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GOVERNMENT OF INDIA

TARIFF COMMISSION

REPORT

ON THE

CONTINUANCE OF PROTECTION

TO THE

COTTON TEXTILE MACHINERY (SPINNING RING FRAMES, SPINDLES, SPINNING RINGS, FLUTED ROLLERS, TIN ROLLERS AND LOOMS) INDUSTRY

BOMBAY,

1954

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PERSONNEL OF THE COMMISSION

SHRI M. D. BHAT ..... *Chairman.*

SHRI B. N. ADARKAR, M.A. (CANTAB.) ..... *Member.*

SHRI B. N. DAS GUPTA,
B.A., A.S.A.A. (LONDON), F.C.A. ..... *Member.*

SHRI C. RAMASUBBAN ..... *Member.*

DR. D. K. MALHOTRA, M.A., Ph.D. ..... *Secretary.*

Personnel of the panel which heard the case

SHRI M. D. BHAT ..... *Chairman.*

SHRI B. N. ADARKAR ..... *Member.*

SHRI B. N. DAS GUPTA ..... *Member.*

GOVERNMENT OF INDIA

MINISTRY OF COMMERCE & INDUSTRY

RESOLUTION

TARIFFS

New Delhi, the 31st December 1954

No. 36(6)T.B./53.—The Tariff Commission has submitted its Report on the continuance of protection to the Cotton Textile Machinery Industry (*viz.*, spinning ring frames, spindles, spinning rings, fluted rollers, tin rollers, and looms). Its recommendations are as follows:—

(1) The existing protective duty of 10½ per cent. *ad valorem* on spinning ring frames, spinning ring spindles, spinning rings and fluted rollers should be continued upto 31st December, 1957. Parts of spinning ring frames should be subject to the same rate of duty as at present. The existing protective duty of 10½ per cent. *ad valorem* on plain looms also should be continued and made applicable to looms of all kinds and parts thereof for the same period. Tin rollers no longer require protection.

(2) Fluted rollers and plain looms should be excluded from the Tariff Item 72(34) and two new tariff items "fluted rollers of all kinds" and "looms of all kinds and parts thereof" should be introduced with a protective duty of 10½ per cent. *ad valorem* in each case.

(3) The cotton textile machinery industry deserves high priority in the allocation of materials. The industry should be given all possible assistance in obtaining adequate supplies of materials required by it and especially in building up reasonable stocks of graded pig iron and mild steel.

(4) The Collectors of Customs and the Director General of Commercial Intelligence and Statistics should, wherever practicable, record imports of spinning ring frames, spinning ring spindles, spinning rings, fluted rollers, tin rollers and plain and automatic looms, in numbers as well as in value.

(5) While imports of textile machinery should be carefully regulated in order to secure a fuller utilisation of domestic capacity, the mill industry should be allowed reasonable freedom to experiment with such improved types of machinery as are not yet manufactured in the country.

(6) Government should give a clear indication to the textile industry as early as possible of their policy regarding the installation of automatic looms, since the present uncertainty is hampering the development of this section of textile machinery industry.

(7) Government should make suitable arrangements as early as possible to obtain expert technical advice on the quality of textile machinery which the mill industry is required to purchase from indigenous sources by reason of import control. The voluntary co-operation of the textile industry is essential for the healthy growth of the textile machinery industry and this cannot be ensured unless adequate arrangements exist for an impartial investigation of all complaints from the consuming industry about the quality of the indigenous products. A special officer for cotton textile machinery should be appointed in the Ministry of Commerce and Industry to keep a continuous watch over the progress of the cotton textile machinery industry as a whole and to recommend suitable measures to promote its development on sound lines.

(8) The Indian Standards Institution should expedite the formulation of standard specifications for the various components of cotton textile machinery manufactured in the country.

2. Government accept recommendations (1), (2), (3), (4) and (8) and will take suitable steps to implement them.

3. As regards recommendation (5), Government's import policy is flexible enough to permit imports of certain types of machinery which are not manufactured in India.

