal, only that work is so arranged as to extract the utmost possible labour from the operatives with the minimum amount of wastage from sickness during the years spent in the

factory. At the same time better ventilated and more spacious work-rooms, the neat, clean dormitories and the general modern conditions of labour, besides making greater intensity of labour possible, impress the foreign visitor and are calculated to make him believe that Japan has no longer any need to defend herself at Geneva against the accusations of rival capitalist Powers who suffer from her competition. Indeed, the visitor to Japan who is content with a quick visit to one or two of the big spinning-mills may perhaps come away with the idea that labour conditions in Japan are much less black than they have been painted—and he will go home and write glowing accounts of the "welfare work" carried on by the big companies and emphasise the fact that this raises their labour costs to the English level. Recent writers have been only too prone to accept the Japanese employers' statements about their high labour costs and marvellous welfare work without trying to verify these statements. As I show in Chapter VIII, the statement as to high labour costs is utterly false. In this chapter I shall try to give an account of labour conditions uncoloured by the rosy atmosphere created by the good dinner and *saké* usually given to the visitor during or after his inspection of a mill.

I was able, whilst in Japan, to supplement my own observation by talks with Trade Union representatives and with actual workers, and also by information supplied by those few missionaries who go among the working classes. The amount of information obtained from the latter was disappointingly small because, although they have unrivalled opportunities for meeting and talking to the workers and are about the only Europeans or Americans who can speak the language, they are usually too much afraid that the management will refuse them entry to the factory to dare to do more than sing hymns when they get inside.

It is well at the outset that the English reader should understand that the women workers are for the most part kept locked away from the world, and that, apart from a few hours' outing on their two or four rest-days per month, their life is spent between the work-room and the dormitory.

It is, therefore, very difficult to obtain any information about

labour conditions from anyone but the employer, and quite impossible to do so unless one stays long enough in the country to make acquaintance with Japanese people who can help one to meet workers, matrons of dormitories and others who know the true conditions. If one is suspected of being critical, it is very difficult to meet representatives of the shadowy Trade Unions which represent the interests of the workers, for they run the constant risk of imprisonment, and might be arrested at once if found having intercourse with a foreigner known to have labour sympathies. (I do not, of course, refer here to the General Federation of Labour.)

In spite of the difficulties, I was fortunate enough—partly through the assistance of the missionaries and partly through sheer good luck—to receive some really useful information from such persons as actual cotton-textile workers, an ex-matron of a factory now engaged in social work, Trade Union representatives, and factory inspectors who did not fully appreciate the necessity of hiding certain facts, or who indirectly gave away certain things usually kept hidden. Nor must I omit to mention the actual information which can be obtained, and the inferences which can be drawn, from news published in the newspapers when strikes occur, or when, for other reasons, factories are referred to.

I will start by describing conditions as actually seen in the big spinning and weaving mills, and in the next chapter will describe conditions in the smaller weaving-sheds where conditions have not changed so much in the last few years.

In the first place it must at once be admitted that conditions in the big mills have been greatly improved. It has been shown in the last chapter that the earlier system of treating girls in such a fashion that they nearly all returned home broken in health after one or two years led to the recruiting areas drying up in a few years. The wastage of human life was too great, and it became more and more expensive to recruit labour. On the other hand, the big spinning-mills had, by about 1921, or at any rate by 1923, made such enormous profits for so long a period that they could afford to accept the necessity of changing the system of exploitation.

The period of rapid accumulation of capital by crude methods could be abandoned, and America could now be taken as a model. They realised that it was becoming far too expensive to recruit girls for the mills, and that, however great the Government repression of the workers, strikes would occur—and they were wise enough to see that it would probably be more economical in the end to treat their workers better and get more work out of them. Urged by the international pressure exerted through the International Labour Office, they could even allow the passage of Factory Acts mildly limiting their absolute power over their workers. Their very comfortable reserves made it quite easy for them to build better dormitories, set up a hospital and a recreation club, and, in some cases, install more up-to-date machinery.

They began to give better food to their workers, even to raise their wages when the workers struck, and at the same time to shorten hours. Their labour force became slightly more contented, and, being better fed and housed, could be made more efficient. The number of workers per thousand spindles was steadily reduced and production increased, whilst, at the same time, strikes became fewer, and visitors representing countries which had complained of the unfair competition of Japanese sweated labour could be shown the beautiful new factories, the theatre, the lecture-rooms and the other cultural amenities provided by the benevolent Japanese employer.

Thus the Japanese cotton spinners put themselves in the enviable position of increasing their dividends and posing as philanthropists. At the present time they are gratified by the praise of nearly every foreign visitor who, seeing the baths and the club-rooms and the hospital, and being subsequently entertained at a regal lunch, forgets the sad faces of the tired little girls standing long hours at their monotonous tasks—and goes home and writes articles about the benevolent employers whose management of their factories is so efficient that they can spend enormous sums on welfare work and yet pay 35 per cent. dividends whilst selling their goods more cheaply than any other producing country.

I think it is clear that the big factories now consider it worth

while to give their workers enough food, of a plain sort, to maintain their strength, to provide healthier dormitories and to look after their workers when they fall ill in order to retain them and make it possible to force them to attend to more machines and work more rapidly. Work has been constantly speeded up in the last few years, as is witnessed by a comparison between the changing ratios between spindles, workers and production. One employer boasted to me of having increased the efficiency of his workers by 10 per cent. between October 1927 and December 1928.

Before July 1929, when night work was abolished, hours were usually ten, and two shifts were always worked. Usually the girls began work at six and worked till five in both shifts, with one hour off: thirty minutes for lunch, and fifteen minutes morning and afternoon, with corresponding breaks in the night shift. I must, however, note the fact that workers have told me that the rest periods other than the lunch hour are not fully observed, and that the total rest period is actually only *forty* minutes.

Four rest days per month were given by most but not by all the companies, and five by some. I have, however, found that what is counted as two out of the four rest-days is the necessary twenty-four-hour rest which is given when the shifts are changed over. For instance, a worker who has finished at 5 a.m. on the day when shifts are changed over will not begin work again until 6 o'clock the following morning. She will sleep during the morning of her day of rest, and can then go out in the afternoon—and sleep again at night. Thus these "rest days" are an unavoidable interval when shifts are changed, since the girls could not possibly work twenty hours on end.

During the first months when they are being trained, the girl workers earn 11d. to 1s. 1d. a day, according to the mill. At the end of six months they are regarded as fully qualified workers, and gradually advance to between 2s. and 2s. 9d., according to the figures given to me. The Government statistics give 1·18 *yen*[1]

[1] See footnote, p. 191, for average wage in spinning-mills in 1930, viz. 1·10 *yen*, according to the British Cotton Mission.

for spinners and 1·12 *yen* for weavers as the average earnings—equivalent at that time to 2s. 2d. and 2s. 0½d.

In my chapter on labour costs I give details of the amounts earned in the different departments of the mill and on a varying number of looms. For the purpose of this chapter we can consider the average as fairly represented by the figure of 1·18 *yen* given above; the average monthly income, therefore, is 30·68 *yen* —that is to say about £2 17s.

Throughout this chapter the *yen* has been taken as worth 1s. 10d., which was the usual rate of exchange in 1929, when I made investigations in Japan. The *yen* is now at par (2s.), but wages have been or are being reduced in Japan this year (1930) and earnings were reduced in July 1929 on the curtailment of night work for women. In the case of the Kanegefuchi, the Press reports stated that a reduction of 25 per cent. was being enforced as from April 1930. The other companies have no doubt followed suit and reduced wages considerably.

In spite of the changes in hours of labour and earnings which have occurred since 1929, the conditions described in this chapter remain substantially unaltered.

The girls are provided with food at a cost to themselves of 15 *sen* a day—or 4·50 *yen* a month. I have been told by managers and directors of mills that the girls' food costs the factory 30 *sen* a day, so that 15 *sen* has to be given by the management. I am, however, doubtful of the truth of this statement. Recently there was a newspaper article describing the researches of a Dr. Tadasu Saiki, Director of the Government Institute of Research on Nutritious Food. An account was given of the introduction of a standardised diet in factory dormitories in the Ehime Prefecture. I quote from this:

> Women operatives at the age of about twenty years require from about 60 to 70 grains of protein and from 2,000 to 2,200 calories a day. The investigation revealed that only five out of a hundred and sixty-six factory dormitories were serving food which contained more than 60 grains of protein. The food served by sixty-five factory dormitories contained only from 30 to 40 grains of protein, that by ninety-one dormitories contained from 40 to 50 grains of protein, and that by forty-five dormitories contained from 50 to 60 grains of protein. The amount of

calories was proportionately low. The cost of raw foodstuffs to prepare three meals for these dormitories is about 20 *sen*. Mr. Hashizume went about the task of studying the kind of foodstuff produced in that district, and finally succeeded in effecting a radical reform in the dormitory menus without raising the cost price.[1]

It is clear that 20 *sen* per day is regarded as the normal cost of food per worker. Admitting that the big factories give somewhat better food, I doubt whether the cost per head is much more than 25 *sen* in view of the fact that the enormous quantity of food they purchase decreases the cost. The famous Kanegefuchi Company, which is said to lead the way in "welfare work," keeps its own pigs, grows its own vegetables and makes its own *soy*—the sauce used for all purposes in Japan, from cooking to making pickles palatable.

But even if the food they provide in the big factories costs 30 *sen* a head per day, the girl pays 15 *sen*: so that there is only 15 *sen* to be added to her wage of 1·18 *yen*, making a total of 1·33 *yen* or 2s. 5½d., as against the English average of 4s. 10d. a day—and the English hours worked are 8.

As regards sleeping accommodation, this consists usually of no more than one and a half mats (a mat being 6 feet by 3 feet) in a room with eleven or fifteen other workers. Japanese people sleep on the floor, on bedding which is folded up in the daytime, and they have very little furniture—at most a looking-glass, a table and occasionally a chest-of-drawers. Bedding and clothes are kept in cupboards in the walls. It is probable that the girl's sleeping place in her peasant home was as small or smaller and less clean than the factory dormitory—but in the village she would be out of doors working in the daytime, not in the cotton-laden atmosphere of a mill. Nor would she spend half the month working at night and sleeping by day.

I have peeped through the one pane of visible glass in the dormitories and seen the girls of the night shift sleeping side by side under their *foutons* (heavy padded coverlets) on the floor. Usually they lie side by side, with the bed-coverings touching, in two rows, facing each other, along the side of each wall. A space of three mats, laid crosswise, separates their feet. The windows

[1] *The Japan Times*, April 3, 1929.

are close-shut, and there will be as many as ten girls in a space 18 feet by 15 feet.

Of course, even this is better than the conditions a few years ago, when the congestion was much greater, and when it was quite usual for the night shift to use the same dormitories as the day shift.

Baths, it is true, are provided every day. The Japanese are probably the cleanest people in the world, and baths are taken almost daily in the towns by the poorest people. The factory bath-room is like Japanese public baths—a big, open tank of hot water. Every one washes outside and, when rinsed, steps into the central tank. These baths are indeed the most pleasant thing one sees in the factory; but the cost per head cannot be very high: perhaps ½d., since the charge in public baths run for profit in Japan is only 5 *sen* (about 1d.).

Heating is almost non-existent—and this in a climate which in winter seems as severe as ours, except in the actual sunshine. The Japanese—even the well-to-do Japanese—are content to warm themselves in the manner of their ancestors at a *hibachi*: a china or wooden bowl full of ashes, with some lumps of glowing charcoal in the centre. One of these *hibachi* to oneself or for a couple of people can provide a tolerable kind of warmth if sufficiently large and if one sits close up to it. In the dormitories, however, one *hibachi* is provided for ten or twelve girls from the middle of December until March, although the cold is severe both before and after those dates. This one *hibachi* is, of course, totally inadequate, and one is not surprised to find that almost every girl has a cold and sniffs continually.

I have not seen even this primitive kind of heating in the lecture-rooms or in the meeting-room where some of the girls attend classes or receive Christian instruction. On several occasions I have sat through two hours of a class shivering in a warm, woollen overcoat, whilst the girls around me had only their cotton *kimonos* and looked blue with the cold. Here again, of course, it may be said that conditions in the girl's home are no better; but at home she does not come from the heated atmosphere of the mill into such cold rooms. I found the Japanese winter very trying, and I

have dwelt on the absence of proper heating to show the extremely low standard of living in Japan, and to indicate how little "heating" costs the employer.

Similarly with food. The Lancashire reader who hears of food being provided by the management at a cost to the girl of less than 3½d. a day receives an impression that the employer spends vast sums on feeding his workers, and calculates this at a very high figure in an assessment of Japanese wage costs. But actually, as I have shown, the employer—even on his own showing—contributes only another 3½d. per head, and in fact probably a good deal less. What it amounts to is that the girl is given rice, a little vegetable and pickles three times a day, accompanied by very weak green tea and a small bowl of bean soup. She also gets fish about three times a week, and very occasionally a little meat.

After a strike in 1927 at one of the Toyo Company's mills in Osaka, the workers were given curried rice *once a month* as one of the gains of the strike. Even so, as the worker who told me this added, " it consisted only of two small lumps of meat!" Nor does the fish given mean a substantial piece of fish such as a whole herring; it means—as I myself have seen—a small piece, three or four inches long, eaten as a sort of flavouring to the rice. It is not surprising to hear that the girls spend nearly all their pocket money on cakes and sweets to supplement their dull diet.

There is, as can be seen, an almost total absence of fats, which probably in part accounts for the terrible prevalence of consumption in the factories. In fact, it is quite obvious that the diet of the poorer Japanese—which is the diet provided in the factories—is not sufficiently nourishing for the strain of modern industrial conditions. It is not surprising that most girls cannot stand the strain of factory life for more than two years, and that the average length of their stay in the mills is *under a year and a half*. I have also been told by an ex-matron of a factory that few Japanese girls can work their full twenty-six or twenty-eight days a month in the factory, but that they are forced to take some days off sick, in spite of their desire not to lose a day's pay. I have been told by managers of mills that 5½ per cent. of the women workers are sick on an average all the year round. Sixty per cent.

of full wages are paid during sickness, but if a girl gets seriously ill the management send her home. This is one of the grievances of the workers, and a demand frequently put forward during strikes is that sick workers shall not be sent to their homes. Naturally the girls do not want to be sent home when they are very ill in view of the poverty of their parents.

In visiting the hospital of a factory I have been struck by the sight of the rows of girls—as many as nineteen in one room—lying with white faces, side by side, upon the floor "in bed." Of course, as I have already said, the better factories realise the losses entailed through sickness, and the percentage of absentees has been greatly reduced of recent years by the provision of better food and housing and of shorter working hours. None the less, the conditions remain anything but ideal, and the fact that the girls find the life too wearing is evidenced by their rarely remaining more than eighteen months in the mills.

I found in one mill that the average stay was a year and a half, and the amount advanced to the girls' parents before they started work was 30 *yen*. This "advance" was said to be deducted at the rate of 2 *yen* a month, so that the girls clearly stayed *just long enough to wipe out their debt and pay their railway fares home*. This in spite of the fact that if a girl stays out her two years' contract at the mill she is not required to pay back her railway fare.

It is quite clear that the girls hate the life, and go home to their villages or try to get other employment as soon as the debt is paid off. The various companies adopt all kinds of methods to try to keep the girls at the factory for the two or three years down in their contracts—from intimidation and the forced retention of their "savings" to the granting of bonuses at the end of the full period. They are even known to withhold letters and telegrams from a girl's home, summoning her back on account of a parent's sickness or death, on the ground that such letters are frequently not genuine but are devices adopted to help her to leave the factory.

Although the contracts with the parents can no longer be legally enforced (though if money has been advanced the parents'

property can be distrained), many young girls do not realise this, and are therefore detained against their will: that is to say through fear even when not through economic necessity—the desperate need of their parents for support from their wages.

Before proceeding to give further details of wages and how they are paid, some account must be given of the "welfare work" in the big factories. A great deal has been said about the welfare work done by the big companies. Recently visitors to Japan have written glowing accounts of the hospitals, the *crèches*, the lecture-rooms, the education given to the workers and so on. They have made out that the employers spend enormous sums on the provision of these amenities which are classified as welfare work.

I will describe separately the various items.

Each large mill has its hospital, its doctor and nurses—and this is always shown to one with great pride. Now in the first place these hospitals are absolutely necessary, since the girls are so hard-worked and so insufficiently nourished that it certainly pays the employer better to keep a girl in hospital with reduced wages till she is strong enough to work again than to pay her fare home and recruit a substitute. In the second place the workers themselves contribute to the upkeep of the hospital through their Health Insurance contributions of 2 per cent. of their wages. Lastly, it must be borne in mind that medical attention, sanitation and other necessary services provided by the big companies are in England and other advanced Western countries provided by the municipalities. In other words, social services are practically non-existent in Japan, so the employer has no rates to pay. The British manufacturer's rates and his Health and Unemployment Insurance contributions are certainly a heavier financial burden than all the "welfare work" of the Japanese mill-owner.

As regards the actual conditions in the hospitals, although they are clean (like most things Japanese), there is obvious overcrowding. Such missionaries as try to work among the factory girls say that, although they are allowed to hold evening religious meetings in a good many of the factories, they are not allowed into the hospitals because conditions are too bad and also because some of the workers are suffering from venereal diseases.

The missionaries no doubt concentrate too much on the "immorality" in the factories consequent upon the herding together of large numbers of girls whose lives consist of little more than working, eating and sleeping. It is quite easy to believe that the men workers—and especially the foremen—have a good deal to do with the girls, who must find it very difficult to resist any commands given them by foremen who have such complete authority over them. Moreover, a life consisting entirely of hard work, with no recreation except lectures on ethics or sewing lessons, with a rare afternoon or evening spent in the town, *must* lead many girls to try to get what pleasure they can—either inside or outside the factory. Matrons have told me that when the girls do get out of the factories for a few hours they have usually no friends to go to and nothing to do but wander about, so that there is a good deal of "immorality."

Many girls become prostitutes when they leave the factory. This may be because they cannot find any other means of subsistence, or because they have already begun the life whilst at the factory. According to a police investigation made in Tokio, 70 per cent. of the unlicensed prostitutes in the suburbs of the city were former factory girls.[1] Whatever exaggerations may be made on this count, it is no doubt true that the conditions of the girls' lives are responsible for some venereal disease as well as for tuberculosis and meningitis. In addition to the large toll of victims of tuberculosis in all the factories, there are fairly frequent outbreaks of typhoid in the worst factories where the water is bad.

The missionaries maintain that the medical arrangements are not good. Naturally in the factories of some companies conditions are very much better than in others, and one cannot generalise from information given by missionaries connected with one or two. It is obvious, however, that, since the doctor is paid by the management and appointed by them (although the workers' contributions partly keep up the hospital), his interest is to please the company rather than to treat his patients sympathetically. Hence the object of the doctor is to get his patients back to work

[1] *Japan To-day and To-morrow* (1928), p. 16.

as quickly as possible, whatever the consequences to their health in future years. In the case of consumptives in particular, little care is given to them so long as they can be forced to work out their two or three years, even if they die soon after they return home.

The foreign visitor is kept away from the factories with bad sanitary or hospital arrangements—as I was from one of the big factories in Osaka which I tried to visit, having heard a good deal about it from my missionary acquaintances. Evidently doctors are not employed in some of the hospitals, and complaints are made of the bad food and the absence of isolation wards. (See end of chapter, where the demands of the workers during a strike are reproduced.)

Some married women are now employed in the factories, though they still form a very small proportion of the total number of workers, but *crèches* for their babies are not generally provided. In my inspection of factories, accompanied by the manager or other representative of the company, I was never once shown a *crèche*, although I was once told of the existence of one.

The only *crèche* I saw was one in a mill in Osaka belonging to one of the largest companies, which had been started by a missionary and subsequently taken over by the factory. I went to see it with the English missionary who had started it, and was still allowed to visit it. She told me how great a disappointment it had been for her to have her well-run *crèche* taken over and mismanaged by the factory, which refused to provide enough money for it to be run efficiently and well.

It was indeed a dreadful place. Some fifty little children were herded together in two small and very dirty rooms. The matting was torn and filthy—in contrast to the cleanliness of even poor Japanese houses. The children themselves had on very soiled clothes, and there was no kindergarten apparatus or anything at all to keep them amused. There were babies a few months old and children up to seven years old. There were only three women to look after the children—or rather two women and a very young girl. Only one of the women was trained. Their hours were from

5 a.m. to 5 p.m.—and the trained woman, who spoke to us, said it was impossible to look after the children properly without equipment, especially having to be with them twelve hours a day. She also told us that eight or nine of the children in her care died of measles each year. The mothers paid 5 *sen* a day for leaving their children at this *crèche*.

The conditions there were bad enough—but at least there *was* a *crèche*.

It may be that the other factories I visited also had *crèches*, but that, since they were as dirty and crowded as this one, they preferred not to take visitors to see them. I might mention here that this factory refused at the last moment to let me see round their premises, although they had previously given my missionary acquaintance permission to bring me. Unfortunately they had learnt that I was not a casual visitor but someone investigating conditions in the cotton industry, and this probably made them send a messenger to us at the last moment with some excuse. This incident illustrates the difficulty of seeing the real conditions in Japan. One is allowed to see only just the particular factories which are best equipped and can make the best show.

I asked, whilst in Osaka, to see one of the Toyo Company's mills—this company having the largest number of spindles of any company in Japan. It has several factories in Osaka—but I was told it would be "dangerous" for me to visit these. Pressed as to what the danger consisted in, something was murmured about rebuilding going on. I was sent on a five-hour railway journey to see one of the Toyo Company's mills in Yamada rather than let me see one of the Osaka ones. No one not absolutely blind to the efforts of the Japanese employers to hide the real conditions in their cotton industry from the foreign observer could fail to appreciate the significance of this refusal. Subsequently I met workers from one of the Toyo Company's factories in Osaka, and was able to some extent to appreciate the difference between fiction and reality in the cotton factories!

I now come to the "cultural work" carried on. It is quite true that some classes are held for the girls. Those who can hardly read or write at all are taught at least enough to enable them to

understand their work better.[1] Then there are in some factories "High School" courses for the few who will pay a small fee and are strong enough to spend three hours, five evenings a week, studying—after having risen at 5 a.m. and left off work at 5 p.m. How far a real education is given, I am not in a position to judge. All I have personally seen of the "High School" course is its class in ethics. Some factories allow the Y.W.C.A. to provide the teachers of ethics, believing that the Christian ethic is useful in keeping people submissive.

"Ethics," indeed, seem to be taught to all the girls in the up-to-date factories: ethics, presumably, consisting of the rules of good conduct—obedience, hard work, meekness and submissiveness as the supreme feminine virtues, and loyalty to Emperor, employers and parents as primary duties.

In one factory I visited, belonging to the Dai Nippon Cotton Spinning Company, which has strong Buddhist affiliations, the director who took me round told me that they had a thirty-minute service for the workers every morning, and found that "it put the girls in a gentle and obedient mood," so that they were always obedient to the foremen. He then went on to tell me how much he admired Mussolini, that the interests of Capital and Labour were one, that no one in the factory was allowed to belong to a Trade Union and so on.

There is little doubt that a large part of the "cultural work" undertaken by the big companies consists of such kind of teaching as they hope will keep their workers from struggling to improve their conditions, and which it is hoped will counteract the "Marxism" which is generally considered to have enormous influence in Japan.

Similarly as to the other subjects commonly taught in factories: sewing, "flower arrangement," tea ceremony and other etiquette. "Flower arrangement" is held to be an art amongst the Japanese, and is taught to girls of middle and upper class families. It is quite clear that, together with the famous tea ceremony and etiquette, it is designed to give to the girls a middle-class outlook.

[1] There are about 6 million illiterates in Japan. Moreover, many of those who are set down as being literate only know a few signs.

If they can learn these arts and save a little money, they can hope to get husbands of a higher class than would otherwise be the case. Many of them go home with little saved and ruined health, but all must hope to elevate their social position in this manner. All the teaching is thus designed to prevent the girls realising their common interests as wage-earners and to make them "middle class" in outlook.

The Japanese employer, in fact, disburses some small sums for the "welfare" of his employees in the same spirit, and with the same hope, as the reactionary British employer who pays money to the Anti-Socialist and Communist League, or helps to start a non-political Union, or supports a church or a mission to the poor. Only, of course, the British employer cannot put these sums down as labour cost in *his* balance sheet.

As regards the girl's actual wages, these are not paid to her outright, either weekly or monthly. The system in all the mills is for the management to give the girls a small sum as pocket money, to remit some to their parents, to deduct charges for food, Health Insurance, etc., and to "save" the rest—when there is any—to hand over to them when they finally leave the factory.

The amount sent home varies, of course, according to the girl's debt and her earnings, and may be 5 *yen*, 12 *yen* or 15 *yen* a month. In no case have I been told of girls drawing more than 5 *yen* a month to spend. The employers say that she is free to draw more if she wants to, but the workers I have spoken to—and also social workers and Trade Union representatives—insist that she cannot draw more. In fact, one of the gains registered by the strike which took place at one of the Toyo Company's mills in Osaka in 1927, was the right to draw 5 *yen* instead of 3 *yen* as before.

It is usual for the recruiting agent representing the company in whose mill the girl is to work to arrange with her parents how much shall be sent home to them each month. It is all part of the transaction by which the girl is still virtually sold to the factory for a certain period.

The factories each have their own shop on the premises from which the workers can buy on credit. The employers tell one that the shop is merely for the workers' convenience, and that

goods are sold there at less than the usual retail price.. The impartial observer, however, cannot but perceive that such purchasing on credit helps to keep the girl indebted to the company and hence unable to leave the factory. Although it is all part of what some foreign visitors have praised as "welfare," in England we should call this system one which would contravene the Truck Act. Workers have told me that if they want to draw any part of the wages they have earned beyond their 5 *yen* monthly, they must tell the matron exactly what they want it for; if it is for a new kimono, the matron will first consider whether the purchase is needed, and then decide whether or not to allow the girl to have some of her own money. Nothing could illustrate more clearly the subject position of these girls who have neither rights nor liberties.

I have already said that what balance remains after money has been sent home and deducted for food and Health Insurance is "saved" for the girl by the company. From what I have been told the wages of a girl earning the usual 30 *yen* a month would be divided somewhat on these lines:

Deducted for food	4·50
Health Insurance (2 per cent. of wages)..	0·60
Drawn as pocket money	5·00
Sent home	12·00
	22·10
Deducted for repayment of debt ..	2·00
	24·10

The remaining 6 *yen* monthly (if she is earning her 30 *yen* a month) would be credited to the girl by the company—less any amounts deducted for purchases at the company's shop, such as overalls, clogs, powder, sweets and soap. If the girl sends less than 12 *yen* home, more is "saved" for her. During the first six months or so, when she is earning only 50 *sen* to 80 *sen*, there is, of course, nothing left to "save." Interest at the rate of 7 or 8 per cent. is paid by the company on the girl's savings, and the total amount saved, plus this interest, is handed over to her when she leaves.

Ex-matrons and workers have told me that often the girls cannot get the company to pay them their savings when they wish to leave before the expiry of their two or three years' contracts, though legally the employers have no right to withhold the money.

It will be readily understood that these girls, brought up from the country, with no knowledge of even such laws as do exist for their protection, are almost defenceless in their relations with their employers. Although their contracts are not binding by law, they often do not realise this. Moreover, in spite of the law, the police openly support the employers by capturing and returning girls who run away. I have been told at the International Labour Office here—an organisation which in Japan, as elsewhere, is on good terms with Government and employers—that the police bring back girls who have run away, just as they help their owners to recapture girls who have run away from the brothels. It is said that the police should not do this; but, as one Japanese naïvely put it: "Of course, the power of wealth, of 'capital,' as they say, is strong, and the police naturally do what the rich men desire."

This police aid to the employers is less avowed than formerly, and if a girl who runs away from a factory or a brothel stands firm (and is not kidnapped by hired roughs), she can escape. But even if she leaves, she dare not return home if the amount borrowed from the company has not been repaid: she knows that her father's little bit of property may be distrained on, and that therefore he will insist on sending her back. It would seem, however, that in the big cotton factories actual running away has become infrequent owing to the improved conditions and the increasing difficulty in getting other employment.

As stated at the beginning of this chapter, it is quite clear that the big employers have found it pays better to provide tolerable conditions than to have their girls continually running away—and, moreover, that the present "hard times" in Japan have made it easier for them to get labour. The conditions which existed as recently as four years ago, in a fairly large spinning and weaving factory near Kyoto, and which must have their counterparts in

many small factories to-day, were described to me by the woman who had been matron as follows. She had to be continually on the look-out for girls running away, and her life was a terribly anxious one for this reason, there being only two matrons for four hundred girls.

One night twenty girls escaped by making a hole through a wall of their room—their windows were, of course, barred. All the girls were in debt to their employer, their parents having usually borrowed as much as 100 *yen*, and the girls having promised in their contracts to work till the debts were paid off. So much was deducted each month against the debt and, since most of them earned only about 80 *sen* a day, and spent a good deal on cakes and sweets to supplement their bad food, and on face-powders and clothes and footwear, which wore out quickly in the factory, there was seldom anything left to save. Only one in ten sent money home.

The dormitories were like pig-sties, the same rooms being used by the day and night shifts, and only one-mat space being provided for each girl. Consumption was rife, and after three years a girl was always unfit to work any longer. The food was edible but poor: rice and some vegetable for each meal, with fish once a week and tinned meat once a week. For this they paid 12 *sen* a day.

When girls ran away the factory's representative would go to their parents and try to distrain their goods, fights frequently taking place.

The girls naturally dared not return home, and so they either got work at another factory or became prostitutes or café waitresses.

The woman who told me all this said she did not know whether conditions were still the same at this factory, since she had left nearly four years ago. Since it was at an out-of-the-way place, she thought probably things were not much changed.

The girls worked in two twelve-hour shifts with one hour off for meals, earning from 50 *sen* to a maximum of 1·90 *yen*, but the majority received 80 *sen*.

I have cited the details given me by this Japanese woman as affording some idea of the conditions which used to exist in almost

all factories, and which it is almost certain still exist in many of those not shown to visitors.

That girls are still forcibly detained at work in the spinning-mills is witnessed by the following incident reported in the Japanese Press while I was in Tokio:

Thirteen young factory girls of the Katakura Spinning Mills at Taira-machi, Fukuoka Prefecture, attempted to escape from alleged cruel treatment by their employers Sunday and Monday nights. They were caught by the factory officials while gathered at Taira railway station Monday night.

A wound which one of the girls received on her leg when she and her companions climbed over the ten-foot iron-plate wall around their so-called dormitory buildings in making their escape has caused the police to look into the conditions of their employment.

It has been discovered that two hundred factory girls under age have been employed on a contract for ten working hours a day, but have been forced to work twelve hours under rigid surveillance.

Aoki, superintendent of the factory girls, has been taken to the Taira police station for a detailed investigation.

It is true that the conditions I am describing in this chapter were those existing before the limitations on night work for women which came into force in July 1929. But this limitation of working hours has not affected conditions nearly so much as is imagined in England. Although the law which came into force then forbade night work for women between 10 p.m. and 5 a.m., "General special permission" was at once given to continue work up till 11 p.m.—a typical Japanese expedient for appearing well in foreign eyes and yet carrying on as nearly as possible in the same way as before.

This means that the number of hours which can be worked is eighteen. Most mills have accordingly adopted two nine-hour shifts, with half an hour off for meals instead of the previous hour. The usual plan adopted to meet the new conditions is to work one shift from 5 a.m. to 2 p.m. and the other from 2 p.m. to 11 p.m., with a half-hour off for a meal in each shift. The loss of one and a half hours per shift is in large part made good by decreasing the number of monthly holidays from four (or sometimes five) to two—and by speeding up production or setting the operatives to attend to more machines.

It should be remembered that by far the greater part of the workers in Japanese mills are women (about 80 per cent.), and that they are all paid on piece-work rates. The men employed, on the other hand, are almost all paid by the day. The men are regarded as the dangerous element, likely to start agitations if their monthly earnings are reduced. Most mills, therefore, placated the men by paying them the same daily wage as before, in spite of the reduced hours of working. In the case of the girls —who are more likely to accept reductions without much protest, being completely under the control of the management by reason of the dormitory system—the same piece-wage rates were maintained, whilst they were at the same time urged to increase their hourly earnings by attending to more spindles or looms and generally by greater efficiency.[1] Only one company announced its intention of increasing piece rates to allow of the same earnings per month.

The advantages to the employers of the dormitory system, which places their women workers entirely in their control and makes the organisation of Trade Unions amongst them almost impossible, could not be more clearly demonstrated. The Japanese newspapers referred plainly to this "strategy to prevent labour disputes," and pointed out that the companies would have reduced the wages of the men operatives paid by days "but for their being conscious of the modern development of the Labour Movement in this country." Moreover, the reduction of rest-days per month to two, limiting them to the fortnightly change-over of the shifts (which anyhow necessitates a rest), had the effect of reducing the effect of the limitation of night work to a 9·8 per cent. shortening of the working hours per month. In the case of the few mills which had previously given five days a month, the effect of the change was less than 5 per cent.

As a matter of fact several of the big mills reduced their working hours several months before July 1929, for it was long ago realised that a shortening of working hours renders possible a greater

[1] To what an extent the management was able to increase the intensity of labour when hours were reduced is shown by the fact that average earnings for women in the following period remained at 1·10 *yen*.

intensity of labour where the machinery and general equipment of the mills are good.

The net effect of the change for the women workers is to have made their hours of labour far more arduous than before, and somewhat to have reduced their earnings. Furthermore, the cotton companies hastened to make arrangements for curtailing the liberty of the girls during their extra hours of leisure in order to ensure that those hours should be utilised for keeping them fit to work hard. The mill-owners, indeed, regard the girls as their slaves—to be fed and exercised sufficiently for the utmost possible amount of work to be got out of them, and to be given no liberty at all, even when not actually working. The *Osaka Mainichi*[1] reports as follows:

Another important factor which has significant bearing upon the efficiency of the operatives is the utilisation of the leisure hours of the operatives which increases as the result of the shortening of the working hours. After nine hours' work and eight hours' sleep the operatives will have seven hours on their hands. Estimating that it takes about two hours for eating, taking bath, preparing to start work, etc., they have five hours to put in somehow.

Some of the spinning companies have hitherto opposed the abolition of the midnight operations through the fear that if such leisure hours be given to the operatives as the result of the shortening of the working hours, the operatives would invariably fail to utilise the leisure hours properly: that is, they would either take on some sort of side job and overwork themselves, or abuse the leisure hours somehow or other and tire themselves, thus affecting their efficiency during their regular working hours.

With this in view the Toyo Cotton Spinning Company has invented a plan of reducing their free hours by two hours to five hours; the plan is that the girls in the dormitory must take part in two hours' collective games or cultural engagements, such as schooling, teaching tea ceremony or flower arrangement, moral training, etc.

The Nisshin Cotton Spinning Company has worked out a programme of giving lessons of middle-grade schools to those stopping at the dormitory, and to the male operatives supporting a family a certain area of field is offered at their disposal, and they are encouraged to do the farming.

The Dainihon Cotton Spinning Company has not announced any proposal in this connection, but it is understood that the company will also find some way of shortening the free hours of the operatives similar to those adopted by the foregoing two companies.

[1] This newspaper and the *Asahi* have over a million circulation.

The spinning companies have hitherto paid attention as to the engagement of the free hours of the operatives stopping at the dormitory, and left those operatives attending the mills from their own homes alone; the Nisshin Cotton Spinning Company's plan of encouraging farming is something new, but there is no knowing to what extent the proposal will be welcomed by the operatives, in view of the fact that they would rather work to earn extra income than rest themselves.

It is obvious from the conditions described in this chapter that the girl workers in the mills have little chance of bettering their conditions by organised co-operative action. Trade Unions are, of course, not allowed by the "benevolent, patriarchal" employers —and, although in a few factories a fair proportion of the workers are members, they have to keep it secret.

When a strike occurs among the men and the girls join in, it is usual for the management to lock up the girls in their dormitories and so prevent their communicating with the men outside. Even if they escape, they are in a most helpless condition, as their homes are miles away and their savings are held by the company. Nevertheless, on many occasions the girls have managed to maintain solidarity with the men and stood out with them for better conditions, or to resist a worsening of conditions.

Whilst the employers use methods of intimidation and actual force against the girls, the police are called in to deal with the men strikers, and usually arrest their leaders and try to force them back to work. Sometimes, as in America, roughs are hired by the company to baton the workers.

In the case of a strike at the Tokio Mousseline Company's plant which occurred in April 1919, it was reported in the Press that the windows of the dormitories where the girls were locked in had been whitewashed to prevent their communicating with the men outside. Previous to this, the locked-in girls and the men outside had sung revolutionary songs together—and this had had to be stopped.

It would not perhaps be entirely relevant to this work to give a full account of the whole position of Trade Unionism and the use of the police against strikers, but the above few details give some conception of the weak position of the workers and their lack of rights. Here I am concerned to show how the dormitory

system benefits the employers and weakens the girls in their struggles to improve their conditions, but the oppression of the workers by the State should also be made clear. There is no Habeas Corpus in Japan. Anyone can be arrested by the police without warrant and kept indefinitely "under examination" at the police stations. Third-degree methods are commonly used by the police to extract "confessions" and prisoners sometimes die under torture. It is a normal police procedure to arrest not only strike leaders and "labour agitators," but all "dangerous thinkers" upon whom they can lay their hands. "Dangerous thinkers" include not only Marxist intellectuals, but even University students who form a group for the study of Sociology. At such times as the Coronation, or when the Mikado visits a locality, the police round up any suspected "dangerous thinkers" and militant labour leaders on whom they can lay their hands, and keep them at the police stations for weeks, or months, even if they are not tried and condemned to long terms of imprisonment. It can therefore be imagined how difficult and dangerous is the struggle of the workers to win higher wages or better conditions. In spite of this the men, who live freely outside, are feared: the girls, who live in and cannot organise, are mercilessly exploited. There is little wonder that the Japanese master cotton spinners prefer to recruit their labour from the countryside rather than to make use of the labour available and unemployed in the towns. Nevertheless, in the big towns like Osaka, Tokia and Nagoya it is not always possible to prevent the girls being drawn into Trade Unions in spite of the shortness of their hours of contact with the outside world. As indicated above, they are sometimes drawn in by the men workers; or the few married women employed in the factory and living outside stir the girls up to organise to demand better conditions. When this occurs the manager of the factory writes to the girl's parents—or even brings them up to the factory if necessary—threatens that their daughter will have to leave and they will no longer get their 12 *yen* a month from her wages, tells them their daughter has come under the influence of dangerous Radicals and so on. The parents—often not yet freed from feudal sentiments—terrified and fearful of losing this monthly sum of

money, then bring pressure to bear upon their daughter, and she has to leave the union.

The following list of demands put forward by the strikers at the Toyo Spinning Factory at Shikanjima gives a vivid picture of the typical grievances suffered by the Japanese cotton workers. Some of the demands are for the most elementary rights and conveniences. Besides the wages clauses the whole amounts to a general demand for tolerable living conditions: freedom of movement, proper medical attention, a certain amount of general consideration and the right to belong to their Union.

(1) To re-employ Olcamura Denshiro, Fujino Konichi and Murakami Washiro, three workers recently discharged.

(2) To change Rule No. 61.

(3) To raise the girls' wages to their former amount.

(4) To cease the compulsory sending of the girls back to their homes.

(5) To announce the amounts of dismissal and stopping allowances.

(6) To recognise the Union.

(7) To raise the wages of every worker at least 5 *sen* twice a year.[1]

(8) To reconstruct the dormitory system to provide for
- (*a*) Freedom to leave the building;
- (*b*) Freedom to meet guests;
- (*c*) Improvement in the health provisions;
- (*d*) Each girl to have at least two mats' space apiece;
- (*e*) The prevention of petty thieving.

(9) Improvement in the food:
- (*a*) Choice of food-materials;
- (*b*) Enlargement of the dining-hall;
- (*c*) More cooks;
- (*d*) Health provision.

(10) Increases in the extra wages for
- (*a*) Perfect attendance; no absences from the factory;
- (*b*) Night work;
- (*c*) Family allowance to the very poor;
- (*d*) Help in the house rent;
- (*e*) To divide up the wages of absent ones among those present.

(11) To elect a committee on discipline from among the whole body of workers.

[1] Since the girls get only 55 or 60 *sen* when they begin work, this demand shows what large numbers must be earning less than the 1 *yen* or thereabouts given as the average wage.

(12) To improve the hospital:
  (*a*) To provide specialists (physicians);
  (*b*) To increase the examination hours and provide hours for night workers;
  (*c*) To improve the food of the patients;
  (*d*) To provide isolation wards;
  (*e*) To move the hospital rooms to a quiet place.

(13) Improvement in Health Insurance:
  (*a*) Reduction of the cost;
  (*b*) Freedom in the selection of examining physicians.

(14) Provision for the prevention of accidents.

(15) To lend umbrellas to the workers in case of rain.

(16) Improvement in the day-nursery:
  (*a*) To treat the children kindly;
  (*b*) To permit the mothers to nurse the babies out of regular hours when the babies are sick;
  (*c*) Improvement in the health provisions.

(17) To have a social gathering twice a year.

(18) To give full wages at special Factory Holidays.

(19) To deliver telegrams immediately upon receipt at the factory.

The elementary nature of many of these demands gives an insight into the restricted lives and dependent position of the girl workers, and the extreme discomfort and lack of ordinary human consideration from which they suffer at the hands of their employers.

The majority of the girls in the mills are very young, having come straight from the elementary school to the factory at the age of twelve or fourteen.[1] They know little of their rights. They know they have been contracted to the factory, and frequently believe they must stay out their two or three years. Moreover, their parents are in bitter need of their earnings: there is the threat of starvation at home to keep them at work, however bad the conditions imposed upon them. Only when they have been a certain time in the factory do they dimly begin to realise the need to combine with the other girls and the men to improve their conditions. When they are fully conscious of this and ready to act, it is frequently the case that they are already worn out in health

[1] Although they are supposed to be at school till fourteen and not to be employed in factories before fourteen, there are many cases of exemption when the parents' economic position is such as to necessitate their going to work sooner. Moreover, according to Japanese reckoning, a child is one year old when born—so what is fourteen to them is thirteen to us.

and their contracted period of work is up; they go home, and a new lot of little serfs takes their places.

The following song, which is a translation of one sung by the girls at their work, gives perhaps some slight insight into the thoughts and feelings of the little girls locked up behind the great walls of the big mills:

The cherry blossoms are falling, but next year
April will come and they will bloom again.
Alas! when will my blossom-time come?
There is no time for my heart to blossom!

Our home is dark with poverty:
Though I am only twelve years old
They sold me to a joint-stock company;
I slave in the Factory for a few pennies!

But my heart has remained clean:
The Lotus Flower blossoms even in a swamp;
When will my heart, like the Lotus Flower,
Bloom on its own high stem?

I am a working girl; a poor little bird!
I have wings, but cannot fly:
There is the sky, but I am in a cage;
A bird with broken wings.

The flowers will bloom in the month of March:
Three weary years I have been a slave;
In the Autumn I shall return to my own land,
No longer fit enough for the Factory!

YOKO-NO-AISH.[1]

[1] *The Miserable History of the Women Factory Workers*, by Wakizo Hosoi, Tokio, 1926.

CHAPTER VII

LABOUR CONDITIONS IN SMALL WEAVING-SHEDS

HAVING described the conditions in the large and medium-sized spinning-mills which do weaving as sub-work, I am now concerned to give some details of the working conditions in those innumerable small weaving-sheds found in so many different parts of Japan.[1] The factories employing hundreds or even a thousand or more workers, belonging to the big companies which are so prominent in the Japanese cotton industry, are the only ones usually shown to the foreigner. But, as shown in Chapter IV, much of the cotton cloth exported is woven in small sheds, and it is therefore necessary to know something about the conditions of labour prevailing in such "factories."

The assistance of certain Japanese factory inspectors, and that of a large firm of agents for machinery in Japan, enabled me to visit a number of small factories in various parts of Japan under comparatively favourable circumstances for seeing the actual conditions existing. The places visited include Osaka, the Sakai and Kishwada districts, Nagoya, the Saitama district north-west of Tokio and the Hakade district.

In almost every place I found a fairly large proportion of the workers in the weaving-sheds living at home and continuing their work after marriage, and this proportion appeared to be growing. The small manufacturers who have slack and busy times, and whose resources are very limited, naturally prefer to employ workers who live at home and can be dismissed when trade is bad; whilst the growing pressure on the land and increasing poverty of the majority of the peasantry mean that in almost every district married women as well as girls are glad to be able to work in the factory. Clearly the hand-loom weavers, who

[1] Under "small" are included not only the tiny factories employing ten to twenty workers, but also some larger concerns with a hundred or two hundred looms.

still exist in fairly large numbers,[1] are gradually coming to work in the small weaving-sheds instead of in their homes—although there are, I found, quite a large number of men and women who weave cloth at home on their hand-looms for a small manufacturer who also employs women on power-looms in a small factory. (In the woollen district of Ichinomiya (near Nagoya) some of the peasants hire power-looms to work in their own homes, doing weaving at a charge for a small manufacturer or merchant. This may also be the case for a certain amount of cotton-cloth production.)

There is accordingly a very wide distribution of these weaving-sheds over Japan for the purpose of securing the local peasant labour, but since a sufficient supply of labour is rarely available in one village, small town or suburb, some girls are imported from remoter places for a year or term of years. Hence in all the sheds I visited in and around Osaka, Nagoya and Tokio there have been some grown-up women weavers (or girls) living in their own homes and coming to work daily, and some apprentices living in the employer's house; the latter, for the most part, would be found engaged on the subsidiary processes, such as winding at a very low wage—but, of course, in some cases where more contract labour was employed they would be weavers also.

The organisation of labour, the type of labour employed and the conditions of work appear to be very similar in the cotton and in the older silk industry, except that, on the whole, the old forms and methods are more prevalent in silk-reeling and manufacture; far more work is still done by hand in the silk industry. Yet between the production of silk and that of narrow-width cotton cloth for home consumption there is very little difference in method, wages and conditions generally. Where such work is done for export—as in the production of the minor kinds of wide cloth such as sateens, flannelettes, crêpes, etc.—the old domestic industry and very small power-loom factories are slowly disappearing in favour of larger enterprises. Nevertheless, as related in Chapter IV, I found a most interesting and apparently successful attempt at

[1] There are about 86,000 hand-looms in Japan employed on cotton manufacture, according to the latest figures. In 1922 there were 165,000.

co-operative purchase of raw material and marketing of the finished product amongst the small cotton-crêpe makers not far west of Tokio.

The widespread use of electricity in Japan enables the very small, semi-domestic concerns to survive even in the manufacture of some types of goods for export—until a sudden fall in prices or a sudden rise in the price of yarn causes their bankruptcy. Even after that they often continue to work on commission for a merchant who may be the agent of a big spinning and weaving company or an intermediary.

The organisation of the weaving industry varies greatly from place to place, and different systems of hiring labour may be found even in one place. For instance, at Kawagoe, one and a half hour's journey north of Tokio, I found that in the same sheds girls were bought for a year—i.e. their parents were paid a lump sum down in advance for their services for the year—and other workers were paid by results. However, all agreed that previously the general system had been to buy girls for a year or two years—but that more and more sheds were now adopting the modern system of payment by results since better work was obtained that way.

Of course, it is a well-known fact that slave labour is less productive than free labour. These girls whose parents have contracted them out have obviously no interest in their work: they can only be driven. Such crude methods of compulsion are less easy to apply nowadays. Even those employers who retain the old system now try to increase output and efficiency by giving the girls rewards in the form of pocket money according to the work done.

My visit to Kawagoe was one of the most interesting I paid in Japan from many points of view. I will start with an account of it because the conditions there were less advanced than in other places I have seen, and therefore historically prior, so to speak.

I was taken from Tokio by the Chief Factory Inspector, a young man to whom I had been introduced, and who, having spent six months studying at the London School of Economics, was very friendly.

My first surprise came at the station, where we were met by several people from the Prefectural Office,[1] including the local Factory Inspector and a policeman. The sight of the policeman made me think that the authorities had become suspicious of me, as I was told they would if I visited factories and showed interest in labour conditions. However, my fears were groundless: the presence of a policeman, as I discovered on subsequent visits to other districts, is normal; there are hardly any factory inspectors, and so the ordinary work of factory inspection is left to the police. The pernicious connection between police and factory inspectorate—the factory inspectorate in each prefecture being part of the police section—is not perceived by the casual visitor. In view of the fact that the police hold it to be their duty to act in the interests of the employers, the position is, to put it mildly, anything but favourable to the workers.

We proceeded on a grand tour of the weaving-sheds. In each the local Factory Inspector was received in a friendly way, and we were all given cups of green tea. There was no evidence of the owners being at all alarmed; they had obviously been prepared for our visit, and there was a general atmosphere of all being gentlemen together—or whatever is the equivalent in Japan when, as so rarely occurs, a woman is included in any public affair or serious business.

At the first shed the material manufactured was velveteen. It is used mainly for the manufacture of *tabbies*,[2] but some is exported to China. Since trade was slack, only nine hours were being worked, though when trade is brisk the maximum hours allowed by the law were worked. There were 110 looms and 60 workers, including those in the preparing-rooms. The number of looms worked was from four to six. The weavers were grown-up women, but there were small girls in the preparing-rooms.

The wages were from 50 *sen* to 70 *sen* a day on the 9 hours plus a bonus on production amounting to from 3 *yen* to 7 *yen* a month. The dormitories were not bad, but permission was

[1] A prefecture corresponds roughly to a county, but is administered by a governor.

[2] The Japanese digitated socks worn by both men and women.

refused me to go into the dining-room when the girls were eating because "they might not like it." I think this was quite obviously not the real reason: I had been told that food was provided free—but probably they did not want me to see *what* food.

From the quotation I have given in the previous chapter, 20 *sen* a day is reckoned as the usual cost of food per head per day in the factories. It consists practically entirely of rice and pickles, and in these small concerns is of worse quality than in the big factories. I would also note here that in the same newspaper article quoted on page 145 it was written:

> Convinced by a lecture delivered by Dr. Saiki, the police authorities in Miyagi Prefecture have recently decided to adopt the same system there. . . .
>
> "When the police authorities of Ehime Prefecture decided to adopt the system I originated," said Dr. Saiki, "I immediately sent Mr. Kojyu to make a thorough investigation of the meals served in the factory dormitories in that prefecture."

I think no further proof than this is needed of how much more important a part the police play in the workers' lives than the factory inspectors.

The factory inspectors, when they do visit a mill or weaving-shed, admit that they usually announce their visits beforehand! Even when they do not, I have myself seen how they and the policeman are entertained with tea and cakes while the place is prepared for them.

In the last factory that day—which was the worst we saw—we arrived very late, and it is probable that the owner, even though warned beforehand of our visit, had given us up. There were signs, when we arrived, of hasty preparation. I saw a tiny girl with a dust-pan evidently trying to remove herself from our sight. Later I saw a small girl (obviously well under fourteen) sliding along one side of the room, trying not to attract attention.

The looms were very close together, so that it was almost impossible to pass. The winding was being done in the same room by small girls who looked tired and dirty. The weavers themselves, older girls and women, looked terribly exhausted. They did not

for one moment look up from their work as they hastened from one loom to another. Some were working four looms; those on *dobbie* cloth three; and those on the most complicated cloth with artificial silk admixture two. It was by now after 4 p.m., and the strain of their long day, which had begun at 6 a.m., was obvious. The girls were clearly too hard-driven. The number of looms stopped showed both the insufficient number of weavers and the bad quality of the yarn.

There were thirty-six wide looms in this room, and twelve girls working. The cloth was mostly coloured woven, and was of great variety. They said that some of it was for export.

There was a second shed with fifty-six narrow looms for making *kimono* cloth. Here the cloth was coarse to medium coloured wovens, gaudy in pattern. Even more than in the first shed one received a general impression of gloom, dirt and overwork. It was December, and therefore stuffy but cold; I tried to imagine what it must be like in the sweltering heat of summer. I was reminded of a friend's tale of how he had visited a factory in the summer where the owner said: "You go in and look if you like—it's too hot for *me*!"

The dormitories needed repair, but were cleanly swept. There was a very small bath-room and a dark kitchen. Some of the girls were said to be on contract and some on a daily wage. Until last year all had been on contract, but now a system of paying by results had been adopted. Wages were from 50 *sen* to 1 *yen* a day, with free food and accommodation. Before—when on a contract—the girls had received 80 *yen* a year if unskilled, and up to a maximum of 300 *yen* if skilled.

We visited five sheds altogether that day. The smallest one employed only five girls and two men; velveteen was being made. One girl was engaged on the preparing, and one man was preparing the warps. The weavers had six looms each, there being twenty-four looms in all. This shed was not under the Factory Act because it employed less than ten workers; however, they said that more than eleven hours were not worked.