4. Regarding Recommendation 6, Government's policy has been defined in the Resolution passed in the Lok Sabha on the 10th September, 1954, namely, that rationalisation of the Textile Industry where it is necessary in the country's interest must be encouraged, but the implementation of such schemes should be so regulated as to cause the least amount of displacement of labour in the industry, providing reasonable facilities to the employment of such displaced labour.

Applications for replacement of plain looms with automatic looms would be considered on merits in each case by Government having regard to the principles laid down in the Lok Sabha Resolution.

5. Government have taken note of recommendation 7 and propose to pursue the point raised therein further.

ORDER

Ordered that a copy of this Resolution be communicated to all concerned and it be published in the Gazette of India.

K. B. LALL, Jt Secy.

GOVERNMENT OF INDIA

MINISTRY OF COMMERCE & INDUSTRY

NOTIFICATION

TARIFFS

New Delhi, the 31st December 1954

No. 36(6)T.B./53.—In exercise of the powers conferred by sub-section (*1*) of section 3A of the Indian Tariff Act, 1934 (XXXII of 1934), the Central Government hereby directs that with effect from the 1st January, 1955, there shall be levied on the articles specified in column (*1*) of the Table hereto annexed when imported into India the duty of customs specified in the entry in column (*2*) thereof.

THE TABLE

Name of articles	Amount of customs duty [inclusive of the duty chargeable under sub-section (1) of section 2 of the Indian Tariff Act, 1934 and any additional duty leviable under any other law for the time being in force].
(1)	(2)
The following cotion textile machinery and apparatus and parts thereof (other than tin rollers), by whatever power operated, namely,—	10½ per cent. *ad valorem*.
(a) spinning ring frames, spinning ring spindles and spinning rings;	
(b) fluted rollers of all kinds;	
(c) looms of all kinds.	

सत्यमेव जयते

K. B. LALL, Jt. Secy.

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APPENDICES

REPORT ON THE CONTINUANCE OF PROTECTION TO THE COTTON TEXTILE MACHINERY INDUSTRY.

Previous Tariff inquiries

1. The claim of the cotton textile machinery (ring frames, spinning rings and spindles) industry to protection or assistance was first referred to the interim Tariff Board by the Government of India in the Department of Commerce by their Resolution No. 218-T(55)/45, dated 13th July, 1946. The Board held an inquiry and submitted its report in April, 1947 in which it stated that it was not possible to make a reasonable estimate of costs, because the industry had not then attained a sufficient volume of production, and that a fresh inquiry into the industry should be held in 1948. The Government of India in the Department of Commerce by their Resolution No. 218-T/B(2)/47, dated 9th August, 1947 accepted this recommendation. On 26th June, 1948, Texmaco (Gwalior) Ltd., submitted a representation to the Ministry of Commerce requesting that imports of foreign looms and loom parts, which they had been manufacturing, should be severely restricted and that their case should be referred to the Tariff Board for investigation. After a preliminary examination of this representation, the Government of India in the Ministry of Commerce, by their letter No. 2-T(5)/48, dated 24th December, 1948 requested the Tariff Board to inquire into the question of protection to looms and parts along with the main inquiry into the question of protection or assistance to ring frames, spinning rings and spindles. The Tariff Board held an inquiry and in the report submitted to Government in October, 1949, recommended *inter alia* that the cotton textile machinery industry consisting of the manufacture of ring frames, spinning rings, spindles and plain looms should be protected for a period of three years, *i.e.*, upto 31st March, 1953 and that a protective duty of 10 per cent. *ad valorem* should be imposed on the imports of these items. The Government of India in the Ministry of Commerce by their Resolution No. 36(5)TB/49, dated 17th December, 1949 accepted this recommendation and protection to the industry came into force from 17th December, 1949. Under the Finance Act of 1951, a revenue surcharge of 5 per cent., of the duty was imposed on cotton textile machinery along with several other items of the import tariff. The rates of duties required to protect individual parts of ring frames, other than spindles and rings, were not considered by the Board; but in order that the protective duty on complete ring frames might be fully effective, Government found it necessary to extend the application of that duty to all parts of ring frames. Fluted rollers and tin rollers thus became subject to a protective duty of 10 per cent. *ad valorem*. The question of granting substantive protection to the fluted and tin rollers section of the industry, independently of the protection granted in respect of complete ring frames, was referred to the Tariff Board for investigation by the Government of India in the Ministry of Commerce, by their Resolution No. 1-T.A.(60)/49, dated 4th January, 1950. Accordingly, the Board held an inquiry into this section of the industry in February, 1951 and submitted a report to Government in May, 1951. The Board came to the conclusion that the existing duty of 10½ per cent. *ad valorem* (including surcharge) on fluted rollers and tin rollers afforded adequate protection to the domestic industry and the Board, therefore, recommended that the duty on fluted and tin rollers