Three of the girls lived at their own homes and earned about 1 *yen* a day. The other two were on a yearly contract for 220 *yen*;

of this sum, half had been advanced to their families, and the remaining half would be paid on the completion of their contract. The two men earned 60 *yen* a month and lived out. Presumably the owner and his family also helped in the shed. The weavers were grown-up women, and were obviously worked extremely hard; not for one moment did they look away from their work as they hurried from loom to loom. The man warping was thin, sickly and pale. The shed itself was well lit.

The most prosperous place we visited was one of forty looms, making narrow-width coloured goods for home consumption. The shed, which was newly built, adjoined the house. There was also a small shed where the yarns were dyed, and one could see them drying in the sun outside. The weaving-shed was sunny and airy. There were sixteen girls and four men: twelve of the girls being weavers. Some of the girls had only two looms, but most had three or four. Fine light coloured wovens of various colours were being made, mostly of Egyptian yarn of about 60's count. The cloth I examined weighed $1\frac{1}{10}$ lb. per *tan* of 10 yards, and had 85 picks per inch. The girls were young; they looked clean in *kimonos* and white overalls. In fact, the conditions here were in every way better than in the other sheds visited.

We were taken into the owner's beautiful house, and whilst we again took tea (we took it at every place visited!) I asked a good many questions. The girls here were all on a year's contract, he said, and the whole of the contract wage was advanced to their parents before they began work. In fact, here was a clear case of girls being sold by their parents, like the girls sold to the licensed houses. Evidently, however, as I have already remarked, this slave labour had not been found altogether satisfactory—for, in order to give an incentive to these girls to give of their best the employer paid them pocket money to the amount of 1 *sen* per *tan*. As a girl produced on an average 12 *tan* a day, she actually received 12 *sen*[1] to spend herself. There was also an additional bonus given to the most efficient workers.

Contracts were from 80 *yen* a year for beginners to an average of 180 *yen* a year for skilled girls.[2] Accommodation and food were

[1] 2½d.

[2] £8 to £18.

free. Contracts were renewed at the old New Year in March, still kept by the peasants in Japan. The girls went home at the end of the year and renewed their contracts after a few days' rest.

I was given to understand that this system is very widespread still. It means, of course, that the owner has absolute control over the girls. They are his property till they have worked off the debt, and nothing is said in the contract about the conditions of their labour. The only restraint on the employer is his knowledge that he may have difficulty in securing new girls if he treats them too badly, and the fact that their work will be wasteful and slow unless he gives them some kind of inducement to work well.

That the girls in these little factories sometimes try to run away in spite of the fact that they are held by their debts is evidenced by the following incident which occurred at Gotemba whilst I was in Japan. I quote from a newspaper report:

Thirteen factory girls and one workman were burned to death in a fire which destroyed the Gotemba filature mill, Gotemba, and the girls' lodging-house in the compound early Sunday morning.

Severe criticism has been directed against the owner because the house had only one narrow entrance. It was a veritable trap, with no emergency exit, and all windows too small for anyone to crawl through.

On Saturday night the girls were subjected to more than twelve hours' work, it is charged—which constitutes a breach of the factory law.[1]

And from another paper the next day:

The building has been so constructed, with only one narrow entrance and with small *barred windows*, as to make the escape of these mill girls impossible—since a factory girl who takes leave of her work, in other words breaks her contract, means so much added expense to overhead. And it is much easier to put bars on windows than it is to treat the girls decently so that they would not want to leave.

In addition to the trap in which they were housed the girls had worked continuously for twelve hours the previous day—so that, worn out by fatigue, their fagged bodies and brains failed to react when suddenly the fire was upon them.

And now that it is all over we hear that the Shizuoka prefectural authorities are "investigating" the matter, and that stern measures will be taken with the mill authorities for violation of the Factory Laws.[2] Such abuse of the law would not have been possible if the authorities themselves had previously exerted stricter supervision, and if the attitude

[1] *The Japan Advertiser*, February 13, 1929.

[2] For working the girls twelve hours.

of the Government was not one of indifference to the welfare of the worker —tolerating factory regulations more or less as a nuisance. For if the authorities had a more sincere attitude towards factory laws, they not only would not yield to the hidden pressure of moneyed interests to block measures for the betterment of the worker, but would also carry out the promises which Japan made in 1919 at the Washington Labour Conference, and endorse and put into effect the convention agreed upon at that time, which was to be for ten years.[1]

Nothing more was reported in the Press about the "Tragedy at Gotemba," so presumably the "stern measures" adopted by the authorities were the imposition of a £10 fine!

There can be little doubt that the limitation of hours to eleven is not observed in small places, although this is not often brought to light as dramatically as in the case reported above. My suspicions have been corroborated in various ways. When spending a week-end with some Japanese friends in a small village about an hour's journey from Osaka, I was able to visit a small shed of about a hundred looms, making 30-inch striped jeans and shirtings for the Chinese market.

Here the middle-aged woman weaver to whom we spoke, and who was an acquaintance of my friends, replied quite naturally: "5 a.m. to 6 p.m." when questioned as to the number of hours the weavers worked. Questioned further, she said they had one hour off for rest, so that working hours must have been twelve. The significant point is that, not only were twelve hours being worked, but the woman did not appear to think it strange or unusual.

In one conversation with the master of a weaving-shed in Nogoya, I had some trouble in persuading him that no English cotton factory worked more than forty-eight hours weekly. He insisted that there must be mills in small places where no inspection was ever made, and where night work would be done and longer hours worked. I tried to explain to him that in England the Trade Unions were too strong to allow it; but he had no idea at all as to the organisation of labour outside Japan, and was frankly incredulous. His remarks were not only illuminating as regards his obvious implication that the law could be easily broken in Japan, but also as revealing his complete inability to grasp the

[1] *The Japan Times*, February 14, 1929.

fact that the workers anywhere could be strongly organised enough to protect themselves. The Japanese employer is so accustomed to being able to put down strikes by police aid that he cannot realise that matters are not the same everywhere else.

Although in theory the State does now give women and young persons a considerable measure of protection under the Factory Acts, the method of administering the Acts renders them in large measure nugatory.

I have already said that in Japan the ordinary work of factory inspection is done by the police, but it is also necessary to explain that Chiefs of Police, and the Governors of Prefectures over them, are politicians, holding office so long as the political party to which they belong is in power. Can it be doubted that the ordinary poorly paid policeman must be greatly influenced by the rich men of the neighbourhood who control the elections, and hence indirectly the appointment of Police Chiefs?

As regards the actual Factory Inspectors who are not policemen, but who belong to the Police Department of the Prefectural Government, their rights are laid down in Section 14 of the Factory Act as amended in March 1923. According to this section, they are not empowered to give the occupier instructions concerning the detailed application of the general terms of the law.

In practice the inspector does give the necessary instructions regarding the fencing of machinery, sanitation and so on, when he makes his visits of inspection, but he can only do so within certain limits. All important orders are issued by the Governor of the Prefecture, who is empowered to issue orders with the force of law, and who also issues such administrative regulations as are necessary.[1]

In one place I visited I asked the Inspector to enquire whether the machinery was cleaned during the eleven working hours; and when the answer was no, he reprimanded the owner and told him in future it should be! When we got outside, he remarked that my question was a very good one—he hadn't thought about it before; but in future he would ask it himself. He was genuinely

[1] See I.L.O. Report, Geneva, 1923.

pleased with this new idea, and determined to remedy the abuse in future.

This Factory Inspector was a conscientious man, anxious to do his job well, but utterly untrained and unfitted, and with such an enormous number of factories and shipyards under his supervision that it was clearly impossible for him to visit anything but a small fraction of them. He himself was an engineer by training, and he saw to the fencing of machinery; he had two assistants, one of whom looked after sanitation. Before we could pay any visits to the weaving-sheds he had to call at the local police station to discover the whereabouts of the factories in parts of his own district, and to ask permission to take a visitor with him.

The Factory Act, although limiting hours for women to those between 5 a.m. and 10 p.m., as from July 1929, also gives the possibility of extension to 11 p.m., if permission is obtained, and in actual fact all Prefectural Governors have given permission for the extension. Similar modifications of the law are possible in so far as its other provisions are concerned, and it is extremely easy for the wealthy factory owner, who contributes large sums to the political funds of one or other of the two big parties—or, if necessary, first to one and then to the other—to get permission from the Governor, who is himself a politician, to modify the working of the law in his case. Since Japan's Factory Acts have been forced upon her by the pressure of foreign countries who suffer from the competition of cheap Japanese labour rather than by internal pressure, evasions of the law are not only easy but are provided for. The main purpose of the Factory Acts—to persuade foreign employers that Japan has restricted working hours—is achieved by the passage of the Act, but at the same time plenty of rope is left to the Japanese employer.

The difficulties put by the authorities in the way of Trade Union development make the organisation of the women factory workers almost impossible, and only strong Trade Unions could see that the Factory Acts were rigorously observed.

Apart from expected non-fulfilment of certain provisions there is not only the extreme facility of breaking the law without permission, but a real temptation to do so in view of the light

penalties inflicted. The fines imposed are usually £10 or £20 at most. £100 is the extreme limit and is hardly ever imposed. Even the £10 or £20 fine is not imposed until frequent warnings have been given. It must frequently be worth the manufacturer's while to break the law to fulfil an order quickly, and take the very small risk of detection, or even be ready to pay up his £10, since he will still have made a profit.

Taking the Government figures for 1926, which is the last year for which I was able to procure them, there were 3,042 warnings given, and 247 fines imposed for all the textile factories in Japan. The offences detailed include the following:

	Warnings	Fines
Employment of children under twelve	23	8
Working more than the maximum of hours allowed by the law	324	113
Non-observance of holidays	62	5
Truck payment	60	1

Both the attitude of the employers and that of the police towards each other, which I observed on my visits—the entertaining, the notice given beforehand, etc.—and what one reads in the Japanese Press of the bribery of the police and the general corruption which obtains in Japan, show clearly the state of affairs. Can one imagine that the normal police official fails to be influenced by the rich men of the neighbourhood in a country where the Chief of the Metropolitan Police was dismissed in 1929 for having taken for political purposes a sum of money obtained by forgery? The scandal which led to his dismissal did not consist in his having accepted this money for political campaign funds, nor in the fact that the money was given in order to obtain a concession for the establishment of a new licensed houses quarter; there is, according to the *Japanese Times*, nothing strange in the fact that "certain sums should have been handled"; the scandal consisted in the fact—of which he was ignorant—that the money had been obtained by forgery. That the police chiefs should be connected with political parties and should collect money for political funds by accepting "presents," is regarded as normal. One newspaper, indeed, naïvely stated: "While Mr. Mizata had nothing to do with the money except that it was in his possession."

I have mentioned this scandal, which occurred while I was in Japan, but which is only one of many, in order to convey to the reader some conception of the corruption in Japan[1]—and hence of the impossibility of impartial administration of the law.

Even if the police were not influenced by the interests of the employers, there would certainly be many places where abuses would go on—since fines, when imposed, are so low that it must often pay to break the law. As things are, corruption, lack of proper penalties for non-observance of the Factory Acts, and, above all, the absence of a factory inspectorate independent of the police administration and the lack of working-class organisations, mean that the law is often completely disregarded.

It cannot be expected that girls brought from remote villages to work in factories far from their homes, and frequently far from any town, can adequately protect themselves from exploitation. Many of them cannot even read, most know nothing of their rights under the law, all are oppressed by a heavy burden of social inferiority—feudal traditions, which persist in the country-side, and the subjection of women to men in Japan, which makes them easily amenable to the foremen. Kept from all contact with the outside by high walls and barred windows, they are frequently completely at their employers' mercy.

The incidents related above and in the preceding chapter are

[1] It would be beyond the scope of this study to give details of the amazing corruption of public life in Japan, but even a few weeks of reading the news in the Japanese Press reveals numerous scandals, and makes the Japanese boasts about patriotism and public spirit seem ludicrous. The granting of State subsidies and the imposition of high import duties in favour of those capitalists who are friends of the political party in power is the root of this corruption. Political parties in Japan have become business enterprises in which individuals or companies can invest sums in the certainty of receiving their interest in the shape of subsidies and import duties, permits, patents, concessions, etc. Power, railway, tramway and gas enterprises are formed by permits and patents. The subsidies in a single year amount to 150,000,000 *yen*. In 1929 extra copper and timber duties were clapped on to pay the "dividend" due to the trusts on money invested in the Seiyukai Party funds. More and more money is spent in such "investments," and in direct bribery of individual Government officials and the crop of "scandals" grows greater every year. In 1929 the number of people involved in the scandal connected with a late Minister of Railways was so great that the enquiry was dropped lest "there should not be enough people left to carry on the administration," as one Japanese newspaper put it.

not isolated ones; the conditions revealed are typical of hundreds of places.

I have dealt with factory inspection in this chapter rather than in the previous one, since it is of greater importance in matters relating to the small sheds than in the big factories. In the latter, as already shown, the employers have realised that exhaustion of their labour force beyond the possibility of recuperation between shifts is uneconomical, and they have the capital resources to enable them to render labour far more productive than in the small factories. The small weaving masters, on the other hand, who are exploited in their turn by the big spinners from whom they obtain their yarn, by the merchants who buy their cloth and by the financial operations of the big capitalist interests in Japan, which cause severe fluctuations in price, are rarely in a position to amass reserves and adopt the more modern system of exploitation. In their more primitive industry their profit consists in working their labour as long hours as possible, and so getting as much produced on their inferior machinery as the big manufacturer with his superior equipment, rather than in keeping their workers up to the speed of the best machines in a shorter working day. Moreover, one shift only is usually worked in the small sheds, and this leads to much longer hours being worked.

With some exceptions, labour seems on the whole to be less intense in the smaller sheds; the looms are worked rather slowly and there seems to be some possibility of resting for a few moments. This is not to say that labour is not extremely arduous and exhausting in the small places: but clearly women working twelve hours on inferior machinery in a badly lit and ill-ventilated room cannot, whatever the compulsion, work as intensely as girls working ten or eight and a half hours in healthier surroundings on the best machines. Both kinds of labour exhaust the workers and make many of them consumptive; it is just a question of method and of capital resources.

The dormitory girls in the small factories can be—and are—harder driven than the women who come to work from their homes. Actual physical compulsion is still used, and they are frequently treated with great roughness without being able to

complain, as they are kept locked up. It is probable that the worst conditions of labour of all, as regards wages, general treatment and exhausting labour, prevail amongst the contract labour employed in small factories, which is still entirely defenceless.

The prosperous proprietor of the shed making goods for the home market, referred to previously in this chapter, had been, until four years ago, a merchant who gave out yarn to be woven by hand and received back the finished cloth; that is to say, he employed domestic workers on piece wages. Four years ago he had already started this factory, but still gave out a little work to be done at home on the old basis. I saw one piece of cloth woven for him by hand; it was a beautiful coloured woven twill. The weaver received 40 *sen* per 10 yards,[1] and the manufacturer stated that she could produce 1½ *tan* a day.

He admitted that in order to do this she would have to work exceedingly long hours, and when I suggested sixteen, he agreed. He said that the only women who still undertake such work are those who cannot leave home and yet *must* get work, such as very poor peasant women with young children. But such domestic industry was, he asserted, fast dying out, though some cloths would probably continue to be woven by hand. In this district there are no domestic workers with power-looms in their cottages as there are in some other districts.

That the hand-loom industry still fights its losing battle against the machine-made products is witnessed by the fact that there were, in 1927, 99,684 hand-looms in Japan for cotton weaving. This, I think, is partly explained by the fact that certain complicated weaves, such as the Japanese love for their *kimonos*, cannot yet be made profitably by power-driven looms, and partly by the extreme poverty of the Japanese peasant, whose wife and children will work sixteen hours for a few pence. Of course, in many cases the hand-looms are still used only in the slack winter months in districts where the soil allows of only one crop per year being grown.

In the Ichinomiya woollen weaving district an employer who both gave out yarn to be woven in the peasants' homes and

[1] 10 yards = 1 *tan*.

employed workers in a small factory admitted that it paid him better to give out the yarn. Evidently the peasant, trying desperately to make ends meet on his farm, or hoping to amass enough to set up as a small weaving master himself, will work himself and his family any number of hours—whereas the factory workers are beginning, even in small enterprises, to organise to improve their conditions. Moreover, the Factory Acts do put some kind of curb on unlimited exploitation in the factories. Hence the survival of hand-loom weaving, and even the extension of such home industry where power-driven looms can be used in the peasant's home. The merchant finds that the home worker can be made to work harder for less pay than the factory worker, whether the latter lives at home or is in the slavish position of working under compulsion without wages—having been bought from her parents.

It is probable that the case of the manufacturer to whom I have referred earlier is typical; that is to say, that the owners of the small sheds of power-driven looms have usually begun as merchant-manufacturers, giving out yarn to be woven and selling the finished cloth. As power-driven machinery spreads such a merchant will find it to his advantage to start a small factory, securing his labour from the same peasants who formerly wove his cloth on their hand-looms.

Most of the manufacturers in the Saitama Prefecture were said to be independent; that is to say, they bought their own yarn and sold their own cloth. Probably, therefore, most had begun as small merchants. In the Ichinomiya woollen district I found quite a different system; here the weaver was frequently a small man, working up yarn at a fixed charge for a merchant or a merchant-manufacturer; and here the master weavers had often begun as peasants who had accumulated a little capital by going to work for ten or fifteen years in a weaving-shed, or by sending their sons and daughters to work in one; or else they had got the money to buy a loom by selling their land—the price of a loom would be from 180 to 208 *yen*. Probably the difference is due to the relatively greater poverty of the Saitama Prefecture peasants, who are clearly usually in debt and contract their children to work,

not in order to accumulate capital, but to get out of debt. Amongst these, there is no possibility of becoming a small weaving master; it is only the merchants who are able to do so.

It is certainly clear that this somewhat old-fashioned organisation of the minor branches of the cotton industry—minor as compared with the manufacture of shirtings, drills and jeans for export—enables the employers to exploit their workpeople more freely than in large factories. The girls working in the big mills are helpless enough, but those working in these little places are utterly defenceless. In the big factories the men workers frequently rouse the girls to a sense of their grievances and to consciousness of their power to improve their conditions through united action. But in the small sheds, strikes are clearly impossible and unknown, and the girls remain as ignorant as when they left their homes. All that they can do when they find conditions intolerable is to run away: and if they run away, where can they go and how can they live? They dare not return home; if they did, their parents, fearful of having their goods distrained for debt, would make them go back to their work. When they do run away, they know the police will return them to their masters if they are found. The only avenue of escape is to become waitresses or prostitutes.

In Chapter VIII some details are given of the goods produced in weaving-sheds in the Kishiwada and Sakai districts near Osaka, where I saw flannelette, velveteen, striped shirtings and sateens being manufactured. In all these sheds the majority of the workers were grown-up women who lived in their own homes and worked for piece wages. Even the few girls who lived in were not bought; i.e., although they had contracted for so many years' work, their wages had not been paid in advance as in the places mentioned at Kawagoe. In fact, in these districts industrial organisation has developed further than in the large spinning- and weaving-mills, for the women weavers, who live in their own homes, are frequently married and continue their work for many years, if not for life. They are becoming a permanent factory population, although they may still have some connection with agriculture; that is to say, some have husbands who are small farmers or agricultural labourers, and some may even help on the

land in the slack times—when the weaving-sheds dismiss some of their hands—but the tendency is for them to spend their lives as weavers; and as the industry continues to develop they and their children will, no doubt, come to form a purely industrial population.

These women are of quite a different type from the somewhat cowed-looking little girls in the big factories; as might be expected, they appear far more independent. Although they look overworked, they are not afraid to look up from their work, or even to speak to the visitor. One weaving master in the Sakai district, making flannelettes, said that his workers always went home for two hours in the middle of the day to look after their children.

On one occasion during my informal visit to a small shed of about a hundred looms in the village of Handa, near Kishiwada, the workers all ran out into the yard to have a look at me and have their photographs taken.

I was, on this occasion, staying for the week-end with a Japanese girl at her home, and was visiting the mill with her, the owner being a friend of her father's. Our visit was impromptu, and it was quite clear that no preparations had been made for our coming. Thick cotton dust lay on the floor. The looms were close together, and very small girls were winding in the same room. The place was rather dirty and stuffy, and on the floor, between the machines, a mother was suckling her baby with two small children standing beside her. Two of the little girls winding were so small that I tried to take their photographs; a woman who was clearly their mother hastily left her loom to tidy their hair and make them presentable. It was clear that the little girls winding were the children of the women weavers, and in time would become weavers themselves. There was here, as elsewhere in the weaving section of the industry, a resemblance to conditions in Lancashire in an earlier period, and clear evidence of the growth of the permanent mill population which must eventually take the place of the present semi-feudal system of recruiting young girls from the country on a contract for a term of years.

As to the age of the little girls I have mentioned, it was difficult for me to believe that they were fourteen—which according

to the law they are supposed to be. Subsequently I found two explanations. In the first place, age is reckoned differently in Japan. A child is reckoned to be a year old at birth; and, moreover, its age goes according to the calendar year instead of according to the date of its birth; that is to say, if a child is born on the last day of the old year it is held to be two years old the following day—on the first day of the new year. Hence a child who, according to our reckoning, is twelve years old, may be already fourteen according to the Japanese register.

Moreover, although the law provides that no child shall be employed in a factory before it is fourteen, and must go to an elementary school up to that age, parents who are too poor to let their children go to school can send them to work. Hence it may be noted in passing that, in spite of the fact that universal education is supposed to exist in Japan, there are actually a very large number of illiterates; it was recently estimated that there are some 800,000 young men and women in Japan who can neither read nor write, and that more than half of these are illiterate through poverty.[1] This is only one of the many examples of how much better things are on paper than in reality in Japan.

I do not mean to imply that a large number of very small children are employed in the Japanese cotton industry. This would not be true. Actually the small children of Japan are mainly employed in small-scale minor industries like button-making, or as little waitresses, shop assistants and errand boys—and, far more frequently, on the land. I do not think that children under twelve are often employed in factories, but I do think it highly probable that many of the small girls in the cotton factories are only about twelve years old according to European reckoning.

Dormitory girls have both the advantages and the disadvantages of slaves; whilst the weavers who live in their own homes pay the penalty of their independence, although they can insist on somewhat better treatment while at work. A recruited girl has some value to-day, and it is worth while keeping her fairly fit, whilst

[1] *The Japan Times*, of March 5, 1929, stated that 50,000 of the young men called up for military examination last year were illiterate, and that illiteracy among women is at least twice as great. The figure of illiterates for the whole population is six million.

the free weaver can be dismissed and someone else engaged in her place if she falls sick; the employer does not have to keep her till she recovers.

It is, of course, only because these weaving-sheds are in small towns or villages near cultivated land that a sufficient supply of labour is available from among the peasantry and the dispossessed agricultural population.

As regards earnings in the weaving-sheds, they vary somewhat as between the bigger sheds where the machinery is worked rapidly and the small places where the number of picks per minute is only 150 or 160. A woman who can attend to six looms earns an average of 1·50 *yen* a day, and the few who can manage eight receive about 1·80 *yen* a day. Some girls on four looms earn 1·20 *yen* a day, but others only receive 1 *yen*, as, for instance, the flannelette weavers of the Wakayama district and the crêpe weavers of Hakade. These were the wages I found paid in various parts of the country, and the amounts stated by the workers themselves corresponded to what I was told by the owner or the foreman. In these weaving-sheds the owner is usually a man who has little, if any, knowledge of the conditions in other countries—and when he tells you that his weavers on six looms earn about 1·50 *yen* a day he thinks he is telling you that they earn a good wage, for he compares them in his own mind with the wages paid a few years ago, or with the miserable earnings in agriculture. Indeed, it should not be forgotten that women are better paid in the cotton industry than in any other Japanese industry.

The director of a big spinning and weaving company, of course, sees things in quite a different light. He knows how low Japanese wages are compared with English ones, and he knows the pressure brought to bear on Japan at Geneva by competing employers of labour. Therefore he realises the necessity of minimising the low wages cost of the Japanese employer. Hence it is almost impossible to obtain any information from the Head Offices of the big companies, whereas one can get more or less true answers from small employers—and even from managers or engineers at big factories, provided they have not been warned by the Head Office.

The wages of the young girls living in in the small weaving-sheds and doing the work of winding are frequently very low, and their living conditions very bad. I recollect the sight of small, dirty rooms, with soiled bedding flung untidily in the corner and torn matting. In the Nagoya shed manufacturing T-cloths wages were only 16 *yen* a month of 28 days, and these little girls looked very tired, neglected and dirty. This shed was very dark, artificial light being used for weaving in the daytime. Cotton dust lay thick on the floor and on the looms, and conditions in general offered a striking contrast not only to those in the big spinning-mills, but also to those in the small shed described earlier in this chapter, where narrow-width fine crêpes were being made for the home market. Nevertheless, as shown in Chapter VIII, the number of looms worked per weaver was above the average. The same small, dark kind of shed, thick with cotton dust, was also to be found in the flannelette and velvet weaving-sheds I visited in the Sakai district, but here the women workers looked to be less hardly driven and wretched than in the Nagoya shed.

Most of the small manufacturers who employ outside workers do not incur any expense for food except when they employ also a few contract girls living in—or when, in very busy times, they provide rice at midday to prevent the workers wasting time by going home to eat.

In this chapter I have described conditions for the most part in very small undertakings. In the chapter on costs of production some details are given of the efficiency in medium-sized undertakings for weaving only, where few of the workers live in. Such places as the one with 410 looms, described on page 216, cannot properly be described as "small," but the conditions of labour and the type of labour employed were similar to those in the small sheds I have described in this chapter. In this shed of 410 looms in a village near Osaka the women weavers nearly all lived at home and remained many years at work; there was no "welfare work" of any kind and the working conditions inside the factory were much inferior to those in the roomy and clean-swept mills described in Chapter VI. Yet this shed belonged to a company which is a member of the Japan Spinners' Association, and two shifts of

ten hours were worked at the time of my visit, whilst actual wages were at about the same level as in the big mills.

It can be seen that there is a kind of gradation, not an abrupt transition, from the big spinning- and weaving-mills to the small weaving-sheds. Nevertheless, in so far as the kind of labour employed is concerned, the broad division remains between the large, up-to-date spinning- and weaving-mills and the weaving-sheds, whether the latter have twenty looms or four hundred. It seems that conditions of labour and the kind of labour employed in the weaving-sheds as a whole, whether small or comparatively large, are in a state of transition from what is almost slave labour (or indentured female labour to use the more polite term) to the "free" labour of women living in their own homes and working for a weekly wage without physical (i.e. with only economic) compulsion to keep them at work. The interesting point is that it is in the weaving-sheds that the "free," permanent labour force is found coming into existence, whereas in the big modern spinning- and weaving-mills the old system of employing girls contracted to work by their parents persists, though in a somewhat changed form, and developed till it now displays many of the features of American efficiency, intensity of labour and low labour cost.

CHAPTER VIII

COSTS OF PRODUCTION IN JAPAN IN COMPARISON WITH LANCASHIRE

NOT long ago Lancashire was content to ascribe her failure in competition with the Japanese in the Chinese and Indian markets to the low wages and long hours prevailing in Japan. Recently, impressed by reports of the superiority of the Japanese in organisation and by accounts of their bulk purchases of raw cotton and their excellent marketing arrangements, Lancashire has been inclined to go to the other extreme, ascribing everything to these latter factors.

I consider this swing of the pendulum to the other extreme a grave mistake. Without in the least underestimating the effects of superior organisation, bulk purchases of raw cotton through a central organisation, or any other advantages due to the better sales organisation and stronger financial condition of the Japanese cotton industry, I consider that the effect of cheap labour costs in Japan is now in danger of being too lightly passed over.

I have already shown how very much exaggerated are many of the reports on "welfare" in Japanese factories given by foreign visitors, and I have described living conditions and wages in both large and small mills. This chapter gives details of output and of the number of workers employed on the various processes of manufacture in comparison with England, and then proceeds to a detailed examination of Japanese labour costs.

At the outset I may say that the information I obtained during a nine months' residence in Japan is very much at variance with that given in Mr. Cunningham's 1927 report on the Japanese cotton industry[1], used subsequently by several speakers and writers, notably Mr. Ellinger and Mr. Grey, as the basis for their calculations in comparing British and Japanese production costs.

[1] *Report on the Cotton Spinning and Weaving Industry of Japan*, by H.M. Consul at Osaka. D.O.T., 1927.

In articles published in the *Manchester Guardian Commercial* on April 25 and May 2, 1929, I showed how my researches proved Japanese labour costs to be about half British ones in spinning and even less than this in weaving. Subsequently Mr. Arno Pearse, in his book *The Cotton Industry of Japan and China*, confirmed some of my results, although his figures were the result of information given to him rather than of detailed calculations.

As regards spinning, the first point to be considered here is the number of workers per thousand spindles as compared with output. One of the most striking features in the development of the Japanese cotton industry is the continual reduction in the number of operatives employed on a given number of machines. Thus, whereas in 1920 the average number of operatives per thousand spindles was 23, in 1925 it was 18·5, and in 1929 (first half) 16·6. These figures refer to two shifts.

Actually estimates based on these general figures are bound to be misleading, since the number of workers is swelled by the inclusion of those who are working on spindles producing very low counts—as, for instance, spinning 4's on mules out of waste. In endeavouring to compare the number of workers on a given number of spindles in Japan and Lancashire, comparisons must be made between mills producing similar counts, and *not* on the general figure for the whole industry—seeing that Lancashire spins a far greater proportion of fine counts than Japan; and the higher the count, the fewer the workers required. What the above general figures do clearly indicate is that the efficiency of the Japanese operatives is increasing year by year—for the declining number of workers per thousand spindles is only partly accounted for by the increasing production of finer yarns.

The fact that, as hours have been reduced in the big cotton mills, labour has been rendered more intense (which has been stressed in the previous chapters), is clearly borne out by the figures showing the numbers of workers employed.

I come now to a detailed account of the numbers of workers employed in an up-to-date mill in Japan before the abolition of

late night work in July 1929.[1] It will be seen that in mills spinning counts from 16's to 42's the number varies from 11 to 13 per thousand spindles in mills with reelers, and to between 8 and 10 per thousand spindles up to spindle-point according to the counts. On 40's the number would be about 7 operatives per thousand spindles up to spindle-point, and on 20's about 9.

In England, according to figures supplied by the Lancashire Cotton Corporation, the number of operatives per thousand spindles up to spindle-point in a ring-mill is approximately 6·5 on 20's. [In making the following comparisons of efficiency I am only considering Ring Spinning, since there is hardly any mule spinning in Japan. In actual fact, however, since the large majority of the Lancashire spindles are mules her actual disadvantage in labour costs is greater than would appear here.]

I now give examples of mills in Japan, showing the exact number of workers in the various departments.

The first example, which I shall call Mill A, was producing yarn of counts 20's to 45's: but two-thirds of its production was said to be 20's for sale to manufacturers or merchants. Of its whole production three-quarters was reeled and sold and only one-quarter used in the mills for the production of shirtings. The average count produced worked out at 28's.

[1] Although the cost calculations for Japan in this chapter are based on data relating to the period before July 1929, i.e. to the period when shifts of ten hours were worked, the comparison still holds good since piece rates remained the same when the shifts were shortened (see Chap. VI). On the other hand, wages were generally reduced in the latter part of 1930 according to the Press reports. Hence my calculations of Japanese labour costs are certainly not too low to-day—rather must they be somewhat too high. However, the figures of wages given to the British Cotton Mission which visited Japan in November 1930 show the average for women almost the same as whilst I was in Japan, viz. 1·10 *yen*. They give 0·70 *yen* as the lowest and 3·00 *yen* as the highest paid. These sums would be worth a little more than in 1929, but, on the other hand, 0·70 is clearly too high a figure for *lowest*, 0·50 being more correct (vide the figures given in this book); 1·10 *yen* may not be an official figure, but one given by the mill-owners. In 1929 the average was 1·18 *yen* a day according to the Government figures for all spinning-mills.

Undoubtedly the intensity of labour has been increased since the shortening of the shifts. The *Japan Year Book* reports that the output per 1 female worker per month rose to 94 *kan* at the end of 1929, from 78 *kan* three years previously.

MILL A

Two shifts. Spindles: 55,000

(*Counts spun* 20's *to* 45's)

Department	Number of Machines	Number of Operatives Men	Number of Operatives Women	Average Daily Wages Male	Average Daily Wages Female	Number of Overseers
Mixing-room—						
Bale-breakers	6	3	12	1·69	1·06	
Blowing-room—						1
Finisher Scutchers	12	26	—	1·65	—	
Card-room	214	49	—	1·60		
Drawing frames	23					
Slubbing frames	23	37	273	1·65	1·36	3
Intermediate frames	30					
Roving frames	119					
Ring spinning frames (400 sp. each) ..	160	61	485	1·60	1·08	
Reeling-room	200	11	408	1·58	1·21	3
Bundling-room	10	30	3	2·08	1·09	—
Yarn-testing, etc.	2	10	37	2·40	1·08	—
Total		227	1,218			7

Total men and women: 1,445. Average wage of overseers: 200 *yen* a month.

MILL B

34,000 Spindles Producing Yarn of Counts 10's to 40's: Average 20's. One Shift

Department	Number of Machines	Number of Operatives Male	Number of Operatives Female	Average Daily Wage Male *Yen*	Average Daily Wage Female *Yen*
Mixing-room—					
Hopper bale-breakers	3				
First Crighton openers	2				
Mixers	2				
Second hopper bale-breakers	4	6	4	2·16	1·32
Hopper openers	2				
Hopper feeders	4				
Intermediate feeders	4				
Second Crighton openers	4				
Scutching-room					
Exhaust openers	4				
Intermediate scutchers	6	8	—	2·28	—
Finisher scutchers	7				
Carding and drawing—					
Cards	115	15	1	2·30	1·50
Drawing frames	15	—	15	—	1·58
Speed-room—					
Slubbing frames (96 sp.)	15				
Intermediate frames	30	9	65	2·46	1·56
Rover frames	49				
Ring-room—					
Ring spinning frames—					
384 spindles	72	9	124	2·47	1·60
400 spindles	16				
Reeling-room	40	1	47	2·28	1·50
Bundling-room	3	8	—	2·58	—
Waste assorting	—	—	2	—	1·27
Yarn testing	—	—	2	—	1·63
Total		68	330		

Five overseers for the whole Mill on wages of from 3·77 *yen* to 4·27 *yen*.

The total number of operatives on the 55,000 spindles in Mill A comes to 1,445 and accordingly works out at 26·26 for the two shifts, or 13·13 for one shift, and to 8 per thousand spindles up to spindle-point for one shift.

The second example I give is of a mill producing yarns from 10's to 40's, but whose average production was 20's. In this mill most of the yarn was used for their own weaving, so the number of workers in the reeling-room is a good deal less proportionately than in Mill A. The figures here refer to one shift, although two shifts were worked, as elsewhere. It will be noted that the "average" wages given are a good deal higher than those in Mill A and are probably "highest" rather than average. The wages figures in the case of this mill were supplied to me by a director of the company, not by the manager of the mill.

In the table on page 193 the number of workers employed comes to 398, or 11·7 per thousand spindles, including reeling, etc., or to 9 per thousand spindles up to spindle-point.

Next I give an example of an English mill spinning 24's to 40's.

PARTICULARS OF AN 80,000 SPINDLE RING MILL, SPINNING 24's, 30's, 36's AND 40's COUNTS, IN LANCASHIRE*

Number of machines in cotton room: 4 bale-breakers and 1 waste machine.
Operatives: 3 men.
Number of machines in blowing-room: 3 openers and 9 finishers.
Operatives: 4 men.
Number of cards in card-room: 144.
Operatives: 10 men and 6 women.
Number of drawing frames: 36 frames of 8 deliveries each.
Operatives: 24 women.
Number of slubbing frames: 12 of 92 spindles each.
Operatives: 12 women.
Number of intermediate frames: 24 of 140 spindles each.
Operatives: 24 women.
Number of roving frames: 48 frames of 172 spindles each.
Operatives: 24 women and 12 young persons.†
Number of ring-spinners: 106 on 4 sides of 187·5 spindles each side, or a total of 750 spindles per ring-spinner. In addition, there are 2 sets of doffers with 8 in each set. There are also 8 gaiters.
Total number of workers employed: 249.

* Supplied by the Secretary of the Card, Blowing and Ring Room Operatives' Association.
† These twelve are girl assistants to the twenty-four women.

Here the figure for the number of workers per thousand spindles up to spindle-point works out at 3·1, but there are only about half the normal number of doffers employed, and the usual figure would be about 4½ workers per thousand spindles. This figure cannot anyhow be exactly compared with the Japanese Mill A, since the latter's average production was 28's, while the average of the English mill would be higher.

For an accurate comparison of the position in the two countries one must compare the figure for Mill B, producing 20's on an average, with the Lancashire Cotton Corporation's figure for a mill on 20's. This gives the following comparison:

NUMBER OF WORKERS PER 1,000 SPINDLES UP TO SPINDLE-POINT ON 20's

England	6·0
Japan	9·0

Yet it must be noted that other figures given me in Lancashire show 4·5 to 5 operatives per thousand spindles—not 6·5.

Accepting the Lancashire Cotton Corporation's figure as the average for Lancashire, the comparison shows about a third more workers per thousand spindles in Japan on 20's, and this is probably about correct.

The figure taken above for Japan is, of course, one relating to one of the best mills. So also is Mill A with 8 per thousand on 28's average. Another Japanese mill I visited, spinning 36's on an average, had 8 operatives per thousand spindles also, i.e. the same number as Mill A on 28's.

Assuming that the English mill for which I have given details of all departments was spinning about the same average count (36's)—as is probable—the following comparison is attained:

NUMBER OF WORKERS PER 1,000 SPINDLES ON 36's

England (example just given)	3·1
England (Lancashire Cotton Corporation)	4·5
Japan	8·0

This comparison bears out the usual contention that as counts

get higher the relative advantage in efficiency of the English mills grows greater, but the Japanese mill to which I am here referring was one in a much weaker financial position than the others of which I have given details—and one in which wages were a good deal lower than in the best mills and the labour turnover very great, so that the number of learners was extremely high. However, even allowing something for this and bringing the Japanese figure down to 7, this would still give a very great advantage to the English spinner.

On 40's the comparison appears to be as follows:

England (Lancashire Cotton Corporation figure)	4·25
Japan (Mr. Pearse's figure)	7·00

Nevertheless, even though the number of workers required in Japan is much greater than in England, too hasty conclusions should not be drawn from this fact. In the first place, if a third more operatives are required in Japan, as on 20's—or nearer double, as appears on counts round about 40's—the earnings of women per hour, even with the addition of "welfare," are little more than one-third of the hourly earnings in England. On a ten-hour day their total earnings, with "welfare," were less than half what a Lancashire female operative receives for an eight-hour day in a ring spinning-mill, and the discrepancy as regards male workers is even greater. To this question of wages and labour cost I shall return. I wish here to emphasise other facts concerning Japanese production which show that, quite apart from the wages question, the Japanese workers' labour is not actually so far off the English standard in efficiency.

In the first place the machinery is worked more rapidly in Japan than in England, and consequently production per spindle is a good deal greater. This naturally entails the employment of more workers than in England. In addition to this there is the fact that Indian cotton is used in Japan for the manufacture of counts under 30's (with or without a small admixture of American): this use of inferior raw material meaning more breakages of the yarn, and consequently more labour required to piece it. Where

American cotton is being used for spinning 40's, I have myself on several occasions seen girls attending to 600 spindles, instead of the usual 400, and an occasional 200, and as against the usual 750 to 800 for medium counts in Lancashire.

These two facts go far to explain the extra labour required. Moreover, the rapid turnover of labour consequent on the failure to keep girls more than two or three years in the mills means that there are always a large number of learners on the frames—and this swells the figures of numbers employed in each department, including the spinning frames. These young learners receive only 50 *sen* to 60 *sen* a day for the first few months at the mill. In the case of the last mill cited above, which was spinning 36's with eight workers per thousand spindles, the girls usually only remained eighteen months in the mill.

Another point which must be emphasised is the great speeding up which has occurred since night work was curtailed in July 1929. Piece rates were left the same, and the girls told to become more efficient in order to keep up their earnings in eight and a half hours' work to the same level as in ten hours' work. The number of girls attending to 600 spindles must have been considerably increased, and even a few more may have been made to attend to 800 on 40's upwards—and in other ways labour has undoubtedly been made far more intense, as the mill-owners have themselves stated.

Even before July 1929 labour was being constantly spurred on to greater efficiency, as witnessed by the decreasing number of workers per thousand spindles. As an example of this, one mill director boasted to me that he had increased the efficiency of his workers 10 per cent. between October 1927 and December 1928. He cited as examples the fact that in spinning those who used to attend to 400 spindles were then able to attend to as many as 600 when spinning medium counts of good American cotton.

Division and specialisation of labour have also been carried further in Japan than in most English mills. The numbers shown in the above examples as employed in the ring spinning department are not nearly all tenters. The division of labour in the ring

spinning-room of Mill A was said to be as follows for one shift:

	Men		Women
Roving bobbin carriers ..	3	Tenters	161
Oilers and repairers ..	2	Doffers	72
Bobbin carriers	3	Sweepers..	4
Spindle banders	2	Cleaners	3
Ring full-bobbin carriers..	2	Assistant overlookers ..	2
Fixers and cleaners ..	18		

This works out at 400 spindles per tenter.

On the drawing, slubbing, intermediate and roving frames the 136 women on one shift were employed as follows: 7 cleaners, 3 sweepers, 11 doffers, 3 bobbin carriers, 112 tenters.

In Lancashire there is usually no special staff for cleaning and sweeping, nor are oilers and repairers usually counted as part of the ring-room staff.

The above details, indeed, show that, in making comparisons of the number of workers employed per thousand spindles in Lancashire and in Japan, one is including in the Japanese figure workers who are not included in the English one, but whose labour makes the running of the mill more efficient and makes possible a greater output—not only on account of the continual care taken of the machinery, but also by enabling the tenters, etc., to give the whole of their day's labour to their one main job.

The details given above concerning the division of labour in the ring spinning-room of Mill A enable one to form a fairly accurate estimate of the number of spindles usually attended to by one tenter. This mill, it will be remembered, was spinning counts 20's to 45's, averaging 28's, and had 55,000 spindles. Therefore on 28's one girl usually attends to 400 spindles as against 600 in England. Since a fairly large proportion of learners must be included among the tenters, this means that some girls (those on the 40's and 42's being spun) attend 600, as I myself observed at this mill. It would seem at first sight that there are an unduly large number of doffers in the Japanese mill, viz. about 4 to every 10 tenters, as against 2 doffers (or gaiters) to every 10 tenters in the English mill on page 194. As already noted, however, the number in the English mill is far below the normal in Lancashire—where the figure for a very efficient mill would

be as high proportionately as in Japan, and where 4 to every 10 tenters may be taken as more accurate than 2. The faster the machinery is worked, the more doffers are required, and therefore the much faster working of the machinery in Japan than in most Lancashire mills necessitates a larger proportionate number of doffers. Further, the average count spun in my English example was higher than in the Japanese Mill A, and hence fewer doffers would be required.

Returning to the question of the number of spindles per tenter, I found in yet another mill (which I will call Mill C) that 440 spindles per girl was the average on 40's (although some attended to more), and this compares with the usual 800 in Lancashire. General comparisons are made extremely difficult in each case by the inclusion of so large a number of learners in the figures of workers in each department. Of course, these apprentices are also paid, but receive only 50 *sen* to 60 *sen* (1s. to 1s. 3d.) a day, as against the 2s. or so received by those who have been in the mill nine months or more.

Before proceeding to some details of production per hour, it should be noted that both the Consular Report of 1927 and the late Cotton Yarn Association's report gave a figure for the number of workers per thousand spindles very much higher than mine, and gave the number of spindles attended to by one worker as much lower. For instance, the Cotton Yarn Association's report stated that 240 spindles was the average number per competent spinner on medium counts—whereas I found 400 to be the average, and 600 quite frequent. Mr. Arno Pearse, Secretary of the International Cotton Federation, has given figures similar to mine in his *Report on the Cotton Industry of Japan and China*, where he gives examples of 400 spindles per girl on 20's and 600 on 40's.

Unfortunately many calculations concerning the relative efficiency of the English and Japanese cotton workers have been based on the Cotton Yarn Association's report and the Consular Report, and consequently inaccurate conclusions have been drawn. The Consular Report was, I understand, based almost entirely in this respect on information supplied to Mr. Cunningham by the big spinning and weaving companies. Mr. Cunningham, in

his official capacity as His Majesty's Consul at Osaka, was obviously not in a position to be able to verify the information given him by personal investigation. Consequently the Japanese mill-owners were able to perpetuate the myth which they have long been propagating concerning the inefficiency of their workers; for whenever the question of the long hours worked and the low wages paid in Japan has been raised at the International Labour Office, the Japanese employers have pleaded the inefficiency of their operatives and the consequent necessity for long hours and low wages—whilst all the time they were intensifying the labour in their mills and reducing the number of workers employed.

The Japanese are past masters in the art of propaganda abroad: there are so few foreigners in Japan—and of those, so few have any interest in labour conditions out there that the Japanese mill-owners have for long been able to "get away with it," so to speak. The working-class movement is both weak and persecuted, and has as yet had little chance of raising its voice in protest against the misrepresentation abroad by the mill-owners.

As an example of the false information given in Japan to the casual visitor—and supplied abroad wholesale—I would cite my experiences on my first visit to a Japanese mill. This mill belonged to the Kanegefuchi Company, which has the reputation of being the foremost in Japan in welfare work, and is also the company which pays the highest dividends. From a subsequent comparison of the figures given me at this mill, I am almost certain that it is on information supplied by this company that much of the Consular Report is based; and here the number of operatives employed per thousand spindles worked out at a much higher figure than in any other mill I visited, viz. 17 per thousand. My visit was brief, and the company was very reticent in giving me any information—so that I could not ascertain the details I required to know to make a calculation of labour costs. I feel sure that the explanation of my experience at the Kanegefuchi Mill (and my experience there is not an isolated one) lies in the fact that the directors of this company appreciate even better than other Japanese employers of labour how important it is for

them to conceal from their rivals in other countries how low are both Japanese wages and Japanese labour costs.

Subsequently, on visits paid to other mills belonging to other big companies, I was careful to set about obtaining the information I required in a more roundabout way. I found it possible to obtain details of production from the engineer; of numbers employed from the manager (and from my own observations); of wages paid from yet another of the staff, and so forth, and subsequently to piece this information together. Moreover, the staff of the mills I visited were not always aware of the lowness of wages paid according to Western conceptions, and considered that, because they are now a little higher than in the past, and a good deal higher than in many other Japanese industries (as, for instance, in silk filatures), they were actually something to be proud of.

The foregoing remarks have been necessary both in order to explain the discrepancy between the results of my reseaches and the statements made by some recent foreign visitors who have paid a few brief visits to the mills, and in order to explain in some measure how my information was obtained. I should also repeat the fact mentioned in Chapter VI—that I was also able on a few occasions to talk to the workers themselves.

Production Comparisons

In Mill A, working on 20's counts, the spindles produce 8 oz. per 10 hours each. In England, according to figures supplied to me by the Oldham Master Cotton Spinners' Association, a spindle produces 2 lb. of 20's twist in a 48-hour week: 6·66 oz. per 10 hours as against 8 oz. in Japan.[1]

On the above figures, Japan's production per spindle per hour is 21·2 per cent. higher than Lancashire's. On higher counts up to 40's, the discrepancy is as great. I give below figures supplied

[1] It is, of course, true that the Lancashire working week, exclusive of cleaning, is less than 48 hours—but, even so, the production per hour is much lower. Moreover, the employment of special cleaners in Japan—instead of letting the spinners do the cleaning in their weekly working hours—is precisely one of the reasons for the larger number of workers per thousand spindles.

to me by various mills belonging to four of the five largest companies in Japan, with the English figures beside them.

PRODUCTION IN 10 HOURS ON RING FRAMES

Japan		England	
Count (Warp)	Oz.	Count (Twist)	Oz.
10's	20·23	10's	11·36
16's	10·40	16's	7·66
20's	8·00	20's	6·66
22's	8·25	22's	5·66
20/2	6·71	30's	3·66
30's	4·37	38's	2·66
38's	3·67	40's	2·40
42's	2·90	42's	2·33
Count (Weft)	Oz.	Count (Weft)	Oz.
40's	2·98	40's	2·50
40's	3·30	42's	2·36
40's	2·84	44's	2·30

England: 47-hour basis taken as 48 hours.

As against my Japanese figure of 8 oz. per spindle in 10 hours for 20's, the Cotton Yarn Association's Statistical Information regarding Japan, based on Mr. Cunningham's report, gave 6·86 oz. as the output of this count in 10 hours in Japan, and further stated that the number of ring spindles per competent spinner is only 240 as against my 400. Yet my figure of 8 oz. is based on information supplied by three different mills belonging to three different companies. I consider it absolutely certain that those reports are now incorrect, whatever may have been the case a few years ago—though I also do not believe that the higher production shown in my figures is wholly to be explained by increased efficiency since 1927. Since the publication of my production figures in the *Manchester Guardian Commercial* in April 1929 Mr. Arno Pearse has given the following production figures in his report:

Count	Oz.
10's	16·00 to 17·60
20's	7·32 to 7·68
30's	4·16 to 4·25
40's*	3·14
40's*	2·88
40's*	2·90

* Various mills.

It will be seen that Mr. Pearse's figures are similar to mine for 40's, although slightly lower for 20's and higher for 30's. Generally speaking, however, his figures corroborate mine—showing a very high figure of production as compared with England.

My lowest figure for 40's was obtained from a mill belonging to a company which had much of its plant destroyed in the earthquake, and which is in a much worse financial position than any other of the big companies. Moreover—probably in consequence of this—it pays lower wages than any of the other big companies, and the dormitory accommodation and general living and working conditions in the mill I visited were not quite up to the best standard. All this, I consider, goes far to explain the lower production figure. The average daily wage in the ring spinning rooms was only 83 *sen* for the women and 1·39 *yen* for the men.[1] The labour turnover at this mill was also very great, the girls usually remaining only a year and a half at work. Hence a good proportion of the workers were young girls paid 54 *sen* a day—which was the rate for the beginners—and this has brought down the average. But in the case of Mill A, and certainly in the case of Mill B, the wages of apprentices were evidently not taken into consideration.

I consider that the conditions in this mill must be closer to (though still superior to) those in the non-model mills which one does not usually see, and that the lower efficiency here is striking witness to the fact that the strongest companies, in paying somewhat higher wages and providing better living conditions, are thus able to speed up and render labour far more intense—thus decreasing their labour costs. Here also it may be noted that in this mill there were 201 tenters on the 52,000 spindles—being an average of 260 spindles per tenter—and yet the counts spun were from 30's to 42's, averaging 36's, so that the number of spindles attended to by one girl has obviously been diminished by the very large number of apprentices included. The fully trained girls were attending 440 spindles each.

[1] The great discrepancy between these figures and those shown for Mills A and B may be partly accounted for by greater honesty in giving me information. Certainly they prove that the figures given for Mill B are too high, as already stated.

In the mill I visited belonging to the Toyoda Company, which manufactures the Toyoda automatic loom, the production figures given me were higher than anywhere else, and have not been included in the table given above. This company, although it possesses only two mills and is mainly concerned with the manufacture of textile machinery, is reputed to be the most efficient in Japan, and its efficiency cannot be therefore taken as typical. It may nevertheless be noted that they gave 8·256 oz. as their production of 20's in 10 hours, and 3·465 oz. as their production of 40's. These counts and 25's were the only ones spun at the mill. Here the frames were all individually driven, and the number of spindles per tenter on 20's was 400.

This mill affords a striking example of what can be done in Japan, and shows what a standard of efficiency is likely to be attained there in the near future.

The facts given above bring out fairly clearly that the efficiency of Japanese labour in mills which have not been "rationalised" is far below the English level, but that in the mills belonging to the leading companies labour has been greatly intensified during the last few years, and that this has far more than compensated for the increase in the daily or monthly rates of wages.

To summarise the position as it existed up to July last, it is true to say that in the best mills, although nearly a third more workers are employed per thousand spindles than in England, the performance of subsidiary tasks (cleaning, oiling, repairing, etc.) by workers especially employed for such tasks, plus the more rapid working of the machinery, plus the use of inferior raw material, brings the actual efficiency of the Japanese workers much nearer to the English standard—and that this, in addition to the low wages, brings the *actual* labour cost of production to a figure *far below* the English one.

Labour Costs in Spinning

I now come to a detailed examination of labour costs. The principal count spun in Japan is still 20's, but she does not export much of this count to India; it is mainly used for weaving in Japan, and the greater part of it is sold to small manufacturers. 40's, of

which Japan has been steadily increasing her production every year, is also one of the principal counts exported to India, although, as will be shown in the next chapter, exports under the heading 30's to 40's are now declining, Japan's place being taken by China.