should remain in the protected category, so long as complete ring frames continued to enjoy protection and that this duty should have the same duration as the duty on complete ring frames, *i.e.*, upto 31st March, 1953. By their Resolution No. 36(5)-TB/51, dated 21st July, 1951, the Government of India in the Ministry of Commerce and Industry accepted this recommendation. Protection to this industry which was due to expire on 31st March, 1953 was extended, on the advice of the Tariff Commission, first upto 31st December, 1953 by the Indian Tariff (First Amendment) Act, 1952 and subsequently upto 31st December, 1954 by the Indian Tariff (Third Amendment) Act, 1953.

Present inquiry

2. The present inquiry has been undertaken under sections 11(e) and 13 of the Tariff Commission Act, 1951, under which the Commission is empowered to inquire into and report on any further action required in relation to the protection granted to an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

Method of inquiry

3. On 22nd July, 1953, the Commission issued special questionnaires to all the known producers, importers and consumers and their associations. On the same date a press note was issued inviting interested parties to obtain copies of the questionnaires from the office of the Commission and to submit replies thereto. The Industrial Adviser (Engineering), Development Wing, Ministry of Commerce and Industry, New Delhi, the Textile Commissioner to the Government of India, Bombay and the Directors of Industries with the State Governments of Bombay, Madras, West Bengal, Madhya Pradesh, Mysore, Madhya Bharat and Saurashtra were addressed for information on various points arising out of the inquiry. The Iron and Steel Controller, Calcutta was consulted with regard to the supply position of certain raw materials required by the industry. The Director, Indian Standards Institution, Delhi was addressed for information regarding the progress made by the Institution in formulating standard specifications for fluted rollers. Data regarding the c.i.f. prices and landed costs of the protected items of cotton textile machinery were obtained from the Collectors of Customs at different ports. A list of those to whom the Commission's questionnaires were sent and from whom replies or memoranda were received is given in Appendix I. Shri M. D. Bhat, Chairman, visited the factory of Textool Co., Ltd., Coimbatore, on 14th January, 1954, that of Textile Machinery Corporation Ltd., Belghuriah (hereafter referred to as Texmaco, Calcutta) on 25th March, 1954 and that of Texmaco (Gwalior) Ltd. on 21st April, 1954. Shri B. N. Das Gupta, Member, visited Texmaco, Calcutta on 21st May, 1954. Dr. D. K. Malhotra, Secretary, visited the factory of the Mysore Machinery Manufacturers Ltd., Bangalore, on 26th February, 1954 and Shri B. N. Adarkar and Shri B. N. Das Gupta, Members, visited the same factory on 5th April, 1954. Shri B. R. Sehgal, Assistant Director, visited the factories of Star Textile Engineering Works Ltd., Bombay, and National Machinery Manufacturers Ltd., Thana, on 12th January, 1954 and 13th January, 1954 respectively. Shri M. D. Bhat, Chairman, and Shri B. N. Adarkar and Shri B. N. Das Gupta, Members accompanied by Secretary and Assistant Director, visited Century Spinning & Weaving Mills Ltd., Bombay on 26th April, 1954 and National Machinery Manufacturers