20's and 40's, accordingly, are the best counts to select for purposes of comparison with Lancashire: 20's being a coarse yarn used to produce much of those sheetings, heavy shirtings and drills which have ousted Lancashire goods from China, and 40's a medium yarn which has already almost ousted the Lancashire yarn in the Indian market, and which is extensively used to manufacture shirtings for export to India—shirtings being an article in which Lancashire is fighting out a losing battle in the Indian market.

Mill A, which stated that it produced 8 oz. per 10 hours of 20's count, also stated that the total cost of production was 50 *yen* a bale—which equals 2¾d. per lb. reeled. This is, however, likely to be an overestimate, since I was elsewhere given the figure of total cost of production of 20/2's as 2½d. per lb. in the mill which gave its production of this doubled yarn as 6·71 oz. in 10 hours. The latter mill also gave 2d. per lb. as the total manufacturing cost of 16's, this figure being said to include interest and taxation—in fact, all costs except packing and office expenses. Office expenses may be included in the figure of 2¾d. per lb. for 20's—and probably something for depreciation. It is always difficult to ascertain exactly what items have been included "in cost of production." The total expenses of manufacture are usually stated to be about double the wages cost. I am here, moreover, mainly concerned in estimating the labour cost. The mill producing 16's and 20's gave figures in *momme*, which worked out at 1·219d. and 1·33d. per lb. as the respective labour costs, while on 38's it gave 1·1d. —the fact that the labour cost of the lower counts was higher was explained by the use of superior American cotton as against poor Indian cotton.

These figures show the difficulty of arriving at a general figure for labour cost where each mill may be using a different mixture of raw cottons. Moreover, it is possible that the cost of reeling is included in the labour cost figure for the 16's and not for the

38's—for in this mill the cloth being woven was of medium counts, so that the lower counts were evidently sold, this necessitating reeling and bundling. I am accordingly inclined to accept the figure of 1·219d. per lb. as fairly near the actual figure for 16's reeled, bundled and packed.

In order to arrive at a figure for 20's based on the facts of numbers employed, wages and production, I have made the following calculation on the data obtained from Mill A.

The total wages bill in two shifts adds up to 1,885 *yen* per day, taking separately the average wage for men in each department and multiplying it by the numbers employed, and the average wage for women in each department multiplied by the numbers employed, and thereafter adding up the totals obtained plus the overseers' wages. To this something has to be added for welfare charges. As shown in Chapter VI, absolute accuracy cannot be guaranteed on this count, but since welfare charges for the women vary from 20 *sen* to 25 *sen* a day, 20 *sen* per head for all the workers —men (who do not live in) and women—is a generous estimate; in fact I am in danger of overestimating rather than underestimating the cost. 20 *sen* a day for the 1,445 workers comes to 289 *yen* for the two shifts. So far, the total cost is therefore 1,885 *yen* plus 289 *yen* per 20 hours' working.

On 20's this mill produces 8 oz. per spindle in 10 hours—or 1 lb. per spindle in 20 hours. Its 55,000 spindles, if all were engaged on spinning 20's, would produce 55,000 lb. in 20 hours at a total labour cost of 2,174 *yen*; this would mean 0·86d. per day labour cost. Since, however, only two-thirds of its spindles are producing 20's and the rest counts up to 45's, the number of workers in the preparing-rooms must be increased to allow for the whole 55,000 spindles to produce 20's. For fear of underestimating the amount of extra labour that would be required, I am allowing an outside figure—viz. two-thirds of the total wages and welfare bill, from the mixing-room to the roving-frames inclusive—to be added as extra to the 2,174 *yen* mentioned above.

This works out at an extra cost of 0·18d. to add to the 0·86d. mentioned above. This brings the total labour cost to 1·04d. reeled—for since 20's are the principal count produced by the

mill for sale, and since it sells three-quarters of its yarn production, nearly all the 200 reels were actually being used for reeling 20's, and so nothing has to be added on this score.

Actually Mill A stated that its average production per day (20 hours) was 40,000 lb. of yarn of 28's average. Taking wages and welfare costs of two shifts as calculated above and dividing it by the average production of 40,000 lb. gives a figure of 1·19d. per lb. for 28's. Even allowing for the fact that a quarter of this yarn would not be reeled, it shows that my figure of 1d. per lb. for 20's is probably an overestimate of labour cost for this count—since it is little less than that for the finer 28's.

Mr. Arno Pearse, in his report, gives 0·935d. as the labour cost of 1 lb. of 20's yarn, including the cost of reeling and making up into bundles. Moreover, in his account of mill visits, he cites 40 *yen* a bale as the total manufacturing cost of 20's in a mill easily recognisable as my Mill A, and states subsequently that labour accounts for half the manufacturing cost, viz. 20 *yen* a bale (400 lb.) at that date (early 1929), which works out at 1d. per lb. Thus Mr. Pearse's figure for the labour cost of 20's reeled varies from 0·935d. to 1d. and is almost the same as my figure of 1·04d. A penny per lb. is a round figure which must be very nearly correct. Unreeled, i.e. at spindle-point, this figure is reduced by about 15 per cent., i.e. to 0·86d. per lb., or 0·75d. if Mr. Pearse's first figure is taken.

In Oldham, the average labour cost of 20's spun on ring frames before the wage reduction in 1929, as given me by the Oldham Master Cotton Spinners' Association, works out at 1·5d. to 1·7d. per lb. at spindle-point. It would now be from 1·4d. to 1·6d. per lb. The following figures therefore show the comparative labour costs of production up to spindle-point of 1 lb. of 20's yarn in Japan and England:

England	1·4d. to 1·6d.—say 1½d.
Japan	0·75d. to 0·86d.—¾d., or a little more.

This comparison shows that English labour cost is *double*, or almost double, the Japanese figure; and the higher Japanese figure has been calculated from the data of a Japanese mill using

70 per cent. Indian and 30 per cent. American cotton—i.e. paying a good deal less for its raw material than the English mill.

Take now the labour cost of producing 40's weft. Mr. Arno Pearse states that the labour cost of 40's is about double that of 20's, which would bring it to 2 × 0·86d., viz. 1·52d. on my calculation. Further, Mr. Pearse gives an example of one mill producing 40's at a labour cost of 1·87d. per lb. reeled and made up in bundles; allowing a reduction of 15 per cent. for reeling and bundling, the labour cost at spindle-point becomes 1·59d., i.e. practically the same figure as mine—and both these figures include office and welfare expenses (the wages of the office staff, matrons, etc.). The labour cost of 40's as actually given to me at one mill was a good deal lower, viz. 1·27d.

In England, the labour cost of spinning 42's ring twist was given to me in Lancashire (1930) as 2·25d. This compared with the Japanese 1·27d. or 1·52d. comes to less than double.

Lastly, I would compare a Japanese figure of 1·1d. for 38's warp as given to me with the English figure given by the Cotton Yarn Association, viz. 2·25d. per lb. up to spindle-point.

From these three comparisons it can be seen that the Japanese labour cost on counts under 40's is little, if at all, more than half the English figure—but from 40's it begins to be more than half. The improved position of England in the comparison in 40's and 42's bears out the usual contention that as counts grow finer English skill begins to count for more and the advantage to Japan of her cheap labour grows less. Nevertheless, Japan is still well ahead, even in 40's—and the above comparison explains by itself, apart from other considerations, the fact that Japan is steadily working her way to the first place in every Far Eastern market.

There is, however, an idea in Lancashire that, although labour costs are lower in Japan than in England (though few recognise how much lower), nevertheless in other manufacturing costs and in fixed capital Lancashire has an advantage. As regards the initial cost of setting up a mill, Lancashire has, it is true, an advantage—but in the matter of costs of production other than wages this is very doubtful. I am leaving out of consideration for

the moment the advantage Japan enjoys from cheaper raw material, and considering only expenses of *manufacture* other than wages. In the first place the Japanese figures mentioned above for 38's and 40's, which include office expenses, form 43 per cent. of the cost of manufactured yarn (exclusive of the cost of the raw material). In England, the wages figure for 36's for instance, plus the cost of superior supervision (directors, managers, salesmen, secretaries and overseers), comes to about 39 per cent. of the estimated cost of production exclusive of the cost of the raw material. But this fact—although it shows that costs other than wages in Japan cannot be higher than in England—must not be taken quite at its face value; for the English cost of production figures take in factors which either do not exist in Japan or are not calculated in costs of production. For instance, there is no unemployment insurance and very little is paid in rates in Japan on the one hand, whilst, on the other, such items as brokerage and commission on raw material and yarn do not come into costs of production in consequence of the central buying organisations of the mills. Further, the Japanese figures include little, if anything, for interest—since the mills are in such an excellent financial position, in contrast to the indebted condition of most mills in Lancashire. In this connection it will be useful to compare figures of the total cost of production of 40's and 42's put forward by employers on either side, though unfortunately here the figures being compared are for mule spun yarn in England and ring-spun yarn in Japan:

COST OF PRODUCTION UP TO SPINDLE-POINT, EXCLUSIVE OF COST OF RAW COTTON

JAPAN		ENGLAND	
40's Weft		42's Weft for a Group of Turnover Mills *	
	d.		d.
Labour	1·27	Wages..	2·365
Other expenses ..	1·65	Interest and depreciation ..	2·000
		Other expenses	1·894
Total	2·92	Total	6·259

* Figures put forward by the employers in 1925. To-day the labour cost would be 6¼ per cent. less.

Other comparative figures—even where such heavy interest charges as in the above English figures are not included—show a very great difference in favour of Japan. In considering the figures given below it must be noted that the Japanese costs include reeling, except in the case of the 38's count, whereas the English figures are to spindle point (ring twist) only.

JAPAN

Count (Warp)	Total Manufacturing Cost per lb. In 1929 with *Yen* at 22d. d.	Total Manufacturing Cost per lb. With *Yen* at 2s. d.	Labour Cost In 1929 d.	Labour Cost With *Yen* at 2s. d.
10's	1·235	1·34	0·855	0·93
16's	2·013	2·16	1·210	1·33
38's	2·486	2·71	1·100	1·20

ENGLAND (RING)

Count (Warp)	Total Manufacturing Cost per lb. d.	Labour Cost per lb. d.
16's	2·50	1·00
38's	4·75* / 3·87*	2·25

* Two different Lancashire figures, but clearly different items, have been included, for the labour cost given was the same in each case.

Comparing the cost of 38's in both countries on these figures, the smaller British one—which includes only a small fixed interest charge figure—shows labour cost forming 58 per cent. of the total cost of production, whereas in Japan they form only 44 per cent. So that where large fixed interest charges are not being borne by an English mill, the relative cost of wages is higher than in Japan. But even in such a case the manufacturing cost other than wages for Japan is only 1·386d. as against 1·62d. in England.

One idea current in Lancashire which needs correction is the one that in Japan "stores," repairs and so forth cost more than in Lancashire. It is thought that because Japan imports textile machinery she must necessarily also import bobbins, strapping, etc. This is emphatically not the case any longer. Some minor items may still be imported, but bobbins, strapping and so forth are made in Japan. Now that Japan has for long been making ordinary looms, has an automatic loom invented by a Japanese and is even making a certain quantity of spinning machinery, it would be strange if she could not supply her own bobbins!

Coming to capital charges, it is, of course, true that the initial cost of setting up a mill in Japan is a good deal higher than in England on account of the higher cost of machinery and the need to build dormitories, etc. But even this advantage to the English manufacturer is gradually diminishing. In the first place, as Japan comes to manufacture her own machinery, the capital cost under this heading diminishes—and here it is worth while noting that the Toyoda automatic loom, now being manufactured in large quantities in Japan, there costs about 600 *yen* (£60), whereas in England, where it is being manufactured by Platt's of Oldham under the Japanese patent, it costs £65.

Nevertheless it is still true that in spinning the machinery costs the Japanese capitalist more than the British.

As regards land and building, the tendency is for new mills to be built in Nagoya, where land is not so dear as in Osaka or Tokio; and the light wooden dormitories—though, being only two stories high, they occupy a large space—are not expensive to build.

The present capital cost, including machinery, land and buildings, in Japan is now generally given as from 55 *yen* to 60 *yen* per spindle (£5 10s. to £6), but the figure given me by a director of one of the biggest companies in Japan was 52 *yen*. In Lancashire, it would be about £2 10s. per spindle for a ring mill equipped for the spinning of 36's twist and 42's weft. Thus England has a great advantage in so far as capital cost is concerned, although to-day, owing to over-capitalisation and indebtedness, this advantage is obscured. The Lancashire Cotton Corporation, however, whose mills are capitalised at about 30s. per spindle, is in a very favourable position in respect of capitalisation as compared with Japan.

Costs of Production in Weaving

It is, I consider, especially in weaving that Japan's low labour costs give her a very great advantage over Lancashire: for in weaving the advantage Lancashire still has in spinning in the lesser number of workers employed hardly exists. The warp-

stop motion device extensively used in Japan on all coarse and medium goods enables the manufacturers to set their workers to attend to more (not less) looms than the Lancashire workers on many kinds of plain goods. It is true that the use of warp-stop motion attachments necessitates the employment of more preparatory labour and of more tacklers—but this men's labour is not much better paid in Japan than women's. In weaving the use of Japanese-made looms renders the capital cost more nearly equivalent to the English cost; moreover, in the small sheds many workers live at home, while dormitory accommodation for those girls who are on contract is of the poorest and cheapest kind.

It is not possible to give a clear account of costs in weaving without giving separate consideration to the big combined spinning and weaving enterprises and the larger weaving-mills which own at least a hundred looms, and usually far more, as distinct from the many small weaving-sheds specialising in various kinds of goods. The production of sheetings and shirtings, and of drills and jeans, is mainly concentrated in large enterprises[1]—shirtings being, I understand, almost exclusively made by the members of the Japan Cotton Spinners' Association, and drills and jeans being also, for the most part, their product. It should, however, here be repeated that some members of the Association are quite small concerns. As a rough generalisation, however, one may say that, in order to examine costs of production for shirtings, one must go to the big combined enterprises; that for twilled goods and sheetings there are medium-sized undertakings which may or may not be members of the Association; whilst such goods as crêpe, flannelette, velveteen, sateens, coloured wovens, etc., are made in very small mills specialising for the most part on one particular product. (A description of these small weaving-sheds was given in the last chapter.)

I start, then, with an analysis of the cost of production of the plain woven cloths made as sub-work by spinners. The number of workers per hundred looms worked out at 60 in 1929, according to the total number of men and women employed on the 71,730

[1] Of a hundred or more looms.

looms belonging to the Japan Cotton Spinners' Association then working. Since very many—but not all—the mills work double shifts in weaving as in spinning, this figure is of little use in calculating the actual number of workers usually employed on one shift of a hundred looms. The 1927 Report of the British Consul at Osaka gave 60 workers per hundred looms, and stated that most of the big companies work only one shift in weaving. Whatever may have been the case some years ago, it is no longer so to-day —for production of cloth is increasing more rapidly than that of yarn; and, moreover, in almost every large mill I visited, two shifts were being worked in weaving as in spinning. Moreover, the figure of 60 workers per hundred looms includes those on winding, warping and sizing—that is, on all the preparatory processes of weaving—and even those on calendering and packing, in the majority of cases, as well as actual weavers.

The failure to appreciate this has led to various miscalculations, notably those of Mr. Grey[1] in his comparison of Japanese and English weaving costs, and those contained in the Cotton Yarn Association's statistical information concerning Japan. This latter report does not, indeed, take 60 workers per hundred looms on one shift to be the figure for Japan, as did Mr. Grey; it gives 48—but it is elsewhere at fault in calculating weaving labour costs by assuming that the 48 are all weavers. It is unfortunate that Mr. Grey's calculations as to labour costs have gained wide credence, and are now frequently quoted to show that English manufacturing costs are actually lower than Japanese.

It is, in fact, somewhat difficult to make comparisons with England if the preparatory processes are taken into account, for some Lancashire manufacturers do their own beaming and some do not; whilst others prepare some of their own beams and obtain others from the spinners. Originally[2] I took Mr. Grey's figures for his mill to refer to weaving only, but I learned subsequently that they include the cost of winding and warping. This shows how difficult it is to give a general figure for Lancashire, and one is on safer ground in comparing actual weaving costs only. It is

[1] Chairman of the Manufacturers' Association.

[2] See *Manchester Guardian Commercial* for May 2, 1929.

nevertheless true that the beaming is usually done by the spinners. It should, however, be noted that all the combined spinning- and weaving-mills in Japan reckon winding and warping as part of the manufacturing side, and that most of the weaving-mills prepare their own beams. That frequent sight in Lancashire, a cart or motor lorry conveying beams along the road, is rarely if ever seen in Japan: the bad roads—or absence of any roads—would anyhow render it exceedingly difficult and in most places entirely impracticable to convey the beams by horse or motor power, whilst the weight would be too great for the human horses who still convey so much of Japan's merchandise from place to place.

Before coming to a detailed examination of weaving costs, a few details may be given of the number of workers on all processes per hundred looms, and the division of that labour on the various processes. In the case of all the big mills I visited, the number of workers per hundred looms on one shift worked out at round about forty where plain cloths of medium counts were being manufactured. The following are the particulars supplied to me of the number of workers in each department of the weaving section of a mill with 1,230 plain looms with warp-stop motion, making 38 in. wide cloth of counts 28's to 40's:

One Shift	Men	Girls
On 8 winding frames (144 drums per frame) ..	2	50
On 8 warping machines	1	6
On 2 warp-tying machines and drawers-in ..	4	8
On 6 sizing machines	8	0
Weaving	45	380
Calendering and packing	10	25
Foremen who also did repair work	3	—
Total	73	469

Total men and women, 542.

It will be seen that the total number of workers here comes out at 43·6 per hundred looms, and that the average number of looms per weaver is 3·25. This figure includes apprentices, of whom there are always a large number. The average length of stay in this particular mill is two years—six months being given as

the period necessary for a girl's training. The figure does not allow for the absence of a number of girls through sickness—which would diminish the figure of those working by 5 per cent. to 7 per cent. The usual number of looms per weaver could be seen to be four, but some girls could attend to six. It will be noted, however, that 45 men or boys were employed in the weaving-room; these brought in and fixed the beams, oiled, fumigated, cleaned the machinery and kept it in working order. The actual weavers did no other work than piecing breakages and changing the cops; they did not even clean their looms as in England.

In the case of weaving, as in spinning, in Japan, the utmost attention is paid in the big mills to keeping the machinery in good condition, and so increasing productivity. Hence the large amount of extra male labour employed—which is also poorly paid labour—repays the employer by increasing output.

The wages of the girl weavers ran from 60 *sen* for apprentices to 1·80 *yen* for girls on six looms. The men's wages were from 1 *yen* to 2·20 *yen* a day, but very few received more than 1·50 *yen*.

In another mill of which I have no such precise figures for the division of labour, but where cloth of the same width but of somewhat higher average fineness was being manufactured, there were also 43 workers per hundred looms for all processes. Here the average number of looms per weaver—exclusive of apprentices—was given as 5·9.

It will be noticed that these figures tally with Mr. Arno Pearse's average figure of 5·5 looms per weaver for the members of the Japan Cotton Spinners' Association. It is clear, none the less, that the figure of looms per weaver is below the four, if the apprentices are taken into consideration.

As against these typical figures, I found that in enterprises where weaving only was carried on, and where many of the workers lived at home, continuing work after marriage, the average number of looms per worker was a good deal higher. In such places women may have been weavers ten or twelve years, and are naturally more skilled than the little girls in the big spinning- and weaving-mills—who remain at work for only three years at a maximum.

For instance, in a weaving-mill in a small village near Osaka, weaving drills and sateens for the Chinese market, I found 120 women weavers in the two shifts on 410 looms. This means 60 weavers in one shift, and works out at an average of 6·8 looms per weaver. All the looms had, of course, warp-stop motion attachments. One cloth being woven was a warp sateen 30 inches wide with (approximately) 93 warp ends and 63 picks per inch. The production average for the mill was 45 yards per loom per shift.

This particular visit was an exceedingly useful one, and the opportunity came to me by a lucky chance. Lucky because this visit was not an announced one (accompanied by a manager or director of a company), but an impromptu visit paid one evening whilst spending a week-end in a small village with a Japanese girl and her family. On the way to the station, about 7 p.m., we passed a factory, and since my friend said her father knew the mill people, I asked her to try to get permission for us to go round the place. There was only a clerk in the office, and he summoned the foreman to take us round. The weaving-shed was low and the machines crowded together, but over each loom hung an electric globe low enough to light each piece of cloth. The night shift had begun working an hour before. A few minutes after we entered the electric light suddenly went out. Everyone rushed out of the weaving-shed, and in the dim light outside we were surrounded by the workers. For a few moments I was able to ask questions of the operatives themselves, one turning out to be a former school-mate of my friend. She said that she and most of the women worked six looms (thereby confirming the information given to me in the mill office), but a few attended to eight. They worked in eleven-hour shifts, with one hour's rest, and the wages earned were 1·50 *yen* a day for six looms, and 1·80 *yen* for eight. She and most of the other women lived at home and brought their food with them to the factory. There were only a few girls living in, these being mainly employed on winding and paying 15 *sen* a day out of their wages for the food provided by the employer.

At this point the electric light unfortunately came on again and the girls ran back to the weaving-shed. I attach great importance

to these few minutes' conversation, since it is rarely possible to talk to workers themselves in Japan; and it is unsatisfactory to have always to accept the management's or employer's statement as to wages, hours and numbers of machines worked, without corroboration or modification from the workers' side.

Other visits paid to mills doing only weaving have confirmed my impression that more looms are attended to by one girl in such concerns than in the big combined spinning and weaving enterprises, where the girls remain only a few years at work, where the number of workers per hundred looms is swelled by the large number of apprentices, and where the weavers do not remain long enough at work to become as efficient as the women who live at home and weave year after year. In the smaller places employing mainly resident labour no reserve force has to be kept, and there is no obligation on the employer to look after the workers when they fall sick or to keep them when trade is slack.

A further example which may be cited here is that of a small shed of a hundred and two looms which I visited at Nagoya, where sheetings and T-cloths were being manufactured. Here the shifts were two of eleven working hours: that is, twelve-hour shifts with one hour's interval for meals. The shifts were changed at midday and midnight. Less than half the women workers were living in: those who did were here also employed on winding and warping. The girls winding were only paid 16 *yen* a month. The total number of workers in each shift was 30 women and 5 men; 35 workers per hundred looms as against 43 in the big spinning- and weaving-mills, to which I have referred above. The number of looms per competent weaver was six and the majority of the weavers were grown-up women. Some of the weavers had worked ten years in this factory and these were stated to be able to attend to nine looms. Here, as in most small sheds, twenty-eight days a month were being worked. All the work of the shed—including winding and warping—was being done by women or girls, with the exception of sizing, and the tacklers were of course men.

It will no doubt be said that even if my figures of the number

of looms worked are accepted, the rate at which the machinery is worked must be much slower than in England. There is, however, not very much difference in the speed at which the looms are worked in the bigger mills. It is true that in the small sheds, where the hours worked are eleven, the looms are often run very slowly and the production per hour is substantially less than in England. Where the hours worked are ten, there is not much difference; and now on eight and a half hours' working the number of picks per minute is probably substantially the same. In any case, even where there is still a small difference, the longer hours worked in Japan give her manufacturers an advantage over Lancashire manufactures in the amount produced per day irrespective even of double shifts.

I will now consider the whole question of productivity and manufacturing costs from an examination of the data I obtained on my various visits to a large number of mills.

My first examples are from large combined spinning- and weaving-mills employing from about forty workers per hundred looms, exclusive of calendering and packing, and engaged solely on the manufacture of shirtings. The average number of looms per weaver (including apprentices) in these mills was three and a half. These are the cloths compared with similar cloths manufactured in Lancashire:

	Counts		Dimensions		Weight	Reed	Picks	Production	Weavers Price
	Warp	Weft	Width Inches	Length Yards	Lb		per Inch	in Ten Hours Yards	per Piece *Yen*
JAPANESE CLOTHS									
1	36	40	38	38·0	6·50	56	57	57·0	0·305
2	30	35	38	40·0	10·25	73	76	39·0	0·500
3	28	30	38	40·0	11·00	72	75	40·0	0·470
4	42	46	44	46·0	9·42	68	72	40·0	0·500
ENGLISH CLOTHS									
(Cotton Yarn Association figures brought up to date)									d.
1	36	42	31	125·0	—	72	72	—	66·250*
(Amalgamated Weavers' Association figures)									
2	24	22	36	40·0	12·00	60	64	46·7	24·450†
3	30	36	44	38·5	10·50	72	68	43·8	28·000†
4	40	40	44	38·5	8·00	64	64	46·7	25·500†

* This particular figure probably includes overlooking, but the others do not.
† Prior to August 1929.

The actual weaving price per hundred yards works out as follows:

WEAVERS' PRICE PER 100 YARDS

	With *Yen* at 22d., as it then was				To-day with *Yen* at par (2/0½d.)			
	Without Welfare		With Welfare		Without Welfare		With Welfare	
	s.	d.	s.	d.	s.	d.	s,	d.
No. 1 cloth ..	1	5½	1	7¾	1	7	1	9½
No. 2 cloth ..	2	5½	2	7	2	6½	2	10½
No. 3 cloth ..	2	1¼	2	4½	2	4¼	2	8
No. 4 cloth ..	2	0	2	3¼	2	2½	2	6

	Lancashire Figures before 6¼ per cent. Reduction		To-day	
	s.	d.	s.	d.
No. 1 cloth	5	5	5	1
No. 2 cloth	5	1	4	9¼
No. 3 cloth	6	1	5	8½
No. 4 cloth	5	6	5	2

Therefore, comparing No. 4 cloth of Japan, which has 72 picks per inch, is made of somewhat finer yarn and is 13 inches wider than the British cloth No. 1 (which also has 72 picks per inch), the Japanese weaving price with welfare is found to be 2s. 6d. per hundred yards to-day as against the English price of 5s. 1d. to-day. The Japanese labour cost of weaving a slightly finer cloth, 13 inches wider than the English, is only *half* the English cost.

If we compare the cost of the same Japanese cloth (No. 4) with No. 3 English—which is also 44 inches wide, but which has only 68 picks per inch as against the Japanese 72—the comparative figures to-day are: Japanese, 2s. 6d.; English, 5s. 8½d.

It may be that the No. 1 English cloth includes overlooking (though the other three English cloth figures definitely do not): if so, another 1½d. or 2d. must be added to the Japanese weaving cost; but this will not greatly affect the enormous disparity.

If the other cloths given in the above table are similarly compared, making allowance for the slight differences in pick, it will be found each time that even to-day, with the *yen* at par, and English wages reduced by 6¼ per cent., the Japanese figure for the weavers' price is never more than half the English figure, and usually less than half.

It can also be seen that before the removal of the gold embargo in January 1930 the Japanese manufacturer enjoyed what in

effect amounted to a subsidy in the fact that the *yen* was usually at 1s. 10d. The gold embargo once removed and the *yen* at par (2s. 0½d.), the Japanese cotton employers began to reduce wages by large amounts—the Kanegefuchi Company starting the attack by what amounts to a 25 per cent. reduction in wages.

It is quite obvious that the difference in labour costs in weaving is so great between England and Japan that the Japanese will continue to have a large margin, whatever reductions in wages cost are brought about in Lancashire—either by direct reductions of weavers' wages or by the eight-loom system now advocated by many employers. Further, it is clear that even the above Japanese labour costs are now reduced: the Kanegefuchi wage reductions having clearly been the prelude to similar reductions in all cotton mills.

I will now attempt a calculation of the total labour cost of the whole manufacturing process in Japan, and compare the result with the Cotton Yarn Association's figures. Taking the mill already cited in this chapter, engaged on the manufacture of plain cloths of medium count,[1] it is possible to make a calculation of the labour cost for the whole manufacturing process from winding and warping to calendering and packing.

The total number of men employed is 70, and their wages run from 1 *yen* a day for the boys to 2·20 *yen* for a very few employed on special jobs. Taking 1·40 a day as a fair average (the majority of the mill workers being boys) and adding 10 *sen* a day per head for cost of food and welfare,[2] one gets a total of 105 *yen* a day for men.

The total number of girls employed, exclusive of the weavers, is eighty-nine. 1·10 *yen* a day would be a high average of their earnings, since a large proportion of them are apprentices earning 60 *sen* to 80 *sen* a day. Adding 20 *sen* per head for food and welfare, the total comes to 116 *yen*. Adding the three foremen at 7·70 *yen* a day (a figure which sounds excessive), the total wages bill comes to 244 *yen*.

[1] Page 214.

[2] The grown-up men all live at home, and this figure is therefore a fair estimate.

Taking the second cloth in my list of examples—this being one of those manufactured at this particular mill—the production being 39 yards per 10 hours per loom, the total production of the 1,230 looms in the factory on one shift would be 47,970 yards.

Therefore the labour cost, other than actual weaving, of producing 47,970 yards would be 244 *yen*.

This was equivalent to 11d. per hundred yards at that date. With the *yen* at par as to-day, it would be 1s. 0½d. Add this 1s. 0½d. to the actual weaving cost, viz. 2s. 10½d., and we get 3s. 11d. as the total labour cost in the manufacture of a hundred yards of a 76 picks per inch shirting of counts 30 warp and 35 weft in Japan to-day. (Before January 1930[1] it was 3s. 6d.)

If it is argued that with the curtailment of night work in July 1929 and the consequent reduction of working hours to 8½ the labour cost has been increased, the answer is that the price lists remained the same after July, the women being told to speed up and try to earn as much in 8½ hours as previously in 10. The men's wages, it is true, being day wages, remained the same for the shorter as for the longer working day: therefore in mills working two shifts in weaving there has been some increase in labour cost on the preparatory processes in weaving. At the particular mill where No. 2 cloth was made, however, only one shift was worked on the weaving side—so that 10 hours will have continued to be worked after July 1930.

I am, of course, aware that the number of workers employed on the preparatory processes in weaving varies according to the type of cloth produced; but the shirtings produced at this mill varied only slightly in count of yarn used and in reed—and the figure of 3s. 11d. as total labour cost must be substantially correct for the cloth given.

At another mill, not yet made use of as an illustration in this chapter—where the number of workers per hundred looms was 41·7, the principal cloth woven was the following: Warp, 38; weft, 40; width in inches, 44; length in yards, 38; weight in lb., 8·3; picks, 61·38; warp-ends, 47.

[1] Actually the *yen* went up to par a short time before the date of the removal of the embargo.

The production was said to be 45 yards per loom per shift, while the figure of total manufacturing cost and that of labour cost were given to me by one of the directors on the understanding that the name of the mill should not be published. On a hundred yards these costs worked out at 3s. 8d. for labour and at 6s. 11d. for total manufacturing costs including labour. The former figure was said to include all processes from winding and warping to calendering and packing; whilst the 6s. 11d. included, in addition, office expenses, taxation and interest. This cloth is not so high in pick as the one I have worked on above, but it is wider.

My figure of 3s. 11d. (in 1929) for the higher picked cloth tallies pretty well with the 3s. 8d. for the lower picked cloth given me by the director of the second mill. This bears out the substantial correctness of my calculation based on numbers employed, wages and production.

Now Mr. Grey, whose calculations of Japanese labour costs have created such a false conception in Lancashire, assumed that the 60 workers per hundred looms in a Japanese mill referred to those on one shift, and made the further mistake of thinking that 3s. 8d. per hundred yards on shirtings is the Japanese labour cost for weaving only, not realising that it should be taken as the total labour cost of all the processes of manufacture from winding and warping down to calendering and packing (though it is true he realises it includes calendering and packing).

Actually the 3s. 8d. per hundred yards for the labour cost of all processes on a typical shirting fits in very well with the result of my researches. It is perhaps slightly too high, since it refers to shirtings 30 inches wide with 60 picks per inch as against my figure for a cloth 38 inches wide with 76 picks per inch: but this discrepancy is probably due to improvements in efficiency in Japan during the last two or three years.

I now come to a comparison of the above total manufacturing cost with such English figures as are available.

The late Cotton Yarn Association gave figures of costs of production for Lancashire which, brought up to date, give 7s. 8d. per hundred yards as the total labour cost (including sizing and overlooking) of weaving a 36-inch 76-pick, standard shirting of

32's warp and 30's weft, and 10s. 5d. per hundred yards as the total manufacturing cost of this cloth. On this basis the cost of manufacturing one hundred yards of a 60-pick 36-inch shirting in Lancashire would be: Labour, 6s. 2d.; total weaving cost, including labour, 8s. 9d.

My Japanese figures, given at the foot of page 221, for one hundred yards of 61-pick cloth came to: Labour, 3s. 8d.; total weaving cost including labour, 6s. 11d.

But the Japanese cloth was 44 inches wide as against 36 inches for the English shirting. In spite of this the total manufacturing cost in Japan is 31 per cent. less than in England.

But even this does not reveal the full extent of the difference, for the Japanese figure includes calendering and packing, which are not included in the English figure of 8s. 9d., and also the cost of winding and warping, which, in the English calculation, comes into the spinning cost. If allowance is made for this fact and for the greater width of the Japanese cloth, the difference in the total cost of production must be quite 50 per cent. in favour of Japan.

The low cost of labour which gives the Japanese manufacturer his great advantage is clearly shown here: his total labour cost for all processes, from winding and warping to calendering and packing, are little more than half the English figure for sizing, weaving and overlooking only. The English figure for other costs than labour comes to 2s. 7d. as against 3s. 3d. in Japan. If the cost of winding and warping plus calendering and packing were deducted from the Japanese figure, the costs of manufacture other than labour would be the same or less in Japan than in England. At least it is certain that they would not be higher in Japan.

In these calculations I have purposely weighted the scales against Japan in case it is argued that my Japanese figures are an understatement in so far as other costs than labour are concerned. I am aware that interest charges such as are usually included in English figures of costs of production will not appear in the Japanese calculation; but I consider not only that my labour cost figures (which are carefully calculated and cannot be more than a penny or two out at the most) reveal an enormous

advantage to the Japanese manufacturer, but also that the other expenses of manufacture are *not* higher in Japan than in England, although so many people in Lancashire are convinced that they must be. (It is, of course, true that in weaving the other expenses form a higher percentage of the total cost of production in Japan than in England.) Power is as cheap or cheaper in Japan; direct taxation is lower and most stores can be obtained in the country. It is probably true that in so far as office expenses at the mill are concerned more persons are required to do the work—for Japanese clerks do not appear to the outside observer to be either quick or efficient—but this is a minor point in view of the fact that so much expense on this side is eliminated by the big amalgamations which control so large a section of the cotton industry.

What I am principally concerned to show is the very great difference in labour cost which no conceivable changes in Lancashire can effect. In so far as automatic looms are concerned the Japanese are already ahead of Lancashire; and since they now manufacture their own automatic looms at low cost (the Toyoda automatic loom costing £60), there is nothing to prevent their going ahead in this direction with far greater facility than the Lancashire mill-owners—who will not be able to introduce and work automatic looms on a profitable basis without a prolonged struggle with their workers and without the need to pay them a much higher wage than the Japanese. Moreover, few Lancashire manufacturers are in a financial position to install new machinery, and it must be principally in the mills owned by the Lancashire Cotton Corporation that the change to automatics can be effected.

The Toyoda automatic loom in Japan is attended to by girls earning little more than the weavers on four ordinary looms. Those who work 40 or 50 looms receive only 48 *yen* a month. This means about 3s. 6d. a day, plus 5d. for "welfare." Most girls cannot work as many as 50 looms, but can work 30 or 40; they then receive about 2s. 6d. a day. Of course earnings depend on the speed of the loom and the kind of yarn used and may be as high on 25 or 30 looms as on 40. In Lancashire it is unlikely that a wage less than 52s. or 55s. a week will be accepted by the workers.

These looms in Japan are worked at from 185 to 210 picks a

minute, according to the number of weavers and the yarn used. In the mill I visited I found two kinds of cloth only being woven, both from rewound weft. The first was as follows: Warp, 40's; weft, 40's; width, 44 inches; picks per inch, 66; reed, 50.

The production per loom per 10 hours of this cloth was 45 yards and the total manufacturing cost 90 *sen*; 500 looms, 12 weavers.

The second cloth was a 5-shaft twill for the Chinese market, 30 inches wide, of 20's warp and 22's weft, 66 picks; 50 yards were produced per loom in 10 hours; 25 looms per weaver.

It was very difficult from a brief inspection to tell exactly how many machines were being worked by each girl, and I had perforce to accept the management's statement as regards the division of labour, the number of machines attended to and the earnings of the workers. These were said to be as follows for the first shed: nine weavers plus three substitutes, these twelve operatives piecing the warp and filling the shuttles; eight girls for cutting the cloth when the beam comes to an end (as compared with twelve girls for piecing and filling the shuttles, this sounds excessive, and it would seem that these eight must either assist the twelve or assist the men workers, probably the former); one man for carrying away and bringing the beams; three men for fixing the beams; one man for bringing and carrying away the bobbin boxes. In the second shed of 500 looms there were twenty-five weavers and the same number of substitutes and other workers as in the first shed, but the output per loom has been shown above to have been extraordinarily high. There were, in addition, three adjusters for the two sheds on the day shift, but none at night.

The maximum number of looms which can be worked by one weaver is stated to be 60. The beginner starts on 10 to 12, and progresses until at the end of a year she is supposed to be able to manage 50. Nevertheless, the Toyoda Company tells intending buyers that 30 looms per girl is probably the most economical way of using the looms in view of the cheapness of labour in Japan. The work looks very strenuous for the girls have to walk rapidly from loom to loom over a large floor space. The weaver is on piece rates, and I was told that she was paid 0·001 *yen* per yard if working 40 looms on the 40's warp, 40's weft material. The

other girls in the weaving-shed were on a standard wage of 1·20 *yen* for the cutters and 1·10 *yen* for the substitutes. The men were earning from 1·25 to 1·45 *yen* a day.

These few facts concerning wages and production on automatic looms in Japan are enough to show how vain is the Lancashire hope that automatic looms will enable her to compete against Japan. It is, of course, true that on automatic looms the wages factor becomes of very much less importance than on ordinary looms, and the use of automatic looms in Lancashire even with a fairly decent wage paid to the weavers would bring Lancashire costs much closer to the Japanese, but it would not give her any actual advantage over Japan. In any case, Lancashire spinning costs would remain much higher. At present Japan is ahead of Lancashire in the substitution of automatic looms for the ordinary type of power-loom, which means she is ahead of Lancashire in increasing the proportion of constant to variable capital in the cotton industry. Lancashire will probably for long retain her superiority in the production of fine-quality and specialised cloths to which mass production methods cannot be applied, but it seems clear that in the production of plain standard cloths she stands no chance and will soon lose even her remaining trade. The very great difference in production costs as between Japan and Lancashire has enabled Japanese cotton mill owners not only to oust Britain from more and more of the Far Eastern and other markets, but also to pay very large dividends and accumulate enormous reserves for the future improvement of their technique and extension of their productive capacity.

Before concluding this chapter with the few details I was able to obtain concerning the production costs of the crêpes, velveteens and flannelettes referred to in Chapter IV, and which are woven in the small sheds described in Chapter VII, I give below the details of the T-cloth manufactured in the Nagoya shed referred to earlier in this chapter (p. 217).

This T-cloth was as follows: Warp 20's; weft 20's; width, 30 inches; length, 24 yards; reed, 61; picks, 60; production per loom in 11-hour shift, 50 yards; weavers' price, 20 *sen* per 40 yards.

As already shown (p. 217) the number of looms per competent weaver was from six to nine, and the total number of workers in each shift per 100 looms was only thirty-five, this figure including the winders, warpers, slashers and tacklers. The winders were paid only 16 *yen* a month, the warpers about 30 *yen*. The men workers were receiving an average wage of about 35 *yen* a month. The total labour cost for all processes including winding and warping, and allowing 10 *sen* a day for food for those women who lived in (not the weavers, who all lived at home), worked out on these wage figures to about 1·10 *yen* per 100 yards. This was roughly equivalent to 2s. The weaver's price alone, as shown above, comes to only 1s. per 100 yards. These figures are sufficient to prove the extremely low labour cost of Japanese coarse goods, and easily account for the disappearance of English sheetings and T-cloths in the Far Eastern markets and Africa.

Cotton Crêpe

In the case of this material I have described the small association of weavers near Tokio[1] which bought its yarn, doubled it, sized the warps and sold the cloth co-operatively. The total number of looms owned by the seven weaving masters in this association was 360. The following particulars of costs of production were given to me:

CLOTH.—30 inches × 40 yards, 38 picks and 58 warp-ends per inch, weight 6 lb.

ASSOCIATION EXPENSES.—Doubling, 25 *sen*; sizing, 18 *sen*; carriage, 4 *sen*; inspection, 4 *sen*.

WEAVERS' EXPENSES.—Labour, 40 *sen*; depreciation, 10 *sen*; interest, 5 *sen*; repairs, 2 *sen*; power, 6 *sen*; extra expenses, 8 *sen*. Total, 1·25 *yen*.

The cost of finishing was given as 0·80 *yen* per piece (arranged for by the merchant). The total cost of the finished crêpe was accordingly 1·95 *yen* per 40 yards, plus the cost of the 6 lb. of undoubled yarn. The selling price was 7·30 *yen*.

I also saw 44-inch and 38-inch material being woven. The

[1] Page 100.

weavers attended to 4 looms and the weaving price was 16 *sen* for 40 yards of the 36-inch material. They worked 11 hours and produced on an average 60 yards per loom (38 picks per inch). The looms were run at only 155 or 165 picks a minute and earnings were just under 1 *yen* a day. All the weavers lived at home.

Flannelette

This is a speciality of the Wakayama district. The weaving is done at a charge for agents who provide the small weaving masters with the yarn and sell the woven cloth to the exporting merchants who have it dyed and then exported to China.

In a typical small shed employing thirteen women weavers, each attending to four looms, I found the following coarse blanket cloth being woven:

36 inches wide, weft 10's and warp 20's, 40 picks per inch and 42 warp ends. 90 yards long.

The working hours were 10½ and the price paid to the weavers 30 *sen* per piece of 90 yards. Their average daily production was 300 yards on the four looms. The weaving master received from 30 to 70 *sen* per piece of 45 yards from the agent, the weaving charge varying according to the state of trade. It was then (1929) between 40 and 50 *sen*, i.e. a little under 1s.

Cotton Velvet

The velvet referred to in Chapter IV is manufactured both north of Tokio and in the Sakai district near Osaka. In a shed visited in the latter district there were 58 looms and thirteen weavers. The velvet woven was made of twofold gassed yarn for the warp. Details are as follows: Length, 38 yards; warp, 2/60's; weft, 40's; weight, 9½ lb.; width, 50 inches wide on the loom, but split in half as woven.

The weavers received 3 *sen* a yard (50 inches wide) and the production per loom per day was only nine yards. Earnings varied very much according to the season of the year. The owner showed me his wages book, how the same weaver had received payments varying from 35·80 *yen* a month of 28 days in December to 45·5 *yen* in September. The temperature makes this great differ-

ence in Japan in small sheds like this, where it cannot be artificially regulated. The most suitable temperatures is 80–90 degrees, and this prevails in September. Hours were supposed to be ten, but were in fact only eight according to the owner. In prosperous times he supplied food to prevent the waste of time incurred by the workers going home, but not at the time of my visit since trade was slack. However, this weaving master had hopes of making his fortune by the capture of the Chinese market for cotton velvet. The men doing the cutting and washing earned from 90 *sen* to 1·45 *yen* a day. The material was out on poles drying in the sun.

These few details of the wages paid to the weavers making Japan's secondary lines of cotton exports have not been compared with the corresponding English figures because these are not available. It is none the less quite clear that the costs of production of these materials must be much lower than in England.

CHAPTER IX

THE CHINESE MARKET AND CHINESE PRODUCTION

THE comparison made in the previous chapter of British and Japanese costs of production shows quite clearly why it is that Japan has almost ousted Britain from the Chinese market. Although China has never constituted such an important market for British cotton exports as India, she came second on the list of importing countries before the War, and the increase of Japanese exports to China at Britain's expense is therefore one of the fundamental causes of the decline of British exports. Although the absolute loss in India has been greatest, the loss in exports to China has been even more spectacular, as is witnessed by the following comparative figures of quantities:

Percentage Ratio between British and Japanese Cotton Goods Exports to China, including Hong Kong

Average 1910–13.—Britain, 81·4; Japan, 18·6.
1924.—Britain, 40; Japan, 60.
1929.—Britain, 24·7; Japan, 75·3.

These figures are not exact because no account is taken of the difference in width of the exports of cotton goods from both countries, but they are near enough to show that the pre-War position has been almost completely reversed in favour of Japan. Comparing the British and Japanese position from the point of view of value in 1910–13, Britain's share of China's total piece-goods imports was 59·5 per cent. and Japan's 15 per cent., whereas in 1929 Britain's share was 21·8 per cent. and Japan's 66·5 per cent.

As compared with this amazing advance in the Chinese market on the part of Japan, her inroads into the Indian market appear far less startling—for in India, although she has also enormously increased her exports, the ratio between Japan and Britain is still very much in Britain's favour in spite of Britain's heavy losses.

In India, Britain retains three-quarters of the trade, but in China it would seem only a question of time before British imports

dwindle to nothing but a few million yards of the finest quality goods. China being Japan's nearest market, she has concentrated on gaining a monopoly there in the import trade, and has also of recent years been rapidly extending the number of her spindles and looms in China, as will be shown later in this chapter.

It is unfortunate that no complete import figures for China in one uniform measurement are available, but Britain and Japan are estimated to account for about 89 per cent. of the total imports of China, so that a comparison of their exports to China gives a fairly accurate picture. A further difficulty arises from the fact that imports into Hong Kong are, of course, not included in the Chinese Customs returns; comparisons of the pre-War and post-War position in the Chinese markets as made by various investigators may or may not include Hong Kong. Therefore an exact comparison of Chinese total imports now and before the War cannot be made. A calculation made by Mr. Barnard Ellinger[1] in 1927 for China proper showed that she imported 23,000,000 pieces of cotton piece-goods in 1925 as against 28,000,000 pieces in 1913, excluding a large quantity of miscellaneous unclassified cotton piece-goods in both years, viz. 6,000,000 *taels'* worth in 1913 and 9,000,000 *taels'* worth in 1925. But 1913 was a record year in which Britain exported 773,000,000 yards to China, Hong Kong, Japan, etc., as against 598,000,000 on an average from 1910 to 1913. It would therefore seem probable that China's imports in the post-War period are substantially the same as pre-War. Japan has not only supplanted Britain in a large share of the trade, but appears almost to have eliminated the United States altogether. The latter country sent 2,500,000 pieces to China (exclusive of Hong Kong, etc.) in 1913; but in 1925 these imports had disappeared, together with another 500,000 pieces sent by Russia before the War.

Mr. Ellinger summarises the position as follows:

> In 1913 England had approximately 68 per cent. of the pieces imported and 72 per cent. of the value, and Japan 23 per cent. of the pieces and at most 19 per cent. of the value—whereas in 1925 England had at most 26 per cent. of the pieces and 33 per cent. of the value.

[1] *Lancashire's Declining Trade with China*, read to the Manchester Statistical Society, November 1927.

As regards yarns, British exports to China, even before the War, were very small indeed, viz. 2·15 million lb., and are at about the same figure to-day. The decline in Chinese imports has been at India's expense, and recently at the expense of Japan.[1] To-day the Chinese import trade in yarns is still diminishing, and will probably soon cease to be of any importance.

What Japanese competition has meant to British cotton manufacturers in absolute figures is shown in the following table. This table includes exports to Japan, Formosa and Japanese leased territory in China. It is not possible to exclude the exports to Japan itself, since these are lumped together with Formosa, Kwantung, etc., in the British trade returns; they are, however, negligible in quantity, as can be seen from the Japanese trade returns of imports of cotton manufactures from abroad. The Japanese figures for exports to China considered in this chapter include those to Kwantung, etc.

BRITISH EXPORTS OF PIECE GOODS TO CHINA, HONG KONG AND JAPAN IN MILLIONS OF YARDS

Year	Totals	Grey	Bleached	Printed	Dyed	Coloured Woven
1910–13*	598·6	—	—	—	—	—
1913	773·2	264·7	274·6	36·5	189·4	7·8
1922	355·5	68·5	149·3	28·2	104·1	5·1
1923	275·2	57·2	95·7	21·8	94·5	5·7
1924	340·4	40·0	150·5	31·6	112·3	5·7
1925	202·2	23·2	94·7	18·5	61·7	3·9
1926	204·7	23·0	95·9	11·4	70·5	3·7
1927	130·4	9·6	58·9	10·1	47·2	4·3
1928	216·6	24·6	97·5	12·3	77·0	5·0
1929	220·5	25·1	100·0	12·7	75·7	7·0

* Average.

British total exports to China, etc., in 1929 accordingly show a 71·5 per cent. decrease on the 1913 figure.

Coming to analyse the nature of the decline in British exports to China, as might be expected, it is in grey goods that the decline has been greatest; so great, in fact, that these have dwindled to less than 10 per cent. of the 1913 quantity. Since 1926 there has been some recovery in the amount of all coloured goods sent to China, whether printed, dyed in the piece or coloured woven.

[1] See Chapter IV.

BRITISH EXPORTS OF COTTON PIECE GOODS TO CHINA, HONG KONG AND JAPAN AS PERCENTAGES OF 1913

	1926	1927	1928
Totals	26·4	16·8	28·0
Grey	8·7	3·6	9·2
Bleached	34·9	21·1	35·5
Printed	31·4	27·8	33·6
Dyed	37·2	24·9	40·6
Coloured woven	47·4	56·4	65·4

Since 1925 the position relative to Japan has not varied greatly, except in 1927, when she enjoyed the advantage of the anti-British boycott during the revolutionary period. In the following table an attempt has been made to show the comparative position of Japan and Britain in the pre-War and post-War periods; but, as already noted at the beginning of this chapter, exact comparison is not possible owing to the lack of knowledge of the widths of the Japanese exports. Moreover, the Japanese figures, being those published by the Manufacturers' and Exporters' Association, may not be exact or complete. Nevertheless, the enormous increase in the Japanese figures and the catastrophic decline in the British figures are clear enough indication of the great advantage now enjoyed by Japan.

BRITISH AND JAPANESE EXPORTS OF COTTON GOODS TO CHINA—INCLUDING HONG KONG, KWANTUNG, ETC.*

	In Millions of Yards			Percentage of Total from Britain and Japan supplied by each Country	
Year	From Britain	From Japan	Total from Britain and Japan	Britain	Japan
1910–13†	598·6	136·6§	735·2	81·4	18·6‡
1924	340·4	516·5	856·9	40·0	60·0
1925	202·2	662·4	864·6	23·4	76·6
1926	204·7	742·4	947·1	21·6	78·4
1927‡	130·4	—	—	—	—
1928	216·6	653·5	870·1	25·0	75·0
1929	220·5	672·7	893·2	24·7	75·3

* As previously, the British figures include Japan and Formosa.
† Average.
‡ Japanese figures not available.
§ The Japanese pre-War figure may not include Kwantung and Formosa. If this is so, the British figure should be reduced to 590·7 million yards and the Japanese percentage would be slightly increased.

Coming to an analysis of the kinds of cloth in which Japan has increased her exports at Britain's expense, Mr. Ellinger's analysis of the imports into China from all sources and from Japan, according to the Chinese Customs returns, gives the following total figures which can be compared with the figure of British exports given on the previous page.

CHINESE IMPORTS OF COTTON GOODS IN PIECES CALCULATED TO BE 30 YARDS LONG ON AN AVERAGE

(0,000 *omitted*)

	Total		From Japan*		Percentage of Total from Japan	
	1913	1925	1913	1925	1913	1925
Totals	28·32	23·04	6·38	16·95	22·5	73·5
Grey	15·13	7·90	5·57	6·70	37·0	84·9
Bleached	4·54	3·02	0·06	1·20	1·2	40·0
Dyed and coloured woven	6·26	8·24	0·51	5·94	8·0	72·0
Printed	2·39	3·88	0·24	3·11	10·0	80·0

* Goods enumerated in yards have been converted into pieces by calculating 1 piece to equal 30 yards. Certain grey goods from Japan, given in piculs only, have been converted into pieces by calculating that a piece weighs 8 lb. on an average.

Thus in every kind of goods, even in bleached, Japan had, by 1925, made the most astonishing progress. Since that date neither the British nor the Japanese figures of total exports to China, Hong Kong, etc., have varied much, and it is probable that the Japanese percentage share of imports is now about the same as in 1925.