Ltd., Bombay on 27th April, 1954. Shri R. Sundaram, Cost Accounts Officer, investigated the costs of production of different items of cotton textile machinery at the factories of Texmaco, Calcutta, Texmaco (Gwalior) Ltd., Star Textile Engineering Works Ltd., Textool Co., and Mysore Machinery Manufacturers, from 19th March to 18th April, 1954. A public inquiry into this industry was held at the Commission's office in Bombay on 29th and 30th April, 1954. A list of those who attended the public inquiry and gave evidence is given in Appendix II.

Scope of the inquiry

4. The terms of reference of the inquiry held in 1949 included spinning ring frames, spinning rings, spindles and looms and parts thereof and those of the 1951 inquiry included fluted rollers and tin rollers. The scope of the present inquiry is accordingly limited to these items only. At the time of the 1949 inquiry, only plain looms were produced in the country and the scheme of protection, therefore, included only this type of looms. In addition to plain looms, the domestic industry is now producing automatic looms and we have, therefore, included such looms in the scope of the present inquiry. Doubling ring frames, fly frames and all other types of textile machinery, not mentioned above, are outside the scope of the present investigation. We are advised that dobbies, jacquards and drop box equipment, which are produced in the country, are usually classed as attachments and not as parts of looms and they are consequently excluded from the scope of the present inquiry. We understand that National Machinery Manufacturers manufacture slubbing and roving spindles and that Lakshmiratan Engineering Works will have capacity to manufacture doubling spindles, in addition to ring spindles. At the public inquiry, National Machinery Manufacturers stated that they did not need protection for slubbing and roving spindles, but Lakshmiratan Engineering Works asked for doubling spindles to be included in the scheme of protection. As stated earlier, however, we have limited the scope of the present inquiry to spinning ring frame spindles only.

Implementation of the Tariff Board's recommendations

5. The principal recommendations made by the Tariff Board in its 1949 and 1951 Reports (on matters other than tariffs) and the action taken thereon are briefly indicated below:

(a) 1949 *Report*.—The Tariff Board had recommended the grant of a subsidy to the domestic manufacturers of spinning ring frames in the event of import control being discontinued. This question did not arise since import control has remained in force, throughout the period of protection. The Board had recommended that so long as the country's balance of payments position required import control in respect of machinery, the system of import control then existing in respect of spinning ring frames should be continued and that licences for imports should be issued subject to a monetary ceiling keeping in view the indigenous demand and production. The import control policy in respect of spinning ring frames has undergone many changes since 1949, as may be seen from the details given in paragraph 10(b) below. The policy has been helpful to the domestic industry. The Board had asked for a review of the entire scheme of protection towards the end of 1952. The Commission, however, was not able to take up this review owing to its pre-occupation with other cases. The scheme of protection which was due to expire on 31st

March, 1953 was extended without modification, first upto 31st December, 1953 and later upto 31st December, 1954. The amendments recommended by the Board to the First Schedule to the Indian Customs Tariff have been carried out with a slight change. The Board had recommended that the Collectors of Customs and the Director General of Commercial Intelligence and Statistics should maintain separately records of imports of certain specified items of cotton textile machinery. In accordance with this recommendation, the Director-General of Commercial Intelligence and Statistics, in collaboration with the Collectors of Customs, has been maintaining statistics of imports of different items of cotton textile machinery since 1st July, 1950. These statistics are maintained in terms of value only and are supplied to the Commission at regular intervals. It has not been possible to include them in the published accounts of the "Foreign Sea and Air-borne Trade and Navigation of India". As recommended by the Board, the various manufacturing units were submitting to the Board statistics of their production, sales, stocks and prices and have continued to submit such statistics to the Commission.