It is of interest to note that Mr. Ellinger's figures show clearly that Chinese imports of all kinds of coloured goods have increased as against a decline in greys and bleached. The same increased consumption of coloured goods is to be found in the Indian market, and it is therefore apparently the case that both the Chinese and the Indians have acquired a taste for coloured clothing now that the Japanese supply them with cheap coloured woven and printed materials. The increase in the consumption of coloured goods by these markets gives importance to the few details I have been able to give in Chapter IV of Japanese finishing methods. In these, no less than in spinning and weaving, the Japanese have the advantage of cheap labour, and even import Korean workers

to do the most unpleasant and hardest labour at a lower wage than the Japanese. Moreover, the Japanese bleach or dye the materials in a far more primitive and less durable fashion than in England, and so provide their poorest customers with cheap coloured goods which they can afford to buy.

In so far as the Chinese market is concerned the coloured goods are principally black, though there are also large quantities of blues and smaller quantities of other colours. China's total imports of black dyed goods have more than doubled since the War; but British exports of these goods are only about half the pre-War quantity, whilst the Japanese are supplying about three-quarters of the imports. The principal lines of Japanese imports are three- and five-shaft drills and jeans and five-shaft sateen drills, such as I saw being dyed and schreinered in the finishing works described in Chapter IV. In Italians and imitation Venetians, Tientsin twills and Venetians, Britain still leads, but Japanese black cotton satins have been replacing the English black Italians and Venetians.

In China as elsewhere Japan markets certain standard lines produced in bulk, instead of manufacturing hundreds of different varieties of goods to order, like British firms. It is only in luxury goods that Lancashire's specialisation and skill enable her to retain her hold on the trade. In all the cheaper materials the Japanese advantage of cheap labour costs and mass-production methods enable her to oust the British goods. This is clearer in China than anywhere else, since the process of ousting British goods has gone farthest in this, Japan's most accessible market.

Japan also clearly has a great advantage over Britain in her methods of marketing. Both the lower margin of the Japanese exporters, the proximity of the market and the Japanese system of dealing direct with the Chinese cloth-dealer instead of through a compradore give her very considerable advantages. The evidence of a merchant given to H.M. Acting Commercial Counsellor at Shanghai[1] affords some useful comparative figures. He states that there are only two intermediaries between the Japanese manufacturer and the Chinese retailers, and in several instances only

[1] *Japan Chronicle*, May 24, 1928.

one. As against this the British manufacturer sells to a Manchester shipper, who has a resident representative in China, who books business with a foreign importer, who in turn sells to a Chinese wholesaler, who sells to the retail shop. The following cloth is taken as an example on which to compare the Japanese and British merchanting charges:

200 PIECES OF 28 INCHES 30 YARDS LONG CLOTH AT 11S. PER PIECE

Charges

	British s.	Japanese s.
Maker's cost	2,200	2,200
Manchester shipper's margin, 4 per cent.	88	—
Freight, insurance, etc.	70	16
Japanese shipping agent's margin, 1 per cent.	—	22
Shanghai importer (foreign), 5 per cent.	113	—
Japanese receiving agent, 2½ per cent.	—	56
Chinese wholesaler, 2 per cent.	50	—
Total	2,526	2,294

Japanese advantage = 10 per cent.

The great superiority of Japanese marketing methods has, however, already been stressed by many observers.

It would seem that Japanese exports to China have about reached their peak, and that the next few years are likely to show greatly increased production by the mills in China, in particular by those belonging to Japanese companies. China is still a country where the bulk of the cotton cloth consumed is hand-woven. Although no exact statistics of hand-loom production are available, a calculation of the amount of raw cotton consumed in China in 1925 showed that about 5,700,000,000 yards would be about the average consumption of Chinese woven cloth; but this figure does not allow for the cotton used as wadding in the winter which must reduce the yardage consumption much below the above figure.

The figure of 5,700,000,000 yards would give Chinese production as eight times the total imported; yet the production of machine-woven goods is only a little over half the figure imported.

China is potentially one of the largest cotton manufacturing and

consuming countries in the world, with her enormous population whose only clothing is cotton (varied by silk and a little wool for the upper classes) and her very large hand-loom production. At present the *per capita* consumption of cloth, if no allowance is made for cotton wadding, comes to twelve yards per head per year of native-made cloth, plus 1½ yards of imported cloth. It has been calculated that 70 per cent. of Chinese cloth consumption is produced on hand-looms. There is still much hand-spinning in China, but the majority of her hand-loom weavers must already be using machine-spun yarn.

The Chinese Cotton Industry

That machine manufacture is as yet so little developed is due to much the same causes as in India, viz. the lack of capital resulting from foreign domination. True, China does not actually belong to any of the Great Powers, but her principal ports do; and, above all, there is the fact that her hopeless attempts to resist foreign aggression from 1839 onwards have saddled her with enormous indemnity payments and delivered both the control of her Customs and the revenue therefrom to the Great Powers. Moreover, the latter have been able to force her to borrow large sums for railway and other development at high interest, and have saddled her through the banks with further debts by loaning large sums to those rulers or generals who undertook to suppress the nationalist movement in the past.

Until recently China has been forced to comply with every demand made upon her, having learned in the opium wars against Britain, and in her subsequent struggles to free herself from foreign domination, that she was powerless to resist Western arms. Thus China, though not nominally a colony, is economically and even politically in a state of dependence.

She is not able to give her infant industries the protection they require, and the revenue from the Customs goes to pay interest to the foreigner and cannot be used to develop her industries as the Japanese Customs revenue has been used in the past to assist the development of Japanese industry. The total indebtedness of

the Chinese Government to foreign capitalists, including railway, telegraph and general loans, is approximately £140,000,000; and this figure does not include the £40,000,000 still outstanding from the Boxer indemnity.

Nevertheless, in China, as in India, although lack of native capital accumulation has rendered impossible the development of heavy industry, a factory textile industry which requires relatively little capital has developed to some extent—and especially so since the War. Yet even here the weakness of Chinese capitalism can be seen from the fact that more than a third of China's spindleage is Japanese-owned, and that the Japanese are able to run mills in China at a greater profit than the Chinese. This, the Chinese maintain, is due principally to the fact that the Japanese companies enjoy the advantage of much lower interest on loans, and that, through being better financed, they are able to buy in large stocks of raw cotton when the price is favourable. Further, the Japanese companies have very great advantages in the matter of freight charges on the Japanese steamers plying up and down the Yangtze. In fact, just as the big companies in Japan are able to rationalise the concerns under their control and the small weavers are not (through being in a weaker financial position), so, too, in China the Japanese mills have been able to improve their methods of production and speed up labour, as well as introducing a system of bulk-buying of raw material and production of standard lines to stock, in a way not possible for the Chinese with their straitened financial resources and lack of Government assistance.

The principal centre of the Chinese cotton industry, as might be expected, is Shanghai, where the wealthy class of Chinese compradores and bankers, closely connected with European merchant houses, has helped to finance the cotton mills and has been directly concerned in the importation of textile machinery. The number of British-owned mills in China is very small. Formerly there were five, all in Shanghai; but one was bought up by the Japanese in 1927, and another (the Oriental) went into liquidation in 1928 and the Japanese purchased it also. There remain three mills, all managed by Matheson Jardine; but they find it difficult to compete against the Japanese mills, and even against the Chinese.

The textile machinery imported into China is almost all of British manufacture.

Machine spinning only began in China at the very end of the century, and it was not till after the War that it developed at all rapidly. Before the War, China's productive capacity was insignificant with a mere million spindles, and not till after 1918 did she begin to advance beyond that figure. Even to-day the Chinese industry is far behind that of Japan with 6,700,000 spindles and that of India with 8,000,000 spindles, although there are now nearly half as many spindles in China as in Japan. Yet before the modern era China was even more advanced than India in manufacturing skill, and Japan had acquired all her knowledge and culture from China. The weakness of Chinese capitalist development, owing to foreign interference and disunion, can be clearly seen in the fact that up to 1918 there were only 765,000 Chinese-owned spindles in China with her population of over 400,000,000 and her uncounted thousands of hand-looms. The following figures show the position:

Year	Number of Chinese-owned Mills	Number of Foreign Mills	Number of Spindles in Chinese-owned Mills Thousands	Number of Spindles in Foreign-owned Mills Thousands	Total Spindles Thousands
1894	1	—	—	—	65
1902*	12	5	302	208	430
1910	22	7	524	300	834
1913	24	10	593	371	964
1914	26	10	652	372	1,024
1915	29	10	700	390	1,090
1916	30	11	721	400	1,121
1917	30	11	740	482	1,222
1918	31	11	765	484	1,249
1927	73	45	2,034	1,546	—
1929	—	—	2,114	1,764†	3,879

* It was in 1895 that China was forced, after the Sino-Japanese War, to allow the import of machinery and the setting up of mills by Japan.
† 1,612 Japanese and 153 British.

Thus the total number of spindles—Chinese- and foreign-owned —which was only doubled in the quarter of a century ending in 1918 (and then amounted to only just over a million) increased threefold in the ten years ending in 1927. Even this increase in total spindleage is very small compared with the great expansion

in Japan in the same periods, viz. from 1·3 million in 1903 to over 6 million in 1927.

The increase in the number of looms since 1925 as compared with pre-War has been as follows:

	1896	1913	1925	1927	1929
Chinese	1,750	—	16,742	13,459	16,787
Japanese	350	—	6,844	10,268	11,203
British		—	2,348	2,348	1,900
Total ..	2,100	4,564	25,934	26,075	29,890

Productive capacity in weaving is therefore still far behind that in spinning.

It will be noted that Japan already owns nearly as many looms as the Chinese themselves. The Chinese mills spin largely for sale to the hand-loom weavers, but the Japanese use most of the yarn they spin for weaving in the same mills, or, since 1927, for export to India.

Whereas only 24 of the Chinese mills are in Shanghai and 19 in Kiangsu, with the rest scattered in various parts of China, 30 of the Japanese mills are in Shanghai. These 30 own over a million spindles against less than 800,000 in the Chinese mills in Shanghai: so that Japan owns more spindles than the Chinese in Shanghai.[1] This is of special importance, since the growing export of yarn and cloth from China to India goes principally from Shanghai and is of yarn and goods made in Japanese mills.

Taking spindleage in China as a whole, Japan now owns about 42 per cent. of the total.

Almost all the Japanese spindles and looms outside Shanghai are in Tsingtao, and it was said in 1929 that future extensions are likely to be greater there than in Shanghai in consequence both of the lower price of land in Tsingtao and of the stronger political position of the Japanese there. On the other hand, if further increases in exports to India and possible exports to Africa and elsewhere are planned by the Japanese, Shanghai would still seem the more favourable place for the extensions.

What the Japanese fear most is an autonomous China which

[1] These Shanghai figures refer to 1927 and are taken from the *Chinese Economic Journal* of November 1928.

would tax their mills out of existence. This leads them both to build new mills in Tsingtao, since they are politically much stronger there than in the south, and also to seek to co-operate with British capital in the establishment of new enterprises. The British appear (for reasons given below) to be unable to run mills efficiently in China, so the Japanese hope to persuade British capital to co-operate with them. They would provide the managerial personnel and generally run the mills, whilst British finance would provide them with assistance and give them political support. It is the same policy as Japan appears to some extent to be endeavouring to carry out in Manchuria and elsewhere in China in so far as American export of capital is concerned.[1] Japan acts already as a sort of agent for America in this respect, and is always trying to persuade the Americans by her Press articles that it is much safer for them to do all their large-scale business in China through Japan—"who understands the Chinese." For Japan has not yet developed her own independent heavy industry and relies to a very large extent on America for supplies of machinery, etc., even for export to her own colonies.

In so far as co-operation with British capital in the cotton industry in China is concerned, the alliance proposed by the Japanese has not yet come into being.

Only about 15 per cent. of the yarn output of the Chinese mills in Shanghai is used for weaving in the mills. Of the remainder, 75 per cent. to 80 per cent. was estimated in 1928 to be sold in the provinces for use on the hand-looms and only some 5 per cent. to 10 per cent. exported,[2] but since the big increase in yarn exports to India has occurred since then, the percentage exported is now probably higher. In 1927, 841 million lb. was the total amount of machine-spun yarn estimated to have been produced in China, but no accurate figures are available. It is therefore clear that there is an immense field not only for the development of power-loom weaving, but also for the development of the import trade, if once the cost of foreign goods can be reduced enough to

[1] Even the iron, steel and machinery imported by the Japanese into Korea is not of Japanese manufacture.

[2] Estimate by the Chinese Bureau of Economic Information.

enable the Chinese peasant to purchase them, and provided conditions in China become more peaceful, allowing for the development of means of transport and of increasing security for trade.

Whereas in India hand-spinning is almost extinct, this is not the case in China.

The Chinese cotton industry, like all her industries, is prevented from developing more rapidly by lack of capital and lack of security. As to how far her subordinate position in respect to the Great Powers is responsible for this it is not within the scope of this book to recount.

Wages, Efficiency and Labour Cost

Coming to the question of efficiency, costs of production and wages in China as compared with Britain and Japan, the writer was unfortunately not able to remain long enough in China to make a detailed investigation, and so to work out more or less exact comparisons, as in the case of Britain and Japan.[1]

Moreover, conditions varied much more as between mill and mill than in Japan. It was clear from the few Shanghai mills visited and the information given that the workers in the Japanese-owned mills are a good deal more efficient than those in the British-owned or in most of the Chinese-owned mills. For instance, whereas two looms per weaver was the usual number in the latter, many weavers in the Japanese-owned mills attended to three. There was evidence of similar superiority on the spinning side. Wages earned were also slightly higher in the Japanese-owned mills, but clearly the greater intensity of labour must render the Japanese costs of production lower.

Cotton mill directors in Japan of companies owning mills in both Japan and China informed me that generally speaking they used to reckon the efficiency of Chinese labour in the ratio of 70 to 100 to Japanese, but that now 85 per cent. of Japanese efficiency can be obtained in China.

Mr. Pearse in his report[2] states that in the most efficient mills in Shanghai only 20 per cent. more Chinese labour is required

[1] See Chapter VIII.

[2] *Report on the Cotton Industry of Japan and China.* By Arno Pearse. Published by the International Cotton Federation, 1929.

than in Japan, but that in many mills 50 per cent. more is required.

Hours of labour are much longer, the machinery for the most part being kept running the whole of the twenty-four hours and in many cases seven days a week. Shifts are accordingly of eleven or twelve hours' duration, the shorter hours being worked in the Japanese-owned mills.

In many mills meals have to be eaten while at work, and there are no set rest periods. Naturally workers working such hours without proper rest cannot be efficient, and the Japanese, realising this, provide dining-rooms and short rest intervals for meals in their better mills in Shanghai. In the one I visited there was a rest interval of thirty minutes at 11 a.m., and one of twenty minutes at 3 p.m., on the day shift, and corresponding rest periods on the night shifts.

According to figures supplied by the Chinese Bureau of Economic Information in Shanghai, one girl usually attends to between 144 and 210 spindles on the ring frames on coarse counts, viz. in a mill spinning counts 12's to 16's. In the British mill I visited there were three to four women per frame of 372 to 400 spindles spinning 19's on an average.

On the mules in this mill there were seven or eight workers on a pair (900 spindles), but, of course, most of the spindles in China are ring.

In the Japanese mill I visited the average number of spindles attended to by one tenter was from 200 to 400, but the counts spun ranged higher than in the British mill. These figures, compared with those given in Chapter VIII for Japan, where the normal figure would be a little under 400 spindles per tenter (exclusive of apprentices), show the very much greater efficiency of Japanese girl labour to that of the Chinese women workers, even if comparison is made with a Japanese mill in China.

The Chinese Bureau of Economic Information also supplied me with the details of numbers employed in the card-room on the basis of 10,000 spindles (see page 244).

These figures refer to a mill of more than average efficiency, and appeared from observation to be little different from those found in the Japanese-owned mills.

Number of Machines	Number of Workers
38 cards	6 to 7
8 drawing frames	8
6 slubbing frames	9
9 intermediate frames	9
5 roving frames	15*

Also 2 foremen and 4 fixers.
The tenters on the drawing, slubbing, intermediate and roving frames are all women.

* This figure, of course, includes the doffing boys.

The winding of yarn is done by children in all the mills, there being usually four children to one frame and thirty to forty spindles per child.

There are estimated to be about a quarter of a million cotton operatives in the mills in China. In the Shanghai area the proportion of men, women and children employed is said to be: 30·6 per cent., 66·2 per cent. and 3·2 per cent., so that comparatively few children are now employed. The number of children in mills in other parts of China is said to be much larger.

As regards wages they average 50 cents (Shanghai dollars[1]) for men and 35–40 cents for women: so that, roughly speaking, a man's wage in 1929 was 1s. a day and a woman's 9d. The children earned about 20 cents a day.

Such unskilled labour as sweeping is very badly paid indeed: viz. 20 to 24 cents a day.

The following figures of wages paid were given to me by the Chinese labour contractor in the British mill I visited:

Spinners attending to one side of frame	39 to 42 cents
Doffers	20 to 24 cents
Roving frames (women tenters)	40 to 42 cents
Slubbing frames (women tenters)	30 to 37 cents*
Doffing boys in card-room	25 to 30 cents
Oiling and banding coolies	50 cents
Frame overlookers—	
No. 1 man	70 Shanghai dollars per month
No. 1 woman	21 Shanghai dollars per month
No. 2 man	25 Shanghai dollars per month

* With a small bonus on production over a certain amount.

[1] Roughly equivalent to 2s. in 1929. With the great fall in the price of silver in 1930 the Shanghai dollar fell to little above 1s., so that these wages are now worth about half what they were in 1929.

These wages were slightly lower than in the Japanese mill and in the best Chinese mill I visited. In the latter, for instance, the women ring-spinners earned 50 cents, as did also the doffers on the ring frames. The manager here informed me that a 10 per cent. rise in wages had been agreed to in 1927 after two strikes. In the more modern mills pay varies according to output.

Working conditions in China vary slightly from mill to mill, according to the strength of the labour organisation, and according also to the methods of production adopted.

Although it has not been possible to give the same detailed information as for Japan (this necessitating a long stay in the country), enough facts have been given to indicate that, in spite of the relative inefficiency of labour, wages are so low and hours so long that costs of production in China on coarse, and coarse to medium, counts must now tend to be below the Japanese figure. This both accounts for the sudden emergence of China as a serious factor in the Indian yarn market and presumes a big increase in Chinese production in the near future.

The figures of production per spindle in China, as given in the *Chinese Economic Journal*,[1] are, however, very low as compared with Japan—and, if correct, would probably mean that costs of production in China, in spite of the low wages paid, are as high as in Japan, if not higher.

The following are the figures given for counts 12's, 16's and 20's: Production in twenty-four hours in pounds: 12's, 1·3 to 1·6; 16's, 0·9 to 1·1; 20's, 0·6 to 0·8. Equivalent per ten hours in ounces to compare with Japan: 12's, 8·66 to 10·66; 16's, 6 to 7·33; 20's, 4 to 4·3.

Taking the figure for 20's, this gives a production of only just over 4 oz. per ten hours in China as against 8 oz. in Japan. However, there seems to be some mistake in regard to these figures, for in the Chinese mill I visited I was given the figure of 0·95 lb. as the production per spindle of 20's in twenty-four hours. This works out at 6·33 oz. per ten hours. This seems much more likely to be correct in so far as mills with up-to-date equipment are concerned and employing moderately efficient labour. The

[1] November 1928.

Chinese Economic Journal figures given above may, however, be correct for the Chinese mills as a whole in view of their ill-paid workers and the long hours worked.

As already stated, my investigations in Shanghai were too cursory to enable me to obtain much information, and the information given in these last pages is presented with little confidence. It may, or may not, be correct. I have only the word of the labour contractor in the British mill and of the manager at the Japanese, plus the general information given by the Chinese Bureau of Economic Information and my own observation during a few short mill visits.

Coming to weaving, it seems clear that here, in spite of lower wages, costs of production must be higher in China than in Japan. Even in the Japanese-owned mills where three looms are worked by one weaver the labour cost may still be a little higher than in Japan.

According to the information given me at the Japanese-owned mill I visited, 50 cents per day is the average amount earned by weavers attending to two looms, 70 cents by those attending to three, and a dollar a day by those few who can attend to six looms (with warp-stop motion).

Production figures were not given to me here, but in the up-to-date Chinese mill visited where conditions were not very different the following particulars were supplied concerning the production of sheetings: Width, 36 inches; weight, 16 lb.; reed, 56; picks, 53; warp, 13's; weft, 16's; length of piece, 40 yards. Production per twelve hours equals 51 yards.

On this cloth the weaver's price was 22·8 cents per piece, which means that a weaver on two looms could only earn 58·14 cents a day. This tallies with the general figure given me here and elsewhere of 60 cents a day as the average wage earned by a weaver.

Another cloth being woven was as follows: Weight, 13 lb.; reed, 44; picks, 49; width, 36 inches; warp, 13's; weft, 17's.

The production per twelve hours of this cloth was given as 62 yards, and the weaver's price as 18·8 cents per piece. Here again the weaver's earnings for his twelve hours' work come to 58 cents.

Comparing these production figures with those for Japan given in Chapter VIII, it will be seen that the Japanese production per loom for a ten-hour shift for a much finer cloth with slightly more picks per inch is higher.

COMPARISON BETWEEN JAPAN AND CHINA

	JAPAN	CHINA
Counts of yarn—		
Warp	36	13
Weft	40	16
Weight, lb.	6·5	16
Picks	57	53
Reed	56	56
Production, yards	57	51
	(in 10 hours)	(in 12 hours)

So a Japanese weaver on four, five or six looms produces more per loom per day than a Chinese weaver on only two looms. Thus, even though the Japanese weaver earns more than double the Chinese, she produces four or five times as much cloth per day. Japanese labour costs in weaving must be much lower than the Chinese labour costs.

Nevertheless, there is no doubt that, given better working conditions, shorter hours of labour, more sanitary living conditions and a wage high enough to allow a sufficiency of food, the Chinese worker could equal the Japanese in efficiency. It is the Japanese who are first in realising this, and the Japanese cotton companies, being in a very favourable financial position, are "rationalising" production in their Chinese mills, speeding up production, increasing the intensity of labour and at the same time providing conditions of work and housing accommodation slightly more tolerable than in the British-owned and most of the Chinese-owned mills.

How extremely bad the usual housing conditions must be is indicated by the fact that the Chinese Bureau of Economic Information states that two rooms are sufficient to house ten workers without families. It is also stated that families usually rent one room or half of a partitioned room.[1] These conditions are referred to as comparatively good. The rent for two rooms was $3 to $5, i.e. 6s. to 10s. a month in 1929.

[1] *Chinese Economic Journal*, November 1928.

Enough has been said here as to wages and hours and living accommodation to show that the conditions of the Chinese cotton workers are the worst of all the three Eastern cotton-manufacturing countries: Japan, China and India. They are even worse than those of the Indian workers, since the latter work only ten hours a day and receive a wage which averages about 1s. 6d. a day in Bombay as against the 1s. a day earned by the male Chinese cotton worker for his twelve hours' work.[1] But the proportion of women or children to men employed is about 70 to 30 in China, whereas in India the large majority of the operatives are men—and the Chinese women workers earn only about 9d. a day.

Child labour is still extensively used in the Chinese mills (though now little used in the mills in Shanghai), and this is the worst feature of all of labour exploitation in China. Physical methods of compulsion are said to be used in the mills in China in so far as children are concerned.

It would seem that the lower-paid Chinese worker, in spite also of the longer hours he or she works, is about on a par with the Indian worker in regard to efficiency. The number of ring spindles per tenter and the number of looms per weaver appear to be much the same in both countries. Unfortunately no figures of production are available which would make possible an exact comparison. Probably the better climate of Shanghai accounts for similarity in regard to efficiency in spite of the worse conditions of the Chinese workers.

Some idea of the horrors of child and woman labour in China and of the squalid living conditions can be obtained from the 1924 Cmd. paper 2846 on *Labour Conditions in China*. It is also clear that extra-territoriality has contributed to the difficulty of improving these conditions.

Comparing Japan, China and India once more, it would seem that in the production of coarse to medium yarns, the country with the lowest wages produces most cheaply, but that when it comes to the production of somewhat finer yarns and to weaving, Japan, with her somewhat better labour conditions, and "ration-

[1] To-day much less than 1s., in consequence of the sharp fall in the price of silver.

alised" methods of production, has the advantage over both China and India.

In so far as Lancashire is concerned, she cannot hope to compete in anything but finer quality and specialised goods against the ill-paid labour of the Far East, and her spindles and looms can never be fully employed again unless China becomes united and prosperous. This can only occur when she becomes independent of foreign interference and financial control, and when her peasantry and her working class achieve their emancipation.

CHAPTER X

BRITAIN AND JAPAN IN THE INDIAN MARKET

As already stated in Chapter I, the decline in British exports to India since pre-War days is to be explained under three main headings: increased production by the native mill industry, Japanese competition, decreased per capita consumption by the Indian people.

In this chapter I shall be concerned with the factor of Japanese competition, leaving the other factors in the decline to be dealt with in detail in the chapters following. Throughout this chapter, however, it should be borne in mind that the post-War decline in India's total imports of piece goods is about 37 per cent., whilst her yarn imports, having risen a little above pre-War in the ten years following the War, did not fall below the figure for 1913–14 till 1928–29.

Coming to the relative shares of Britain and Japan, the percentage of India's total yarn and cloth imports supplied has been as follows for quantities:

Yarn: 1913–14, 90 per cent. Britain, 2 per cent. Japan; 1925–26 31 per cent. Britain, 65 per cent. Japan; 1928–29, 53 per cent. Britain, 17 per cent. Japan (26 per cent. China); 1929–30, 46 per cent. Britain, 25 per cent. Japan.

Piece Goods: 1913–14, 97 per cent. Britain, 0·3 per cent. Japan; 1925–26, 82 per cent. Britain, 14 per cent. Japan; 1928–29, 75 per cent. Britain, 18 per cent. Japan; 1929–30, 65·5 per cent. Britain, 29·8 per cent. Japan.

It may be noted here, before the position is considered in detail, that whereas India's total yarn imports have fallen very slightly since 1922–23, her imports of piece goods have risen, but that, whereas Britain has been improving her percentage shares of the yarn trade since 1924–25 and Japan's share has lessened, in piece goods Japan has been steadily increasing her share at the expense of Britain. The piece goods trade is of course very much more important than the trade in yarns, and Japan's declining

percentage in the yarn trade is partly due to the fact that she is using a larger part of her yarn production in manufacture, and partly to the increased export of yarns to India from Japanese mills in China. It is also a fact that Britain has been increasing the quantities of yarn she sends during the last few years.

The Yarn Trade

The following table shows the fluctuations during the last ten years, as compared with 1913–14, in the percentage share taken by Britain and Japan, together with the totals imported by India and China's share since she entered the market.

RELATIVE POSITION OF BRITAIN AND JAPAN IN INDIA'S TOTAL YARN IMPORTS

Year	Total Imports in Million Lb.	Britain's Percentage Share	Japan's Percentage Share	China's Percentage Share
1913–14	44	90	2	—
1918–19	38	25	72	—
1920–21	47	49	43	—
1921–22	57	70	26	—
1922–23	59	52	45	—
1923–24	45	49	46	—
1924–25	56	37	57	—
1925–26	52	31	65	—
1926–27	49	41	54	1·9
1927–28	52	39	32	25·0
1928–29	44	53	17	26·0
1929–30	44	46	25	24·0

Japan's peak year was in 1918–19, when, as a direct result of the War, she increased her yarn exports to an unprecedented figure. But although Lancashire imagined that Japanese competition would diminish, Japan maintained her share at slightly over or slightly under half the total down to 1926–27. The change in the last two years is clearly due to Chinese imports rather than to increased exports from Britain, although these have played their part. Since the Chinese yarn now coming into India is for the most part spun in the Japanese mills in Shanghai, owned to a large extent by the same companies as those operating in Japan, the fall in Japan's percentage share to 17 per cent. in actual

fact means a transference to her Chinese mills of the production of yarn for export to India. If the Chinese and Japanese shares are added together the total is very much the same as the Japanese share in previous years. Even though Britain raised her share to 53 per cent. in 1928–29, this is very unlikely to be permanent. The explanation for the improvement in the British position in the last two years reviewed, may in part be explained by the change in the import duty on yarn as from September 1927. In September 1927, instead of the previous 5 per cent. *ad valorem* import duty on all cotton yarns, an import duty of 5 per cent ad valorem *or* of 1½ annas per lb., whichever is the higher, was imposed. This means a relative disadvantage to the country which sends the cheapest yarns to India and a slight advantage to England which sends the most expensive ones. The new duty of 1½ annas was calculated to affect yarns under 40's, but not to affect the higher counts at all. It must be levied on yarns 31–40's, which are the principal counts imported and now account for nearly half the total yarn imports. The duty is accordingly designed to assist the Indian spinners to increase their production of yarns over 30's at the expense of Japan, China and Britain. Competition between the latter countries for this trade must consequently become even keener than in the past, but since Britain's share is now only between 15 per cent. and 18 per cent., she does not sacrifice much by giving protection to the Indian mills.

It is extremely probable that China, which was once a large importer of Indian yarns, will soon take a predominant share in the export trade to India in spite of the increased tariff. The fact that by 1929–30 she was already supplying as large a quantity as Japan, although three years previously she had supplied less than 2 per cent. of the total imported, is a sufficient indication of what is likely to occur. The Indian cotton spinners are trying to shut out all imports of coarse and medium yarns, but Chinese costs are so very low that she will probably be able to compete with the Indian mills in spite of the duties.

It has for long been customary in Lancashire to regard losses in export as due to the War, and to find comfort in the illusion

that, as soon as the temporary effects of the War are passed Lancashire will regain the trade "filched from her" during the War years. But the above table shows that although the position of 1918–19 has been improved upon, Lancashire in the most favourable years has only been able to get back half the total trade in yarns as against her 90 per cent. pre-War.

The short survey made below of the immediate post-War position will provide the background for a better appreciation of the course of development in the last ten years.

In 1919 H.M. Senior Trade Commissioner in India published a most useful report on the conditions of British trade in India at the close of the War. He found that as regards yarns the principal effect of the War had been the enormous shrinkage of imports from the United Kingdom, the almost stationary output from the Indian mills and the very great increase in the imports of Japanese yarns. These latter were twenty-seven times as great in weight and thirty-nine times as great in value as in 1913–14.

He showed, further, that in counts below 30's the Indian mills were supreme and imports negligible, that in counts 31–40's Indian production was greater than imports, whilst above 40's Indian production was two-thirds of the quantities imported, Japan having the lion's share of the imports.

Japan was actually supplying India with 71·6 per cent. of her cotton yarn imports as against only 25·2 per cent. from the United Kingdom, whilst in 1913–14 Japan had only supplied 2·2 per cent. as against 85·5 per cent. from the United Kingdom. Yet, whilst the quantity of the United Kingdom's shipments of yarn to India was little more than 9½ million lb. as against 33·8 million lb. in 1913–14, the value of the smaller quantity was almost the same as that of the greater, viz. £2,238,057 as against £2,318,346, which means that there had been an increase in price of 293·7 per cent. As compared with this, the price of Japanese yarns had only risen 33 per cent.

That this discrepancy was mainly due to the fact that Britain was sending yarns of a higher grade than in pre-War days is, of course, clear (see table on pages 254 and 255), but this was not all. During the War the price of Japanese yarns was very much lower

INDIAN YARN IMPORTS

TOTALS OF VARIOUS COUNTS AND KINDS IN THOUSANDS OF LB. AND PERCENTAGE SHARES OF UNITED KINGDOM AND JAPAN

	1913-14	1918-19	1920-21	1921-22
Greys, 1-20's—				
Total imported	651	7,858	7,358	6,701
Percentage from United Kingdom	—	—	2·5	23·0
Percentage from Japan	—	—	61·0	72·0
Greys, 21's-30's—				
Total imported	3,072	1,927	3,564	4,963
Percentage from United Kingdom	—	—	40·7	72·0
Percentage from Japan	—	—	54·5	26·0
Greys, 31's-40's—				
Total imported	8,833	2,805	13,885	19,035
Percentage from United Kingdom	—	—	32·4	63·4
Percentage from Japan	—	—	67·5	36·2
Greys, 41's-50's—				
Total imported	3,062	3,316	1,429	2,517
Percentage from United Kingdom	—	—	73·0	92·5
Percentage from Japan	—	—	27·0	7·5
Greys, 51's-60's—				
Total imported	3,470†	2,718†	1,776	2,708
Percentage from United Kingdom	—	—	43·0	97·7
Percentage from Japan	—	—	56·0	2·3
Grey, twofold doubles*—				
Total imported	—	—	3,183	4,974
Percentage from United Kingdom	—	—	46·6	76·6
Percentage from Japan	—	—	52·8	22·6
Bleached—				
Total imported	—	—	2,040	2,520
Percentage from United Kingdom	—	—	87·5	93·7
Percentage from Japan	—	—	12·4	5·0
Coloured—				
Total imported	18,266	5,410	11,805	10,011
Percentage from United Kingdom	—	—	92·0	84·0
Percentage from Japan	—	—	0·4	—
Mercerised—				
Total imported	—	902	1,280	794
Percentage from United Kingdom	—	—	24·9	54·9
Percentage from Japan	—	—	74·7	43·9
Yarn—				
Total imports	44,171	38,095	47,334	57,124
Percentage from United Kingdom	—	25·2	49·0	70·0
Percentage from Japan	—	71·6	43·0	26·0
Percentage from China	—	—	—	—

* Consists mainly of 2/42 counts.
† Above 50's.

INDIAN YARN IMPORTS—*continued*

TOTALS OF VARIOUS COUNTS AND KINDS IN THOUSANDS OF LB. AND PERCENTAGE SHARES OF UNITED KINGDOM AND JAPAN

1922–23	1923–24	1924–25	1925–26	1926–27	1927–28	1928–29
12,777	6,586	6,809	4,303	815·7	2,060·5	824·9
2·3	2·4	5·8	10·0	61·5	33·0	90·0
96·7	92·7	89·6	88·0	23·0	22·5	1·5
5,100	1,124	845	583	430·7	398·4	452·2
65·5	34·2	40·5	72·3	—	—	71·0
34·3	64·8	59·4	27·4	—	—	20·0
21,061	12,943	21,383	21,681	20,951·5	21,978·2	16,272·1
51·0	23·8	10·2	7·3	14·8	15·0	18·75
48·6	76·8	89·7	92·5	77·0	34·5	12·50
2,131	2,078	1,983	1,288	1,421·0	1,130·7	1,080·50
96·0	91·2	90·0	73·3	78·4	94·0	98·50
4·0	8·8	10·0	26·7	21·5	4·0	—
1,772	2,490	3,123	2,883	3,504·5	3,492·9	4,543·80
100·0	100·0	85·3	61·2	—	—	99·90
—	—	14·7	38·8	—	—	—
4,063	3,434	5,023	5,222	61,601·2	5,291·3	5,341·60
70·8	30·2	24·8	11·7	—	—	55·00
29·2	69·2	73·4	87·5	—	—	21·00
1,894	2,650	3,427	3,751	4,061·5	4,813·1	5,068·30
93·6	85·6	81·5	81·8	79·9	80·2	90·20
6·1	14·4	18·5	18·2	19·9	18·0	8·00
7,027	8,647	8,482	7,108	5,370·0	5,976·0	3,890·80
78·0	77·0	73·0	68·8	70·4	73·0	89·00
—	—	0·5	2·7	—	—	—
1,320	2,019	2,664	2,845	4,169·1	5,364·9	4,077·50
39·0	59·3	37·4	10·0	—	5·0	7·00
60·6	40·3	62·3	88·4	—	95·0	90·20
59,274	44,575	55,907	51,687	49,425·0	52,344·0	43,766·00
52·0	49·0	37·0	31·0	40·7	39·0	52·50
45·0	46·0	57·0	65·0	53·8	32·0	17·30
—	—	—	—	—	25·0	26·00

than that of the *corresponding* type and quality of British yarn, e.g. in 1916 Japanese best 40's cost 28 per cent. less than British.[1] The importance of this cannot be overestimated in view of the fact that counts 31–40's form by far the largest class in India's yarn imports. From the table above it is clear that by the end of the War the trade between India and the United Kingdom in counts under 30's was almost extinct, whilst Japan was wiping out Britain's share in counts above 30's, since the quantity she was sending to India was nearly three times as great as the quantity shipped from the United Kingdom. A further analysis of the position showed that it was only in miscellaneous coloured yarns that the United Kingdom was still leading and that even here Japanese competition was severe and especially so in mercerised yarns.

In 1919–20 Britain had begun to retrieve her position, but in the most important class of imports, viz. grey yarns of counts 31–40's, Britain steadily lost ground to Japan after 1921–22. This trade is now being monopolised by China according to the latest figures. In grey two-fold doubles and in mercerised, which occupy an important position in India's total, she has also lost heavily to Japan. The surprising fact is that it is in the coarsest yarns (under 30's) that Britain has regained ground in the last two years under review.

The table on pages 254 and 255 shows the fluctuations in yarn imports and the percentage shares supplied by Britain and Japan of the different counts in the ten post-War years as compared with 1913–14.

In 1929–30 the total imports were divided up as follows: Total, 44 million lb.; from United Kingdom, 20 million lb.; from Japan, 10·8 million lb.; from China, 10·5 million lb.

This picture of the relative shares of the countries shows some surprising fluctuations.

The explanation of the sudden fall in Japan's total share in the last two years under review was in large part accounted for by increasing Chinese imports. Since these come mainly from the Japanese mills in Shanghai, the Japanese companies are still getting the profits.

[1] Cmd. 442 of 1919.

It is further clear that Britain has lost ground in all the more important class of imports with the exception of bleached yarns and the finest grey yarns, although 1928–29 saw what is probably only a temporary recovery in certain lines. The most important class of yarn imports are 31–40's, which in 1925–26 formed 50 per cent., and in 1928–29 36 per cent., of the total yarn imports. These yarns are of so much greater importance than any other and the British and Japanese shares so fluctuating that I give the details separately below:

INDIA'S IMPORTS OF GREY YARNS—31–40's

Year	Total Quantities (in Million Pounds)	Percentage from Britain	Percentage from Japan	Percentage from China
1913–14	9	100	—	—
1920–21	14	32·4	67·5	—
1921–22	19	63·4	36·2	—
1924–25	21	10·2	89·7	—
1925–26	22	7·3	92·5	—
1926–27	21	14·8	77·0	4·6
1927–28	22	15·0	34·5	49·4
1928–29	16	18·8	12·5	65·6

The most remarkable thing of all is that China should in 1928–29 have done the bulk of the trade with India, not in coarse yarns, but in these medium counts.

An examination of the average price of Lancashire yarns as compared with the Japanese prices, and of the percentage increase in Lancashire prices since pre-War days, makes it sufficiently clear that the loss in British yarn exports is due to high prices. When Lancashire prices have fallen trade appears to have been regained immediately. For instance, in greys, 31–40's, the average declared value per lb. in 1925–26 was 1·30 Rs., or *circa* 2s. per lb., for the English and 1·15 Rs., or *circa* 1s. 8¾d., for the Japanese yarns imported under this head. In that year Japan sent 20 million lb. as against only 1½ million lb. from England. In 1928–29, when India decreased her total takings but took over 3 million lb. from Britain and only just over 2 million lb. from Japan, the average declared value of the English was 1s. 8d. and of the Japanese 1s. 9d. per lb.

I have devoted a good deal of space to the consideration of the

yarn market because, although the total value of this trade is now comparatively small, the relative positions of Japan and Britain indicate what kinds of yarn Japan is successfully producing for use on her own looms and also the capacity of the Chinese mills.

The Piece Goods Trade

Great as is the decline in British exports of yarn to India, the effect of the decline in Lancashire is, of course, not to be compared in gravity with the effect of the decline in the exports of piece goods. The total quantity and value of yarn exports are very much smaller, the total volume of British trade in yarns having been comparatively small even before the War. Moreover, it had been slowly declining ever since the later years of the nineteenth century, with the development of the native mills. British exports of cotton piece goods to India had, on the contrary, been mounting before the War, and especially rapidly during the

INDIAN IMPORTS OF COTTON PIECE GOODS

(In Million Yards)

1911–12 to 1913–14 and 1919–20 to 1929–30

	1911–12	1912–13	1913–14	1919–20	1920–21	1921–22
United Kingdom	2,379·5	2,941·9	3,104·3	976·1	1,291·8	955·1
Japan	0·6	5·8	8·9	76·0	170·3	90·3
U.S.A.	9·0	15·8	10·3	9·6	13·5	23·3
Italy	7·0	11·7	22·7	1·4	10·0	2·3
Holland ..	23·0	26·1	24·6	7·7	13·5	12·0
Switzerland ..	4·4	4·9	6·0	1·6	4·1	0·7
China	—	—	—	—	—	—
Totals ..	2,437·9	3,022·5	3,197·1	1,080·7	1,509·7	1,089·8

INDIAN IMPORTS OF COTTON PIECE GOODS

(Percentage of Total taken by certain Countries)

1913–14 and 1919–20 to 1929–30

	1913–14	1919–20	1920–21	1921–2
United Kingdom	97·0	90·0	85·5	87·9
Japan	0·3	7·0	11·3	8·1
U.S.A.	0·3	0·1	0·9	2·1
Italy	0·7	0·1	0·7	0·2
Holland	0·8	0·7	0·9	1·1
Switzerland	0·2	0·1	0·3	0·1
China	—	—	—	—

years immediately preceding 1914, owing to the fall in the price of American cotton.

The decline in British cloth exports to India was 48·5 per cent. from 1922–26 and 52·5 per cent. in 1928–29, whilst in 1929–30 it fell yet further to 58·6 per cent. below the pre-War figure. India's total consumption and the growth of her own textile industry will be dealt with in detail in the following chapters, but here it should be borne in mind that the cloth production of the native mills is now double pre-War whilst the total consumption of machine-made cotton goods in the whole of India is just about the same as pre-War. This, of course, means that the fall in her net imports of cotton goods has been very sharp, viz. 36 per cent. in 1927–28 on the 1913–14 figure and 38 per cent. on an average from 1921–22 to 1925–26.

India's net imports being therefore now less than two-thirds the pre-War figure, and her consumption much the same, India

INDIAN IMPORTS OF COTTON PIECE GOODS—*continued*

(*In Million Yards*)

1911–12 to 1913–14 and 1919–20 to 1929–30

1922–23	1923–24	1924–25	1925–26	1926–27	1927–28	1928–29	1929–30
1,453·4	1,318·8	1,613·9	1,286·7	1,466·8	1,453·0	1,456·0	1,247·0
107·8	122·7	155·3	216·8	243·5	323·0	357·3	562·0
7·8	7·4	9·4	15·1	15·6	28·2	29·8	33·0
2·0	5·8	10·3	10·9	17·0	26·3	37·6	25·4
13·1	11·1	11·7	16·5	19·7	19·5	19·6	21·6
2·6	7·4	7·4	7·4	11·8	14·8	11·1	10·2
—	—	4·8	2·2	1·8	6·9	13·5	10·0
1,593·3	1,485·8	1,823·2	1,563·7	1,788·0	1,973·0	1,937·0	1,919·0

INDIAN IMPORTS OF COTTON PIECE GOODS—*continued*

(*Percentage of Total taken by certain Countries*)

1913–14 and 1919–20 to 1929–30

1922–23	1923–24	1924–25	1925–26	1926–27	1927–28	1928–29	1929–30
91·2	88·8	88·5	82·3	82·3	78·2	75·1	65·5
6·8	8·3	8·5	13·9	13·6	16·4	18·4	29·8
0·4	0·5	0·5	—	—	1·4	1·6	0·5
0·1	0·4	0·5	0·6	0·8	1·3	2·0	1·3
0·8	0·7	0·6	1·1	1·1	1·0	1·1	1·1
0·2	0·5	0·4	0·4	0·6	0·75	0·5	—
—	—	—	—	—	0·3	0·7	0·5

herself accounts for the largest part of the decline in British exports to India. Japan accounts for practically the whole of the rest of Britain's loss.

The rest of this chapter is devoted to an analysis of the extent and nature of Japanese competition in the piece goods trade. Where other countries are beginning to take their place in the picture, or still maintain a small trade since pre-War days, mention is made of their share. Such countries are China, Italy, Holland, Switzerland and the U.S.A. with some few other very small contributions.

The first of the two tables on pages 258 and 259 shows India's total imports from the various countries in quantities, and the second the percentage share of each country over the years since the War as compared with pre-War.

The percentage share taken by the United Kingdom is still not only much greater than that of any other country, but in 1928–29 still formed two-thirds of the total trade. It is as yet too soon to say whether the further sharp fall in the British percentage share in 1929-30 and the steep rise of the Japanese percentage to nearly 30 per cent. will be permanent or whether the new Indian Tariff of April 1930, which gives Britain a 5 per cent. preference against Japan, and gives special disadvantages to Japanese plain grey goods, will enable Britain to retrieve the 1928–29 position. It seems most probable that the effect of the Tariff will only be to drive Japan to increase her exports of bleached and coloured goods to India, and therefore to compete more strenuously in these lines against Britain.

The effect in Lancashire of Britain's decreased percentage share can only be fully appreciated by considering the figures in the first line of Table I, which gives the total quantities of cotton piece goods sent by Britain to India. These figures show an average decline of 41 per cent. over the years 1924–25 to 1926–27 on the average figure for the years 1911–12 to 1913–14. On the 1913–14 figure, the loss is 51·6 per cent. In 1928–29 the decline on 1913–14 is 52 per cent., and in 1929–30 59 per cent. As against this drop in Britain's total, Japan's over the years 1924–25 to 1926–27 rose 4,000 per cent., or, to put the matter more simply,

her exports to India during the latter period were 41 times the quantity they were in the three pre-War years. In 1929–30 the Japanese cotton cloth exports to India were more than 62 times larger than in 1913–14.

It should also be noted that Italy, who is a serious rival to Britain in the North African and South American markets, has increased her exports to India and now occupies third place in the list, having in 1927–28 and 1928–29 gone well beyond her pre-War total. Although her percentage share is only 2, it was only 0·7 before the War, and Japan's rapid development since then offers a warning as to how soon Italy's exports to India may grow to large proportions. It is of course not suggested they will ever come near the Japanese figure.

The U.S.A. comes next, having increased her exports substantially during the last two years. She now already exports nearly three times her pre-War quantity to India, but the amount is still very small. Holland is the only important exporting country which, like Britain, sends less to India than before the War. Although China has only just entered the market, she is almost certain to greatly increase her exports to India in the immediate future and may become almost as serious a competitor as Japan to the British cotton industry. Britain is, in fact, losing trade not only to Japan and to the native Indian industry, but to some extent to almost all her rivals, and, although all except Japan still supply comparatively insignificant quantities, each and every one of them may become serious rivals. This applies with special force to the U.S.A., which has not yet made a bid for a substantial share in the world's cotton trade, but is almost certain to do so now that economic depression at home must lead her manufacturers to make a drive into foreign markets.

For the present the principal rival of Britain is Japan, and I consider that Japan and China (meaning principally the Japanese mills in China) will come in the next two or three years to hold a far greater share of the Indian trade even than at present. But in order to appreciate both the nature of the Japanese competition and the prospects of the future a detailed analysis of India's imports of different kinds from the two countries is necessary.

It then becomes possible to estimate whether there are certain classes of goods in which Britain is likely to maintain a monopoly or at least be able to compete.

There is no doubt that the phenomenal increase in Japanese exports to India and the corresponding decrease in those from the United Kingdom is due to differences in price plus the initial advantage enjoyed by Japan in the War years, when she was able to step in and supply the demands previously met by British exports.

The comparisons of English and Japanese labour costs made in Chapter VIII render it indeed a matter for surprise that Britain still retains so large a portion of the trade. This is, I consider, to be accounted for principally by the fact that Japanese productive capacity, though rapidly increasing, is still comparatively small and her machinery has until recently been fully occupied supplying the home market, China, India and other Far Eastern markets. In other words, Britain has retained three-quarters[1] of the Indian trade in large part because Japan has not yet got enough mills to produce sufficient goods to oust Britain. The fact that the depression in 1929–30 led the Japanese to take a 30 per cent. share of the Indian market shows what may be expected, but, as shown in Chapter IV, the lack of concentration of capital on the weaving side of the Japanese industry and the way in which the price of yarn is kept artificially high in Japan, also prevent exports increasing more rapidly. Secondly, there are certain lines which Japan has not yet learned to produce, or has not yet taken the trouble to produce, having been fully occupied with the bulk trade in plain grey and cheap coloured goods. Lastly, there is the factor of the time lag and the close connection between Indian merchant capital and Britain. In any event, the fact that Japan does not yet compete in certain lines or does not yet compete seriously in others, is no guarantee that she will not do so as soon as she finds it pays, as soon as the markets for her present products appear to be reaching saturation point. The events of 1929–30 fully bear this out. In that year Japan doubled her yardage exports of bleached goods to India, suddenly sending large quantities of white shirtings and drills.

[1] Down to 1928–29.

Apart from the factor of cheaper production costs, Japan is held by many observers to be in closer touch with the Indian natives and so to be able to form a juster estimate of their requirements and taste. The superiority of her general marketing arrangements has already been mentioned in Chapter IV, and has, perhaps, been too much emphasised by recent visitors to Japan.

A detailed account of the decline and change in type of India's total piece goods imports is made in the next chapter, but here it is necessary to get a general view of the position now and pre-War.

QUANTITATIVE DECLINE IN INDIA'S CLOTH IMPORTS

(*In Millions of Yards, taking no Account of Re-exports*)

Year	Total Imports	Greys	Bleached	Coloured, Printed or Dyed
1913–14	3,197	1,534	793	832
1917–18	1,524	626	502	396
1924–25	1,823	846	549	407
1927–28	1,973	876	557	505
1928–29	1,937	839	554	507
1929–30	1,919	926	474	483

This shows the following (taking 1913–14 as 100):

	Total	Greys	Bleached	Coloured, Printed or Dyed
1913–14 =	100	100	100	100
1924–25 =	57	55	69	50
1927–28 =	61	57	70	61
1928–29 =	64	55	70	61
1929–30 =	60	60	60	58

In view of the fact that before the War Britain accounted for 97 per cent. of India's total imports of cotton cloth, the above figures may be taken as showing approximately the amount of trade Britain would have lost if there had been no Japanese competition—trade not entirely lost through the competition of the Indian mill industry, but mainly so.

With the added factor of Japanese competition Britain's loss in exports to India under the three different headings can be seen from the following figures (again taking 1913–14 as 100):

	Greys	Bleached	Coloured, Printed or Dyed
1913–14	100·0	100	100·0
1924–25	50·0	68	44·0
1927–28	43·0	67	45·7
1928–29	38·5	67	43·6

The greatest fall is in greys, and here of course there has also been the greatest absolute decline, British exports of grey goods in 1913–14 forming 50 per cent. of her total exports as against 40 per cent. now.

Coming to consider in detail the factor of Japanese competition, the following table shows the comparative position of Japan and Britain in India's total cotton piece goods imports.

PERCENTAGE SHARES OF JAPAN AND BRITAIN IN INDIA'S IMPORTS

Year	Greys		Bleached		Coloured, Printed or Dyed		Totals	
	Britain	Japan	Britain	Japan	Britain	Japan	Britain	Japan
1913–14	98·8	0·5	98·5	0·5	92·6	0·2	97·0	0·3
1917–18	87·1	11·7	98·8	0·5	91·8	4·7	—	—
1918–19	64·3	35·5	95·9	3·7	88·5	9·2	—	21·0
1920–21	72·4	25·9	96·9	0·9	91·8	3·3	85·6	11·3
1921–22	82·8	13·1	97·7	0·6	88·0	3·6	87·7	8·1
1922–23	89·5	9·6	98·2	0·6	86·9	6·3	91·2	6·8
1923–24	85·2	13·7	97·0	0·6	87·4	6·7	88·8	8·3
1924–25	86·0	13·0	97·1	0·8	83·1	10·0	88·5	8·5
1925–26	79·0	20·1	96·0	1·0	73·1	18·9	82·3	13·9
1926–27	79·0	20·0	96·4	0·5	71·1	19·2	82·3	[1] 13·6
1927–28	74·2	24·5	94·7	1·0	69·8	20·3	78·2	16·3
1928–29	69·4	28·2	94·8	1·0	66·2	21·7	75·1	18·4
1929–30	56·2	42·5	92·0	2·9	57·6	31·9	65·5	29·8

The steady rise in the Japanese share of imports corresponds to the steady fall since 1924–25 in the British share. Only in bleached goods does Britain nearly retain her pre-War percentage share, and in these goods Japan has made hardly any headway.[1] Although Britain retains 95 per cent. of the bleached trade, the total imports had fallen by 30 per cent. in 1928–29. Moreover, new competitors, and former pre-War competitors, have begun to enter this field

[1] In the last year under review, however, Japanese bleached goods imported were doubled in quantity, and the bleach and finish are reported to be much improved. See *Report on the Conditions and Prospects of British Trade in India*, 1929–30, by H.M. Senior Trade Commissioner.

during the last two years under review, notably Switzerland and Austria.