(b) 1951 *Report*.—The Board had recommended that the Iron and Steel Controller should examine the possibility of making available to the fluted rollers industry 15/16" and other sizes of steel rods which were more economical for the manufacture of fluted rollers than the sizes then available. We understand from the Iron and Steel Controller that every effort was made to meet the requirements of the industry for non-rationalised section such as 11/16", 13/16" and 15/16" but that certain difficulties had been experienced recently in arranging the production of such sections at the works of the Tata Iron and Steel Co., Ltd. The Board had recommended assistance to the domestic industry in securing its requirements of tin sheets. The Industrial Adviser, Ministry of Commerce and Industry (Development Wing), has informed us that the manufacturers of tin rollers have been provided with adequate supplies of tin sheets. The Star Textile Engineering Works Ltd., Bombay, however, have complained that they have found it difficult to obtain tin sheets suitable for tin rollers of 11" diameter. The steps taken by the manfacturers of fluted rollers to remove the various defects mentioned in the Board's report have been discussed later in this report (*vide* paragraph 9 below). The manufacturers have informed us that, as recommended by the Board, they have made adequate arrangements for the testing of their fluted rollers and tin rollers at their works. The Board had recommended that Government should arrange for a periodical testing of indigenous fluted rollers and tin rollers. With regard to this recommendation, the Industrial Adviser, Ministry of Commerce and Industry (Development Wing), has stated that this question can be taken up only after standard specifications have been drawn up in respect of these items. The Indian Standards Institution has undertaken the work of formulating standard specifications for fluted rollers. As in the case of ring frames, the Director-General of Commercial Intelligence and Statistics has been recording statistics of imports of fluted rollers and tin rollers since 1st August, 1951. These statistics are maintained in terms of value only and are supplied to the Commission from time to time. The Board had advised the manufacturers of fluted rollers and tin rollers to take up the question of concessional freight rates on these items directly with the railway authorities. We understand that

Texmaco, Calcutta made several representations in this matter to the Chief Commercial Manager (Rates), Calcutta, but that no concessions have been granted.

Domestic demand

6. (i) *Spinning ring frames.*—(a) At the previous inquiry held in 1949, the domestic demand for spinning ring frames was estimated at 625 frames in 1950, 875 frames in 1951 and 1,250 frames in 1952. At the present inquiry, we have received widely divergent estimates of demand. The Development Wing, Ministry of Commerce and Industry, has estimated the annual demand for ring frames at 816, the Engineering Association of India and Texmaco, Calcutta, at 500, the Director of Industries, West Bengal, at 175 and the Millowners' Association, Bombay, at 1,375.

(b) During the three years from 1951 to 1953, Texmaco, Calcutta, Textool, Coimbatore and Ramakrishna Industrials, Coimbatore, together produced, on an average, 275 ring frames per annum. The average value of imports of ring frames from January, 1951 to November, 1953 amounted to about Rs. 2,11,29,000 per annum. On the basis of an approximate c.i.f. value of Rs. 30,000 per ring frame, the average number of ring frames imported during this period may be estimated at about 704 per annum. The total consumption of ring frames during the last three years would thus appear to be 979 per annum. During this period, according to the statistics published by the Millowners' Association, Bombay, the number of additional spindles installed in India amounted to an average of 290,700 per annum, equivalent to 727 ring frames. Out of the estimated consumption of 979 ring frames, therefore, 727 were for expansion and 252 for replacement. The importers have pointed out that but for the import restrictions, and particularly the conditions imposed on mills regarding purchase of indigenous ring frames, the consumption of ring frames during 1951 to 1953 would have been much higher. On the other hand, the machinery manufacturers have expressed the view that since the cotton mill industry has already attained the target fixed in the Five-Year Plan, its further expansion is likely to take place at much slower pace in the next few years. The financial resources available to many mills may not permit expansion on any large scale. Moreover, a large part of the imports in 1951 to 1953 has probably taken place against licences issued previously and was due to the pent-up demand which then existed but is now largely satisfied. After a careful consideration of all these factors, we have come to the conclusion that the annual demand for ring frames during the next three years may be estimated at about 750 per annum.