In grey goods Japan is steadily pushing Britain out of the market in plain goods, but Britain's hold on the bordered *dhuti* trade, of which she has almost a monopoly, keeps her percentage from falling much farther than would otherwise be the case.

In coloured woven, printed and dyed, Britain retains a large share of the printed goods trade, but has lost heavily in coloured wovens and dyed in the piece goods, not only to Japan, but also to some extent to Italy. Japan is yearly making great strides forward in the supply of all these coloured goods and her total figure is now not so very far from her total of plain greys.

As regards the relative importance of the three main classes of goods to Britain and to Japan, the following is the position:

JAPAN'S EXPORTS TO INDIA.—Grey, 68·5 per cent.; bleached, 1·5 per cent.; coloured, printed or dyed, 30 per cent.

BRITAIN'S EXPORTS TO INDIA.—Grey, 40 per cent.; bleached, 36 per cent.; coloured, printed or dyed, 24 per cent.

Thus Britain's exports of bleached goods are now nearly as large as her exports of greys.

I now come to a closer consideration of the kinds of goods in which trade has been lost than can be obtained merely by the classification into grey, bleached and coloured, printed or dyed.

Grey Goods.—Although the decline in British exports is mainly to be attributed to increased Indian production and to Japanese competition, China, which sent just on 7 million yards of grey goods to India in 1928–29, as against 1·7 million yards the previous year, and very small quantities previously, will undoubtedly soon have a larger share of this market than her present 0·9 per cent.

As already noted, and as might be expected, it is in plain grey goods that Japan scores, for it is in their production that Japan, with her mass production methods, her cheap labour and her increasing use of automatic looms, has a very great advantage over Lancashire. In bordered grey goods, which mainly consist of *dhutis*, *saris* and scarves, Britain still maintains almost a monopoly of the trade (93 per cent.), for here her more skilled

labour and the suitability of the old methods of production give her the advantage.[1] The striking difference in the import position of plain grey goods and of *dhutis* is shown here:

(*In Million Yards*)

	1924–25	1927–28	1928–29	1929–30
India's total imports of plain greys	354·0	348·0	351·0	423·0
From United Kingdom ..	237·0	157·0	129·0	—
From Japan	109·0	181·0	207·0	—
Total imports of grey *dhutis*, *saris* and scarves	489·0	527·0	486·0	501·0
From United Kingdom ..	488·0	493·0	452·0	—
From Japan	0·7	33·8	34·6	—

The contrast between the position in plain grey goods, of which Japan supplies 60 per cent. more than Britain, and in the *dhuti* trade, where Britain still supplies the great bulk of the imports, is very striking.

In plain grey goods Japan has since 1924–25 increased her exports by 100 million yards, almost doubling them, whilst Britain has decreased hers by the same quantity. It is a question of direct substitution of Japanese for British goods, since the total quantity imported remains at practically the same figure.

It is not usually understood in England that Britain's position versus Japan has grown very much worse since 1924–25. Bad as was the position that year, it was still thought that Britain might "win back" some of the trade lost, but she has, in actual fact, been losing more and more to Japan.

Of these plain grey goods imports, of which Japan now supplies 60 per cent. as against Britain's 36·7 per cent., the great bulk (76 per cent.) consists of longcloth and shirtings. Total imports of sheetings, T-cloths and domestics have sunk from 39 million yards in 1924–25 to only 6½ million yards in 1928–29, and of this Britain supplied a bare 70,000-odd yards, practically the whole trade being in Japanese hands, whether coming from Japan or from the Japanese mills in China. Imports of drills and jeans have also been sinking, but Japanese drills with a coloured woven stripe and Japanese printed jeans are to some extent

[1] The latest news from Japan shows that the mill-owners are now beginning to pay special attention to the manufacture of *dhutis*.

supplanting grey drills and jeans. It is only in the finer goods included under the classification jaconets, madapollams, mulls,[1] etc., that there has been little change both in the general import position and in Britain's position, which is a monopoly one.

The following tables summarise the position:

INDIA'S IMPORTS OF PLAIN GREY GOODS

(*In Million Yards*)

	1924–25	1927–28	1928–29
Total imports of plain greys	354·50	347·60	351·10
Imports of longcloth and shirtings ..	206·70,	233·40	252·00
Imports of sheetings, T-cloths and domestics	39·40	23·00	6·50
Drills and jeans..	17·30	—	11·80
Jaconets, madapollams, mulls, etc. ..	89·40	78·90	78·90

QUANTITIES SUPPLIED BY BRITAIN AND JAPAN UNDER THE ABOVE HEADS

(*In Million Yards*)

	1924–25	1927–28	1928–29
Longcloth and shirtings—			
Total	206·10	233·40	252·00
From United Kingdom	145·50	76·80	48·30
From Japan	59·70	153·60	191·40
Sheetings—			
Total	39·30	22·90	6·50
From United Kingdom	0·10	0·05	0·01
From Japan	34·20	18·10	5·00
From China	4·00	4·00	1·30
Drills and Jeans			
Total	17·30	—	11·80
From United Kingdom	0·35	0·26	0·32
From Japan	14·45	9·00	10·00
Jaconets, madapollams, mulls and cambrics—			
Total	89·40	78·90	78·90
From United Kingdom	88·90	78·90	78·50
From Japan	0·20	—	0·20

Thus in longcloth and shirtings, the principal class of plain grey imports, which are increasing and of which Britain still supplied 70·6 per cent. in 1924–25, she now supplies only 19 per cent. as against Japan's 76 per cent. Year by year Britain has lost more and more of this trade to Japan, and even between 1924–25 and

[1] Jaconets and mulls are muslins; madapollam is fine calico.

1927–28 their relative positions in the trade had been completely reversed, whilst by 1928–29 Britain's share had sunk still further. These goods are for the most part manufactured from medium yarns, large quantities from yarns 38's to 42's, that is precisely from those yarns in the production of which I have shown British labour costs to be nearly double Japanese. A certain small portion of the imports are of finer qualities, and for a few years Britain may be able to retain one-fifth or so of the trade by reason of the preference now given her, though even this is open to some doubt. It is precisely in these goods that Britain is prepared to make a special effort to regain trade, and the competition between Japan, Britain, India and also China is certain to become more and more fierce.

Sheetings are becoming of less and less importance, though it is possible that, in spite of the increased Indian duties, China will send larger quantities to India in the near future. I have already noted the fact that some of the Japanese shirtings should really be classed as sheetings. In any case, the British trade in these goods is almost extinct.

Drills and jeans, still imported in considerable quantities, are almost a Japanese monopoly, but increased production of some of the native mills is to some extent driving them off the market.

It is only in the finer-quality goods included under the heading jaconets, madapollams and mulls, etc., that Britain, as might be expected, still holds a virtual monopoly. Imports under this heading also appear to be fairly constant, both because there is no competition from the Indian mills, and because these goods are bought for the most part by the middle and upper classes who are not forced to go without new clothing if prices rise, and who are able and ready to buy the finest-quality goods, which are best made in Britain.

It is clear from the above tables that *dhutis*, *saris* and scarves, together with jaconets, mulls, etc., are the only kind of grey goods imported into India in which Britain still holds her own. In all the other principal classes of grey goods she has lost, or is losing, the trade to Japan, or has lost it to the Indian industry. The position in the Indian market is that Britain having been

almost entirely pushed out of the trade in the coarser plain grey goods, the fight goes on between Japan and India, and in this fight the coarsest goods of all (sheetings, etc.) are ceasing to be imported by India at all, since it is these goods which feel the effects of the tariff most. Sheetings are becoming a monopoly of the Indian mills in so far as their place is not taken by hand-woven cloths, but it is at least questionable whether China will not make a bid for this trade in spite of the higher tariff. It is also said that Japan is now sending a cloth to India which is almost indistinguishable from *khaddar*.

It is the obvious fact that the market in the coarser kinds of plain grey goods is already irretrievably lost to Lancashire, and this has made the Imperial Government give extra protection to such goods under the new tariff of April 1930 (which imposes $3\frac{1}{2}$ annas per lb. on plain grey goods if this comes to a higher figure than 15 per cent. or 20 per cent.), in return for a 5 per cent. preference on British goods against Japan. Since the coarser end of the plain grey trade is already gone, Lancashire wants to preserve her *dhuti* trade and her trade in bleached and coloured goods against Japanese competition, and she will help India against Japan in grey longcloths and shirtings, drills and jeans.

Bleached Goods.—In bleached goods, as already shown, Britain still enjoys the bulk of the trade, but total imports have declined by 30 per cent. Thus here it is not yet a question of Japanese competition but rather of Indian competition and decreased Indian consumption. It is unfortunate that in the statistics of Indian mill production grey and bleached goods are not shown separately, so that it is not possible to say how far the factor of Indian production is responsible for the net decline of 239 million yards in India's imports of bleached goods since 1913–14. The figure of total imports has hardly varied since 1924–25, and is always just under or just above 550 million yards. During the last two years under review Britain's percentage share of the trade has fallen slightly, and Holland, Switzerland, Austria and U.S.A. have slightly increased their exports of certain kinds of bleached goods to India, though altogether their totals amount to very little. In 1929–30 Japan doubled her exports of bleached goods.

The principal lines of bleached goods are as follows:

TOTAL INDIAN IMPORTS OF PRINCIPAL LINES OF BLEACHED GOODS

(*In Million Yards*)

	1913–14	1917–18	1924–25	1927–28	1928–29
Dhutis, scarves and *saris*..	104·3	41·6	68·9	71·7	43·0
Jaconets, mulls, cambrics, etc.	308·0	165·0	195·0	224·5	258·0
Nainsooks	205·0	150·0	105·0	93·0	76·6
Longcloth, shirting ..	115·3	113·3	122·7	112·0	123·0
Checks, spots and stripes	16·1	5·0	11·0	14·1	12·7
Twills	8·3	7·0	13·0	14·9	17·7
Total bleached	793·0	502·0	249·0	557·0	554·0

Of these goods the whole of the imports of the first named come from Britain even to-day. Of the goods coming under the heading jaconets, etc., the greater part are mulls, and of these latter almost the complete total comes from Britain. Thus in half the bleached trade, Britain still has virtually no competitors. Moreover, India's total imports of these mulls have risen considerably since 1924–25, viz. from 185·5 million yards to 242·8 million yards.

In jaconets there is serious competition from Switzerland and also some competition from the U.S.A. and Austria, but the total imports only amount to 15 million yards.

In nainsooks almost the whole of the imports come from Britain, but Switzerland is beginning to compete.

INDIA'S IMPORTS OF WHITE JACONETS, NAINSOOKS, ETC.

(*In Million Yards*)

	1924–25	1927–28	1928–29
Jaconets—			
Total	9·2	16·20	15·10
United Kingdom	8·3	8·40	7·60
Switzerland	0·5	4·80	3·40
U.S.A.	—	0·69	1·20
Austria	—	0·89	1·74
Nainsooks—			
Total	105·4	93·00	76·60
United Kingdom	104·0	89·40	73·90
Switzerland	1·1	—	2·40
Checks, spots and stripes—			
Total	—	14·10	12·70
United Kingdom	10·5	12·00	10·50
Drills, jeans and twills—			
Total	—	21·80	23·40
United Kingdom	16·8	18·90	21·30

In all the above goods, therefore, Britain holds almost the whole of the trade with only very slight competition in every line except jaconets, where she only supplies half the imports, but which only form a very small part of the total trade. The only important class of bleached imports in which Britain's supremacy is seriously challenged is shirtings and longcloths. Even in these she still retains 91 per cent. of the total trade, and the total quantities imported are almost the same as pre-War. In 1913–14 the total was 115 million yards and in 1917–18, 113 millions. In 1924–25 the total was 122·7 million yards, of which Britain supplied 116·5 million; in 1927–28 the total was 112 million yards, of which Britain supplied 102 millions, whilst in 1928–29 the total was 123 million yards, of which Britain supplied 112 millions. It is clear from this analysis of the bleached goods trade that Britain has lost very little to outside competitors, although increased production of the Indian mills must account for a part of the total decline in imports. For the most part this trade now consists of fine goods, the greater part of the imports being of cloth woven from yarns above 50's, i.e. goods not woven in India.

In bleached goods which come under the heading of shirtings and longcloths there has actually been an increase in total imports since 1913–14. The big decline has been in such goods as *dhutis* and nainsooks and also in jaconets, madapollams and mulls. It would therefore seem that the high price of British bleached goods has driven many Indian consumers to substitute grey goods of coarser quality or to make them wear their old clothes longer. This must, at any rate, be the case so far as *dhutis* and *saris* are concerned, except in so far as the change is due to increased consumption of coloured *dhutis*. In the case of bleached goods it is particularly clear that high prices on the one hand and the increasing poverty of the Indian people on the other hand are the main factors accounting for the 30 per cent. decline in imports.

Printed and Dyed and Coloured Woven.—In the case of goods coming under this heading there is a decline in total imports of nearly 40 per cent. and a decline in British imports of roughly

56 per cent., as against an increase in Japanese imports from a bare 1·7 million in 1913–14 to 109·8 million yards in 1928–29, besides a substantial increase in the Italian imports since 1924–25.

In 1929–30 there was a yet further decrease in the British figure and a rise in the Japanese. Several other countries send over a million yards of these goods and together account for a considerable trade, so the following table is appended to show the full position:

INDIAN IMPORTS OF PRINTED, DYED AND COLOURED WOVEN

(*In Million Yards*)

	1913–14	1917–18	1924–25	1927–28	1928–29
Total	832·00	396·00	407·0	505·0	509·0
United Kingdom	770·00	363·00	338·0	352·0	336·0
Germany	6·30	—	1·5	0·6	0·2
Holland	16·00	4·50	6·2	12·0	11·0
Belgium	7·30	—	0·9	1·7	2·0
France	0·59	—	less than ½ million yards		
Switzerland	3·00	1·09	—	2·5	2·3
Italy	22·40	7·00	—	24·5	36·1
Austria	2·50	—	less than ½ million yards		
Japan	1·70	18·70	40·9	102·7	109·8
Straits Settlements*	—	—	3·8	3·2	2·1

* British or Dutch goods reshipped.

It will be noticed that, at the close of the War, England still supplied the bulk of the imports, although they had shrunk so very greatly, but that during the post-War period Japan and Italy have had the benefit of most of the increase in imports, so that now England actually supplies less than immediately after the War, in spite of the increase of over 100 million yards in total imports since 1917–18. Holland, which after the War was the second most important exporter, now supplies only one-third of the Italian quantity. But it is Japan which year by year has enormously increased her exports of these goods, now supplying 5½ times as much as at the close of the War and 21·7 per cent. of the total imports.

It used to be said before the War that Germany specialised in

supplying the Indian bazaars with cheap, gaudy materials, and at the close of the War the British Trade Commissioner rejoiced at the elimination of this competition. Yet England has reaped no benefit at all from the War in this respect, for it is evident that it is Japan and Italy which are able to produce those cheap goods of bright colours so attractive to the poorer Indians. In so far as Japan is concerned there is no doubt that she is able to produce cheap cloths of the most pleasing pattern and colour for her own population, and so must find it easy to supply the Indian market with suitable materials. A further examination of the statistics reveals the fact that, whereas Italy specialises in printed goods for the bazaars, Japan's exports are principally of coloured woven, that is of goods made of dyed yarns, although she also sends larger quantities of both printed and dyed in the piece than does Italy, and appears to be increasing the quantities of printed very rapidly. The trade is divided up as follows:

INDIA'S TOTAL IMPORTS OF PRINTED, DYED AND COLOURED WOVEN, AND THE SHARES OF THE PRINCIPAL IMPORTING COUNTRIES

(*In Million Yards*)

	1923–24	1927–28	1928–29	1929–30
Printed—				
Totals	189·0	235·0	244·0	200
United Kingdom	176·0	190·0	175·0	—
Japan	4·9	21·8	36·0	—
Italy	2·0	15·9	23·5	—
Dyed in the Piece—				
Total	142·0	158·0	156·0	151
United Kingdom	121·0	117·0	116·0	—
Japan	12·4	29·8	23·0	—
Italy	2·7	3·1	5·7	—
Netherlands	1·9	4·2	3·4	—
Coloured woven—				
Total	76·0	111·0	107·0	133
United Kingdom	41·0	45·0	44·0	—
Japan	23·7	51·0	50·0	—
Italy	4·7	5·5	6·9	—
Netherlands	3·3	5·1	1·3	—

Thus in coloured woven goods Japan already supplies a larger quantity than Britain.

Below is a summary to show the principal lines of import of coloured goods:

INDIAN IMPORTS OF PRINTED, DYED AND COLOURED WOVEN

(*In Million Yards*)

	1913–14	1917–18	1924–25	1927–28	1928–29
Dhutis, etc.	115·2	40·5	46·0	38·4	36·3
Cambrics, etc.	113·6	50·8	44·5	50·4	49·7
Shirtings	152·6	60·8	69·3	88·7	95·0
Prints and chintz ..	209·7	101·0	59·5	69·9	75·0
Drills and jeans	30·0	22·8	25·4	64·2	57·9
Checks, spots and stripes	19·7	11·3	15·5	18·4	22·4
Twills	31·4	23·5	12·2	40·5	49·9
Others	159·6	84·9	124·6	134·3	122·7
Total	831·8	395·6	407·0	504·8	508·9

Britain has a complete monopoly, or almost a monopoly, in the following goods:

Printed.—Cambrics (which come to 20 million yards yearly); checks, spots and stripes; lungis; prints and chintz; *saris* and scarves; sateens.

Dyed.—Checks, spots and stripes (total 11 million yards, Japan supplied 1 million in 1928–29); Italians and sateens (United Kingdom, 27 million yards; about ¾ million yards from Italy and ¼ million yards from Japan).

Japan and Italy share the trade in printed, dyed and coloured woven flannels and flannelettes amounting to about 22 million yards in all.

Coloured Woven.—In checks, spots and stripes, amounting to a total of 10 million yards, Japan supplied 2 million yards.

IN COLOURED SHIRTINGS the trade was divided as follows in 1928–29:

Dyed.—Total imports, 36·6 million yards. Of which Britain, 25·8; Holland, 2·5; Japan, 7·8.

Printed.—Total imports, 32·6 million yards. Of which Britain, 25·2; Italy, 1; Japan, 6·4.

Coloured Woven.—Total imports, 26 million yards. Of which Italy, 1; Japan, 16·1.

IN DRILLS AND JEANS Japan led in all coloured imports in 1928–29, as shown below:

Printed.—Total imports, 32 million yards. Of which Britain, 10·8; Japan, 21·07.

Dyed.—Total imports, 7 million yards. Of which Britain, 3; Japan, 4·1.

Coloured Woven.—Total imports, 17·4 million yards. Of which Japan, 17·4.

Yet in printed drills and jeans Japan only seriously entered the market in 1926–27 with 2 million yards. This sort of example shows how rapidly Japan may at any moment begin to oust Britain from the market in other goods in which Britain still has the monopoly or the leading position.

In twills Britain still holds about half of the trade, but although Japan and Italy have only recently begun to compete in these lines, France already supplies the bulk of the coloured woven and Italy more than half the printed.

In 1928–29 the *Imports of Twills* were as follows (in million yards):

Printed.—Total, 19: Italian, 10; Japanese, 1.

Dyed.—Total, 18: Italian 2; Japanese, 1.

Coloured Woven.—Total, 12: Japanese 11.

Total Printed, Dyed and Coloured Woven. —Total, 49: Italian, 12; Japanese, 13.

There are now few important lines of coloured, printed or dyed goods in which Japan does not compete with Britain. Moreover, almost every year Japan enters into competition in some new line. It is the hope of British manufacturers and merchants that the 5 per cent. preference to British goods will stop any further advance on the part of Japan, but this hope is based on a fundamental misunderstanding of Japanese production costs. These are so much lower than Britain's that 5 per cent. preference is not nearly enough to protect British goods against Japanese competition. On the other hand, the special import duty on

cheap plain grey goods must drive Japan to compete more strenuously in coloured goods. Italy is also now a real competitor in cheap coloured goods, as shown above.

Further details of India's total consumption of cotton cloth, and the percentage supplied by India, Britain and Japan, are given in Chapter XI.

CHAPTER XI

THE PRODUCTION, DEVELOPMENT AND FINANCIAL POSITION OF THE INDIAN COTTON INDUSTRY

ALTHOUGH Lancashire's attention has of recent years been focused on Japanese rather than on Indian competition in the Indian market, in actual fact much more trade has been lost to the Indian mills since the War than to the Japanese. The trade so lost is, however, generally recognised to be permanently lost; and consisting, as it does in the main, of the coarser quality goods, few people in Lancashire have any idea that it can be regained, regarding the present position as more or less in the scheme of things. Moreover, the loss of this trade may have been somewhat more easily accepted by Britain in consequence of the fact that indirectly Britain receives back some of the profit out of the Indian cotton industry through the managing agency system. To this point I shall return later in this chapter.

To state the position briefly. the Indian mills now produce more than double the quantity of goods they produced before the War, and the amount of trade lost by Lancashire to the Indian mills is greater than the total amount of Japanese goods now imported into India. Put in another way, India accounts for about 76 per cent. of Britain's loss on the pre-War figure, and Japan for 20 per cent. At the same time the production of India's hand-looms, far from decreasing, has actually increased in comparison with pre-War figures.

Increased production of yarn and cloth by the Indian mills is, of course, not merely a result of the War. The native industry was rapidly increasing its output in pre-War days—but the effect of this had not yet been felt in Lancashire because India had been increasing her consumption of machine-made cotton cloth more rapidly than the native industry increased its output—so that an increasing instead of a decreasing amount of cloth was demanded from Lancashire. Exports of textile machinery to

India must eventually have had the effect of turning consumers into competitors; but it was not till the War gave its great stimulus to the native industry that this result became apparent.

In this chapter I shall be concerned to outline the growth of native production and to show in what lines Lancashire has been superseded, and in what lines the principal competitors are now Japan and India, whilst at the same time indicating why the native industry has not developed more rapidly than has actually been the case. The question of India's total consumption will be dealt with in more detail in the next chapters.

At the outset it is necessary to show the position of the hand-loom industry, else it may be thought that the native mill industry has been developing mainly at the expense of the hand-loom weavers. Also it is important to realise that hand-loom weaving is still the occupation of very large numbers of Indians: this implying that there is still a large field for the extension of machine production of cloth in India. It is, of course, only the extreme poverty of the Indian people which causes hand-weaving to continue against the competition of machine-made goods, the hand-loom weaver receiving a bare subsistence from excessively long hours of toil. Further, a result of the War which has been little emphasised is the effect of high cloth prices in reviving and stimulating the hand production of cloth. Faced with the impossibility of buying durable cloth at prices within his means, the Indian peasant, during the War years and after, took to supplying himself and his family with the produce of the local hand-loom weavers who could still procure comparatively cheap Japanese yarn.

Although in spite of Gandhi's propaganda hand-spinning is becoming almost extinct,[1] the hand-loom industry occupies a far larger number than are employed in the cotton factories.

Mr. Pillai, in his *Economic Conditions in India*, shows how the hand-loom weavers have remained faithful to their hereditary trade and that the local demand for their product continues, since they alone know exactly what their customers require and produce precisely what is wanted. He shows that in the Census

[1] There are, nevertheless, reported to be some 50 million spinning-wheels in existence in India which are intermittently at work.

of 1891, 1,668,895 persons in towns returned the cotton industry as their means of subsistence, and that the total number supported by spinning and weaving was 7,380,278. The factory hands were only 120,000 of this huge total. In 1901 there had been a decline of 10 per cent. in the numbers, and by 1911 the total number of persons supported by cotton spinning, sizing and weaving had declined by 6·1 per cent., but was still nearly 6,000,000, of whom only 237,000 were factory workers. From statistics furnished from Madras, it would appear that the weavers were producing more per head than before, as evidenced by their increased consumption of yarn. The hand-loom weavers, like those in England in the 'forties of the last century, were evidently working harder than ever to maintain their position in competition with machine production; but this large body of hand-loom weavers mainly use imported yarn, and India's consumption of machine-spun yarn had been steadily increasing.

In 1921 there had been a further decrease of 5·5 per cent. in the numbers supported by the textile industries. There has been some substitution of the shuttle-thrower since the War, and this, of course, renders the hand-loom weaver's labour far more productive. Before the War, according to the report of the International Federation of Master Cotton Spinners' and Manufacturers' Association,[1] the Indian weavers threw the shuttle by hand through the warp; this necessitates a slow movement, as the weaver has to release his grip of the reed with every pick, and 20 picks a minute is the average speed as against 180 to 190 average on power looms and 50 picks a minute by the European hand-loom weaver. The introduction of even the shuttle-thrower enables the hand-loom weaver to double his production. This substitution has occurred in some cases and partly accounts for the increased production of the Indian hand-looms since the War. But since even the few shillings necessary thus to improve the loom are beyond the reach of the majority of the poverty-stricken peasantry, it is not likely to have been general.

It is, of course, almost impossible to estimate the precise output of the hand-loom weavers in India, but the evidence of yarn consumption makes it certain that the production of the hand-

[1] *Indian Cotton*, published 1915.

loom industry is greater than before the War.[1] The Indian peasant evidently finds the coarse, hand-made cloth cheaper and more durable than the product of the factories. The usual type of hand-woven cloth (*khaddar*) is made of yarns of counts 7's to 20's. Observers have stated that a whole family can be dressed in it at about one-fifth of what it used to cost them in clothes.[2] This estimate was, it is true, made in 1923, and to-day machine-made cloth is very much cheaper; but it may still be that the peasant finds the hand-made cloth more durable—and so cheaper. It is impossible to calculate exactly the amount of hand-woven cloth consumed in India, although approximations have been reached by calculating the amount of machine-made yarn imported into India, or made in India, which is not exported or used to produce machine-made cloth. From the figures given in the *Indian Tariff Board Report*, the amount of yarn available for consumption in the hand-loom industry, as compared with that consumed in the mills, has been as follows:

(*In Million Pounds*)

Year	Yarn consumed in Mills for Production of Woven Goods, assuming 100 lb. of Yarn to equal 112 lb. of Cloth*	Balance available for Consumption in the Hand-loom Industry
1899–1900 to 1903–04†	103	214
1903–04 to 1908–09†	155	264
1908–09 to 1913–14†	232	248
1913–14	245	267
1915–16	314	272
1917–18	340	204
1919–20	343	140
1921–22	361	299
1923–24	359	252
1924–25	410	314
1925–26	415	290
1926–27	481	333
1927–28	507	328
1928–29	398	294
1929–30	502	375

Figures from the Indian Tariff Board Report up to 1925–26 and brought up to date on the same basis of calculation for the last four years. These figures do not take account of stocks held in India, and this fact affects the figures of the last two years in particular. For the Bombay mill-owners have been complaining of having large unsold stocks of yarn.

† Average.

[1] The actual number of hand-looms in existence in India is 1,938,178, according to the last census.

[2] *Manchester Guardian Commercial*, January 25, 1923.

These figures clearly show that more hand-made cloth is used in India than in pre-War days, and that, whereas up to 1913–14 the production of hand-made cloth was still a little larger than that of the mills, already in 1915–16 the Indian mills were producing more cloth than the hand-loom weavers; so that it is clear that the expansion of the native mill industry has been at the expense of foreign imports rather than at the expense of the hand-loom weavers. However, the imposition of a 5 per cent. import duty on yarns in 1922 was a blow at the native hand-loom industry; and the further change in the tariff in 1927, making the duty 5 per cent. or $1\frac{1}{2}$ annas per lb., whichever is the higher, may mean that the Indian mill-owners will soon be in a position to keep up yarn prices in India sufficiently high to drive the hand-loom weavers out of existence. During the War and after, the hand-loom weavers obtained a large proportion of their yarns from Japan, but during the last three years China has begun to supply them. The new duty on yarn is aimed specifically at the cheap coarse and medium yarns imported from China into India for use on the hand-looms.

In the debate in the Legislative Assembly on the new duties in March 1930, a Mohammedan Member, speaking against the continuance of the yarn import duties for another three years, said that he spoke in defence of the 6,000,000 hand-loom weavers,[1] 4,000,000 of whom he asserted to be Mohammedans, who used to earn 6 annas or 8 annas a day, but now earned only 4 or 5 annas; he stated that their yarn cost them more since the imposition of the 5 per cent. duty, but that they still sold a pair of *dhutis*, which took two days to make, for 3 rupees. It must undoubtedly be the case that the hand-loom weavers are living at a starvation level in their losing competition against machine-made goods, and that there is a very wide field for expansion in the production of machine-made goods in India.

To the whole question of the failure to develop machine industry in India I return in the next chapter. I now come to the consideration of the position of the native mill industry,

[1] The number was not correctly stated—6,000,000 is the number of those *supported by* hand-loom weaving.

the proportion of India's total consumption it supplies and its development of productive capacity and output before and since the war.

Yarns.—The table given on page 280 shows the great increase in Indian yarn consumption since the beginning of the century. The figures of total consumption as compared with imports show that the proportion supplied by the Indian mills is substantially the same as before the War; the average for the five pre-War years being 93 per cent. and the average for the last five years being also 93 per cent. But during the War India supplied a larger percentage; her share rising to 98 per cent. in 1917–18 and 1919–20, when imports were half, or less than half, the pre-War quantity.

India's total yarn consumption was rising from 1919–20, and is now (1929–30) 64 per cent. above the 1913 figure. The rise in total consumption is in major part due to increased Indian production (total yarn imports having only slightly increased) and to the practical cessation of yarn exports from India (see page 299).

It has already been shown in Chapter IX that the principal counts of yarn imported are 31's to 40's,[1] the Indian mills having practically a monopoly in yarns below 30's. This monopoly has, it is true, been severely challenged by China, which suddenly sent large quantities of coarse yarns to India in 1926–27[1] and 1927–28, but it is probable that the increased import duties will again enable the Indian mills to keep out almost all imports of coarse yarns and monopolise the trade themselves, thereby being enabled to keep up prices to the hand-loom weavers who, for the most part, consume these coarse yarns. The table on page 283 compares imports and production of the various counts of yarn.

The total increase of yarn production in 1927–28 is less than 20 per cent. on the 1913–14 figure, but this table shows the interesting fact that, whereas Indian yarn production of counts below 20's has remained practically stationary since 1913, and is now at just about the same figure as in 1913–14, her production of

[1] Nearly half of the total yarn imports.

INDIAN YARN IMPORTS AND PRODUCTION

(*In Million Lb.*)

Counts	1913–14		1924–25		1926–27		1927–28		1928–29		1929–30	
	Production	Imports	Production	Imports	Production	Imports	Production	Imports	Production	Imports	Production	Imports
1–20's	492·7	1·2	469·8	7·2	515·7	1·1	494·7	2·5	382·0	1·10	493·3	2·0
21–30's	166·0	4·6	223·8	1·4	248·3	0·9	263·0	0·8	213·0	0·70	271·8	0·7
31–40's	19·7	23·6	19·4	27·7	27·6	24·4	33·7	27·3	37·5	19·10	46·4	20·1
Above 40's	2·7	7·8	5·8	7·6	11·5	7·5	11·1	8·0	10·0	9·30	15·3	8·0
Grey and coloured twofolds	—	—	—	5·8	—	7·1	—	13·6	—	12·60	—	13·1
Unspecified waste	0·7	6·8	0·6	6·1	3·9	8·3	6·1	—	5·7	—	6·7	—
Total	682·8	44·2	719·4	55·9	807·1	49·4	808·9	52·3	648·3	43·76	833·5	43·9

the counts above this has increased. In counts 31's to 40's which, as already shown, is by far the largest class of imports, Indian production since 1926–27 has outstripped imports, although these were maintained at the pre-War figure until 1927–28. It would seem that the increased output of 31's to 40's in 1928–29 must have been stimulated by the Chinese exports of counts below 20's, in which yarn the Indian mills somewhat reduced their production.

To summarise, it may be said that during these last years India's increased production has all been of counts above 20's, that she now has a monopoly in counts 21's to 30's, and that she is clearly beginning to concentrate more and more on the production of those yarns which compete with British and Japanese and Chinese imports: viz. 31's to 40's and above. This is in spite of the fact that the Indian mill-owners complained to the Tariff Board that the price-cutting policy of Japan had prevented more rapid development in the production of medium yarns. Thus India finds herself secure in 21's to 30's, meeting Chinese competition and a little English in counts 20's and under, but practically monopolising the sales of these counts also, and hoping to oust foreign imports of 31's to 40's, i.e. the bulk of the foreign trade, under the protection of the customs duty.

India's increasing production of 30's to 40's yarns is of great importance apart from the actual yarn trade since, according to an estimate made by the Manchester Chamber of Commerce, 40 to 45 per cent. of the total exports of Manchester cotton cloth from Britain to India contains warp or weft of 30's to 40's. Consequently the fact that imports of these counts are being maintained at the same time as the Indian production of them is increasing means that the Indian mills are manufacturing more and more of precisely those kinds of cloth imported from Britain. It means that the Indian manufacturers, who have been meeting intense Japanese competition in coarse shirtings, etc., and are now beginning to meet Chinese competition as well, are producing larger quantities of the shirtings, longcloths and other goods made of medium yarns in which, as shown in Chapter IX, com-

petition between Japan and Britain is especially fierce, and in which Britain has lost so heavily to Japan.

It would seem extremely probable that in all plain grey goods of medium counts of yarn, the battle of the next few years will be between Japan and India—and possibly China—with Britain completely ousted from the market, as she has already been ousted from the market in sheetings, T-cloths and coarse shirtings.

The analysis given below of Indian cloth production bears out the above.

Cloth Production in the Indian Mills

It is here that the Indian mills have so largely supplanted imports since the War, their production of cloth being now roughly double the pre-War figure as against an increase of only 20 per cent. in yarn production. It should also be noted here that, as well as actual increased yarn production and slightly larger yarn imports, Indian yarn exports have almost ceased since the War with the development of the Chinese industry, so that altogether a far larger quantity of yarn is available for cloth production than in pre-War days.

It used to be frequently stated that India consumed less cotton cloth than in pre-War days, and this was true in respect of the immediate post-War period. To-day the total consumption is very much the same as pre-War; but mistakes in estimating that total are made because account is not taken of the hand-loom industry whose production is calculated to have increased 32 per cent. in 1925–26 on the pre-War figure, in which year mill production had increased 78 per cent. The table on page 286 shows the position as regards total consumption and Indian production.

From 1921–22 to 1925–26 the Indian mills supplied on an average 38 per cent. of India's total consumption of cotton cloth as against an average of 22 per cent. in the five pre-War years and 20 per cent. in 1913–14; and, whereas in 1899–1900 the Indian mills had supplied only 9 per cent. of India's consumption of cloth as against 64 per cent. supplied by imports, and 27 per cent.

INDIAN CLOTH CONSUMPTION

(In Million Yards)

Year	1 Net Imports	2 Indian Mill Production	3 Hand-loom Production*	4 Exports of Indian Piece Goods	5 Consumption of Indian Mill Produced Piece Goods†	6 Net Consumption of India: Imports and Native Production	Percentage 5 is of 6	Total Indian Consumption of Machine-made Goods
1899–1900 to 1903–04‡	1,972	493	857	115	378	3,207	11	2,350
1904–05 to 1908–09‡	2,190	744	1,057	121	623	3,870	16	2,813
1909–10 to 1913–14‡	2,477	1,105	991	127	978	4,447	22	3,455
1913–14	3,042	1,164	1,068	130	1,034	5,144	20	4,076
1914–15	2,327	1,136	1,184	110	1,026	4,537	23	3,353
1915–16	2,019	1,442	1,048	161	1,281	4,348	29	3,280
1916–17	1,771	1,578	816	309	1,269	3,856	33	3,040
1917–18	1,405	1,614	812	234	1,380	3,597	38	2,785
1918–19	955	1,451	1,048	187	1,264	3,267	39	2,219
1919–20	836	1,640	564	239	1,401	2,801	50	2,237
1920–21	1,405	1,581	1,148	170	1,411	3,964	37	2,816
1921–22	980	1,732	1,190	187	1,545	3,715	42	2,525
1922–23	1,467	1,725	1,341	186	1,539	4,347	37	3,006
1923–24	1,374	1,702	1,005	201	1,501	3,880	39	2,875
1924–25	1,710	1,970	1,256	230	1,740	4,806	36	3,450
1925–26	1,529	1,954	1,160	165	1,790	4,479	38	3,319
1921–22 to 1925–26‡	1,412	1,816	1,190	194	1,623	4,245	38	3,035
1926–27	1,759	2,259	1,332	197	2,062	5,153	40	3,821
1927–28	1,939	2,356	1,312	169	2,187	5,438	40	4,126
1928–29	1,913	1,893	1,592§	149	1,744	5,249§	—	3,657
1929–30	1,897	2,419	2,008§	133	2,286	6,191§	—	4,183

* These figures can only be approximate since they take no account of the yarn held in stock in India. They are calculated on the assumption that 1 lb. of yarn = 4 yards of cloth. See *Indian Tariff Board Report*, Vol. I.

† Taking it that the exports are all of Indian mill-made goods, *not* the product of the hand-loom weavers.

‡ Average.

§ Figures for 1928–29 and 1929–30 certainly an overestimate as it is known that the Indian mills had large stocks of unsold yarns.

by her hand-loom weavers, in 1921–22 the percentages had changed to 42, 26 and 32.

By 1926–27 Indian machine-made cloth production was just about double pre-War—viz. 2,259,000,000 yards as against 1,105,000,000 pre-War. In 1927–28 it rose further to 2,356,000,000, but in 1928–29, consequent on the prolonged strike in Bombay in the spring and summer of 1928, it fell to 1,893,000,000 yards. Consequently, for purposes of comparison, it will be best to consider the year 1927–28. Thus an increased Indian mill production of over 100 per cent. has to be set against a decrease in net imports of 36 per cent., and an increased hand-loom production of 23 per cent.[1]

Whereas the ratio between Indian mill production and imports (irrespective of exports) in 1913–14 was 28 to 72, in 1927–28 it was 56 to 44. Comparing Indian mill production for the home market (production less exports) with net imports, the ratio in 1913–14 was 25 to 75 as against 52·5 to 47·5 in 1927–28.

As regards total consumption, it is not very satisfactory to have to take hand-loom production into account, since it must for the most part be narrower than the mill-produced goods and since the figures of total production are only an estimate. I therefore give the figures of machine-made and hand-made consumption separately, as well as the net total.

INDIA'S TOTAL COTTON CLOTH CONSUMPTION

(*In Million Yards*)

	1913–14	1918–19	Average 1921–22 to 1925–26	1926–27	1927–28
Total machine-made goods	4,076	2,219	3,035	3,821	4,126
Total of hand-loom production (estimated) ..	1,068	1,048	1,190	1,332	1,312
Total all cloth	5,144	3,267	4,245	5,153	5,438

This table shows that India's total consumption is very much the same as pre-War, that her consumption of machine-woven cloth was a little under pre-War down to the end of 1926–27, but is now slightly above, and that her consumption of hand-woven cloth has been above pre-War since 1920–21, and now forms a little over or a little under a quarter of her total consumption.

[1] As already stated, the figure for hand-loom production is only an estimate.

I now come to analyse the production of the Indian mills, and to show in what kinds of cloth India has increased her production.

It is unfortunate that Indian manufactures are divided into fifteen heads only in the Monthly Statistics of Cotton Spinning and Weaving in Indian Mills, and that grey and bleached goods are lumped together. This is particularly unfortunate in view of the fact that, as already shown, the United Kingdom's strongest line of export to India is bleached goods and it is important to know to what extent India is now producing them herself.

The Indian Tariff Board in 1927 reported that, according to figures collected for it by the Bombay Mill Owners' Association, 67·6 million yards of their production is bleached. This represented less than one-eighth of the total production of grey goods in Bombay. Figures obtained from Ahmedabad showed that the production of bleached goods represented 39 per cent. of the total production under the heading Grey and Bleached,[1] whilst in eleven mills the production of bleached goods was 60 per cent. of the total.

The table on page 289 shows the increase in Indian production since 1913–14 in the main classes of goods produced.

Grey and Bleached.—The principal kinds of goods produced both now and pre-War are *dhutis*, shirtings and longcloths, and the production of these has more than doubled. The *dhutis* are plain grey for the most part, not bordered like the British imports, and consequently a much cheaper line of goods. The longcloths and shirtings compete directly with Japan and Britain, and occupy a position of equal importance with *dhutis* in Indian production. These types of goods now account for more than half of India's total production.

It ts surprising that the production of sheetings, T-cloths and domestics has fallen since the War, although imports have also fallen. It would seem that *khaddar* must have taken their place in Indian consumption, and that the mills now manufacture an imitation of this hand-woven cloth to take advantage of the Gandhi campaign.

[1] It is also stated that most of the bleaching in Ahmedabad is done by *dhobies* (washermen), which is a much cheaper process than bleaching by machinery.

PIECE-GOODS PRODUCED IN INDIA (BRITISH INDIA AND THE INDIAN STATES)

(*In Million Yards*)

	1913–14	1917–18	1924–25	1925–26	1926–27	1927–28	1928–29	1929–30
Grey and Bleached—								
Chadars	69·8	54·0	61·6	62·0	65·5	66·8	56·6	66·0
Dhutis	284·7	325·0	458·4	516·3	585·7	615·9	564·1	776·0
Drills and jeans	27·8	78·6	77·2	74·1	79·7	91·2	76·3	100·2
Cambrics and lawns	5·0	8·2	5·4	3·2	3·4	5·5	4·6	3·5
Printers	30·3	26·5	32·8	25·8	20·9	20·2	22·4	19·4
Shirtings and longcloths	292·4	450·6	525·8	521·1	580·5	620·0	474·2	585·2
T-cloths, domestics and sheetings	128·9	137·4	77·7	74·0	93·3	92·1	75·4	90·6
Tent cloth	5·8	24·5	9·9	9·0	6·7	6·0	6·9	7·6
Khadi, dangri or *khaddar*	—	—	87·2	87·4	98·6	116·1	93·6	124·6
Other sorts	27·2	35·9	46·7	41·0	42·7	40·9	35·0	41·3
Total	872·4	1,141·0	1,382·0	1,414·0	1,577·0	1,675·0	1,409·6	1,814·9
Coloured	291·8	473·1	588·0	540·1	681·4	681·5	483·6	604·0
Total all piece goods	1,164·0	1,614·0	1,970·0	1,954·0	2,259·0	2,357·0	1,893·0	2,419·0
Exports—								
Greys and bleached	44·2		45·3	22·0	21·5	19·3	16·3	15·0
Coloured	45·0		136·2	176·0	175·9	149·3	131·4	117·0
Total	89·0		182·0	165·0	197·0	169·0	148·0	132·0

The other cloths which show a big increase are drills and jeans, and these imports have been declining even from Japan in so far as grey goods are concerned; but in coloured drills and jeans there has been a big increase in Japanese imports for the past few years, as was shown in the last chapter, so that there may have been a change in consumption from grey to coloured, rather than a substitution of Indian goods for Japanese.

The following detailed table shows the tremendous increase in the share taken by Indian industry in total consumption[1] in the "bread and butter" part of the trade; that is to say in the production of articles of mass consumption such as *dhutis*,[2] *saris*, sheetings, longcloth and shirtings, drills and jeans, which together form the greater part of India's total consumption of grey and bleached goods (the finer grey goods, such as jaconets, mulls, madapollams, etc., are still supplied mainly by Britain).

In the table on page 291 the figures for Indian production under the heading "grey" include their production of both grey and bleached, since, as already explained, the figures are not available separately. These figures are compared with the imports of grey goods, since the import of bleached goods is principally of finer goods than those produced in India, i.e. of goods not competing with Indian production. Nevertheless, some of the Indian production of bleached goods does consist of the same lines as imports, so that the figures of percentage consumption under the heading "grey" on page 291 are not exact.

The table shows clearly enough the very great change which has occurred since the War in all goods of general consumption.

India has obviously concentrated on producing the goods consumed by the peasants and workers of the country, and, although she now also produces large quantities of slightly better-class goods, she has hardly attempted the production of nainsooks

[1] The consumption figures here and following do not take account of exports and re-exports, these being in any case small, and being to countries which would otherwise be supplied by the same countries as India.

[2] *Dhutis* and *saris*, though classified as piece goods, are really garments sold in pairs. They are usually five yards long each, but can be shorter or longer. *Dhutis* are worn by men and *saris* by women; the latter have a wider border in the import trade.

INDIA'S TOTAL CONSUMPTION OF CERTAIN MAIN CLASSES OF MACHINE-MADE GOODS

(NOT DEDUCTING EXPORTS AND RE-EXPORTS)

(In Million Yards)

	1913–14			1917–18						1928–29					
							Percentage of whole supplied by—						Percentage of whole supplied by—		
	Indian	Total Imports (almost wholly from Britain)	Percentage of whole by India	Indian	British	Japanese	India	Britain	Japan	Indian	British	Japanese and Chinese*	India	Britain	Japan and China
Greys—															
T-cloths, domestics and sheetings	129	6	93·0	137	—	27	80·0	—	16	75‡	—	6	91	—	7
Dhutis and *saris* ..	284	809	26·0	325	396	—	45·0	55·0	—	564	453	35	54	43	3
Drills and jeans ..	28	21†	57·0	79	1	6	91·0	1·0	7	76	—	10	86	—	11
Shirtings and longcloth	292	545	35·0	451	83	40	78·6	14·4	7	474	48	203	65	7	28
Total	872	1,534	36·2	1,141	531	74	64·5	30·0	4	1,409	582	255	63	26	11
Printed, dyed and coloured woven	292	832	26·0	473	364	19	54·4	41·7	2	484	336	110	50	34	11
Grand total all piece goods, including bleached ..	1,164	3,197	27·0	1,614	1,430	95	50·0	45·0	3	1,893	1,457	357	49·4	38	9

* Chinese as yet very small, included because they come from the Japanese mills in China. They consist of 12 million yards longcloth and shirtings and 1 million yards sheeting.

† Half Britain and half U.S.A.

‡ Also 94 million yards of *khaddar*, which is really sheeting, but made to look like hand-woven cloth.

or of the muslins of various kinds and finer calicoes included under the import headings of jaconets, madapollams, mulls, etc., or of the fine shirtings which are imported bleached.

As already shown at the beginning of this chapter, the bulk of her cloth is manufactured from yarns below 30's and is consequently coarse. This is a natural state of affairs in a country where labour is both very badly paid and unskilled, and where the bulk of the demand is for the cheapest materials which can be had. In cotton manufacture the relative value of cheap labour is greatest in the production of the coarsest yarns and materials. The cheapest labour at present is in China; hence China's ability to sell coarse yarns to India in spite of the import duties. Nevertheless, there is no intrinsic reason why the Indian mills should not turn to the production of somewhat finer materials in competition with Japan and Lancashire, and this is bound to happen as the Indian market becomes more and more congested.

The incalculable factor is hand-loom production which, as already shown, has tended, as far as can be judged by the statistics of cotton yarn consumption in the post-War years, to increase rather than to decrease. The increased duties on yarn will obviously tend to decrease hand-loom production, but the extreme poverty of the Indian people, the absence of alternative employment, and the distance from road or railway of many villages all help to keep the hand-loom weavers in existence.

Hand-loom production probably accounts for the diminution in the production of machine-made sheetings in the absence of imports. The Indian mills are themselves now producing *khaddar*, and it seems that this must have been included before in "sheetings, etc." In any case, coarse, narrow-width hand-woven cloth more closely resembles T-cloths than any other kinds of machine-made goods. As mentioned in Chapter IX, the Japanese are now reported to be selling a coarse cloth almost indistinguishable from *khaddar*.

The figures given in this chapter show how much more serious a factor than any other has been the growth of the native Indian industry to Lancashire. Severe as the competition from Japan may be, yet it is the Indian industry which is supplying India

with the greater part of those goods which used to come from England. The actual question as to whether the Indian mills produce the same type of goods as Lancashire is not so relevant as is sometimes supposed, for even if the United Kingdom does not export the same class of goods to India as the Indian mills produce, this does not mean there is no competition. On the one hand, the native consumer may turn to buy another cheaper, though coarser or less durable, class of article because he can no longer pay for the British product; on the other hand, it is obvious that the United Kingdom does not export the class of article made in India because, finding the competition too severe, she has already given up the struggle (not because she cannot produce or never has produced these types of goods).

In actual fact the Indian mill industry has been prevented in many ways from growing as rapidly as it would have done in a free country. The fact that Britain, in 1928–29, with all her loss of trade, still supplied 38 per cent.[1] of India's net consumption of machine-made cloth and Japan another 9 per cent., is due to the retarded development of the Indian industry.

The fact that the Indian industry has not developed at nearly the pace which might have been expected in a country which not only grows cotton, but is such an enormous consumer of cotton goods, will become clearer after a survey of the industry's development has been made; but, before proceeding to do this, it will be well to summarise the competitive position of India, Japan and Britain in the Indian market in the main classes of goods, and to estimate what is likely to be the future position consequent on the changes in the Tariff as from April 1930.

The new Tariff, which imposes a 20 per cent. duty on all cotton goods imported from foreign countries, and a 15 per cent. duty on those of British manufacture, further provides for a specific duty of 3½ annas per lb. on all plain grey goods, whether of British manufacture or not, whenever this should be higher than the standard 15 per cent. or 20 per cent. This means, in effect, that British goods have preference, except in the case of the cheaper plain grey goods imported.

[1] Britain's percentage for 1929–30 is lower than this.

It has already been shown in Chapter IX that Britain's share of the plain grey goods has been rapidly diminishing and is now a good deal less than Japan's, whereas in bordered grey goods—which are, for the most part, *dhutis* and *saris*—there is as yet hardly any competition from Japan. In the calendar year 1929, the exports of plain grey goods from Japan to India leapt to almost double the figure for the previous calendar year—viz. from 174,000,000 yards to 325,000,000 yards—raising the total figure of Indian imports by almost this amount. This phenomenal increase in Japanese imports of plain grey goods into India must therefore have been mainly at the expense of the Indian industry (since British exports to India under this heading fell only slightly); and it is this menace from Japan which has created at least a temporary alliance between the British and the Indian mill-owners over the Tariff.

As was pointed out in the Legislative Assembly debate on the new Tariff, Lancashire has been willing to sacrifice her remaining 77,000,000 yards of grey longcloth and shirtings in order to preserve her 493,000,000 yards of *dhutis* from possible Japanese competition in the near future. Similarly, in coloured goods, Lancashire has been ready to leave Japan and India to fight it out in the matter of the coarser goods—with the scales weighted heavily in India's favour by the 20 per cent. duty—whilst hoping to preserve for herself the trade in medium and fine quality coloured goods against Japanese competition by reason of the 5 per cent. preference she will enjoy.

To give only one example of the threat to the Lancashire trade from Japan even in printed goods, where Britain's position is firmest, one may cite the fact that Japan, who entered the printed drill and jean trade only in 1926–27, reduced British imports under this head from 20,000,000 yards that year to 11,000,000 in 1928–29, and to 3,000,000 in the first half of 1929–30. Altogether Japanese exports to India of coloured goods have been increasing very rapidly, and constitute a severe menace to the trade Lancashire still does.

Again, in the case of bleached goods—in which Lancashire still has a virtual monopoly of the imports, but to the production

of which Japan must turn more and more as the increased duties cut her off from the grey goods market in India—the new Tariff gives Lancashire an advantage over Japan, whilst the preference to Britain does not affect the Indian manufacturer who does not yet compete in these lines.

The closer one examines the new Tariff, the clearer it becomes that it is in large measure an expression of alliance between British and Indian cotton manufacturers and merchants against Japan; the reason for such an alliance (of however temporary a nature it may be) being, on the British side, the fact that Lancashire cannot compete against Japan or India in the coarser plain goods or in the cheaper coloured goods, that she hopes to be able to maintain and improve her position in bordered grey, bleached and coloured piece goods against Japan with the assistance of the 5 per cent. preference, and that, having given up hope of recapturing the coarsest end of the trade, she would prefer the Indian mills to get it than see it all go to Japan. The Indian mill-owners, on the other hand, at present need protection against Japan more than against Lancashire, and have been willing to pay for it by preference to Britain in those goods of which they do not yet manufacture large quantities, or in which they think the 15 per cent. duty will give them sufficient advantage. It was stated in the debate that in coloured goods the 86 million yards from Japan were of kinds which competed against Indian mill production as against only 50 million yards from Britain within the sphere of competition with the Indian mills. Although the majority of the Assembly disliked giving a preference to Britain, many voted for the Bill because the Government had threatened to withdraw it altogether if any substantial changes were voted.

Development and Management of the Indian Cotton Industry

Since so many misconceptions exist in Lancashire concerning the pre-War position in the Indian market, a short survey of the pre-War development of the Indian industry becomes necessary. For, owing to the fall in raw cotton prices immediately preceding

the War, and to the general fall in the price level of manufactured goods as compared with that of raw materials,[1] leading to increased consumption of cloth in India, Lancashire cotton spinners and manufacturers tended to ignore the development of native production, whose full effect had not yet been experienced. Moreover, up to the War, the British Government had to a considerable extent hindered the development of the Indian industry for the benefit of Lancashire.

Clothing being one of mankind's three primary needs, and the initial capital required for setting up a cotton mill being small, it is natural that textile production should be the first industry to develop in a backward agrarian country. Although the domination of India by Britain has led to India's industrial development being retarded instead of assisted, the Indian textile industry had developed to some extent even before the War.

Although capital for large engineering enterprises cannot easily be raised in India, where capital accumulation is for the most part in British hands and is drained away to Britain, the smaller amount of capital required to set up cotton mills could to a large extent be raised amongst the wealthier Indians. The initial capital was, in fact, evidently provided by the traders in Indian raw cotton. Moreover, the textile machinery makers in England, wishing to extend their sales, have through their agents helped to finance the industry, both in its initial stages of development, and subsequently by the provision of the variable capital of the industry, although always at a heavy cost to the native Indian capitalists.

To this question of the financing of the Indian cotton industry I shall return at the end of this chapter, but for the moment it is necessary to emphasise that the Indian cotton industry has developed in spite of, not with the assistance of, the British Government or British finance; consequently the development of the industry has not actually been rapid but very slow, considering both the size of the country, its enormous demand for cotton goods and the fact that India herself supplies the raw material. The development of the Japanese cotton industry has been very much more rapid, although Japan is a small country and has

[1] See next chapter.

to obtain her raw material from India or America. This far greater expansion of production in Japan is quite obviously due to her being an independent state, whose Government does everything possible to assist the development of industry.

The Japanese Government and banks all assist the cotton industry in every possible way, whereas in India the industry has developed in spite of the hindrances in its way, and has only since the War received a limited amount of protection.

Beginnings of the Indian Industry.—Bombay City is still the most important centre of the Indian cotton industry, but since 1923 the industry at Ahmedabad has expanded far more rapidly, and Sholapur and other centres in the Bombay Presidency are increasing in importance. The other centres in India are now Cawnpore, Delhi, Nagpur and Madras.

The first successful mill to be set up in India was the Bombay Spinning and Weaving Company in 1854. But the American Civil War period brought such enormous profits to bankers and traders concerned in the export of Indian cotton to Lancashire, and led to so much speculation and subsequently to such financial instability, that progress in setting up new mills was temporarily retarded. By 1870 there were only thirteen factories with a total of 291,000 spindles and 4,100 looms.

From the table given on the next page showing the progress of the Indian mill industry from 1877 onwards, it will be seen that in 1881 India still had only one and a half million spindles, but that progress after that date was a little more rapid, in spite of the removal of the small revenue duty on cotton imports between 1882 and 1894.

Until the beginning of this century India was exporting large quantities of yarn to China, and the number of her looms was very far from corresponding to her productive capacity in spinning. In fact, nearly half her yarn production was exported at the beginning of the century. It is since 1905 that, meeting with increasing Japanese competition in the Chinese market for yarns, India has been decreasing her yarn exports and increasing the number of her looms at a greater rate than her spindleage. It was only with the virtual elimination of Indian yarns in the

Chinese market after the War that this development was accelerated. Still, even before 1905 India had been slowly bringing up the number of her looms to correspond with her spindleage.

India's Productive Capacity

Number of Spindles (millions).—1877, 1·2; 1887, 2·4; 1896, 3·9; 1899, 4·7; 1902, 5; 1908, 5·7; 1911, 6·3; 1914, 6·70.

Number of Looms (thousands).—1877, 10·3; 1887, 18·5; 1896, 37·2; 1899, 39; 1902, 42·5; 1908, 67·9; 1911, 85·3; 1914, 104·1.

Thus in 1914, whereas India's spindleage had increased 31 per cent. on the 1905 figure, the number of her looms had been more than doubled.

Yarn exports to China began to decline after 1905 as a result of Japanese competition in that market, and this stimulated the Indian mills to utilise more of their own yarn in cloth production. By the end of the War yarn exports had fallen to 30 per cent. of the 1908 figure—and by 1925–26 had dwindled away to a mere 32 million lb. with the rapid increase in the yarn production of mills in China. The table on page 299 shows the position since the beginning of the century.

The largest markets now are Egypt and North Africa, the Red Sea ports and the Persian Gulf, but no one of these takes more than 5 or 6 million lb. Exports to China in these last three years were only a little over a million lb.

The Indian industry was severely hampered from 1896 up to December 1925, not only by the difficulty of obtaining capital and the absence of any real degree of protection until 1921, but also by the excise duty on all goods produced.

In order to show how the development of the Indian cotton industry was directly hampered up to the War by the Government a brief survey of the Tariff position becomes necessary. In 1894 an import duty had been imposed on cotton piece goods and yarn, but this was done purely on account of the need to raise revenue and a "countervailing cotton excise" of 5 per cent. was at the same time imposed on all Indian cloth and on yarn above 20's counts. In 1896, consequent upon the protests in Lancashire, the import duty on cotton cloth was lowered to 3½ per cent.,

INDIAN YARN EXPORTS

(Millions of Pounds)

Year	Amount of Indian Yarn Exported*	Percentage of the Figure for the Year 1908–09
1899–1900	244	—
1901–02	278	—
1903–04	260	—
1905–06	305	—
1908–09	242	100
1910–11	191	79
1912–13	215	89
1913–14	207	—
1914–15	143	59
1915–16	168	—
1916–17	178	74
1917–18	130	54
1918–19	73	30
1919–20	161	66
1920–21	89	37
1921–22	88	36
1922–23	64	26
1923–24	46	19
1924–25	46	19
1925–26	32	13
1928–29	24	10
1929–30	24	10

* Figures for exports by sea only available.

and that on yarn taken off altogether. The excise on cloth was also lowered to 3½ per cent., hand-woven cloth was exempted and the yarn excise removed. The general import duty was not raised till 1916, when it was increased to 7½ per cent., but the cotton duties and excise remained at 3½ per cent. In 1917 the import duty on cotton piece goods was also raised to 7½ per cent., but the excise remained at 3½ per cent. The War position made it too dangerous for the Government to arouse the anger of the Indian mill-owners by any increase in the excise. In 1921 the general import rate, including the duty on imported piece goods, was raised to 11 per cent., with the excise still remaining at 3½ per cent. It was accordingly not until 1921 that any real degree of protection was given to the Indian cotton industry, and even then the 11 per cent. was only part of the general rise in the Tariff for revenue purposes. Moreover, the excise duty of 3½ per cent. remained in existence partly to annul the effects of the increased

revenue Tariff. The excise duty is calculated even before the War to have amounted to about £3 per year per loom—and, during the War and after must, of course, have been at a much higher figure, owing both to the greater loading of machinery and to the general rise in prices. It was not till December 1925 that the Government of India was forced to abolish the excise as the outcome of the long strike against wage reductions in the Bombay mills: wage reductions which the mill-owners said they would not impose if the excise duty were abolished. The Government gave way in consequence of the grave disturbances in Bombay, and the violent and prolonged opposition to the duties of a strong body of Indian capitalists.

The abolition of the excise duty, and the subsequent abolition of import duties on machinery in October 1927, freed the Indian industry from some of the restrictions hampering its development, and both the figures of productive capacity and those of output show how much greater progress was made after 1925–26; i.e. from April 1926 onwards. Production of cloth, which was only 78 per cent. above pre-War in the year ending March 1926, rose to 100 per cent. above pre-War in the following year.

The removal of the import duties on certain kinds of machinery in October 1927, in pursuance of the recommendations of the Indian Tariff Board, led immediately to a big increase in the imports of machinery and mill-work, which became third in the list of imports: following cotton manufactures and iron and steel.

The figures already given show that it is since the end of the War—not during the War—that the main expansion of the Indian industry has taken place. In 1917–18 the cloth production of the Indian mills had increased only 38 per cent., but since 1920–21 it has been steadily mounting—and in 1927–28 was more than 101 per cent. above pre-War.

The War period itself was, in fact, one of arrested development, owing to the difficulties in obtaining new machinery and to the financial position in India. It was Japan, unburdened by any kind of War taxation, who profited by the War, filling the Indian market with her goods; for Japan not only worked her machinery night and day to the limit of its capacity, but was able to manufacture her

own looms and also to obtain spinning machinery from America.

The Indian cotton mill owners endeavoured to make up for the difficulty in getting new machinery by greater loading of plant in the War years, i.e. by the increased working of existing machinery so that productivity increased and labour was made more intense, while standing charges (with the exception of increased salaries to the managerial and office staffs) remained practically constant. This, of course, meant that profits were swollen; thus the period of "prosperity" led, not to an extension of productive capacity, but only to the distribution of enormous dividends, to big profits for the managing agencies firms and to some accumulation of reserves.

Some idea of the rationalisation process pushed through in India during and immediately after the War may be gathered from the fact that, whereas the number of looms in the Indian mills increased by only 15 per cent. between 1914 and 1920, the increase in the production of woven goods from the Indian mills was 46 per cent. Summarising the position at the end of the War, Mr. Coughbrough, in his *Notes on the Indian Piece-Goods Trade*,[1] stated that, whereas production had risen 46 per cent., the cost of labour had increased only 58 per cent., whilst prices had, at times, reached *three times* their pre-War level.

It is since 1920–21 that India has begun substantially to increase her productive capacity, but this increase has been to a large extent in the new cotton manufacturing areas, especially in Ahmedabad. The figures are as follows:

PROGRESS OF THE INDIAN MILL INDUSTRY

Year	Total Number of Mills	Total Number of Spindles	Number of Looms
1913–14	271	6,883,395	106,579
1919–20	253	6,768,788	119,482
1920–21	257	6,895,804	123,783
1921–22	298	7,576,219	137,420
1922–23	333	7,927,938	142,462
1923–24	336	8,313,273	151,485
1924–25	337	8,510,633	154,020
1925–26	334	8,714,168	159,464
1926–27	336	8,702,760	161,952
1927–28	335	8,704,172	166,532
1928–29	344	8,807,064	174,992

[1] *Bulletin of Indian Industries and Labour*, No. 16.

The following are the percentage increases over periods of years before and since the War:

Year	Spindles Increase per cent.	Looms Increase per cent.		
1903–04	156	181	on	1883–84
1908–09	20	73	on	1903–04
	208	228	on	1883–84
1920–21	17	16	on	1913–14
1924–25	38	96	on	1908–09
	24	44	on	1913–14
1928–29	28	64	on	1913–14

It has already been shown how much greater has been the increase in the production of cloth than of yarn, but it is also to be noted that the increase in cloth production has been out of all proportion to the increase in the number of looms: The percentage increase in 1927–28 on the 1913–14 figures was: Spindleage, 26 per cent.; number of looms, 56 per cent.; yarn production, 20 per cent.; cloth production, 101 per cent.

There is no doubt that the demand of the Indian capitalists for protection will grow more and more insistent, and that they will not be content with the present 20 per cent. and 15 per cent. any more than they were with the 11 per cent. imposed in 1921. They see the Japanese industry protected by a towering tariff wall in Japan itself, helped by the Government and the banks in every way from generous credit terms to shipping subsidies—and they feel very strongly the fact that it is only the domination of Britain which prevents their progressing like the Japanese. Moreover, they are in the happy position of being able to make every addition to their profits through increased duties seem a patriotic action. The demand for protection is raised most loudly by the Bombay cotton capitalists, yet their loss of trade, of which they complain, is to a large extent due to competition from Ahmedabad. Nevertheless, the close connection between Gandhi and Ahmedabad must not be forgotten in connection with his propaganda against foreign cotton goods—both Bombay and Ahmedabad, though rivals, are naturally behind this propaganda and ready to provide funds to pay for the picketing of shops selling foreign cloth.

The most important factor hindering the progress of the Indian

industry is undoubtedly the absence of large accumulations of capital in Indian hands, except in the case of a small class of wealthy merchants in a few centres like Bombay. The fact that most of the wealth of India accumulated from year to year goes into British hands or are squandered by feudal landowners, and the fact that banking and finance are under British control, have meant that the raising of capital for Indian industrial enterprises has been extremely difficult. For instance, even where most of the initial capital for setting up a cotton mill has been provided by Indian shareholders, it is not possible to obtain working capital or credit from a bank, as is possible for the Japanese companies, for instance. It is a well-known fact in India that an Indian company cannot get financial assistance from the banks as easily as a British company can; moreover, the rate of interest charged in India is always very high. The Indian company's only way to secure the necessary financial assistance has been to go to one of the big firms of managing agents, who of then control and conduct the whole enterprise. [For the number Indian and British firms of managing agents, see below, page 309.]

Here another consideration arising from the whole line of British policy in India arises: the absence of native technicians. The schools and universities of India turn out, for the most part, lawyers, barristers, clerks and teachers—not engineers, chemists or other technicians.[1] Difficulties have even been put in the way of the small number of students who are able to come to Europe to study independently of Government aid, and who wish to become engineers; the universities do not encourage them, and British firms make it difficult for them to secure their training. So much is this the case that increasingly large numbers of Indian students now go to study engineering and chemistry in Germany, where every facility is given them in place of the difficulties they meet with in England.

[1] See *The Economic Development of India*, by Vera Anstey, p. 4: "Do we not find that instead of teaching the people to understand the world about them and how natural forces can best be utilised and controlled, they have been taught to write notes on archaic phrases in the works of sixteenth- and seventeenth-century Englishmen, and to learn by rote the personal history of obscure rulers of a foreign land?"

Whereas Japan, at the outset of her industrial development, trained her own people in Western science and technique as a deliberate policy, sending students abroad at the Government's expense, the equally deliberate policy of the Imperial Government in India has been to give young Indians of the middle classes the sort of education which would make them into useful servants in the Administration, and rarely to give them any such knowledge or training as is necessary to build up the industries of their country.

Hence both the absence of Indian technicians and the British financial monopoly drive Indian industrial enterprise into the clutches of the big managing agencies—and, once established, leaves them short of a skilled administrative and managerial personnel. The heads of these agencies are not themselves technicians or men with any knowledge of cotton manufacture: they are merchants, acting usually as agents for British machinery makers, as cotton and coal merchants, as insurance agents and shippers. The agencies are, in fact, great merchant houses, primarily interested in commerce and not in industry. As the British Trade Commissioner reported in 1919, "they have been charged with lack of enterprise and an unwillingness to follow up lines of development naturally proceeding from the expansion of operations in their own specialised industries. In other words, they have been inclined to develop commerce rather than industries, and have thus at times been less helpful than might have been the case in clearing the way for continuous industrial progress." The reason for the control over Indian industry exercised by these managing agencies is also recognised in his report: "The system originated and still has continued owing to the ability of these houses to furnish financial help to industries."

Again, in 1929, in giving evidence to the Whitley Labour Commission, the representative of the Ahmedabad Cotton Mill Owners' Association stated that mills could not be managed, as in England, by a Board of Directors and a Managing Director without the intervention of a managing agent, because of the difficulty of obtaining capital. The managing agents, he stated, collect the capital in the beginning, giving a portion of their

commission on production or sales to each particular shareholder according to the capital subscribed. In Ahmedabad—though not in Bombay—the agents receive a commission on production or sales, not on profits; but since they invest far more money themselves in the enterprises they promote, and are not for the most part engaged in any other business, they give them more attention and more efficient management than the Bombay agents. The same witness gave it as his opinion that the cotton industry was developing in Ahmedabad, and not in Bombay, because in the former centre it was the only sphere for the investment of capital, whereas in Bombay there are the many export and import trades.

This is further testimony to the fact that in the large towns of India capital is mainly employed in trade, and that the easy profits to be made by commercial capital in exploiting the peasants as producers and consumers as contrasted with the difficulties in the way of industrial development prevent capital being used to develop industrial enterprises.

It is clear that the British financial monopoly, the absence of credit facilities or of accumulated capital in the hands of any Indians except the big merchant class who are so closely connected with British mercantile and financial interests, force the Indian industrialists to get credit from the managing agents on such onerous terms that the latter have, in Bombay at least, acquired complete control of the cotton enterprises and now hinder their development. The Indian shareholders have been powerless in the face of the original agreement made with the agent who, being in the first place the promoter of the company, has become, not a managing director under the orders of the company and with knowledge of the processes of manufacture, but, so to speak, a preferential creditor, entitled to his interest or remuneration whatever the financial position of the company.

Capital was scraped together to start most of the Bombay mills in such a way that, once started, they laboured under all sorts of disadvantages. They had not a free hand in buying either stores or cotton, and were burdened with heavy liabilities which all made the efficient working of the mills and the accumu-

lation of funds for the extension and improvement of their business out of the question. The following account, taken from the *Indian Textile Journal*, gives a clear conception of the way in which mills were started in the 'eighties and 'nineties:

Small capitalists would get subscriptions on the promise of a share in the agency commission. Cotton merchants, coal dealers and store suppliers also came to the help of the mill promoter on the prospects of securing a monopoly of the supply of those necessary commodities to the mills.

The contract for the cartage of the company's cotton, machinery and other requirements was given to those who took a large number of shares, while the building contractor had to accept a substantial sum in scrip for his work in lieu of cash. The machinery order was also placed with makers whose representatives in India could offer tempting commissions to the promoters, with a lion's share for the managing partner.

In addition to these facilities, the mill promoter received accommodation from the machinery makers in the shape of deferred payments and a contribution towards the share capital from their agents in India. The price of machinery in those days ranged from Rs. 7,000,000 to Rs. 8,000,000 for an average-sized mill, and the commission of the machinery agent came to half a lakh of rupees at the rate of 5 per cent., including accessories and spare parts. He could thus offer to invest a substantial portion of this in the mill project in order to secure the order against competition. The shares could be sold at a discount after the mill commenced working, leaving enough in hand for investing in another concern and securing the order for machinery.

In Bombay the promoters themselves became self-appointed Agents under the Articles of Association; the Directors were the friends and relatives of the Agents and were nominated by them, along with the Auditors and Accountants. The Agents had full executive powers in the management of the mills, and the purchase of cotton and sale of yarn, and they could be interested in any other mill in a similar capacity, or own and work a mill themselves, or deal in yarn, cotton and other commodities on their own account. The remuneration of the Agents was generally fixed on the basis of a quarter-anna commission on every pound of yarn produced during a year, whether a mill yielded a profit or not.

The companies being projected by wealthy citizens, they could subscribe to a substantial portion of the share capital and also attract the larger investors, who were given an interest in the business in addition to the dividends.

In short, the powers of the Agents under the Articles and the agency agreement exceeded those of the shareholders, who had very little voice in the management of the factories.

A description follows of the irregularities in management which

occurred, and the waste due to the ignorance of the agents (drawn from the merchant class) of machinery and manufacturing processes. When the shareholders protested at being cheated, they "had to face the baton of the agency agreement and the counter-votes of fellow-investors who also had their fingers in the mill pie."

Matters are said to have improved somewhat after the failure of many concerns at the end of the nineteenth century, and the substitution of a commission on profits instead of on production, which is now usual in Bombay. But the commission is very high (10 per cent. to 12½ per cent.) and is paid on the gross profits earned, before deducting depreciation, income tax and super tax, and the system is still one by which the managing agents stand to make profits whatever the state of the business.

The Indian Tariff Board also attributes the managing agency system to "the ability of these houses to furnish financial help to industries." It states that the majority of the large agency firms are European except in Bombay, and that these agency houses control the majority of the cotton, jute and other mills, as well as the tea gardens and the coal mines—and also stresses the fact that they have always developed commerce rather than industries. The system is generally agreed to have led to a great deal of corruption, waste and inefficiency in management, and no doubt accounts in large part for the depression in Bombay. I am indebted to an Indian student of the industry for the following description of the system:

> As insurance agents, the managing agency insure the plant, the material and the building of the company which they are managing, with their own firm. As purchasers of raw material, they will buy it first for themselves and sell it to the company at a profit. As contractors of stores, they will supply the company with the necessary material. As distributors of manufactured goods, they will buy the stuffs the company produces, and, enjoying absolute control, they almost always decide the purchasing or selling price as it suits them.
>
> Thus it often happens that, while there is loss on paper for the company and therefore for the agents, the latter in their different capacities accumulate profits. The agents become richer and richer, while the companies lose.

Managing agencies have been hawked about, mortgaged and sold

as though they were privileges instead of responsibilities. For agencies are for "forty years and after."

Then again, agency firms speculate in cotton on their own account and then transfer to the mill's account those transactions which after a lapse of time appear to be unwise. The agents also speculate in the shares of the various mills they manage, going so far as to spread wrong information on the Stock Exchange, or even to manipulate the accounts of the companies so as to secure larger or smaller dividends in a particular period—so playing against the markets with loaded dice. The *Bombay Chronicle* writes as follows:

A ghastly network of inefficiency and corruption has grown round the textile industry and has made it unable to stand on its legs in a period of stress. That there is corruption is an open secret, though it is disguised under the garb of custom.

Firms speculating in cotton on their own account also embark on hedging transactions on behalf of the mill, transferring to the mill account transactions which have resulted in failure. Managing agencies have been hawked about, mortgaged and sold as if they were privileges instead of being recognised as responsibilities. The previous promise for the grant of one concession or another in respect of brokerage or the like has been utilised to get control of mills in a weak position.

Some twelve persons have monopolised seats on the Boards of about 80 per cent. of the principal Bombay mills. Although the managing agent of a company may not be also a Director, he can be the Director of another company—and the managing agent of that company be a Director of his.

The shareholders are in a most helpless position, continually overruled and only half aware of what is going on.

Of the 130 Directors of the different mills in Bombay, as many as 112 are merchants or gentlemen investors, 8 belong to the legal profession, while only 10 have served their apprenticeship in a cotton mill or have received practical training as mill managers or engineers. Of these 10, 9 are Parsis and 1 a Lancashire man. Of the 130 directors, 78 occupy the position of mill agent as well in various mills.[1]

As already mentioned, the Indian Tariff Board states that the majority of the large agency firms are European except in the case of Bombay. But even in Bombay a third of the spindles belong to European agencies (including the Sassoons')—and their capital is much larger than that of the other communities.

[1] Reproduced in *The Times* Trade Supplement, May 23, 1925.

DISTRIBUTION OF MILL AGENCIES IN BOMBAY*

Communities	Agencies	Mills	Spindles	Looms	Capital Rs.
Parsis	13	22	978,200	25,600	35,992,000
Hindus ..	17	19	831,740	15,150	33,345,000
Mohammedans	3	15	587,650	60,810	32,153,430
Jews	3	14	652,000	15,500	76,150,000
Europeans . ..	5	11	421,500	8,160	19,011,200
Total ..	41	81	3,417,100	73,220	196,651,600

* *Indian Textile Journal*, Review of Bombay Industries, 1927.

It becomes very clear from the facts given above that the financial difficulties in India for the Indian industrialist have to a large extent stultified the development of even the cotton industry. The managing agents control the industry, and this means that the big *compradore* class—the class of wealthy Indian traders closely connected with British "big business" and finance and in alliance with the British agency firms, taking their toll at every stage of purchase, production and sale—bleed the young cotton industry, if not to death, into such an anaemic condition that it cannot grow except very slowly, and cannot withstand Japanese competition. The profits which might go to improve and extend productive capacity are drained away into the coffers of the managements, and through them a large proportion goes to England.

British finance gives practically no assistance to the industrial capitalist in the provision of working capital, and the latter's only means of getting credit is through the agent: British, Parsi, Jewish or Indian. The banks use the managing agency firms to assess the assets and to provide an intermediate guarantee by putting their signature jointly with signature of the mill, refusing always to make advances even to factories with large unmortgaged assets without a collateral signature. When the agents themselves finance the factories, they charge even heavier interest than the banks.

The Tariff Board admitted the difficult position of the Indian mills in securing working capital as compared with those of other countries "which are more advanced than India in banking matters" —which, in actual fact, means in countries free from the financial

domination of an alien Power which hinders the development of industry.

"Whereas in other countries, supplies of cotton or stores are covered by bills of exchange at 60 or 90 days' sight, and the mill is therefore able to keep control over a large supply of the necessary cotton, etc., for its near future requirements without having to lock up capital, an Indian mill has immediately to provide the cash necessary for its purchases."[1] In fact, as the English *Observer* reminds us in its summing up of the Simon Commission's Report, "let us never forget that British banking is still the mainstay of the whole credit system."

It is obvious that financial control by Britain means that the Imperial Government is able to hinder or assist the development of Indian industry; and its policy in the case of the cotton industry has clearly been to assist only if British interests—or the interests of big merchant capital closely bound up with British interests—were benefited. Hence the refusal of ordinary credit facilities to perfectly solvent mills unless the collateral signature of a big managing agency firm is given. To this whole question of British policy in India I return in the next chapter.

Profits and Financial Position

During the War, and the boom period which followed the end of the War, the profits which could be made by even the worst managed mills were so enormous that very large dividends were paid out. This was possible owing to the extremely low wages paid and to the fact that, as the cost of living rose and as the prices of cotton goods in particular leaped to enormous figures, wages were only moderately increased—in spite of a very much greater intensity of labour forced upon the workers. For we have already seen that in 1920 there had been an increase of 46 per cent. in cloth production as against an increase of only 15 per cent. in the number of looms and an increase of only 58 per cent. in wages.

It was probably in large part due to the vicious managing agency system that there were so many speculative sales of mills at

[1] *Indian Tariff Board Report*, Vol. I.

enhanced capital values. When the depression began in 1923,[1] many mills began to show small profits, and some eventually hardly any, on account of the great inflation of capital values; but this did not mean that very respectable profits on the real capital value of the mills were not still being made. The apparent losses sustained, or the apparent failure to make profits, was naturally made an excuse for an attack on wages in 1925, and a determined push to rationalise the industry—i.e. increase labour intensity—in 1928.

Although the extent of speculation in mill shares and the refloatation of companies with greatly enhanced capital valuation did not in Bombay rise to such heights of folly as it did in Lancashire, there was a great deal of gambling, and in 1920–21 many Bombay mills changed hands at fabulous prices and others capitalised their reserves.[2] Recapitalisation of one kind or another appears to have affected about one-third of the industry. The table on page 312 shows what occurred in the case of thirty out of Bombay's total of eighty-one mills (controlling one-third of the spindleage).

These figures of increased capitalisation, compared with Lancashire's, are not high; but the change was sufficient to weaken the position of these mills in the subsequent depression—sufficient, at least, to make their profits *appear* very low or non-existent in the last four years under review. If dividends had not been paid out on the inflated capital during the boom, more would have been placed to reserve, and so been available now. Thus, as in Lancashire, high profits made in the boom, leading to speculation, resulted in large sums being taken right out of the industry.

The Indian Tariff Board report bears evidence that examination of the balance-sheets of the Bombay mills shows that those mills

[1] The post-War "depression" in India is not to be compared with that in Lancashire: in fact production has greatly increased since 1923. It is true that Bombay has suffered in competition with the younger centres such as Ahmedabad and the mills in other parts of India, but actually what is called a "depression" is the failure to make the very large profits of the War and immediate post-War period—partly due to general depression and partly to the stabilisation of the rupee at 1s. 6d. instead of 1s. 4d.; partly also to the fall in price of American cotton, and partly to the enforced lowering of prices in competition with Japanese imports.

[2] See *Indian Textile Journal*, October 1926.

	Number of Spindles and Looms in 1918	Number of Spindles and Looms in 1923	Total Capital (In Thousand Rupees) 1918	Total Capital (In Thousand Rupees) 1923	Percentage Increase in— Total Capital	Spindles	Looms
Thirteen mills recapitalised, which changed managing agencies	376,714 spindles 4,811 looms (1 loom to 78 spindles)	515,632 spindles 7,791 looms (1 loom to (68 spindles)	12,171	36,027	196	36·8	61·9
Three Mills, two of which capitalised reserves and one of which issued fresh capital: all running under the same agents	121,972 spindles 2,487 looms (1 loom to (49 spindles)	140,532 spindles 2,923 looms (1 loom to 48 spindles)	3,995	9,400	135	15·0	17·0
Nine proprietary mills which became public companies in 1923	360,104 spindles 7,021 looms	379,368 spindles 7,337 looms	—	70,999	—	—	—
The Bombay Dyeing and Manufacturing Company	55,100 spindles 3,423 looms	180,296 spindles 4,832 looms	312	6,275	102	—	—
Sir Shapoorji Broacha: increased capital *before* changing hands	185,676 spindles 4,256 looms	277,584 spindles 5,503 looms	5,000	7,493	49	—	—

Productive capacity of total number of recapitalised or reconstituted mills: 1918 = 1,044,466 spindles; 1923 = 1,313,116 spindles.

which did not increase their capital during the boom are now in the strongest position. Even these, however, paid out enormous dividends—as can be seen by the following average dividends (for all the Bombay mills) paid from 1917 to 1925:

Year	Percentage of Dividend to Paid-up Capital	Total Amount Paid as Dividend Rs.
1917	22·2	16,962,045
1918	23·7	19,195,613
1919	40·1	37,720,074
1920	35·2*	59,815,856
1921	30·0*	53,478,663
1922	16·4*	29,444,334
1923	4·9	9,369,467†
1924	3·2	6,084,686†
1925	2·2	4,311,066†

* If figures for largest flotation omitted, dividends = 47 per cent., 40·5 per cent. and 21·5 per cent.
† Partly paid from reserves.

It should be borne in mind that, in view of the recapitalisation of one-third of the Bombay industry between 1918 and 1923, the dividends of 35·2, 30 and 16 per cent. given above represent a greater total profit than the 40·1 per cent. of the previous year, as is clear from the column of total dividends. The dividends paid from 1920 to 1922 inclusive were on a share capital some 80 per cent. higher than in 1917.

Dividends have continued to be paid since 1923, even by some mills making no profits; this being possible on account of the huge reserves previously built up. In the case of other companies also, on account of their having reduced their capital by paying off their debentures, profits have been made and dividends paid without touching reserves. Although some mills squandered their resources in the boom, the rate of profit was so exceedingly high that, even after the above huge dividends had been paid, very large sums were available to be placed to reserve and carried forward: so that even in 1925, after two years during which sums had been withdrawn to pay dividends, the total amount in reserve and carried forward amounted to more than half the total paid-up capital.

The following table shows the financial position of the Bombay mills up to 1925:

FINANCIAL POSITION OF THE BOMBAY MILLS UP TO 1925

(*In Lakhs of Rupees**)

Year	Capital Paid Up	Reserves, including Carry Forward	Original Cost of Land, Buildings and Machinery	Annual Depreciation Written Off	Net Profit or Loss †	Dividends Paid Out	Put to Reserve	Carry Forward
1917	7,66	2,36	17,98	86	3,02	1,70	81	50
1918	8,10	5,50	19,53	88	2,28	1,92	38	— 3
1919	9,40	3,79	20,95	1,44	6,16	3,77	1,90	46
1920	16,99	6,53	33,50	1,64	10,11	5,98	3,19	91
1921	17,83	9,81	38,09	1,82	8,46	5,35	3,33	24
1922	17,96	12,44	42,95	1,38	3,88	2,94	1,38	46
1923	19,19	13,98	46,55	1,82	— 1,28	94	—	—
1924	19,28	12,13	46,76	—	— 2,43	61	—	—
1925	19,21	10,46	46,72	—	— 2,88	43	—	—

* 1 lakh = 100,000 rupees = £7,500. 100 lakhs = 1 crore.
† Loss from 1923 to 1925.

The following figures show the enormous profits made between 1917 and 1922 more clearly:

FINANCIAL ANALYSIS, 1917–22

(*In Thousand Rupees*)

Dividends paid out	21,66,17
Reserves and carry forward	12,12,66
Provident Fund	10,67
Total	33,89,49
Less depreciation written off	— 8,01,88
Net profits made	25,87,62

Thus by 1922 nearly three times the paid-up capital of 1917 had been made in profits. Two and a half times the 1917 capital had been paid out in dividends.

By 1923 the reserves of the companies had increased some six times in amount.

The Indian Tariff Board found that in Ahmedabad—in contrast to Bombay—there was very little change in managing agencies or capital during the boom period.

In the nine cases wherein recapitalisation occurred without the managing agency being changed there was a 72 per cent. increase in capital, a 43 per cent. increase in the number of spindles and a 28 per cent. increase in the number of looms between 1918 and 1923. Taking into consideration the high price of machinery at the time, it can be said that the higher capitalisation of 1923 corresponded with the higher productive capacity. These nine mills had 271,672 spindles and 5,497 looms in 1923. In the case of three mills which increased their capital and changed their managing agencies, there was hardly any increase in productive capacity: so these must now be over-capitalised, but since they comprise only 18,150 spindles and 883 looms, they are not important. Seven new mills with 62,564 spindles and 1,533 looms were erected in Ahmedabad between 1918 and 1923.

Ahmedabad generally, with its 1,311,939 spindles and 28,507 looms, was therefore comparatively little affected by overcapitalisation, and this is one of the main reasons why it is now in a much healthier condition than the Bombay industry, and is, bit by bit, filching her trade from the latter. It is to be noted that the Ahmedabad managing agencies are small Indian firms unconnected with foreign trade.

The Report of the Indian Tariff Board showed that Bombay, with less than three times the looms and spindles of Ahmedabad, had almost exactly six times the paid-up capital of the latter. It is stated that the cost per spindle would, in any case, be lower in Ahmedabad, owing to the higher average count spun there—and also that consideration must be given to the fact that it is the practice there to raise a proportion of the block capital by loans. The first point cannot, I think, be held to account for anything but a very small proportion of the difference in capitalisation between the two centres, while, as regards the loans, many of the Bombay mills have debentures as well as debt loans. The following has been the average rupee capitalisation per spindle in the two centres:

Bombay.—1918, 27·9; 1923, 44·4; 1925, 42·2.

Ahmedabad.—1918, 16·9; 1923, 20; 1925, 19·3;

The increase in 1925 over 1918 was 53 per cent. for Bombay and 14 per cent. for Ahmedabad.

There can be little doubt that if the Bombay mills had conserved more of their profits in the boom, they would have expanded their productive capacity since then, instead of working at a loss—or at an apparent loss. To illustrate this, I have analysed the position of those mills which were still making profits in 1924, when the "depression" had set in. The details for this analysis were taken from S. M. Rutnagur's book *Bombay Industries: The Cotton Mills*, in which he gives some details of the financial position of each company from 1920 to 1924; without, however, tabulating the information in any way, or giving a list distinguishing mills making a profit from mills working at a loss. The results of this analysis show that out of twenty-seven companies making a profit in 1924 only six had debentures; and, of these, all but one paid off their debentures in 1923 or 1924, whilst the Fazulbhoy Co., which still had debentures in 1925, had reduced its debt loans by 56 per cent. Three of those which had paid off their debentures also decreased the amount of their debt loans, whilst two of them increased their debt loans.[1]

There were in 1924 seven companies making a profit which had had no debentures or debt loans in 1920 and had none in 1924; and two others (the Finlay and Swan companies) which paid off their debt loans in 1924.

Most of the twenty-seven companies had a paid-up capital equal to their authorised capital, but eight had a share capital considerably less than their authorised capital.

Of these eight companies full details are available for six, and these details give the following results:

Authorised capital, Rs. lakhs 122; paid-up capital, Rs. lakhs 78·5; average percentage dividend, 1924, 9·6; percentage increase in reserve and depreciation fund, 209·5; percentage increase in fixed assets, 62; debt loan 1920, 58·1; debt loan 1924, 63·9; Total reserve and depreciation fund, 190·1.

I have taken these eight companies, being those in a particularly strong financial position, to show what large profits were being

[1] Even these 27 companies had most of them paid out enormous dividends in the boom period ranging as high as 50 per cent. to 100 per cent. on the ordinary share capital.

made in India after the so-called depression began by those firms which had used their past profits to pay off debentures, loans or preference shares.

Although these companies had increased their debt loans some 10 per cent., they had increased their reserve and depreciation funds to such an extent that in 1924 they were 206 per cent. greater than their paid-up capital, and 56 per cent. greater than their authorised capital.

There are a number of companies which had no debentures in 1920, and which made little or no profit—and, in most cases, paid no dividend—in 1924. Of these, eleven are companies with debt loans or liabilities which already, in 1920, were larger than their paid-up capital; four are companies which had debt loans in 1920 smaller than their paid-up capital, but which have become greater in 1924; whilst two are companies with a debt loan which existed in 1920, but was still smaller than their paid-up capital in 1924. There are two companies which, although they paid no dividend in 1924, had improved their financial position or their productive capacity: the first paid no dividend in 1923 or 1924, but paid off its debentures in 1922; the second had neither debentures nor debt loans, but a sum equal to half the paid-up capital was spent on renewal of machinery from 1921 to 1924, so that —its fixed capital being much enhanced in value, though not in capitalisation—it is now in a strong position.

It is quite clear from the figures given that the Bombay mills as a whole behaved in a thoroughly spendthrift fashion, issuing enormous dividends in times of prosperity, but it is probable that the managing agency system was largely responsible for this, the agents having no interest in the development of the industry. It is also clear that those companies which pursued a different policy and rid themselves of their debt loans and debentures are now able to make a profit in spite of the alleged depression. Even in the case of the mills which are making no profit, they have most of them accumulated such enormous reserves in the good years that they could well afford to do without for some time; presumably, if they used their reserves to increase their fixed capital and to manufacture more goods, they could lower their

overhead expenses, reduce their prices and easily regain that part of the home market which has been lost to the Japanese. The latter make a point of the fact that they themselves used their profits in the past to write down their capital and put themselves in a stronger financial position. In the evidence they gave to the Press at the time of the Indian Tariff Board investigation the Japanese Cotton Spinners' Association stated:

> Even Bombay mills which conserved their resources during the boom period and built up good reserve funds are showing a fair margin of profit to-day. The average dividend paid out during the boom was 65 per cent., and if the mills in Bombay had limited it to 50 per cent., the whole of the industry would have been in a decidedly better position now. All the flourishing cotton mills in Japan owe their prosperity to the handsome reserve funds built up by them. . . . Prodigals are reaping to-day what they sowed in the past.[1]

They go on to say that 25 per cent. of the machinery in the Bombay mills is old-fashioned and the managing agency system extravagant, whilst there is waste at every stage of production.

An investigation into the position in Bombay makes it clear that Bombay, with all its advantages over Lancashire in the way of cheap labour, larger-scale organisation and home market, has not yet developed into as great a rival as might have been the case, owing to its financial position, the lack of men with technical knowledge and of directors with a real interest in the industry; and, above all, because of the wasteful agency system of management which annuls the advantages which should accrue from there being less subdivision of function than in Lancashire. In Lancashire, yarn has to be transported to the manufacturer, cloth to the merchant, thence to the finisher, thence to the packer and finally to the docks; at each stage of the process a profit is taken and how much the various middlemen's charges amount to is clearly evidenced by the Cotton Yarn Association's figures of costs.[2] In Bombay, although these various processes are more centralised, the managing agency system results in a similar enhancement of costs.

The burden of the double interests of shareholders and managing agency means that the Indian workers are forced to work very

[1] *The Englishman*, November 30, 1926.

[2] See Chapter II.

long hours at very low wages to produce the double set of profits, and to make up for the mismanagement and the lavish distribution of dividends in the good years.

Although the margin between the real cost of production and the sale price is extremely wide, in times like the present the workers are told that no profits are being made—because all the profit is going in commission and "pickings" and fixed interest charges.

Work is being made more and more intense, and the whole double burden of English financial interests and Indian industrial interests is being placed on the shoulders of the workers—just as, in the countryside, the peasant is forced to bear the double burden of British and Indian exploitation through Land Tax, usurer, trading capital and rent.

Leaving out of account the sums taken in commission and so forth by the agents, we may compare the following interest charges in England and India in 1877–78. Although these figures refer to fifty years ago, the relative position is to-day not very different —except as regards the cost of the machinery, which is no longer subject to an import duty in India.

	Lancashire	Bombay
Primary cost of erecting a mill of 50,000 spindles	£55,000	£150,000
Interest charge on fixed capital at 5 per cent. and 9 per cent. ..	£2,500	£13,000
Interest of working capital	4 per cent.	7½ per cent.

Added to the very great difference in the rate of interest payment is the fact that mill stores as well as machinery are imported, and so cost a good deal more in India.

In the evidence given to the Indian Tariff Board in 1926 it was stated that good mills with large reserves could obtain money on fixed deposit at 5 or 6 per cent., but that some mills usually have to pay 1 or 2 per cent. above the bank rate. Moreover, it was stated that mills without reserves experience even greater difficulties than before the War in obtaining finance.

Since no new mill has been erected in Bombay since 1914, it may be concluded that both the land monopoly and the close

monopoly maintained by the agencies allied with the banks have prevented new enterprises being set up.

Finally, in an estimation of the disadvantages under which the Indian industry is placed as a result of the English control of Indian finances and exchange, something must be said of the stabilisation of the rupee at 1s. 6d. in spite of the opposition of the Indian industrialists. The cotton-mill owners complain that this has meant reducing the price of foreign piece goods in rupees by 12½ per cent. When it is remembered that down to the end of 1929 the Japanese mills also had the benefit of the depreciated value of the *yen*, it becomes clear that the Indian manufacturers have in fact suffered through the deflation of Indian currency. If they bought their raw material from America, it might be argued that they gained on their purchases, but the great bulk of the cotton they consume is Indian: so the exchange does not benefit them there. Thus the British control of the Indian exchange has hindered the development of the Indian cotton industry and neutralised the advantages given to it by the increased import duties.

A sketch of the terrible conditions under which the Indian workers live as a result of the twofold exploitation to which they are subjected is given in the supplementary chapter on Indian factory conditions. In the next chapter the causes for the general backwardness of India's industrial development are analysed.

CHAPTER XII

THE INDIAN MARKET

I. The Poverty of the Indian People and British Economic Policy before and since the War

In Chapter XI it has been shown that India's total consumption of cotton cloth up to 1926–27, even if hand-loom production be included, was either below or on the same level as pre-War. In 1927–28 and 1928–29 it was slightly above. Thus, generally speaking, it may be said that her total consumption is now much the same as in 1913–14, in spite of the increase in her population.

The post-War *per capita* consumption of machine-made cloth is about 12 yards as against 13½ yards pre-War.[1] Nothing could more clearly demonstrate the increasing poverty of the Indian people. Here is no question of a change in needs or of a change in clothing: cotton cloth is the only clothing worn by most of India's 320,000,000 odd people; and clothing is one of mankind's three primary needs—the other two being food and shelter.

In England most people imagine that British rule in India has brought increasing prosperity to the mass of the people, but the facts of the case prove exactly the opposite, as can be incontrovertibly shown by the disclosures of the various Royal Commissions which have investigated different aspects of Indian life and by the independent research work done in various parts of the country, no less than by the unmistakable evidence of her declining *per capita* consumption of clothing.

It is this fact of increasing poverty among the vast peasant population of India which affects Lancashire far more than increased production by the Indian mills or increasing Japanese competition. I have accordingly devoted two chapters to the examination of the economic position of the Indian people and the causes of their poverty.

Taking into account the fact that India's upper and middle

[1] See Table page 287 for total yardage consumption.

class women wear very voluminous clothing, and that, in a hot country, those who have any means change their clothing at least once a day—remembering also that large quantities of cotton goods are imported for the use of the Army and the English community, both for clothing and for household use in tents and so on—a large part of India's total consumption of 4,000,000,000 odd yards of machine-made cloth has to be deducted before an estimate of the average *per capita* consumption of cloth by the peasants and workers can be made. Such a calculation, if it could be made, would bring down the average well below the present fourteen yards per head per year.

The millions of men who wear only a loin-cloth require three yards for each cloth, and would therefore require nine yards a year to allow them three cloths. But there are calculated to be some 15,000,000 labourers who can afford only a kind of face-towel style of loin-cloth, and so consume far less.

Saris for women and *dhutis* for men usually take five yards of cloth. The upper and middle classes who wear undergarments as well consume large quantities of cloth yearly.

In addition to millions of women who can only afford to wear a *sari* and have no under-garment, there are some 15,000,000 women who wear only a skirt, leaving the breast bare, and another 20,000,000 with only a short cloth, covering them to the knees. Moreover, the age of nudity is said to have been raised since the War, which means that children run about completely naked even after their sixth year because their parents are too poor to buy them even a small piece of coarse calico.

The poverty of the Indian people is a well known fact; and obviously the millions of families who never know what it is to have enough to eat—who exist on one scanty meal of rice a day—can rarely spare a few coppers for clothing. When prices go up they must make the same inadequate rags last them another year.

Before coming to analyse the causes of the economic position of the Indian peasantry—which is such as to make all talk of keeping Lancashire's spindles and looms occupied by "persuading the Indians to add a few inches to their garments" seem a bitter mockery—something must be said of the discrepancy between the

rise in the world price of raw materials and of manufactured goods since the War, which has been an additional factor in reducing the Indian peasant's purchasing power. The fact that the prices of the latter have been maintained at a higher level than the prices of agricultural produce is a primary reason for the decreased *per capita* consumption of cloth in India since the War, although the reasons for the continually intensified poverty of the Indian peasantry go deeper than this and were in existence long before the War.

In the world market the scales are always weighted against the peasantry and the farmers, both because of their more primitive methods of production in most parts of the world and because of their being unable to combine to keep up prices as manufacturers and merchants are able to do.

In the early nineteenth century any country producing by machinery was able to make a super-profit in selling manufactured goods to the peoples of those countries which had not yet begun the process of industrialisation; that is to say, the standard of prices being determined in such countries by the handicraft production, the country selling machine-made goods, by selling a little below the price for the hand-made goods (but far above the cost of production of the machine-made goods), reaped enormous profits. As one country after another in Europe began to develop its own factory industries and to erect tariff walls to protect them, the great undeveloped but densely populated areas of Asia and Africa—especially the former with its higher level of civilisation—became the areas where super-profits could be obtained. In India in particular Britain was able all through the nineteenth century to sell manufactured goods at a high price in exchange for raw materials at a low price, almost without competition from other countries.

At the end of the nineteenth and the beginning of the twentieth century competition began to be more severe between the capitalist countries of the West and prices of manufactured goods, even in India and other parts of Asia, began to fall without any corresponding fall in agricultural prices; so that the disadvantage of the agriculturalist became less marked. In other words, the

ratio of exchange began to change in favour of the agriculturalist in the first years of the twentieth century, instead of going more and more against him, as it had during most of the nineteenth. In his book, *A Study of Industrial Fluctuation*, published in 1915, D. N. Robertson demonstrated from an analysis of the figures of British imports and exports over the period of the nineteenth century that in the 'seventies the tendency of the ratio of exchange was in favour of agriculture, that in the 'eighties and 'nineties it was against agriculture, but that from the opening of the twentieth century it was again in favour of the agriculturalist. Mr. Keynes and Professor Taussig also demonstrate that from the beginning of the century to the beginning of the War the balance of advantage in international trade moved in favour of countries producing food-stuffs and raw materials.

All this, of course, means that in the period immediately preceding the War the demand for raw materials was increasing faster than the supply as more and more parts of the world developed their industries, and that the increasing competition in the sale of manufactured goods and the actual cheapening of their cost of production all led to a lowering of the price of manufactured goods. On the other hand, the relative advantage to manufactured goods in the 'eighties and 'nineties of the last century was, no doubt, due to the opening up of Africa by the European Powers—who seized 5,000,000 square miles of territory there in the 'eighties—and to various other seizures of territory by Britain, France, etc., which increased the available supplies of raw materials. During the War prices rose together; but in countries such as India the rise which would normally have taken place in the price of her agricultural products was checked by the control exercised by the Imperial Government. Consequently the prices of Indian agricultural products did not rise nearly as steeply as those of the manufactured goods imported for the consumption of the masses of the people, i.e. cotton goods in particular, since the Imperial Government controlled both the internal market and shipping and the exchange rate of the rupee.[1]

[1] For an account of the Government of India's financial policy during the War, and also of the fluctuations of the price level in India, see *The Economic Development of India* by Vera Anstey (Longmans).

After the conclusion of the Armistice the prices of Indian products began to rise far more rapidly than during the War, and even more rapidly than the prices of manufactured goods; the Government gave up trying to control the exchange, the rupee rose higher and higher, and consequently India was able to import more and more manufactured goods in spite of the great increase in their prices. Then, with the great fall in prices in 1921, the position was reversed, and the prices of manufactured goods have remained on a higher level than those of agricultural products ever since, "so that a given unit of food-stuffs or other agricultural products has been exchanged for a smaller unit of manufactured goods than was previously the case. The explanation of this is to be found in the fact that manufacturing industries are highly organised, and are therefore in a stronger position to resist wage and price reductions than the agricultural population."[1]

Being "highly organised" means being able to establish monopolies[2] and being able to restrict production and control the market to a greater or lesser extent, restricting production and keeping up prices in spite of a reduced demand. The whole movement of international capitalism in the post-War period, to a far greater degree even than in the quarter-century preceding the War, has been towards the establishment of monopolies in industry after industry, either within each country or internationally. This, of course, frequently entails production below capacity, and increasing unemployment as rationalisation reduces the amount of labour required to produce a given quantity of goods. For the agriculturalist it means a slackened demand for his produce; not because the world does not need food, clothing and other necessities in far greater quantities than they are produced, but because the capitalist system at its present stage of development restricts production in order to maintain profits as far as possible at the old level, and thus counteract by restricted produc-

[1] *Indian Tariff Board Report* (Cotton Textile Industry Inquiry), 1927, Vol. I, p. 30.

[2] Monopolies in industry also mean that the agriculturalist is at the mercy of the buyer of his produce, the price obtainable being no longer fixed by competition.

tion the tendency of the rate of profit to fall as the world's productive forces increase.

Moreover, the agricultural producers are not only unorganised, but further handicapped by the great increase in the cultivated area, since the War, in the great agrarian areas of the United States, Canada, the Argentine and Australia, and by the more intense exploitation of the newer colonial areas (in Africa, etc.) which has brought the products of the latter to the world market in increasing quantities. A larger total production of agricultural produce and a reduced effective demand for such produce—owing to the restriction in the production of manufactured goods by monopoly capital, and to the greatly increased burden on industry of fixed interest charges and taxation since the War, which also inevitably keeps up the prices of manufactures—maintains the ratio between manufactured goods and agricultural produce in the former's favour.

In 1929 things began to move against the agriculturalist yet more sharply. In that year the agrarian crisis—the causes of which have been indicated—began to enter on a worse phase, which in 1930 has become very acute and means bankruptcy or starvation for millions of farmers and peasants. The crisis in production, which in 1929 began seriously to affect almost every country and not merely Britain as heretofore, has meant a still smaller demand for food-stuffs and raw materials, and consequently a further catastrophic fall in the prices of agricultural products—which, as these lines are being written, are almost at the pre-War level as against a much higher level for industrial commodities.

The world is at present at a stage where it has become impossible within the existing system to utilise its resources of raw materials and machinery for the production of the necessities of life. Whether we are at the bottom of a trade cycle and the present glut of raw materials may soon lead to a spurt in production and a moderate boom, or whether this time we shall find that the existing monopolies and the strength of labour organisations make it impossible for prices of manufactured goods to fall sufficiently to start the process of production once more at a lower level, it is impossible to prophesy; but, one way or another, the existing world crisis,

even if surmounted this time, is bound to recur more and more frequently, and in an ever more intense form—even if no new war soon occurs as a consequence of the competition for such trade as still remains.

In so far as India is concerned the inferior position of agricultural prices as compared with those of manufactured goods has meant that the Indian peasant could no longer clothe himself adequately—or rather one should say even as inadequately as before the War. There are other causes for his decreasing ability to purchase clothing which I shall come to in the second part of this chapter, but how he has been affected by the changes in the world price level is clearly shown by the following figures:

INDEX FIGURES OF THE VALUES OF INDIAN IMPORTS AND EXPORTS ON THE BASIS OF THE DECLARED VALUES FOR 1913–14*

Year	Imports	Exports
1913–14	100	100
1920–21	237	140
1921–22	214	127
1922–23	169	140
1923–24	190	145
1924–25	180	154
1925–26	158	152
1926–27	148	132
1927–28	136	130
1928–29	133	127
1929–30	128	118

* Figures taken from the *Review of the Trade of India*, published annually by the Government of India. It is to be noted that these index numbers are based on data which can only be taken as approximately correct.

Thus, in the boom year 1920–21, the prices of imports, which consist almost entirely of manufactured goods, were 137 per cent. above pre-War, as against a rise of only 40 per cent. in the prices of exports, consisting almost entirely of food-stuffs and raw materials, and it was not till 1925–26 that the two index figures drew much closer. To-day they are again drawing wider apart. The world economic crisis has led in 1930 to a steep fall in the price of agricultural commodities and only to a much smaller fall in the price of manufactured goods—in the case of cotton manufactures in particular the price has fallen very little as against

the heaviest fall of all in raw cotton. The following figures taken from the annual *Review of the Trade of India* show clearly how very greatly the economic position of the peasantry has been worsened.