(ii) *Spindles.*—(a) The domestic demand for spindles has been estimated at 422,790 (as spares only) by the Development Wing, Ministry of Commerce and Industry, 735,000 by the Engineering Association of India, Calcutta, and Texmaco, Calcutta, 70,000 by the Director of Industries, West Bengal, 550,000 by the Millowners' Association, Bombay, 1,100,000 by the Bengal Millowners' Association, 750,000 by Parmar Mechanic Works, Surendranagar, 1,000,000 by Textile Equipment Co., Bombay, and 200,000 (as spares only) by Lakshmiratan Engineering Works, Bombay. At the previous inquiry, the Tariff Board assumed that the entire demand for spindles would be in the form of complete ring frames. Since spindles are sold as spares as well as in the form of complete ring frames, we consider it necessary to form a separate estimate of demand for spindles.

(b) Production of spindles in India during the three years from 1951 to 1953 was about 369,000 on an average. From January, 1951 to November, 1953, the average value of imports of spindles amounted to about Rs. 32,11,900 per annum. On the basis of an approximate c.i.f. value of Rs. 7 per spindle, the average number of spindles imported during this period may be estimated at about 458,800 per annum. In addition, the number of spindles imported with 704 ring frames which are estimated to have come into the country annually during the same period work out to 281,600 per annum, on the basis of 400 spindles per ring frame. The average annual consumption of spindles during the last three years would thus appear to be about 1·1 million. As stated earlier, the average annual addition to the installed spindleage in the cotton textile industry during 1951 to 1953 was 290,700; the balance 809,300 was for replacement. In examining these figures, we have taken due account of the various considerations urged by the importers and producers in the case of ring frames which apply equally to other items of cotton textile machinery and we have come to the conclusion that the demand for spindles may be estimated at about 1 million per annum. Since the demand for complete ring frames has been estimated at 750 ring frames per annum, 300,000 spindles are likely to be required as original equipment and 700,000 as spares.

(iii) *Spinning rings.*—(a) The Development Wing, Ministry of Commerce and Industry, has estimated the annual demand for spinning rings at 520,878 (as spares only), the Engineering Association of India, Calcutta, Texmaco, Calcutta and the Director of Industries, West Bengal, at 735,000 and the Bengal Millowners' Association at 1·1 million. The Millowners' Association, Bombay, have not furnished any estimate. No estimate of demand for spinning rings was made at the previous inquiry.

(b) The average annual production of spinning rings in India during the three years ending 31st December, 1953 amounted to 431,578. From January, 1951 to November, 1953, spinning rings were imported from abroad to an average value of about Rs. 7,69,000 per annum. On the basis of an approximate c.i.f. value of Rs. 1-8-0 per ring, the number of spinning rings imported during this period may be estimated at about 512,700 per annum. To this we have to add the number of spinning rings imported with complete ring frames imports of which during the same period have been estimated above at 704 per annum. Taking 400 spinning rings per ring frame, the number of spinning rings imported with complete ring frames during the last three years may be estimated at 281,600 per annum. On the basis of these figures, the total consumption of spinning rings during the last three years would appear to be about 1·2 million. Of this, it is estimated that 290,700 were for expansion and 909,300 for replacement. After taking into consideration all the relevant factors such as the existence of pent-up demand during the last three years and the probable rate of expansion in the textile industry in the immediate future, we estimate the annual demand for spinning rings during the next three years at 1·1 million, of which (on the basis of the estimated annual demand for 750 ring frames) 300,000 would be required as original equipment and 800,000 as spares.