CALCUTTA INDEX NUMBER

(*July* 1914 = 100)

	September 1929	March 1930	July 1930	Percentage Decline on Basis of September 1929	
				March 1930	July 1930
Cotton manufactures ..	161	149	137	7	15
Cereals	128	103	101	20	21
Raw cotton	146	107	87	27	40
All commodities ..	142	125	115	13	20

Returning to the general question of cotton-cloth consumption, the above figures make it quite clear that the Indian peasant's purchasing power was greatly reduced during and after the War, since he obtained only a little more for his produce and has had a great deal more to pay for his clothing and any other manufactured goods he is able to purchase. His position was worst of all from 1916–17 to 1921–22, when the annual average consumption of machine-woven cloth was only 2,520,000,000 yards as against 4,076,000,000 yards in 1913–14. Yet the actual amount spent on imported cotton piece-goods remained practically the same as pre-War; that is to say, consumption fell off in proportion to the rise in price. In consequence, if hand-loom production is excluded, the average amount of cotton cloth available for consumption in India was only nine yards per head in the five years ending March 1919, as against thirteen and a half yards per head in 1913–14.

Wide as was the discrepancy in the rise of prices as between manufactured imports and exported food-stuffs and raw materials, the cost of cotton goods had risen even more sharply than that of other manufactured commodities. As late as 1924–25 His Majesty's Trade Commissioner for India reported that the *ryot* was receiving a price 30 per cent. above pre-War for his produce as against a 70 per cent. rise in the prices of all commodities in India, and as against a rise of 150 to 170 per cent. in the prices of cotton piece goods. For, at that date, American cotton prices had not fallen nearly so sharply as the prices of those agricultural products produced in India; moreover, when the price of American

cotton did fall below 13d. towards the end of 1924, British manufacturers increased their margins instead of greatly lowering their prices. This is a very clear example of the advantage enjoyed by the more highly organised manufacturers of industrial commodities as against the peasant producers of agricultural commodities—although this advantage is, of course, considerably modified by competition between the different manufacturing countries.

In 1926–27 and the two following years the improved position for the Indian agriculturalist, as shown on page 327, had its effect on imports and consumption: so that in those years the pre-War level of total consumption was attained—though not the pre-War level of *per capita* consumption. It is, unfortunately, not yet possible to see the full result of the fall in prices of agricultural products in 1930 as affecting India's cotton-cloth consumption, but it is at least clear that only when the price levels of the two sets of commodities began to approximate in 1924–25, as shown in the import and export figures for India, did India reach again her pre-War consumption figure.

I now come to consider why it is that the *per capita* consumption of cloth has gone down—which, in essence, means to answer the question: why are the Indian people even poorer than before the War, even with the ratio between the agricultural price and manufactured commodity price levels almost restored (as it was from 1927 to 1929)? Why were they becoming progressively poorer even before the War?

Poverty of the Indian People

According to the 1921 Census, 73 per cent. of the Indian population is engaged in agriculture. The general view taken in England is that this heavy preponderance of agriculture in Indian economy is something natural to India, for which British rule has no responsibility. The facts of the case are far otherwise: for a glance back over the results of the Census taken during the last thirty years shows that the heavy pressure on the land—in which lies the explanation of Indian poverty—has come about under British rule. It did not exist before.

Proportion of the Indian population dependent on agricul-

ture: 1891, 61 per cent.; 1901, 66 per cent.; 1911, 72 per cent.; 1921, 73 per cent.

The tremendous increase in the proportion of the population which is dependent on agriculture for its living is therefore not an age-long phenomenon in India, but has been brought about under British rule. For the consequence of British rule has been to destroy the Indian handicraft industries, which had flourished for untold generations, by the competition of cheap machine-made goods manufactured in Britain—and so to throw millions of handicraftsmen back into agriculture as their only means of subsistence. This process is, of course, by no means completed, but has already gone far enough to increase the proportion of the population dependent on agriculture from 61 per cent. to 73 per cent. in the short space of thirty years.

In England, when power-driven machinery was first introduced, the old handicraftsmen, who could not compete in the market against the cheap machine-made goods, were eventually absorbed into the steam factories. If they were not, then their children were. The net result of the Industrial Revolution was to absorb the greater part of the population of Britain into mining, transport and factory industry. But in India the men and women thrown out of work by the machine-made goods could not be absorbed into the factories, since it was not goods produced in Indian factories but goods produced in British factories which had deprived them of their livelihood. Their only alternative to starvation was to return to the land in the hope of a living from agriculture.

Whereas between 1818 and 1837 British cotton exports to India increased 2,200 times, the population of Dacca—the former manufacturing centre—decreased from 150,000 to 20,000.[1] But it was not only that the old city populations of skilled craftsmen dwindled to smaller and smaller proportions, but also that in every village where "Manchester goods" and other machine-made products penetrated the craftsmen of the village—who had formerly been half agriculturalists and received payment for their services in the form of so much produce—were no longer

[1] See R. P. Dutt's *Modern India*.

able to make a living at their craft but were forced to try to live on the land. On the other hand, a quantity of agricultural produce had to be sold outside the village in order to pay for the manufactured goods now bought. In other words, the cultivators now sent their surplus food-stuffs and raw materials to Britain to pay for the manufactured goods they bought from her, instead of exchanging that surplus for goods produced by native craftsmen. It should also be noted that no amount of extravagance on the part of native rulers could induce such poverty as that existing under British rule since it did not lead to the export of the country's agricultural produce abroad.

The change forced the craftsmen to cultivate land themselves, thereby enormously increasing the number of cultivators, raising the price of land and reducing the average holding of a peasant family to an impossibly small size.

The drawing of India into the world market through the development of railways, roads and steamship lines, and the introduction of capitalist relationships into agrarian economy, led to the break-up of the old self-subsistent village economy, as was inevitable. But whereas production for the market led normally to changes in the economy of the Indian village in much the same way as anywhere else, in India—dominated by a foreign nation which profited by keeping her as a supplier of raw materials in return for imported manufactured goods—it was not accompanied by any corresponding industrial development, and so led inevitably to greater and greater pressure on the land, thus progressively intensifying poverty in the villages.

To-day this process of breaking up the self-subsistent village economy is, as already stated, by no means completed. Great as have been the changes brought about in Indian economy under British rule, India's 500,000 villages have not all yet been fully affected, and many continue in some respects in their old traditional way. In villages far from road or railway the old hand-loom weaver still plies his loom; and in remote places even spinning is still done by hand, though this is now very rare, almost all the yarn used by the hand-loom weavers being machine-spun. But the process of pushing the handicraftsman out of business

continues from year to year at an accelerated pace, and the Census Commissioners have had no hesitation in assigning the overcrowding of agriculture to its true cause:

> There seems to be no doubt that the number of persons who live by cultivation is increasing at a fairly rapid rate. The profits of various artisan classes have been diminished owing to the growing competition of machine-made goods, both locally manufactured and imported, with the result that these classes show a growing tendency to abandon their traditional occupations in favour of agriculture.[1]

British rule has, in fact, led to the break-up of the old, self-subsistent village economy, to production for the market and to the expropriation of the tiller of the soil by the money-lender and trader, without the concomitant growth of factory industries to absorb the dispossessed agriculturalist or the ruined handicraftsman. It has introduced the evils of commodity production without its benefits.

Statistics clearly reveal the fact of the ruin of Indian handicraft industry without any corresponding growth in machine manufacture to absorb the ruined handicraft workers. The figures of the decline from Census to Census in the numbers of those supported by industry (which is the reverse side of the increase in the number of those living on the land) clearly show also that the few thousands more employed in factories are as nothing compared with the millions less employed in industry as a whole.

Even during the ten years between the Census of 1911 and that of 1921 the numbers of those supported by industry had declined by 6 per cent.—the total number in the latter year being 33,000,000. This means that only 10·5 per cent. of the Indian population are supported by industry, as against 5·7 per cent. supported by trade (mainly in agricultural produce).

Of the 10·5 per cent., only a fraction are employed in factory industry. In fact, only 1 per cent. of the population of India are supported by employment in "organised industry"—while 30 per cent. of this 1 per cent. are on plantations (and so should

[1] *Census of India Report*, 1911.

really be classed as agricultural labourers). The following are the actual figures for 1921:

TOTAL POPULATION OF INDIA (320,000,000)

	Total in Millions	Percentage of the 320,000,000
Supported by agriculture ..	230·65	73·0
Supported by industry	33·16	10·5
Supported by trade	18·11	5·7
Supported by transport	4·33	2·0
Administration, army and police	4·82	1·5

Of the 33,000,000 still supported by industry, 15·72 million are actual workers and the rest dependants. Those supported by organised industry, i.e. in industrial enterprises employing ten or more persons, number only 1 per cent. of the population, viz. 3·20 million, the actual workers, exclusive of dependants, numbering 2·68 million. The bulk of the remaining 30,000,000 supported by industry, and also a considerable portion of the 3,200,000 "industrial workers," are engaged in "industries connected with the supply of personal and household necessities, and the simple implements of work."

When one considers further the nature of the occupation of the 2,680,000 actual industrial workers, it is found that even this insignificant total is too high a reckoning for "organised industry"; for out of these 2,680,000, 800,000 are employed on plantations, "growing special products" (tea, etc.), and so should really be designated as agricultural labourers and not as industrial workers at all.

Moreover, only half the industrial enterprises which employ the remaining 1,860,000 industrial workers use power-driven machinery. Probably 1,000,000 out of India's total population is an outside figure for those supported by machine manufacture; the rest are handicraft workers, brought together into a small "factory" to work for a capitalist. Of this million the greater proportion are employed in textiles, cotton ginning and flour-mills.

Taking Indian industry of all kinds as a whole—whether handicraft or factory—the great bulk of the workers are to be found working on goods for immediate consumption, and only a minute percentage on construction work of any kind, so that hardly any

progress has been made in developing those industries essential for the development of large-scale capitalist industry.

The following are the figures of actual workers in industry in 1921 (not reckoning their children, or their wives, if the latter do not also work):

NUMBERS OF WORKERS

	1921
Total industry	15,700,000
Metallurgy	730,000
Building	810,000
Textiles	4,030,000
Ceramics	1,080,000
Other industries	3,400,000

The numbers of those employed in modern large-scale industry, as already shown above, are insignificant compared with the enormous numbers of those who have lost their livelihood from handicraft production and been thrown back on the land for subsistence.

The following figures show that the same process of reducing the numbers of those supported by industry is going on in every branch of production, and affords unmistakable proof of the fact that old industries are being wiped out very much more rapidly than new power-driven industries are being built up:

	Numbers Supported in 1921 (000 omitted)	Percentage of Total Numbers Supported by Industry in 1921	Numbers Supported in 1911 (000 omitted)	Percentage Decrease since 1911
All industries	33,167	100·0	35,320	6·0
Textiles	7,848	23·7	8,296	5·5
Wood	3,614	10·9	3,799	4·9
Metals	1,802	5·4	1,861	3·2
Ceramics	2,215	6·7	2,240	1·1
Chemical	1,194	3·6	1,241	3·9
Food	3,100	9·3	3,711	16·5
Dress and toilet	7,425	22·4	7,750	4·2
Building	1,754	5·3	2,062	14·9
Jewellers	1,694	5·1	—	4·8
Scavengers	1,377	4·2	—	0·9
Construction of means of transport	53	—	57	—
Production and transmission of physical forces (heat, light, electricity, motive power, etc.)	25	—	14	—

These figures afford the explanation of the over-pressure on the land; the 6 per cent. less supported by industry in 1921 than in 1911 have had to thrust themselves on to the land for subsistence, thereby increasing the subdivision of small holdings and the number of agricultural labourers.

An examination of the facts revealed by the Census makes it clear that it is the dependent position of India, the subordination of her interests to those of Britain, which accounts for her poverty; for, under Britain, India has been turned into a supplier of raw materials, her old industries have been destroyed and the development of modern large-scale industry prevented except on an inconsiderable scale. The East India Company went to India for profit; and, although the ways and means of extracting riches from India to-day differ from those employed up to the middle of the nineteenth century, and although the individual administrator in India to-day may quite sincerely be doing his best within his province for the welfare of the Indian people, and may fail to realise the underlying motive for the British domination of the country and the futility of his efforts, that motive is the same which impelled the buccaneers or traders of the seventeenth and eighteenth centuries. In the frank words of Lord Brentford: "We did not conquer India for the benefit of the Indians. I know that it is said in missionary meetings that we conquered India to raise the level of the Indians.

"This is cant. We conquered India by the sword and by the sword we hold it. We hold it as the finest outlet for British goods in general and Lancashire goods in particular."[1]

In the first stage of Britain's connection with India in the days of the East India Company trade was hardly distinguishable from plunder, and open force was used to acquire the silks, spices, calicoes and muslins which were sold in Europe at such enormous profits that the dividends of the company were usually from 100 to 250 per cent. a year. Even in the days of the East India Company the policy of turning India into a producer of raw materials subservient to the manufactures of Britain was begun. Naked force, and not the "operation of natural economic law,"

[1] Quoted in *Harper's Magazine*, October 1928.

was then used. In 1769, before Britain was able to kill Indian industry by means of the competition of machine-made goods, the East India Company wrote to Bengal:

> The Company desired that the manufacture of raw silk should be encouraged in Bengal and that the manufacture of silk fabrics should be discouraged; they also recommended that the silk winders should be forced to work in the Company's factories and prohibited from working in their own homes.[1]

Very heavy import duties on Indian calicoes and muslins protected the British manufacturers in the eighteenth and early nineteenth centuries, and continued to do so, even when the introduction of power-driven machinery was enabling English cotton manufacturers to begin the process of flooding the Indian market with cheap machine-made goods. Montgomery Martin write as follows in 1832:

> Under the pretence of Free Trade, England has compelled the Hindus to receive the products of the steam looms of Lancashire, Yorkshire, Glasgow, etc., at mere nominal duties; while the hand-wrought manufactures of Bengal and Behar, beautiful in fabric and durable in wear, have had heavy and almost prohibitive duties imposed on their importation into England.

In the nineteenth century, therefore, there began the accelerating process of destroying primitive Indian manufacture and turning India from a country which, together with China, had produced the most valuable manufactures in the world, into an agricultural colony of poverty-stricken peasants producing raw materials for the use of foreign manufacturers. Even if the driving of the population increasingly on to the land may be taken as largely the result of the natural working of economic forces, there is no doubt that it has been intensified by the policy of the British Government, which has prevented the development of modern machine manufacture in India to replace the old handicraft industries.

Prior to the War there were high import duties on machinery and on iron and steel, but, as shown in the previous chapter,

[1] A quotation taken from R. C. Dutt's *Economic History of India* and quoted in the Indian Legislative Assembly in March 1930.

nothing but a small revenue duty on cotton piece goods and other kinds of consumable goods, and there were Excise duties imposed on Indian manufactures. It has, of course, been argued that allowing imports of consumption goods free of duty benefited the Indian peasantry, and such a Tariff policy was pursued by the British Government for the former's benefit. But what it necessarily resulted in was the agrarianisation of the country, the driving of the handicraftsmen on to the land—or to starve; it did in fact mean "covering the plains of India with the bones of the Indian weavers." India became to an ever-increasing extent a great area for the supply of raw materials and the consumption of British manufactures.

The history of every country[1] has shown that modern industries can be developed only with the active assistance of the Government in the shape of subsidies, protection and orders, and in India none of this assistance has been forthcoming. The most striking contrast to India is offered by the development of Japan during the last sixty years—a development rendered possible only by the whole power of the State being used to assist the development of capitalist large-scale industry.

In India orders for Government stores were always, up to the time of the War, placed in England. In India there was no possibility of the Indians carrying out an independent customs policy. Moreover, the Indian Government looked with disfavour on attempts to encourage industrial development.

In the *Annual Report on the Moral and Material Progress of India* for 1921 it is stated:

> Some time prior to the War certain attempts to encourage Indian industries by means of pioneer factories and Government subsidies were effectively discouraged from Whitehall.[2]

[1] This is even true of Britain, where capital was first accumulated and industries developed in the period of mercantilism.

[2] What is here referred to is probably the schemes for improving technical education, assisting private enterprise and starting pioneer industries with State resources which were begun by Sir Alfred Chatterton in Madras early in the twentieth century. These schemes, although actually begun, were negatived by Lord Morley (then Secretary of State for India). The experimental factories begun were sold or abandoned and the separate Department of Industries abolished. Similar developments in other provinces were similarly discouraged.

Not only was the necessary assistance for the development of industries not forthcoming from the Imperial Government whose Tariff policy and whose policy as a buyer of goods were all exercised in the direction of discouraging the development of industry, but Britain's continued support of the backward feudal elements in the country acted as an all-powerful deterrent to India's industrialisation. The class of wealthy landowners always favourably treated by Britain, and indeed in many places kept in existence only by the support of the Imperial Government and its armed forces, naturally does not use its wealth to develop industries but squanders it for the most part in luxury. The accumulation of capital in the hands of a new middle class has been rendered extremely difficult by heavy taxation and rents, unequal trade and interest payments to Britain. India is thus drained of her wealth, and the necessary accumulation of capital in Indian hands which is requisite for industrial development rendered almost impossible. Almost the only wealth which remains in Indian hands is, as already shown, held by the feudal landowning aristocracy, or is used for trading purposes, since trade offers such large profits as compared with industry in the given conditions of Indian economy. In so far as capital is accumulated in the hands of a new class, therefore, it tends to be used in trade or in what is closely allied to trading in India, viz. usury. For the heavy pressure on the land and consequent poverty of the peasantry, coupled with the development of transport and production for the market, have led to the growth of an enormous class of petty usurers and village traders, who find in usurious lending a far more remunerative return on the capital they accumulate than in any other form of investment available in the conditions prevailing in India as a direct consequence of Government policy.

A class of wealthy Indian merchants closely allied to the British in economic interests has come into being through the development of India's import and export trade, and this class, benefiting by the sale of India's raw materials abroad and the sale to her of manufactured goods from abroad, has not, at least until recently, been interested in furthering the development of native

industry. Its interests have been one with those of British traders and financiers.

British investments in India have been for the most part in railways, plantations, irrigation, mining and jute mills, or in merchant firms and banking. Until the War textiles were about the only industries which British capital had helped to develop, and this only to a limited extent, except in the case of the jute industry. It can readily be seen, therefore, that British investments have for the most part been for the purpose of increasing the available quantities of agricultural produce for export, or for promoting the sale of British manufactured goods to the Indian people.

Interest payments to British shareholders now constitute an enormous drain on Indian economy which would prevent sufficiently rapid capital accumulation for the much-needed industrialisation of the country, even if India obtained a large measure of "self-government," and if the Government of India used its position as a large buyer to encourage that industrialisation.

The amount of capital invested by the British in India has been estimated at £1,000,000,000, which includes £341,000,000 in State debts and railway debentures. Some is in railways, some in plantations, some in jute-mills, some in cotton and some in mining and irrigation. In view of the enormous profits made by the plantations and the jute-mills (the latter paying as much as 50 per cent.), 10 per cent. can be taken as a fair average rate. This means £100,000,000 a year paid by India into the pockets of British shareholders. The drain of wealth away from India is in part revealed by her import and export statistics. Year after year India has what is euphemistically called "a favourable balance of trade." Her exports always far exceed her imports in value, although her imports are of goods which are sold at a higher rate of profit than her exports.

An excess of exports from an advanced, industrialised country would mean that investments were being made abroad, and would denote the growing prosperity of the capitalists of that country. But in an agricultural country like India an excess of exports

obviously does not mean this: it means a draining away of Indian wealth to pay interest to Britain on money invested in India at a very high rate of interest and to meet the burden of the Army and civil administration (salaries, pensions, remittances to England and so forth), the burden of that "good government" for which the Indian masses pay so highly, receiving so little in return.

The excess of exports does not, of course, reveal anything like the whole burden borne by the Indian people; for, of course, not all profits are remitted home, some being spent on luxuries, service and so forth in India, and some reinvested. There are, in addition to profits on investment, the enormous profits of British commercial capital on the sale of India's raw materials, and the sale to her of manufactured goods; banking profits; and last, but not least, the heavy burden of the upkeep of the Army and the civil administration. British Civil Servants and British officers are paid fantastically large salaries whilst in India; their pensions on retirement are also borne by India; the cost of their frequent passages home on leave, and even the cost of the upkeep of the India Office in London are all borne by India, and besides this there is the burden of the Indian officials and soldiers.

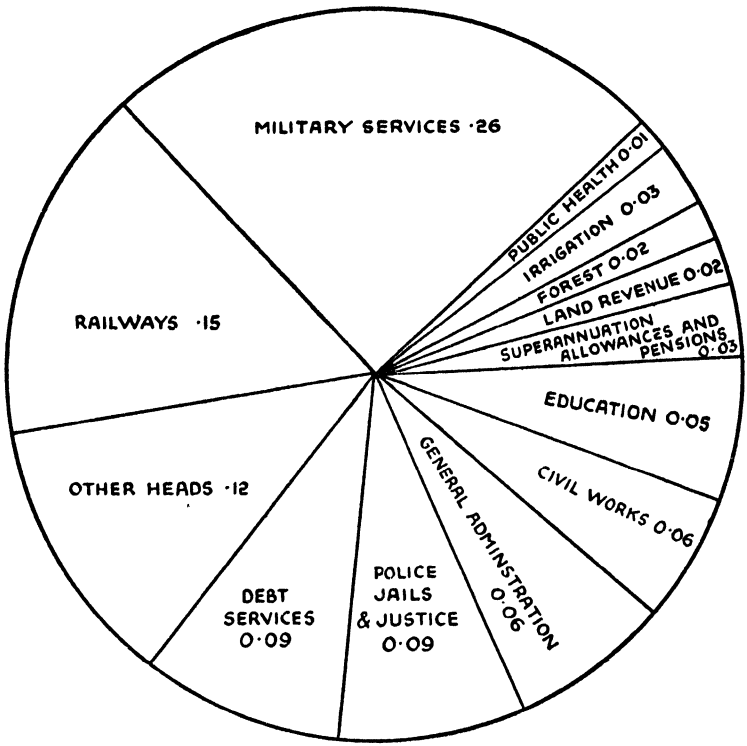
India pays in all £15,000,000 a year to England under the headings diplomatic service, education, military and naval payments and pensions, civil pensions and military works,[1] and she pays a far larger sum than this to maintain the Army and Civil Service resident in India.[1] If the Indian people received some return in the shape of education, sanitation, medical services and so forth, taxation would not be so onerous a burden; but the greater part of the Indian revenue is spent on the maintenance of "law and order," by means of the Army and the police force—in other words, most of the revenue raised in India is used for keeping the Indian people in subjection. If there is anything left over after the Army, Civil Service, jails and police and debt charges have been paid it can be used for education and medical services.

The following diagram shows the distribution of the revenue from all forms of taxation:

[1] See Statistical Abstract under the heading "Expenditure in England."

HOW EACH RUPEE OF EXPENDITURE WAS MADE UP IN INDIA, 1927–28

(PROVINCIAL AND CENTRAL COMBINED)



CENTRAL REVENUE AND EXPENDITURE, 1929–30

(*In Crores of Rupees*)

REVENUE		EXPENDITURE	
Customs	51·22	Defence (net)	55·10
Income Tax	16·60	Debt charges (net)	12·14
Salt	6·35	Civil administration	12·67
Opium (net)	2·35	Loss on posts, telegraphy and irrigation	0·33
Railways (net)	6·25	Other expenditure (including pensions and cost of revenue collection)	11·15
Currency and mint	3·06		
Other receipts	5·56		
Total	91·39	Total	91·39

PROVINCIAL REVENUE AND EXPENDITURE OF BRITISH INDIA

(*In Crores of Rupees*)

Population in millions .. .. .. 243·1
Area in thousands of square miles .. 1,018·5

Revenue		Expenditure Reserved	
Land revenue	35·48	Land revenue and general administration ..	15·76
Excise	19·44	Police	12·28
Stamps	14·35	Jails and justice	8·31
Irrigation (net)	7·71	Other reserved expenditure (including debt charges, pensions, etc.)	21·61
Forests (gross)	5·44		
Other sources	14·14		
Total	96·56	Total	57·96
		Expenditure Transferred	
		Education	12·57
		Medical relief and public health	6·38
		Civil works	9·79
		Other transferred expenditure	8·57
		Total	37·31
		Total reserved and transferred	95·27

It is difficult to refute the Indian contention that India is for the British Empire a source of enormous profit, an area comprising one-fifth of the world's population, administered mainly with a view to extracting the utmost possible amount of profit for Britain. True, the necessity of not killing the goose that lays the golden eggs is recognised as it was not recognised in the days of the East India Company; but, apart from necessary safeguards against the complete economic ruin of the country, every penny possible is wrung from the peasants. They are taxed beyond the possibility of paying, and they receive in return almost nothing in the form of education, sanitary services or the financial assistance necessary to enable them to improve their methods of cultivation.

Their self-subsistent village economy has been broken up by the railways and roads, the land tax and the introduction of cheap manufactures, but factory industries have not been developed as would have been the case in a free country into which the "germs of the capitalist system" had been introduced. British rule with its "security," the increased pressure on the land it has brought about, and the legal system it has introduced, has led to the rapid growth of a class of usurers who spread over the Indian countryside like some choking weed.

The result, though profitable for Lancashire cotton manufacturers as for British financial interests in the first place, has ceased to be profitable for the former to-day. Textile manufacture, requiring comparatively little initial capital to set up factories, and supplying one of mankind's primary wants, besides being a manufacture which can be run with unskilled and illiterate labour, is the one important industry which has developed in India. The interests of the British textile machinery makers led them, through their Bombay agents, to help to finance the development. It has not developed nearly as rapidly as would have been the case if India were independent, but, nevertheless, it has developed sufficiently to ruin many Lancashire spinners and manufacturers and to help in creating mass unemployment in Lancashire.

The Bengal jute industry, which was directly developed by British capital, has already brought ruin to Dundee.

The question of the immediate future is whether the Imperial Government will continue the pre-War policy of discouraging the development of Indian industry or whether there will be a change in policy, as was stated at the close of the War; a change of policy which would mean allowing a limited development of Indian industry at the expense of English manufactures, but as far as possible under British direction and control to the immediate advantage of British iron and steel interests, machinery makers and financiers. It is not likely that such a change of policy would ever have come about voluntarily, but the weakening of British Imperialism consequent upon the War may render it inevitable as the only way of retaining India against the rising tide of revolution within the country and the serious intrusion of American

capital and American and Japanese goods during and since the War.

During the War the political situation in India, military needs, shortage of shipping and dangers of transport, together with the flooding of the Indian market by Japanese and American goods, led the British Government to encourage the development of certain Indian industries. The general tariff on imports was raised to 7½ per cent. during the War, and extended to cotton goods in 1917. Even the development of heavy industry was encouraged.

The Tata ironworks supplied materials for the defence of India and the conduct of the War in Egypt and Palestine and East Africa. Coal production was increased. The Indian mills worked on Government contracts for the Indian armies and supplied part of the goods required for the Indian home market, left almost bare of Lancashire goods. Moreover, in time of war, when demands for material and military assistance were being made on India, it was necessary to do something to conciliate Indian Nationalism and no longer to rely entirely on the political support of the landowners, princes and big merchants.

On the conclusion of hostilities the foothold gained by America and Japan in the Indian market must have made it seem the lesser of two evils to allow a certain development of Indian industries, rather than have Japanese and American manufacturers supply the goods formerly supplied by Britain and rather than see American capital developing Indian industry.

The Report of the Industrial Commission set up after the War quite clearly states both the line of previous Imperial policy and the effect of the War in changing that policy.

It is stated that money in the past was interested in commerce rather than in industries, and that only those industries offering safe and easy profits were taken up. Further, it is stated that imports from England were encouraged by the Government practice of purchasing stores in England, but that it is now vital for the Government "to ensure the establishment in India of those industries whose absence exposes us to grave danger in the event of war."

It is admitted in the report that the inefficiency of the Indian worker is due to lack of education, low standard of comfort and the effects of preventive disease. Lastly, it is admitted that the purchase of Government stores in the past was conducted in such a way as to handicap Indian manufacturers in competing for orders and to retard industrial development in India, and that reduced railway rates to and from ports have been prejudicial to Indian development. The key to the change in British policy foreshadowed in the report lies in the statement that India's industrial system renders her liable to foreign penetration in time of peace and serious danger in time of war.

In addition to all this there was the powerful political reason that the period following the War was one of great disturbance and mass discontent in India, and of the rise of a strong Nationalist movement led by the growing Indian bourgeoisie, but backed by the masses of workers and peasants whose conditions of life, always intolerable, had become worse than ever in consequence of the War. Up to 1922, when the revolutionary movement, weakened by the betrayal of its leaders, collapsed for the time being, British Imperialism was forced at least to promise a change of policy; politically this change was expressed in the Montagu-Chelmsford reforms, economically in her setting up the Indian Industrial Commission and in her declarations of readiness to assist in the development of Indian industry. Moreover, Britain thought she could herself control and profit from this development, since, even though registered in India under Indian names, new companies setting up manufacturing plant were to be financed by British investors and managed by Englishmen.

The report of H.M. Trade Commissioner in India immediately after the War on the prospects of British trade[1] lays bare the policy which it was designed to pursue immediately after the War, and makes it quite clear that it was a necessary, though somewhat unreal, concession to the Indian capitalist class, and a necessary step in face of strong Japanese and American competition. The course of subsequent events appears to show that

[1] *Prospects of British Trade in India at the Close of the War.* By Mr. Ainscough, H.M. Trade Commissioner in India.

it may have been only a manœuvre by a weakened Britain then in a very dangerous position—threatened by labour troubles at home, by revolution in India and by strong competition from Japan and America—and not a new policy which it was intended to pursue if the situation became easier; for the promises of 1919 to 1921 have been only very partially fulfilled.

The 1919 Report of His Majesty's Trade Commissioner in India is of such importance as proof of the statements made in this chapter that I now give some fairly extensive quotations. He starts by saying that, as a result of the War, the most important change had been the elimination of the goods of the Central Powers and their replacement by imports from Japan and the United States which were both also competing with Britain in goods previously exclusively supplied by the United Kingdom. The United States were sending iron, steel, machinery, hardwares and instruments; Japan electrical accessories, copper, paper, glassware, textiles, beer and apparel.

He then reports on the most serious aspect for British manufacturers of the change brought about by the War:

> Before the War, most of the purchases of plant, machinery, metals and mill stores were made by the London Offices of the firms of managing agents of the various industries. Now, owing to abnormal conditions, the tendency is to purchase greater quantities locally or by direct indent on exporters in the United States.
>
> The London buying connection has been considerably weakened as a direct result of the War.

He goes on to advise English manufacturers to appoint representatives or set up branches in India, telling them that, in future, orders will not come to them automatically as before. He outlines the new Imperial policy of "controlling and developing Indian resources," and proceeds to show how it began during the War "with special reference to the needs created by the War." He next gives advice to British capitalists concerning the opportunities they have for developing Indian industry for their own profit, and finally shows that it is the fear that if Britain does not "direct and control" this development, America will, which has caused the change in British policy. The whole passage is so illuminating and clear that I quote it almost in full:

In 1917 the Indian Munitions Board was set up with the express object of controlling and developing Indian resources, with special reference to the needs created by the War . . . of applying the manufacturing resources of India to War purposes with the special object of reducing demands on shipping. The activities of the Board have undoubtedly operated as a great stimulus to local manufacture.

The researches and recommendations of the Indian Industrial Commission have also been of great value in impressing upon the Government the two cardinal principles underlying future State policy, namely:

(1) That in future the Government must play an active part in the industrial development of the country, with the aim of making India more self-contained in respect of men and material;
(2) That it is impossible for the Government to undertake that part unless provided with adequate administrative equipment and forearmed with reliable scientific and technical advice.

These principles coincide with the new Imperial policy of stimulating the development of all local resources for the benefit of the Empire as a whole.

The development of many industries, and particularly iron and steel, engineering, chemical, electro-chemical and electro-metallurgical industries will provide great scope for British capitalists and industrialists to erect works in India and so to take the fullest advantage of India's natural resources for the good of the Empire.

A most important factor to be considered is the risk that if British manufacturers do not take advantage of such industrial opportunities as India presents, our foreign competitors may do so and thereby undersell our imported goods in the market (author's italics).

Further on, Mr. Ainscough shows that in the four War years American shipments of iron and steel to India increased by 800 per cent. Concerning Japanese cotton goods exported to India, enough has already been said elsewhere in this book.

Then he shows that the industrial development of the country will be for the benefit and under the control of British capitalists, in spite of the supposed concessions to Indian nationalism:

British manufacturers who may decide to erect works in India would do well to register their companies in India with rupee capital.

There follows a statement of the advantages of the exchange and of lower rates of income tax and rates in India, and the need to take account of the strong national feeling; but he goes on to say

that, since Indians are not fit to inaugurate and run large industrial enterprises—

> The industrial development of the country must therefore in the main be carried on under European direction and management.
>
> Subject, therefore, to reasonable control in order to safeguard the interests of the promoters and managers of the enterprise, British manufacturers in the country would do well to secure Indian capital in their undertakings, and, wherever possible, to allow it to be represented on the Board of Directors in order to secure that friendly co-operation which is invaluable in dealing with many local problems, *the most important of which is that of labour.*
>
> In many of the larger Indian enterprises, the agency firms are finding it advantageous to associate themselves with leading home manufacturers in order to secure the benefit of their advice and experience in the lay-out, purchase and working of the new plants and to obtain the services of experienced managers and foremen from home.

The remark concerning the united front of British and Indian capital versus Indian labour is of considerable interest; for it is this common interest which may, in the future, lead Indian and British capitalists into co-operation and alliance.

The fact that such industries as already exist in India, as well as the first stages in the working up of raw materials, are under British control through the big managing agencies, is revealed elsewhere in the report, as also is the fact that this control has been exercised on the lines of furthering commerce and not industrial development, but that there has come about a change since the War. Referring to the managing agents, he says:

> They control the majority of the cotton, jute, paper, flour, rice and other mills, as well as of the tea gardens and the coal mines. This system originated and still was continued owing to the ability of these houses to furnish financial help to industries.
>
> They have been charged with lack of enterprise and an unwillingness to follow up lines of development naturally proceeding from the expansion of operations in their own specialised industries. In other words, they have been inclined to develop commerce rather than industry, and have thus been at times less helpful than might have been the case in clearing the way for continuing industrial progress.

Yet in spite of all the indications of a changed policy immediately after the War, with the crushing of the Nationalist movement in 1922 Britain appears to have returned to the old policy of keeping

India undeveloped and preserving her as a purveyor of raw materials and a market for manufactured goods. The figures of capital exports to India show the change after 1923:

CAPITAL EXPORTS TO INDIA AND CEYLON

(*In Million £*)

Year	To India	Total Capital Exports from Great Britain	Percentage of Total to India
1908	13·5	146·0	9·2
1909	15·9	182·0	8·7
1910	14·7	189·0	7·8
1920	3·5	53·2	6·6
1921	29·3	115·7	25·5
1922	36·1	135·2	26·8
1923	25·3	136·2	19·0
1924	2·6	134·2	1·9
1925	3·4	87·8	3·9
1926	2·0	122·0	1·6
1927	0·8	153·0	0·5
1928	—	—	—

Of course these figures are not conclusive, as capital exports may be mainly for the development of plantations, etc., and not for industrial development; and because the decline in their export after 1923 may be due to the weakened position of British finance, and to actual lack of capital available for export. One thing is, at any rate, clear: that is that after the boom year 1921–22, machinery imports fell sharply, and did not begin to increase substantially till 1927–28. The increase that year "followed on a long period of depression extending over five years. The increase was well spread over almost all types of machinery, and clearly shows that the tide in Indian industries has at last turned. . . . The steel and engineering industries appear to be at the beginning of a period of considerable expansion."[1]

In 1927–28 there was also a heavy advance in imports of iron and steel: from 845,000 tons the previous year to 1,197,000 tons. This synchronised with a record production of 363,195 tons of finished steel by the Tata Iron and Steel Works.

It seems that after the defeat of the revolutionary movement in 1922, Britain returned to her policy of putting obstacles in the

[1] Mr. Ainscough, for year 1927–28.

way of industrial development, but since 1927 has again been forced to make concessions to the Indian capitalists as the Nationalist movement has revived and grown in strength.[1] In the intervening period the British Government, by deflating the Indian currency (fixing the rupee at 1s. 6d. instead of 1s. 4d.), hit Indian industry hard and brought about a severe loss of profits in textiles, her most important industry; besides raising the value of previous British investments in India and creating a special premium for the furtherance of British exports to India. Further, in spite of the promises of 1919 and 1920, the Indian Government began again to place its orders for railway material and construction with British firms; this leading to a fall in the value of the shares of Indian engineering, locomotive and rolling-stock works —some of which closed down, while others were unable to increase their productive capacity.

But in December 1929 the Government of India promised, although in somewhat guarded terms, to assist Indian industrial development by purchasing Government stores as far as possible from manufacturers in India. In Resolution No. S.217 of the Department of Industries and Labour (dated 12/12/29), but with effect only from 1/1/31 the following declaration is made:

> The policy of the Government of India is to make their purchases of stores for public service in such a way as to encourage the development of the industries of the country to the utmost possible extent consistent with economy and efficiency.
>
> Preference is to be given:
>
> *First*, to articles which are produced in India in form of raw materials, or manufactured in India from raw materials produced in India, provided that the quality is sufficiently good for the purpose.

It is significant that this undertaking was only given when the Nationalist movement in India was again assuming threatening proportions. If the after-War declared policy of the Government of India had not been subsequently abandoned the above Resolution would have been redundant. As it is, it indicates a renewal

[1] It can, of course, be argued that financial stringency in India has made a progressive policy of industrialisation impossible. But the answer to this is that there has been no reduction in the enormous expenditure on the armed forces.

of the pledges of the immediate post-War period, an effort to conciliate the Indian industrialists.

Whether the year 1927–28 marks a return to the War and post-War policy, it is yet too soon to say. This must depend in large part on the strength of the Nationalist movement in India and the strength of the menace from the United States and Japan, which are still threatening to take a hand in India's industrial development if Britain will not. The removal of the duties on most kinds of machinery in October 1927, the import duties on iron and steel, and the preference to British iron and steel, indicate an attempt to unite with Indian capitalist interests against the United States; whilst the removal of the cotton excise in 1925 and the increased import duties on cotton yarn and goods, in 1927 and 1930, in a form to hit the Japanese most severely, must mean an attempt to unite Indian and British textile manufacturers against the Japanese and also against the Indian hand-loom weavers, as I have shown in the previous chapter.

Britain, seeing the coarser end of this trade already lost to Japan, hopes to retain the finer end and part of the medium trade by means of the 5 per cent. preference—in return for the assistance given to the Indian manufacturers by the duties aimed against Japan in the coarser trade. Furthermore, British capital, through the British managing agencies, now controls a larger proportion of the Indian cotton industry than before; and if India forces the Imperial Government to raise the tariff wall still higher, British capital will take a larger share than in the past in the development of the Indian cotton industry. Setting up mills in India with British capital and for the profit of British shareholders must seem to the British financiers who so strongly influence British policy in India a better thing than allowing Japanese capitalists to have it all their own way in the Indian market, however disastrous this may be to individual cotton spinners and manufacturers in Lancashire.

From the point of view of the latter, however, no good can come from the enforced backwardness of India, or from the hindrance of her industrial development. If not textiles alone, as at present, but every necessary branch of manufacture were developed in

India, Lancashire could not but benefit from the increased prosperity of the country. As the Indian people grow poorer, the more impossible it becomes for them to buy British cloth; but if the prosperity of the mass of the people were increased through industrial development, there could not fail to be an increased demand for British cotton goods in spite of the tariff.

Put in another way, the position is that all but a minority of the Indian people will soon be unable to purchase the finer goods which are the only ones in which Britain can compete—if they are not already unable to do so. Increased prosperity, therefore, is the only way to increase the demand for British cotton materials. Lancashire stands to gain by a policy which will develop India's prosperity, even though this entails higher duties on cotton goods as a protection to Indian industry. Lancashire stands only to lose even more disastrously than at present if the old policy which puts a brake on Indian development and leads to the ever greater impoverishment of the Indian peasantry, is continued. But the Indian people can only emerge from their terrible poverty through the cessation of the enormous interest payments to Britain and by the sweeping away of the feudal landlord and money-lending classes. This cannot happen under British rule, it cannot happen without a social revolution, and the Indian bourgeoisie as a whole are as little desirous of such a revolution as the Indian landowners and merchants or the British Raj. The leaders of the Indian National Congress endeavour to use the mass movement of the peasants and the workers for their own ends, that is to say for forcing concessions from Britain, but they are in constant fear of being themselves devoured by the monster whom they call up against the British forces. Hence their capitulation to Britain in 1922, and now again Gandhi's capitulation in 1931.

It would seem that any compromise likely to be effected between British Imperialism and the Indian Nationalists will not succeed in improving the conditions of the mass of the people, and may indeed render them yet worse. For the industrial development which the Indian Nationalists want, if it comes about even to a limited extent, must do so at the cost of yet further "squeezing"

of the Indian people (through tariffs, etc.) for the purpose of accumulating the capital necessary for that development. It is abundantly clear that Britain does not intend to abate a jot her claims on India, or abandon her traditional policy of supporting the landowning and usurer class. This being so, capital for Indian industrial development can only be accumulated through placing yet heavier burdens on the mass of the people. There is no hope under British rule of the abolition of the feudal relics which shackle Indian agriculture nor of the extortions of the money-lenders being put an end to. Voluntarily Britain would never cease to maintain the feudal elements, and the most powerful section of the Indian bourgeoisie is too closely connected with the landowning and money-lending classes and naturally fears, as any propertied class must fear, the threat to "law and order" which refusals by the peasantry to pay rent or interest naturally involve.

Acute as may be the differences between the feudal elements and British Imperialism on the one hand and the Indian bourgeoisie on the other, they yet have an overriding common interest in the maintenance of security in India and against any threat of revolutionary activity on the part of the peasants and workers. The awakening movement among the latter has, it is true, been used up to now by the leaders of the Indian National Congress as a weapon against the British, but they have realised that the weapon is double-edged, and this has led them to seek a compromise with the "Satanic power"—to use the expression which was once Gandhi's, but which he must have abandoned now that he has decided to throw over the demand for independence and make terms with British Imperialism.

Between the peasantry and the workers on the one hand and the capitalist class on the other hand stand the artisans, the small shopkeepers and the intellectuals, who form the Left Wing of the Nationalist movement and who, although definitely opposed to the feudal elements in the country and driven by the increasing difficulties of their economic position to be against any compromise with British Imperialism, vacillate between the workers and the big capitalists who dominate the Indian National Congress,

and have up to now been easily influenced by the "idealism" of Gandhi, and so kept from support of a social revolution.[1]

[1] Since this chapter was written the Indian Round Table Conference has been held. It is, however, not yet quite clear what compromise is to be effected between British Imperialism and the Indian bourgeoisie. The strategic powers: finance, military control, etc., are to remain with British Imperialism. It is, therefore, obvious that no fundamental concessions have been granted by Britain, and also that she is still seeking to maintain her domination by the support of the backward feudal elements, witness the placing of the Princes, the most reactionary element in the country, in a dominant position in the proposed new Constitution. Such concessions as have been made to the Indian Nationalists are more "face saving" than anything else and will not allow of any rapid progress of industrialisation. There is no prospect of any alleviation of the position of the peasantry nor can the changes contemplated lead to any financial loss to Britain. The strongest section of the Indian bourgeoisie—the cotton capitalists, with whom Gandhi has worked in close alliance—are the one section to whom any real concession seems to have been made and for whose interests Gandhi has stood out. The duties on cotton goods imported have been raised another 5 per cent. in the Indian budget for 1931 and the boycott of foreign cloth continues in a modified form.

CHAPTER XIII

THE INDIAN MARKET

II. Poverty and Indebtedness of the Indian Peasantry

The over-pressure of population on the soil, brought about under British rule, and intensified to-day as in the past by the draining away of Indian capital accumulation to Britain, combined with the feudal conditions on the land maintained by British policy, has led to ever-increasing poverty amongst the Indian peasantry. The net output of Indian agriculture has increased only slightly in spite of the much larger number of persons employed on the land. The improvements in transport which have brought Indian agricultural products on to the world market have led to a decrease in the area under food crops and an increase in the cultivation of the raw materials of industry for export, besides an actual export of food grains, in spite of the fact that the whole production of the country is insufficient to feed the population.

Lupton, in his *Happy India*, calculated that in 1919–20 British India produced 70·8 million tons of grain and rice, 2·5 million tons of fruit and vegetables, and 3 million tons of sugar. Of this total, 3 million tons were exported, leaving 73·3 million tons for home consumption. This, divided by the population of India—247,000,000—gives 665 lb. per person per annum, or 1·82 lb. per head per diem. Allowing for seed and cattle food, this 1·82 lb. is reduced to 1·2 lb. per head.

The jail rations in Bombay are 1·5 lb. of cereals and 0·27 lb. of pulses for hard labour, and 1·32 lb. of cereals and no pulses for light labour; whilst even the Famine Code rations for diggers are 1·29 lb. of cereals per day.

Thus, even if there were equal distribution, the total food-stuffs available for consumption in India would only equal the jail and famine rations.

These figures alone prove that it is no idle statement that, after more than a century of British rule, the great majority of the Indian population never know what it is to have enough to eat, and that the increased export of food-stuffs and raw materials from India is a *hunger export*, a draining away of the stamina and life-blood of the Indian people.

Since 1906 there has been scarcity or famine almost every year in one part of India or another, but grain goes on being exported to pay the interest on British capital, to pay for British manufactures or to pay the pensions and remittances of British soldiers and officials. Attempts are sometimes made in India to derail trains, so wanton and intolerable seems the export of food-stuffs from a starving land. "Railways must appear to an Indian to be rather like huge iron suckers, taking the corn out of the country for Europe."[1]

But even if food-stuffs were not exported and even if the area under grain were not diminishing, there would be a shortage of food-stuffs, not because of over-population, but because of the wastage of land and the primitive methods of cultivation which result from the feudal relationships maintained in existence in India by Imperial policy. There has been no change in methods of cultivation, no increase in the productivity of the soil; but, instead, an actual progressive reduction in the fertilising content. For the most part the Indian peasant cultivates his land in precisely the same fashion and with precisely the same primitive tools as his distant forefathers. Not only this, but his methods have actually in some sense deteriorated: for his cattle have grown weaker and less able to toil as their numbers have increased, since they, like their owners, are always starved.

The facile explanation of Indian poverty, as being due to over-population, will not stand a moment's examination. The actual increase in population is very slow owing to the extremely high death-rate—viz. 30 per 1,000—itself due to under-nourishment, lack of clothing, bad sanitation and lack of medical assistance. Comparison with other countries shows how very small the increase of population has been.

[1] *Shall England Lose India?* By Lieut.-Col. Osborne (Knopf.)

For the period 1870–1910 the percentage increase was:—India, 18·9; England, 58; Germany, 59; Russia, 73·9; Europe (average), 45·4.[1]

If economic development had not been arrested by the British domination of the country, as shown in the last chapter, there could be no question of over-population in India.

The area under cultivation is much less than the total amount of good soil available for cultivation, as can be seen from the following figures:

AGRICULTURAL AREA OF BRITISH INDIA*

	1915–16	1918–19	1924–25	1925–26
Total area	619	625	668	668
Forest	85	87	87	87
Barren land	144	147	153	152
Culturable waste, other than fallow	114	114	153	152
Fallow land	52	73	47	49
Tilled land	222	201	227	226
Irrigated	47	47	45	48

* Figures from the *Statistical Abstract of British India.*

This table shows that the increased pressure on the land has not led to the break-up of the cultivable waste. This is due to the absence of any possibilities of capital accumulation in the hands of the cultivators, to the use of the most primitive implements and to the land monopoly. One may add that the weakness of both men and bullocks, resulting from generations of insufficient food, disease and bad conditions, impedes the peasantry from undertaking the hard labour of breaking new ground, as also does their lack of any resources with which to obtain implements, and the fact that the uncultivated land itself is not free but is owned by the State or by landowners.

There is, indeed, a striking analogy between the position of the Indian peasant and that of his buffaloes and bullocks. In the chapter devoted to the subject of cattle in the Report of the Royal Commission on Indian agriculture, it is shown how the number of bullocks is always increasing, whilst their strength is always decreasing. Lack of nourishment, arising from lack of grazing grounds and winter fodder, makes them weak, whilst their

[1] *The Population of India.* By B. Narain.

weakness makes the peasant desire to own as many as possible to do the work; hence their ever-increasing numbers, which leads to less food all round and an ever-weaker breed. There is over-pressure on the land of live-stock, as of men and women. Indeed, it might also be argued that, just as the feudal economy maintained by British rule results in over-pressure of men and women on the land, so do the feudal superstitions maintained in existence through the failure of the Government to provide any kind of education for the peasantry, prevent the killing of live-stock for food, and so lead to weakness among both men and beasts. Certainly also the failure to give the peasantry any kind of elementary education is partly responsible for the early age of marriage and the high birth-rate.

Again, since the failure to develop the country's resources means that the coal of India is not brought to the peasant, he has no other fuel but wood or dung. The forests are kept as State property, and he cannot have wood without paying for it. So he uses dung as fuel, and, in so doing, deprives his fields of necessary manure—the only manure available. The slightest infraction of the Forest Laws—the mere gathering of a handful of sticks for fuel—is punished by fines; and in some districts it is reported that whole villages have been abandoned owing to the peasants' inability to pay fines imposed on them for gathering fuel or for pasturing their live-stock in the forest.

In some ways the shutting out of the peasantry from the great forest tracts of India may be likened to the enclosure of waste-land in the English villages in the eighteenth century.

It is true that the British have been responsible for the irrigation of certain tracts of previously uncultivated desert, and have thus slightly increased the area under cultivation. But this irrigation has been undertaken, not for the benefit of the Indian peasantry in return for the taxes they pay, but in order to return a profit on capital invested.[1] The peasant pays heavily for the water he uses.

Nor does the peasant receive any return from the State in the form of elementary education, sanitation or medical services—all

[1] *The Simon Commission*, Vol. I, p. 363, for the amount irrigation contributes to the Revenue.

of which are practically non-existent. Indeed, sanitation is now far worse than in the days before British rule:

> In the olden days, tanks were dug or cleaned out, wells sunk and roads made or repaired by corporate action of the villagers, although this good custom has largely fallen into disrepute.
>
> The cultivator himself is not well enough off to pay for hired labour, and it is certain that neither the local bodies nor the Provincial Governments can provide either the men or the finance for carrying out such undertakings.[1]

The only return the peasant receives for his large payments to the Revenue is security, maintained by army and police force and benefitting, not the peasant, but the landlord and the moneylender. For it might well be argued that the peasant could not be nearly so efficiently fleeced by a foreign invader as he is fleeced by tax-collector, landowner and moneylender.

I now come to the whole question of Indian land tenure and taxation and the causes of the indebtedness of the peasantry which has risen to such enormous proportions under British rule.

Great as is the pressure on the land, the cultivated area would, nevertheless, just yield a sustenance to the peasantry, were it not for the burden of the Land Tax and the existence of an enormous and ever-growing parasitical class of landowners and money-lenders whose existence is directly attributable to British policy. British rule in India is based on the support of the land-holding aristocracy: consequently, the aim of British policy has always been to favour and protect the old feudal land-owning classes whilst at the same time it has sought to maintain the *ryot* on the land and not allow his final expropriation and conversion into a landless proletariat. But British law, though protecting the tenant rights of the peasantry, has brought into existence an enormous class of small traders and money-lenders who have become, through the indebtedness of the peasantry, the actual owners of the latter's holdings, even where no landlord class existed in the early days of British rule. This is admitted by the Royal Commission on Agriculture in India (see below, pp. 368–9).

Thus matters have not been allowed to take their natural

[1] The Royal Commission on Agriculture in India. Abridged Report, p. 56.

course, which would have meant the complete expropriation of a great part of the peasantry and the setting up of large-scale modern farms. Instead there has been division and subdivision of holdings and the maintenance on the land of millions more people than are needed to cultivate it, the large majority of whom are barely on the subsistence level and permanently indebted. Although the Imperial Government can maintain that its policy has protected the peasant on his ancestral holding, that policy has in fact been a necessary counterpart of the general policy of hindering the industrialisation of India. No Government could afford the risk of allowing large numbers of peasants to be driven off the land unless there was other work for them, and such other work could only be provided by the development of large-scale modern industry.

It is necessary to examine in some detail the manner in which taxation has favoured the large landowners, and how heavy a burden it has been upon the peasantry, in order to understand the manner in which the British have sought to base their rule upon the support of the feudal aristocracy and to appreciate why it is that a state of permanent indebtedness has been the necessary consequence for the peasantry.

In such provinces as Bengal, Oudh and Northern Madras, where large landowners—*zamindars*, *talqudars*, etc., originally collectors of revenue under the Moghul emperors, but having acquired hereditary rights to the land—were in existence before the British occupation, their right to their estates was made permanent. In the case of Bengal and a few other smaller parts of India the Land Revenue settlement was also made permanent at the end of the eighteenth century.

In some places a landowning class was actually established as an easy means of securing taxation; but, this system not proving very successful, a system of taxing the peasantry direct was introduced in the remaining provinces.

In Northern India village communities with landlord rights or individuals owning one or more villages were dealt with direct. Elsewhere the *ryotwari* system of direct assessment and collection from individual cultivators was introduced.

At present more than half the total cultivated area of India is held under the *ryotwari* system of tenure, which means payment of Land Revenue to the Government direct by the cultivator under assessments revised every thirty years. The Land Revenue assessment was fixed extremely high, amounting to 50 per cent. of the estimated average net yield of the land.

The way in which the increased pressure on the land has led to rack-renting—to "a competition rental value of the soil," to use the polite official term—and the way in which the Government has encouraged the increase in rents as facilitating the collection of Revenue, is exemplified by the following passage from B. H. Baden-Powell's book:

> At first, theoretical rents (rents as they ought to be) were considered. But some years ago the rents were still very much customary rents, i.e. they did not represent anything like a competition rental value of the soil. As, however, time went on, this feature began to disappear; land came to be more in demand for a largely increasing population; the rents paid gradually became more and more proportionate to the real value and advantage of different soils in different situations. But the difficulty was to find out what the rents really were in all cases: for those recorded in the village accounts of past years were either incorrect or the information was altogether wanting; and even when a rent rate was found out, it was at first considered that this might be far below what the land would probably be made to pay directly the settlement was over. So it became customary to calculate full rent rates *such as it was supposed would be obtained in the years immediately following the settlement.*
>
> The assessment so obtained might be correct in theory, but its working success depended largely on whether the landlord succeeded, either by aid of the Settlement Officer's friendly interposition or by the action of the Rent Courts, in getting his tenants to pay rents at least up to the standard of those calculated by the Settlement Officer.[1]

By 1886, however, the rents taken as the basis of the calculation came to be the actual paid rent rates, without any theoretical increase for supposed future enhancements: presumably by that date rents had been forced up to a sufficiently high figure. The above passage shows clearly how the Government assisted the working of those economic forces which were in any case increasing the value of land and so raising rents, by assessing the landlord at a rate calculated at half the highest rental which it was supposed

[1] *Land Revenue in British India*, by B. H. Baden-Powell.

could be extorted from the cultivator, and then by helping the landlord to extort it by means of "friendly interposition" or through the Rent courts.

The policy of the British Government in the case of both the *ryotwari* districts and those districts in which landlords paid the tax has clearly been to extract the utmost possible from the cultivator—and, where landlords existed, to win their support for British rule by helping them to rack-rent their tenants.

In the case of the big landlords of Bengal, Oudh, etc., the favoured treatment of the landlords has been even more marked. In the case of Bengal the permanent settlement with the *zamindars* made by the East India Company in 1793 has been allowed to remain in force[1]—which means that to-day they pay an extremely small sum, although Bengal is one of the richest of the provinces.

A process of sub-infeudation has gone on, resulting in the existence in many places of as many as fifty intermediaries between the *zamindar* and the actual cultivator, none of which intermediaries pays any Land Tax at all. Nor do *zamindars* or their wealthy sub-tenants pay any Income Tax, for, true to its policy of favouring the wealthy landowners on whose support British rule is based, the Government does not charge Income Tax on agricultural incomes.

In the case of the big landowners of Oudh (the *talqudars*) and elsewhere where the Government does not deal directly with the peasant or the village but collects the revenue from the owners of big estates, the settlement is not permanent, but is revised every thirty years; so that the more the landlords can get out of their tenants, the more they have to pay in Land Revenue.

The most vicious aspect of the Land Revenue system is the fact that the assessment takes no account of the size of the cultivator's holding, the same 50 per cent. assessment being made in the case of the poorest classes with two or three acres of land as in that of the big farm or large estate. It is therefore hardly necessary to point out how much heavier is the incidence of taxation on the poor than on the comparatively well-to-do and the rich. Even

[1] There is also a permanent settlement with the *zamindars* of the Benares district and that north of Madras.

where the assessment to-day is fixed at a little below 50 per cent. its incidence is terribly heavy. Nor must it be forgotten that it is the masses of the people who also bear the burden of indirect taxation: of the duties on sugar, kerosene, salt, etc.

Even the Simon Commission has felt compelled to comment, although only in mild terms, on the inequality of taxation in India:

> We refer not only to the grave disparity in the incomes of different classes of people in India, but to the grave inequalities which, as it seems to us, prevail in the distribution of taxation. A poor cultivator, who not only pays to the State a substantial portion of his income from the land, but also bears the burden of the duties on sugar, kerosene oil, salt and other articles of general consumption, seems to receive very different treatment from the big *zamindar* or land-holder in areas where "permanent settlement" prevails, who owns extensive estates for which he may pay to the State a merely nominal charge fixed over a century ago and declared to be unalterable for ever, while his agricultural income is totally exempt from Income Tax.[1]

The Commission does not remark upon the almost equally unfair allocation of taxation as between big land-holders and peasant cultivators in other districts where no permanent settlement exists, or condemn at all the outrageously heavy taxation of 50 per cent. of the net produce of the small cultivator, which does not merely put him on the starvation level, but sooner or later places him in the clutches of the money-lender, who turns him into a landless labourer in fact if not in name.

In India, as in France before the Revolution and in the Roman Empire in the fourth and fifth centuries, the Government seems to act on the policy so well described by Taine as "taking, not from those best able to pay, but from those least able to resist." The *ryot* is taxed to the utmost limit, but the big landlord escapes lightly, since the former cannot resist, while the Government fears the latter and realises that the big landowning class, together with the merchant princes, are the only classes in India who support British domination. The feudal landowner and the Imperial Government are natural allies, for both wish to perpetuate the existing system and to hold India back from developing into a modern State.

[1] *The Simon Commission*, Vol. I, p. 335.

It is not only in the districts in which the Land Revenue is collected from the owners of the big estates that landlords exist. Everywhere in India the numbers of those who live on rent, or interest on money lent on the security of land, are increasing.

"With the enormous increase of land values under British administration, subletting has become exceedingly common," says the Simon Commission.[1] This increase in the value of land under British rule is always called attention to by the Simon Commission, as by the Royal Commission on Indian Agriculture of 1928, as a proof of the beneficial nature of British rule; but it is clear from the facts given in the previous chapter that it is the result, not only of security and peace, but of the continually increasing pressure on the land. As shown on page 357, the area under cultivation is hardly increasing, but the agricultural population is increasing rapidly: so that the demand for land becomes continually greater, the natural consequence being increased value.

There is division and subdivision of the land, letting, subletting and mortgaging: for a further consequence of the brake put on the development of machine industry in India by Britain has been to encourage the investment of capital in land, not productive investment for the enrichment of the land and its better cultivation, but pure parasitical investment (if one may coin such a term) in the form of loans at enormous rates of interest. Loans are rarely given for the purpose of allowing the purchase of tools, or in any way of assisting the peasant to increase the productivity of his holding; the loans are made to enable the peasant to pay his taxes or his rent or to keep him from starvation when the harvest is poor.

Capital first accumulated from village trading or usury, which might be used to develop industry, or to start large-scale capitalist agriculture if the peasantry were not protected by the tenancy laws, is used instead to acquire indirect ownership of the peasant's holding for feudal exploitation of the small cultivator. The process is going on all over India of reducing the cultivators of the soil

[1] P. 341.

to the position of labourers: a process much facilitated by the high Land Revenue assessments, and by the fact that the Land Revenue has to be paid in cash.

A very close comparison could here be drawn between British policy in India and that of the Romans in their conquered provinces. In Asia Minor, for instance, in the second century B.C., the Romans, having first plundered the country during the war of conquest (the East India Company stage), imposed an enormous tribute which could not possibly be paid; whereupon the Roman money-lenders lent the native inhabitants the wherewithal to pay it at exorbitant rates of interest, and thereafter, from generation to generation, drew away the wealth of Asia Minor in the form of interest and further taxation. True, in India the money-lenders are natives, but, as traders as well as usurers, their capital is closely bound up with British commercial and financial interests, and the Land Revenue has operated to bring the producers of wealth (the peasantry) into permanent debt servitude to the trader-money-lender, who is thereby enabled to force the peasant to give up his produce at a price far below its market value. This, in effect, means that food and raw materials, obtained from the peasant at an extremely low figure, can be exported to the very great profit of British merchants. Of course, it is not the Land Revenue alone which is responsible for the indebtedness of the peasantry, but it may be put down as the primary cause.

The introduction of capitalist relationships into India under British rule, the building of railways and roads, and the import of cheap manufactured goods—in a word, the break-up of the old self-subsistent village economy consequent upon the dragging of India into the world market—must anyhow have led to a sharp differentiation of classes in the villages, some peasants prospering and becoming traders and money-lenders and some being reduced to destitution; but the whole process was immensely aggravated by the Land Revenue.

Once the Indian peasant was forced to obtain cash to pay the Land Tax and to buy cotton cloth, kerosene and salt and his few other necessities, instead of obtaining them from the village craftsmen in exchange for produce, he had perforce to

obtain that cash by selling his produce—he became a producer of commodities for the market.

This break-up of the self-subsistent village economy only became general when the building of railways and roads made possible the transport of agricultural produce to distant markets, and when overseas trade was enabled to develop after the opening of the Suez Canal in 1869. Exports before then amounted to only Rs. 80 crores[1] per annum. By 1926–27 they amounted to 350 crores, mainly consisting of agricultural products, such as cotton, jute, oil-seeds, etc. Railways, roads and steamships having made possible the disposal of the village surplus,[2] the illiterate *ryot*, who had hitherto produced only for his own needs and in order to pay a rent in kind, found himself left to the free play of economic forces in an open market. He was cheated right and left, and, unable to calculate what he should receive, between the tax-collector and the village trader he soon found himself hopelessly in debt; and, once in debt, his creditor, the village trader, could force him to sell his produce at the latter's own price.

He is an infinitely small unit as compared with the distributors and consumers of his produce who become more highly organised and consolidated each year. The handicaps of the Indian cultivator in particular are heavy indebtedness, low standard of literacy, unsatisfactory communications, absence of properly regulated markets and the lack of combination among producers.[3]

Whether the *ryot* sells to the village trader, or in the nearest market through a broker, he gets cheated; but, since he is frequently indebted to the village trader, he is usually forced to accept the latter's dictated terms. Money-lender and trader are frequently one and the same individual.

The money-lender, who is generally a grain-dealer, cloth-merchant and Jack-of-all-trades, is an indispensable figure in the village economy. Every typical village has at least one usurer who finances the local cultivation and local trade.

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[1] One crore of rupees = approximately £750,000.

[2] It is, of course, not really a surplus. Increased export without increased production per acre or per head has meant decreased consumption of food in India and starvation for millions.

[3] *Royal Commission on Agriculture in India*, Chap. XII.

The collection of Government *kist* in money soon after the harvest compels the small *ryot* to sell his paddy at once instead of waiting for a more favourable time. Whatever may be the cause, the price of paddy is comparatively low at the time of harvest and gets higher as the season proceeds. The necessitous cultivator is thus at a disadvantage in that he cannot afford to wait.[1]

It is the Land Tax which usually first delivers the cultivator into the hands of the money-lender, and, once in the latter's clutches, he can rarely escape. Of course, the cultivators of the soil at all times and in all countries have been in a position where indebtedness was hard to avoid, and doubly so in India, where everything depends on the monsoon.

The loss of a pair of bullocks at a critical stage of cultivation, and the partial failure of a single crop in consequence, may place a cultivator wholly in the power of the money-lender and ultimately involve him in ruin.

When the primary collector who acts also as a money-lender succeeds in getting a cultivator into his grip, he is apt to use his advantage ruthlessly.[2]

The cultivator is forced to sell to the village trader on the latter's terms, even when there is a market nearby.

The rate of interest charged on loans is enormous, 10 per cent. being exceptionally low and 40 per cent. and more quite common.

Whether it be through having had to get assistance after a bad harvest, or because their holdings do not suffice to keep them and pay the rent or the land tax, even in the best of seasons millions of peasants become indebted to the village money-lender. Although the *ryot* nominally retains possession of his holding, he gets into the position of handing over to the money-lender all he produces and receiving back from him a bare minimum of subsistence. He has become, in fact, an agricultural labourer, tilling the land for the benefit of the money-lender and receiving a subsistence wage in kind. The money-lender trader becomes the actual owner of the land, but British law and policy alike prevent the *ryots* being driven right off the land, and large-scale farming

[1] *Economic Life in a Malabar Village*, by S. S. Aiyer, 1925.
[2] *The Royal Commission on Agriculture in India.*

taking the place of the present tiny farms, whilst at the same time it gives protection to the usurers.[1]

The Madras Board of Revenue stated in reference to a proposed Bill to prevent partition or transfer of holdings to two or more persons:

> In so far as the Bill could be applied to poor families it must tend to create a landless proletariat which is always a danger, and doubly so in a country where industries are so little developed that they cannot absorb the surplus agricultural population.[2]

And again:

> It would afford an opportunity to co-sharers to effect collusive registration thereunder for the purpose of defrauding creditors.[3]

Rural indebtedness in India to-day has grown to such enormous proportions that even on a conservative estimate of 10 per cent. interest it must absorb usually twice as much of the peasant's produce as the Land Tax. An enormous money-lender trader class has become the real owner of the soil.

This is how the Royal Commission on Agriculture[4] reports on the situation and how it came about:

> It is sufficient to say that when land had little or no sale value there could not have been much security for credit based on it [i.e. before the days of British rule in India]. The total sum advanced upon this form of security must now be a very large one, and it is to be regretted that no reliable data for an estimate are available. A detailed enquiry carried out in the Punjab in 1920 suggested that the total sum secured on usufructuary mortgages of agricultural land in that province was Rs. 35 crores, which works out at an average of rather less than Rs. 12 for each cultivated

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[1] The growth of law and order has led to competition for land instead of for tenants, whilst the institution of Civil Government tends to act as an engine to deprive the cultivator of his holding and of the profits of cultivation. The verbal contracts of the past and the easy relations with a hardly more literate money-lender have given way to a formal, though one-sided account-keeping which tends to reduce the more important party to slavery or indigence." *Indian Co-operative Studies*, essay on "The Problem of Rural Organisation in India," by B. A. Collins, quoted by Vera Austey in her *Economic Development of India*, Chap. VIII.

[2] *Royal Commission on Agriculture in India*, p. 137.

[3] *Royal Commission on Agriculture in India*, Part IV.

[4] *Royal Commission on Agriculture in India*, p. 418.

acre.[1] Although the average in other provinces may be much lower than this, the gross total must represent a very large sum locked away in this form of investment. When it is remembered that this type of security did not exist to any great extent before the introduction of the British legal system, it becomes possible to realise how rapidly it followed on the settlement of rights in land and the rise in land values which resulted. . . . It may be said with confidence that mortgage credit is rarely used to finance improvements in agricultural land. . . . The mortgager too often declines to the position of a permanent tenant under the mortgagee, paying, not a fair rent, but the utmost the lender can extract or extort. . . .

The rapid development of commerce and trade, the introduction of established law and permanent Civil Courts and the enactment of such measures as the Contract Act have strengthened the position of the money-lender. His capital has been swelled by the accumulating profits of his business, which has been extended by his own thrift and intelligence. . . .

Amongst the comparatively poor, where the habit of saving is not strong, the cultivator has to wait half a year before he receives the return of his labour, and in many areas with one crop only, twelve months between successive receipts.

The crowding of people on the land, the lack of alternative means of securing a living . . . force the cultivator to grow food wherever he can and on whatever terms he can.

It is also admitted in the Report that the mortgagee is reluctant to accept redemption, since no other such good investment is available; and also that the Government has on several occasions refused to attempt wholesale clearance of debt through agricultural banks.

There could be no clearer admission than that made by the Royal Commission on Indian Agriculture of the fact that British domination has meant the introduction of capitalist legal relationships and conceptions of landownership, without the benefits of large-scale modern farming and increased productivity, and without industrial development. The capital accumulated in the hands of the non-cultivating classes is not used to develop agriculture on modern lines, or even to develop rural industries to any considerable extent. The money capital accumulated by means of usury and commerce is hindered from turning into industrial

[1] According to another investigation in the Punjab made by Mr. Darling, 80 per cent. of the cultivators were found to be in debt, the total rural indebtedness amounting to 55 crores of rupees. He estimates that debt for the province as a whole is twelve times the land revenue. The total rural indebtedness of British India has been estimated at 600 crores of rupees.

capital by the maintenance of the feudal structure in India as a direct consequence of British policy.

The pauperised *ryot* remains on the land, tilling it in as primitive a fashion as his forefathers, with the help of bullocks or buffaloes, which, like their masters, grow feebler and feebler from want of nourishment. Capitalist methods of production—large farms, machinery and chemical manures—are not introduced to increase the productiviy of the soil. Even the development of small rural industries such as oil-crushing by machinery only progresses very slowly. Nor does India even manufacture agricultural machinery, tools or implements.

Instead of this, the peasantry find themselves each year more heavily burdened and more starved. Some become landless labourers; but most still maintain a fictitious right to their holdings. Of the 229,000,000 dependent on agriculture in the last Census, 10,000,000 are put down as obtaining income from rent; whilst at the other end of the scale there are now 37,000,000 landless labourers and 6,000,000 actual debt slaves—the *kamia*, who work as labourers for their creditors for nothing but subsistence, the son inheriting the debt. These *kamias* are actual slaves who cannot leave the soil.

Between these wretched beings at the bottom of the scale, and the few remaining independent peasants, is the great mass of indebted peasants, whose position is hardly better than that of the *kamia* and becomes more intolerable from year to year, as holdings are split up further and further and rural indebtedness increases.

Enough has been said in this chapter to explain why India's *per capita* consumption of cotton cloth goes down and not up. In each village a yearly increasing number of *ryots* are trying to live on the same acreage and to pay an increased quantity of produce in the shape of taxation, rent and interest.[1] Their ability to purchase even the cheapest and coarsest cotton clothing is consequently always diminishing. When they do buy, they must perforce buy the cheapest possible stuff available; which to-day means cloth

[1] It has, in fact, been estimated that 80 per cent. of the produce of the soil is paid away by the peasant.

of Indian or Japanese manufacture, or Indian hand-woven cloth. Soon only the landlord, merchant and money-lending classes will be able to afford the British goods imported.

The desperate poverty of the great mass of the Indian people also explains the continued existence of the hand-loom weavers. The living to be obtained from a tiny fragment of land is so scanty that it still pays some weavers to work at the hand-loom. Even though in competition against the machine-made goods and with the yarn he uses subject to an import tax, he can earn only 4 annas or 5 annas a day[1] for tremendously long hours of toil, that sum may equal or surpass what his brother in the village obtains from his holding after paying rent, taxes and interest.

Moreover, many *ryots*, so long as they can obtain cheap machine-spun yarns, will naturally make their own clothing when unable from the produce of their holdings to obtain the money to buy manufactured goods. Another cause to be taken into consideration here is the fact that, with the price of his agricultural produce only a little above pre-War and the price of manufactured cloth more than double pre-War, it clearly paid the *ryot* better to buy cheap Japanese or Indian yarn and make his own clothing rather than sell rice or wheat and go short of food to realise cash to buy cloth.

The disparity in the price level for agricultural produce and manufactured goods dealt with in the last chapter must have helped to keep the hand-weavers alive, and explains the increase in the production of hand-woven cloth since the War.

The facts given in this chapter reveal the existence of an acute agrarian crisis in India—and a crisis which is clearly insoluble under British domination. Not only, indeed, under British domination for only a social revolution which would abolish the property rights of landowner and usurer can solve the land question in India—and a social revolution is as little desired by the leaders of the Indian National Congress as it is desired by Britain. The interests of an enormous class of landowners, merchants and money-lenders, as well as those of British Imperialism, are bound up with the present form of peasant exploitation,

[1] 4½d. or 5d.

and only a minority even of the industrial bourgeoisie wish to end it.

Enough evidence has been given in these chapters to show why it is that under British rule the bulk of the Indian population has become poorer and poorer, and is now "the most chronically underfed, underclothed and disease-ridden people in the world." The evidence here given is of primary importance for an understanding of the position and prospects of the British cotton industry which depends to such an enormous extent on the purchasing capacity of the Indian market. It is clear that an Imperial policy which once benefited British cotton manufacturers and merchants has now already led to the loss of nearly half their trade and has created mass unemployment in Lancashire.

The Lancashire workers to-day are led to believe that the "concessions" made to India in regard to her tariff, etc., are the cause of the decline of British exports to India. They have, of course, no conception of the responsibility of Britain for the poverty of the Indian masses, nor do they understand either the reasons for the bitter hatred of Britain and British goods in India to-day, or the close identity of their interests with those of the peasantry and workers of India. In other words, the true facts of what British Imperialism entails in India, and its effect on their own conditions in England, are never made clear to them.

The truth of Marx's saying that "a people which oppresses another people cannot itself be free" has never been more forcibly demonstrated in history than now in the case of the Lancashire workers. The effect of the Imperialist exploitation of conquered peoples on the position of the workers in the ruling country is to make the latter's emancipation impossible without the cessation of that colonial exploitation. The history of Ancient Imperialism teaches the same lesson. In the Roman Republic the common people lost their long fought for, and newly won, political and economic rights when Rome, in the course of the Punic Wars, entered on her long history of conquest and Imperial rule of subject peoples. Rome became a State of millionaires and paupers, the millionaires drawing enormous wealth from the slave labour of the conquered peoples and the Roman masses reduced to

beggary and "doles." In spite of the infinitely greater development of productive forces in the modern world and the consequent changes in social relationships and political forms, there are certain analogies between the position of the peasantry and workers under ancient and modern Imperialism. There is certainly a very close resemblance between the treatment of the peasantry in India by Britain and the treatment by Rome of the people of the provinces, as I have already pointed out in this chapter. There is an analogy also between the position of the cotton workers to-day competing against low-paid Eastern labour (which economically at least can be regarded as slave labour) and maintained on a "dole" when reduced to unemployment (which dole itself is payable because of the profits of Imperialist exploitation of the colonies), and the position of the Roman farmers and artisans ruined by "cheap corn" from Sicily and Egypt, or by the competition of the labour of the slaves brought to Italy. In the case of the Romans also the "doles" were payable out of the profits of the exploitation of an empire, and were used then as now as a "safeguard against revolution" on the part of the dispossessed of the conquering race.

As in Rome in the second century B.C., so in Britain in the nineteenth century, the workers paved the way for their present condition of poverty and unemployment by giving up the struggle for economic emancipation in order to pick up the crumbs which fell to them from the tribute drawn from the colonies, and in particular from India, by the ruling class. It is true that in the British Empire these revenues which maintain the very fabric of the State—Lord Rothermere is quite correct in describing India as the lynch pin of the Empire—are not called tribute, but merely profit and interest. But the effect is the same and, unless and until an end comes to the British Empire as we know it, more and more workers in cotton and other industries producing primary necessities of life will be thrown on the "dole."

CHAPTER XIV

SUPPLEMENTARY CHAPTER CONCERNING FACTORY CONDITIONS IN INDIA AND THE EFFICIENCY OF THE INDIAN COTTON WORKERS[1]

THE terrible poverty on the land and the lack of alternative employment lead to the fiercest competition in the labour market and reduce the general level of wages to a very low standard. Men, women and children compete with one another for employment on the plantations, in the mines, in the textile mills of Bengal and Bombay, in the Tata iron and steel works at Jamshedpore, and in the few other centres of industry. The majority of these workers are too weak and feeble from generations of chronic starvation and disease to be efficient workers, and the wages paid to them in most occupations are so small that the condition of many of them is only a little better than that of the peasantry. Moreover, there is such competition for work that the "jobbers" who contract with the owners of industrial enterprises for the supply of labour are able to exact huge sums in bribes from the wretched men and women desperately seeking for work —bribes which have to be paid monthly out of the latter's low wages.

[1] The writer of this book, not having had the opportunity to visit India, has not been able to give the same detailed account of Indian as of Japanese conditions. This chapter is, therefore, only a supplementary one, and the facts given in it are necessarily incomplete. It is only intended to give a general conception of the conditions prevailing from such material as is available. For such information as is easily accessible the reader is referred to Mr. A. Pearse's *Report on the Cotton Industry of India*, published by the International Cotton Federation (which unfortunately did not appear until after the rest of this book was written), to the publications of the Bombay Labour Office and to the *Indian Tariff Board Report* of 1927. Information can also frequently be obtained from the Indian Press. Concerning housing conditions in Bombay, a graphic description of the terrible living conditions of the factory workers is to be obtained from Mr. Burnett Hurst's *Labour and Housing in Bombay*, 1925.

The evidence presented to the Whitley Commission on Indian Labour, when published, will provide more material than has yet been made available concerning the conditions of the Indian factory workers.

There is also the short report made by the Rt. Hon. Tom Shaw to the International Federation of Textile Workers on the Indian cotton industry, but this gives very little information about conditions and throws no light on the competitive position as between the Indian and British mills.

Both the lack of elementary education and the absence of Labour Exchanges, as also the system which still prevails in most factories of paying wages a month or more in arrears, preserve this system of obtaining labour and have created a class of labour contractors who live on usury. The factory workers being paid a month or six weeks in arrears and being usually absolutely destitute when they start work, obtain food supplies from the "jobber" or the *bania* (money-lender) to keep them for the first few weeks. The enormous interest paid for this accommodation, plus the bribe or commission paid to the jobber for the privilege of getting work, keeps the worker in debt slavery to the jobber, who allows the former just enough food to live and money for rent, but keeps him permanently in his debt.

So great is the power of the *bania* that even those workers who are free of debt buy their food from him even when they can get supplies cheaper at the factory shop, for fear of the day which may come when they will have no work and will need to borrow money from the *bania*.[1]

The system is stated to suit the mill-owners who purposely pay wages in arrears "because if full settlement were made immediately after wages fell due, the workers would have a tendency to change mills frequently."[1]

In other words, the system is devised to prevent the workers freely selling their labour power for the best price available.

In considering the wages paid in India, low as they are, it must therefore be borne in mind that the workers actually receive for their own use very much less than even the small sums stated, on account of the payments almost all of them have to make to jobber and to money-lender, who may or may not be the same individual. It is, of course, also true that the wages received are worth more than the same sum of money in England.

The worst paid workers of all are the agricultural labourers, who receive on an average a wage of only 12s. a month. Next to these come the workers on the tea plantations of Assam, which are most of them British owned. Here the average wage, according to the

[1] Oral evidence given before the Royal Commission on Labour in India by a representative of the Ahmedabad Mill-owners' Association.

highest computation, is about 20s. a month for men and 16s. 6d. for women. Nearly half the plantation workers are women, and large numbers of children are also employed at a wage of about 10s. 6d. a month. Hours worked on the plantations are practically unlimited.

In the mines, also mainly run for the profit of British capital, women work underground for 9d. a day and men for 1s. 6d. or less. The men hew and women haul the coal in place of pit ponies. There are 49,572 women working in the Indian mines, 28,408 of them underground, although underground work for women is now being slowly brought to an end.

In the jute mills of Bengal, which have paid such fabulous profits to British shareholders,[1] the average wage earned by men is about 22s. a month (weeks of five days) according to the latest figures. Women's wages are much lower and many women and children are employed. Hours are ten a day.

The ruin brought upon Dundee by the competition of this low paid labour is an omen of the possible future of the Lancashire cotton industry.

In the cotton industry wages vary very greatly as between Bombay and the newer centres. Even in Bombay City, where wages are the highest in the Indian cotton industry, men earn on an average 53s. a month and women 26s. In Ahmedabad, the second most important centre of the industry and the centre where it has recently been expanding most rapidly and competing successfully against the older mills of Bombay City, the average earnings in the best mills are 49s. 6d. for men and 27s. for women, but rents and the cost of living in general are lower than in Bombay. In Sholapur (also in the Bombay Presidency) men only receive on an average 33s. and women 13s., whilst in centres outside the Bombay Presidency, notably in South India, such figures of earnings as are available show them to be little more than half

[1] According to the report made by Tom Johnston, M.P., and J. F. Sime for the Dundee Jute and Flax Workers' Union, the dividends distributed from 1916 to 1924 were in many cases over 100 per cent. annually, and the average dividend for all the companies over a period of ten years was 90 per cent. This report also shows that 40 per cent. of the capital in the Bengal jute industry is British and that the effective management of the whole industry is British.

the Bombay figure. About three-quarters of the workers employed are men, in contrast to Japan and China, where 75 to 80 per cent. are women. In Bombay, in 1927, only 0·02 per cent. of the operatives were children, while in Ahmedabad the figure was 2·01 per cent. The following are the average figures for earnings for the cotton industry in the Bombay Presidency, as given in the Indian Tariff Board Report (1927). Average figures for all workers in other centres are not available, but 85 per cent. of Indian cotton spinning and weaving machinery is in the Bombay Presidency.

MONTHLY EARNINGS PER HEAD*

Centre	May 1914 Rs. A. P.	May 1921 Rs. A. P.	August 1923 Rs. A. P.	Percentage Increase in 1923 over 1914
Bombay City—				
Men	18 6 8	34 15 2	35 10 7	—
Women	10 0 10	17 6 6	17 5 5	—
Big lads and children†	9 6 7	18 0 10	17 14 0	—
All workers	16 6 3	30 10 0	30 10 1	86·9
Ahmedabad—				
Men	15 7 1	34 2 11	33 0 9	—
Women	9 15 11	19 9 4	18 2 7	—
Big lads and children†	7 2 3	18 6 6	17 3 11	—
All workers	13 9 9	30 2 11	29 7 0	116·3
Sholapur—				
Men	14 3 11	25 13 9	22 3 10	—
Women	5 13 11	10 15 9	8 9 7	—
Big lads and children†	6 9 6	14 12 0	12 7 11	—
All workers	10 9 4	20 9 4	17 10 6	66·8
Baroda State—				
Men	13 8 7	28 12 4	24 0 1	—
Women	6 13 4	16 6 11	14 14 11	—
Big lads and children†	7 3 8	14 7 4	11 7 3	—
All workers	11 14 1	25 1 10	22 0 8	85·5
Other centres—				
Men	13 8 7	28 12 4	24 7 4	—
Women	6 13 4	16 6 11	11 14 7	—
Big lads and children†	7 3 8	14 7 4	12 8 8	—
All workers	11 14 1	25 1 10	21 6 5	80·1

* One rupee = 1s. 6d. in 1923; 16 annas in a rupee and 12 pies in 1 anna.
† Counting two half-timers as one full-timer.

No complete figures are available for a later date than 1923, but the figures of average earnings in Bombay, Ahmedabad and Sholapur

published in the *Bombay Labour Gazette* of May 1930 show the average monthly earnings of all adult workers as Rs. 32.14.1, which indicates that there has been no substantial change since 1923. The average monthly earnings for workers who attended without any absenteeism were Rs. 40.4.0 for men and Rs. 24.6.1 for women. Average daily earnings are given as follows:

	Men	Women	Children	All Adults
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Bombay	1 8 0	0 11 11	—	1 5 3
Ahmedabad ..	1 6 8	0 12 6	0 5 6	1 4 8
Sholapur	1 0 5	0 6 8	0 4 0	0 14 8

It will be noted that there is a fairly wide margin between average earnings and average full-time earnings. The majority of the workers must be absent for a day or two at least each month. It is clear from the figures given above that the average weekly earnings for a full week's work of six days are only 13s. 6d. for men and 6s. 9d. for women, even in Bombay City, which is the most highly paid centre. In Sholapur they are only 9s. for men and 3s. 9d. for women.

It is to be noted that the figures for Ahmedabad, not being calculated on returns from all the mills but only from those of representative mills, show average earnings higher than the real figure.[1] There is accordingly a somewhat greater difference between the wages paid in the two centres than appears in the table.

As already pointed out, almost all the workers are forced to pay a part of their wages over to the jobber or foreman, or are in debt to the *bania*, so the actual wages most of them have to spend are a good deal less than the above.

Although wages are highest in Bombay City, so is the cost of living, and the housing conditions there are perhaps the worst in the world.

General figures for all classes of workers are apt to be misleading, and it is far more satisfactory to consider the wages paid to each class of worker. These are available for certain main classes of workers, not only for the Bombay Presidency, but also for the

[1] See *Tariff Board Report*, Vol. I, p. 112.

newer centres elsewhere. Unfortunately, where they are available, it is not known how many spindles or looms or other machines are attended to by one worker. In considering the following figures, however, it may be borne in mind that a weaver usually attends to two looms and only very rarely to three, and that the usual number of spindles per operative is stated to be 180.[1] One man attends to one roving frame. It should also be noted that about three-quarters or more of the workers are men and that even in ring-spinning men attend to the frames.

The figures are taken from a representative enterprise, except in the case of the Bombay Presidency, where they are average ones for all the mills.

	Bombay			Ahmedabad			Cawnpore		
Spinning—	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Blow-room tenters	29	0	0	23	10	0	16	14	6
Card-room tenters	27	4	0	24	7	6	23	12	0
Frame tenters	37	12	0	29	6	0	27	13	0
Ring-frame side boys ..	29	12	0	26	7	6	15	10	0
Weaving—									
Winders	21	4	0	23	1	0	27	13	0
Weavers	47	12	0	47	15	9	32	7	0
Folders	29	0	0	25	11	3	14	6	0

	Delhi			Nagpur			Madras		
Spinning—	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Blow-room tenters	19	0	0	24	0	0	25	14	6
Card-room tenters	14	0	0	24	0	0	23	3	3
Frame tenters	25	0	0	30	12	0	25	2	0
Ring-frame side boys ..	20	0	0	24	0	0	14	10	8*
							17	5	0†
Weaving—									
Winders	25	0	0	18	8	0	21	8	0
Weavers	35	0	0	41	0	0	34	7	0
Folders	20	0	0	24	0	0	26	3	5

* For minding 180 spindles.
† For minding 240 spindles.

These figures show that wages in Ahmedabad are a good deal lower in spinning than those in Bombay, although the previous general figures for all workers given showed little difference. It must be the fact that weavers are paid the same in each centre and that a larger amount of weaving relative to spinning is done

[1] See *Bombay Labour Gazette*, September 1925.

in Ahmedabad than in Bombay, which brings up the general figure for all workers in Ahmedabad.

The weavers' wages are a good deal higher than those of the other workers in every centre, yet in Madras and some of the up-country centres in the Bombay Presidency a weaver only minds one loom.[1] Since the publication of the *Indian Tariff Report* in 1927 the Bombay City mill-owners have been trying to induce the weavers to attend to three looms instead of two. On the spinning side also they have been trying to increase the efficiency of the workers. It was in fact the efforts of the Bombay mill-owners thus to "rationalise" their industry in accordance with the recommendations of the Tariff Board which occasioned the big strike of 1928. At present they are again endeavouring, against the opposition of the workers, to increase the number of machines attended to and to speed up production, this occasioning much resistance and frequent strikes.

It is stated that the mill-owners in Ahmedabad have been in a more favourable position than in Bombay because the influence of Gandhi in the former centre has led to the acceptance by the workers of compulsory arbitration in labour disputes. The Arbitration Board came into existence in 1920. According to Mr. Pearse's *Report* it consists of Mr. M. K. Gandhi, nominated by the operatives, and a past president of the Mill-owners' Association, nominated by the masters. "First the mill authorities try to settle the dispute, then the union official and the mill authority; if unsuccessful the union and mill-owners meet and, if no solution is arrived at, the above two arbitrators try to settle, and, if they do not succeed, they appoint an umpire, whose decision is final and *must* be accepted by both parties." Elsewhere, in summarising the advantages enjoyed by the Ahmedabad mills over those of Bombay, he writes: "The existence of a labour arbitration board has prevented in Ahmedabad strikes of a lengthy period, whilst in Bombay two strikes of six months during the past two years have crippled the industry to the advantage of Ahmedabad and other up-country mills."

[1] In Sholapur the monthly earnings of a full-time worker on one loom are Rs. 23.5.3, whilst the average monthly earnings are Rs. 20.0.11.

The way in which the Ahmedabad Union has assisted the employers and the attitude of severe disapproval towards strike action taken up by the Union officials, are further witnessed to by the Rt. Hon. Tom Shaw in his *Report* on the conditions of the Indian textile workers. He writes:

During 1925 there were thirty-three strikes in Ahmedabad, but not one of them was authorised by the Union. The following quotation from the report is enlightening: "The strikes in Union mills were all unauthorised strikes. We can understand many of them in the light of desperate action to which workpeople were driven in consequence of inordinate delay in the settlement of complaints. But for some of these there was not the shadow of an excuse, and they could only be due either to sheer senselessness or wanton mischief. Whatever the cause, these strikes are a matter for deep regret and deserve severe condemnation."

The Union relies apparently absolutely on arrangements between the employers and its officials, and there is absolutely no provision made in the rules for anything in the shape of a definite weekly or other payment in the case of strikes.

In striking contrast to the Ahmedabad union is the recently formed *Girni Kamgar* (Red Flag) Union of Bombay, which took the lead in the big strike of six months' duration in 1928. In that year it gained 60,000 members. In Bombay there has been strike upon strike since 1924, when the War bonus was discontinued. In 1925 the workers by a prolonged strike resisted the attempt of the Bombay mill-owners to reduce their wages, and the strike resulted in the removal of the Excise duties by the Government and the maintenance of the previous rate of wages.

The big strike of six months' duration in 1928 was the result of the employers' efforts to increase the intensity of labour in the Bombay mills in accordance with the recommendations of the *Tariff Board Report*. The mill-owners were seeking to maintain their profits in spite of the inefficient manner in which most of the mills are run and the consequent loss of trade to the up-country mills and to Japan. Although the workers' organisations to-day are considerably weakened through the prevalence of unemployment and as a consequence of divided policies, the Bombay mill-owners have not yet been greatly successful in their efforts to increase the number of machines attended to and to introduce a uniform list of wages for all mills which they are desirous of doing.

The Bombay cotton workers have shown in the big strikes of recent years an extraordinary unity and persistence, leading them to stand out for very long periods in spite of their extreme poverty and absence of any trade-union pay during strikes, and frequently in spite of the opposition of their trade-union leaders.

The following table shows the number of disputes which have occurred since 1921 in the Bombay Presidency and the numbers affected:

Locality	Total Number of Disputes, April 1921 to June 1929	Total Number of Workers Affected	Total Number of Working Days Lost
Bombay	401	1,077,927	49,297,817
Ahmedabad	221	135,200	2,605,087
Sholapur	10	39,484	1,214,434
Viramgam	8	3,705	32,854
Broach	22	8,966	85,022
Karachi	14	9,893	399,554
Jalgaon	7	4,445	56,990
Surat	12	4,840	35,254
Poona	11	3,763	40,903
Rest of Presidency ..	32	21,288	181,399
Total	738	1,309,511	53,949,314

More than half the disputes occurring were in Bombay City and 30 per cent. in Ahmedabad.

Mr. Pearse, in his *Report on the Cotton Industry of India*, admits that better working conditions have been obtained in Bombay during the last ten years through trade-union organisation, and he reports on the strike of 1928 as resulting in concessions to the workers.

Wages, Hours and Efficiency

Not having been able to study conditions in the Indian industry on the spot, it has not been possible to form any exact estimate of the differences in labour costs between Lancashire, India, Japan and China. To do this one must obtain figures of output and more detailed information as to the number of operatives employed on a given number of machines and the exact wages paid to them.

On the data available, however, it would seem that the Indian cotton worker in the main centres of the industry, viz. in Bombay City and Ahmedabad, usually attends to about the same number of spindles and looms as the Chinese, but receives a higher wage and works ten hours instead of eleven or twelve. His daily wage appears to be some 70 per cent. or so higher than that of the Chinese male worker, whilst the difference between his wage and that of the Chinese women operatives on the same work is even greater. But in the other centres of the Indian industry the difference is very much less.

India is the one Far Eastern cotton manufacturing country where the bulk of the labour employed is male, and this in part accounts for the fact that the average wages paid are higher than in China.

Mr. A. Pearse, in his *Report*, notes the social customs which render it more difficult to obtain female labour than male, and says that the women workers, where they are employed, as in the reeling-rooms in Bombay, "work at least twice as hard as the male operatives and for far less money." Thus, bad as are the conditions in Indian factories, the horrors of the Japanese system of employing indentured female labour have at least been avoided.

Hours of work in factories for all adults are limited to sixty a week in India since 1922, so that in this respect conditions according to the law are somewhat better than in Japan.

As regards child labour, the Act of 1922 prohibits the employment of children under twelve years in factories. Children aged twelve to fifteen can be employed for a maximum of six hours, but it is recognised that children frequently work two shifts in different factories in spite of the law. However, in Bombay itself child labour has almost disappeared in the mills, but it persists elsewhere.

As regards actual legislation concerning hours of work Indian conditions are accordingly somewhat better than Japanese, even since the prohibition of late night work for women in Japan since July 1929. In other respects than hours, conditions in India are worse. But although Japanese wages, in the big spinning-mills at least, are higher than Indian wages, and housing conditions and

sanitation very much better, labour is very much more intense and labour costs much lower.

Comparing the position in the three Eastern countries and in Lancashire as regards number of spindles attended to on ring frames, the following result is obtained:

Average number of spindles per tenter on coarse counts.—Japan, 300 to 400; China, 144 to 210; India, 180; England, 540 to 600.

This is, of course, by no means an exact comparison, since the precise counts spun are not stated, but the figures given convey some idea of the difference. Whereas a competent tenter in Japan attends to two sides and in England to three, in China and India only one side to the ring frame is usually attended to by one worker. (The number of spindles on each side of the frame varies slightly according to the make of the machine, but runs from somewhat under to somewhat over 200 spindles.)

In India, in a few of the mills, tenters can look after two sides of a ring frame, though this is not at all usual. The usual number of operatives per thousand spindles in India is 33, according to the *Bombay Labour Gazette*.[1]

As already shown in Chapter VIII, the output per spindle per hour is higher in Japan than in England, but in India and China it is lower. Comparing the figures given for Japan and Lancashire in Chapter VIII with such figures as are given in Mr. Pearse's *Report on India*, the following comparison can be made:

Production in ten hours, 20's warp yarn.—Japan, 8 oz.; England, 6·66 oz.; India, 5·75 oz.

Yet in certain mills in India an output equivalent to the Japanese figure is shown to have been obtained. For instance, in one newly equipped mill with individually driven frames and tape drive a production of over 8 oz. per ten hours on 20's warp yarn is stated to have been obtained, this figure being equivalent to the Japanese and above the English figure. Here the individual

[1] September 1926. This figure must presumably include reeling or winding and warping. In any case, in both spinning and weaving absenteeism has to be allowed for. The figure for absenteeism in Bombay is given as high as 11 per cent. in June 1926.

drive allowed of a variation in speed from 6,000 revolutions per minute at starting to 11,000 after fifteen minutes.

In another mill reported on a production of 6·3 oz. per spindle in ten hours was usual on 20's warp yarn. In another mill a production of 2·71 oz. per ten hours of counts 40's was obtained, this being almost up to the Japanese figure and above the English one.

Such production figures are, however, clearly quite exceptional, and only found in a very few mills with very new equipment and exceptionally well run. They should not be compared with an average figure for Lancashire calculated on the output of mills with old machinery. Nevertheless, these exceptional Indian examples show what results can be obtained and what efficiency is possible in India in the future. It seems that the best type of Indian spinning-mill can obtain production results equivalent to or slightly better than the normal figure in Japan, but still employs far more workers than the Japanese mill. Yet even in this respect a "rationalised" Indian mill is not far from the normal standard of Japan, since a tenter on 20's in the former can attend to two sides of a frame, i.e. to 400 or nearly 400 spindles.

Mr. Pearse, in the *Report* already referred to, calculated that the labour cost of producing a pound of yarn is roughly speaking a halfpenny less in India than in Lancashire. He, however, refers only to coarse counts, his calculation being based on the figures for one Bombay mill spinning yarn of counts 13's to 17's and an Oldham mill on similar counts. He finds the overhead costs higher than in Lancashire.

In weaving the following comparison can be made:

AVERAGE NUMBER OF LOOMS PER WEAVER

Japan	5·5 if apprentices are not included (looms with warp-stop motion)
England ..	4 (but 3·6 if average for whole industry including finest goods is taken, according to the last Census of production)
China	2 (average in Shanghai, but some work 3 in Japanese-owned mills)
India	2 (in Bombay and Ahmedabad. Only 1 in some centres, but 3 in a very few mills)

Average number of operatives per 100 looms in India is stated to be 87.*

* *Bombay Labour Gazette*, September 1926.

It seems certain that, given somewhat better conditions of labour, the Indian standard of efficiency in spinning, though not perhaps in weaving, could be brought near to the present Japanese standard,[1] but the giving of such improved conditions, and the provision of the welfare work and educational facilities necessary to improve the efficiency of Indian labour, must depend upon political developments in India. The whole question is bound up with the matters discussed in the three preceding chapters, since in order to "rationalise" their industry on the Japanese model the Indian employers must accumulate greater resources and must be enabled to receive a greater amount of financial assistance from the banks or merchant houses than they do at present. Furthermore, the industrial enterprises must be rendered independent of the managing agency firms. Until this becomes possible the more primitive forms of labour exploitation now prevailing in India are bound to continue—long hours, low wages, poor working conditions, old machinery and low labour productivity. With rare exceptions only where the workers have been able to combine to force the granting of better conditions by the employers has there been some slight improvement, and there has been no general acceptance among the mill-owners of the idea that they could lower labour costs through "welfare work" on the Japanese model. The higher rates of wages prevailing in Bombay Island, and the fact that there has been no wage reduction there since 1921, is directly due to the strength and militancy of the trade unions.

Where no strong labour organisation exists wages are very much lower. At present the Bombay mill-owners hope to be able to reduce their labour costs on account of the weakening of the Trade Unions, and the disunity among the workers brought about by the different policies adopted by the "moderate" and the "revolutionary" Trade Unions. The weakening of the latter trade unions, and in particular the partial collapse and split of the *Girni Khamgar* Union, have been due to the severe repressive measures of the Government, which arrested eight textile Trade-Union leaders early in 1929. These leaders are still on trial at Meerut two years after their arrest.

[1] That standard itself is, however, continually being improved.

Mr. Pearse found Indian labour to be very inefficient and wasteful, and he puts this down as mainly due to bad feeding and bad housing conditions, lack of elementary education and the absence of any welfare work undertaken by the mill-owners (with very rare exceptions) as contrasted with that which he admires so much in Japan. It is perhaps somewhat strange that, in spite of the fact that he shows the conditions of the Indian cotton workers to be extremely bad and the methods of the mill-owners wasteful and inefficient, he nevertheless attributes the discontent of the workers to "agitation." He descants upon the "untrained brains" of the workers, "easily misled by political agitators with consequence of frequent strikes and political upheavals." For this state of affairs he sees the remedy in elementary education, which he presumes would render the Indian workers more docile and amenable to discipline and less prone to strike to remedy their grievances.

General Conditions of the Cotton Workers.—The picture of factory conditions in India as represented in the accounts of various observers, and also as given in evidence to the Whiteley Commission,[1] shows a badly paid, wretchedly housed and ill-fed cotton worker permanently indebted, and without hope or incentive to give of his best. The climate of Bombay no doubt further aggravates the position, and in part accounts for the fact that labour costs in Bombay are evidently higher than in Shanghai. Only a very few mills have installed air-cooling plants, which are absolutely essential if the productivity of labour is to be increased.

As on the land, so in the factories in India, debt is a permanent condition for most workers. The fact that the diet of the Indian cotton worker is utterly inadequate to maintain his strength is due partly to the low wages received and partly to the enormous interest payments he has to make on debts inevitably incurred. Wages are paid a month or six weeks in arrears (*vide* Mr. Pearse's *Report* and also the evidence presented to the Whiteley Commission). The mills even charge 9 per cent. interest if they give short advances up to the next pay day on wages already earned, but usually advances can only be obtained from money-lenders, the

[1] This Commission had not reported at the time of writing, but some of the evidence given was available.

rate of interest charged being one anna per rupee, or even sometimes two for the period of four to six weeks. This works out at from 75 to 150 per cent. per annum.

The fact that a man must work at least a month before receiving any wages means that he starts in debt and can rarely free himself from it, since the interest rates charged are so enormous. The evidence shows that, though there may be also a good deal of wasteful expenditure on drink and at marriage and other family festivities, the actual fact is that the budget of the worker is such as to leave no margin for emergencies, whilst the evil system of engaging labour through jobbers leads to bribery and indebtedness, which necessarily bring the worker's income far below the amount he is supposed to receive according to official statistics and employers' returns. In fact, it is clear that the worker's position is frequently so hopeless that he sinks into a state where there is no incentive to earn more by increased efficiency, since anything extra he earns will anyhow be taken from him by the money-lender, who allows him out of his earnings just enough for food to subsist and money for rent.

According to an enquiry conducted by the Bombay Labour Office for the Presidency, 47 per cent. of the families considered were indebted, and the extent of indebtedness was on an average equivalent to two and a half months' earnings. The workers frequently did not know what their interest charges were. In Ahmedabad and Sholapur an even higher percentage of the workers were found to be indebted in 1926, viz. 69 per cent. and 63 per cent. respectively, but the interest rates appeared to be a little lower than in Bombay, where 75 to 150 per cent. per annum was normal.

Not only are the workers' earnings enormously reduced by interest payments on debts, but the system of fining prevalent in all the mills further reduces them to a considerable extent. The system of making deductions from wages for fines is general in the Bombay Presidency. Fines are imposed for insubordination, disobedience, breaches of discipline, bad or negligent work or damage to machinery. It is usual to hand over to the worker any material spoilt or rendered defective in process of manufacture,

deducting from his wages the selling price of the perfect article. That is to say, the fine amounts, not to the cost of production of the damaged article, but to the full price at which it would be sold if undamaged. It can readily be seen that this practice, carried out extensively as it is, amounts to truck payment and can very easily be abused.

The housing conditions for the factory workers of Bombay especially are terrible beyond description. Seventy per cent. of the tenements in the City are one-roomed.[1] According to the investigations of the Bombay Labour Office, 97 per cent. of the working classes, with their families, live in one-roomed tenements, the average area per room being 103·6 sq. feet. Sanitary arrangements are of the most primitive kind, and foreign visitors bear witness to the terrible stench and the prevalence of disease due to overcrowding, bad sanitation and underfeeding. The infant mortality rate in Bombay is the highest in the world, viz. 300 to 400 per thousand—but this is the lowest estimate, and the rate in the tenements has been estimated as high as 600 per thousand.

In Ahmedabad conditions are somewhat better, only 75 per cent. of the workers living in one room, whilst in Sholapur only 33 per cent. live in such conditions.

In many of the Bombay tenements there are more than one family to a room. Cases are reported of six families living in a room 15 feet by 12 feet. The lack of water (observers have stated that in some places 100 families share one tap) and of latrines and means for the disposal of garbage makes the living conditions indescribably terrible.

The concrete tenements built by the Government of Bombay are to a large extent unoccupied on account of the high rents demanded—from five to nine rupees per room per month. Obviously a worker trying to keep his family and pay heavy interest on debt out of a wage of about thirty rupees a month cannot pay so high a rent. The overcrowding in Bombay is due to low wages and indebtedness.

Some workers remit money home to their villages, but this

[1] 1921 Census.

applies in the main to single men and not to those permanently settled with their families in the city, though even some of these remit money to their relations in the village.

This chapter is only intended as a sketch of the conditions of the Indian factory workers, and not by any means as a full and exhaustive account, since the writer has no original matter on the subject obtained through personal investigation, and the general facts are fairly well known from the reports of various observers and from Government investigations.

The few details of wages, production and number of machines attended to at least show roughly where India stands in comparison with Japan and Lancashire, although it has not been possible to make any exact comparison of production costs such as has been made in Chapter VIII in the case of Lancashire and Japan.

In India, Lancashire competes against extremely poorly paid, undernourished and relatively inefficient labour which, although it cannot produce the better-class goods made in England, can produce the coarser goods of mass consumption at a cheaper cost. It is probable that in weaving labour costs in most Indian mills are as high as in Lancashire, but in spinning coarse and even medium counts they are clearly lower, though not so low as in Japan or China.

There is also little doubt that any successful reduction of costs in Lancashire through rationalisation, leading to a considerable increase in exports to India of those goods produced by the Indian mills, would immediately rouse a vehement demand for increased protection by the Indian mill-owners—a demand which the Imperial Government would be unable to refuse.

The close connection between the over-pressure on the land in India, dealt with in the preceding chapter, and the low wages paid to industrial workers is obvious. Thus the extreme poverty of the Indian people affects Lancashire not only in so far as the consumption of British cloth is concerned, but also through the competition of the cheap labour employed in the Indian mills. Inefficient as that labour is, it nevertheless constitutes almost as great a menace to the standard of life of the Lancashire workers as the girl labour of Japan.

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