(iv) *Fluted rollers.*—(a) The Engineering Association of India, Calcutta, Texmaco, Calcutta, and the Director of Industries,

West Bengal, have estimated the annual domestic demand for fluted rollers at 269,800 pieces, while the estimates furnished by the Bengal Millowners' Association, Calcutta, Lakshmiratan Engineering Works, Bombay and Star Textile Engineering Works, Bombay are 137,000, 455,000 (for ring frames only) and 400,000 respectively. The Development Wing, Ministry of Commerce and Industry, has estimated the demand for fluted rollers, as spares only, at 99,518. No estimate has been made by the Millowners' Association, Bombay. The estimate adopted at the previous inquiry for fluted rollers of all kinds required for replacement as well as original equipment was 460,000 made up of 340,000 for ring frame fluted rollers and the balance for fluted rollers for drawing frames, speed frames, etc.

(b) We have reviewed the previous estimate in the light of the data regarding production and imports now available. During the three years 1951 to 1953, the average annual production of fluted rollers of all kinds was 126,639 per annum. The average value of imports of fluted rollers (excluding those imported as original equipment) during the period from August, 1951 to November, 1953 was about Rs. 2,90,000 per annum. At the approximate c.i.f. value of Rs. 14 per fluted roller, the number of fluted rollers imported as spares during this period may be estimated at about 21,000. The average imports during the period 1951 to 1953 (for which complete statistics are not available) may be assumed to be at the same rate. To this we have to add fluted rollers imported as original equipment with ring frames, speed frames, drawing frames, etc. We have estimated above the average annual imports of ring frames during 1951 to 1953 at 704 frames; at an average of 175 fluted rollers per frame, it may be estimated that about 123,200 ring frame fluted rollers were imported as original equipment during that period. No figures are available regarding imports of speed frames, drawing frames, etc. but at the last inquiry, the demand for ring frame fluted rollers was estimated at 74 per cent. of the total demand, and on this basis, the average imports of fluted rollers of all kinds as original equipment during 1951 to 1953 may be estimated at 167,200 per annum. The total consumption of fluted rollers of all kinds during the period 1951 to 1953 would thus work out to about 315,000 per annum. During this period 727 new ring frames are estimated to have been installed annually and about 127,225 fluted rollers are likely to have been used for new ring frames and the rest for new speed frames and drawing frames and for replacement of old fluted rollers of all kinds. In estimating the future requirements on the basis of the above figures, we have to make due allowance for the possibility that actual imports during the period August, 1951 to November, 1953 might have been higher but for import restrictions. At the same time the textile industry may not be able to maintain the rate of expansion recorded in the last two years. On the whole, we consider it reasonable to estimate the domestic requirements of fluted rollers at about 250,000 per annum. Since the demand for ring frames has been estimated at 750 frames per annum, 131,250 fluted rollers are likely to be required as original equipment and the balance, 118,750 rollers, as spares per annum.

(v) *Tin rollers.*—(a) The Engineering Association, Calcutta, Texmaco, Calcutta, the Director of Industries, West Bengal and the Bengal Millowners' Association have estimated the annual domestic

demand for tin rollers at 916 sets (equal to 5,496 pieces at 6 pieces per set). The estimate made by the Development Wing, Ministry of Commerce and Industry, is only 1,690 pieces. No estimate has been made by the Millowners' Association, Bombay. The estimate adopted at the previous inquiry was about 6,000 pieces.

(b) As stated in the Tariff Board's report on fluted rollers and tin rollers, tin rollers are purchased by mills only occasionally, and old rollers are often re-used after re-conditioning. During the three years 1951 to 1953, four units engaged in the manufacture of textile machinery produced only 2,001 tin rollers per annum on an average, but it is possible that tin rollers are also produced by certain small workshops. We understand that National Machinery Manufacturers, Bombay, have recently taken up the production of tin rollers and expect to have an annual off take of 1,000 to 1,500 rollers. This additional production by National Machinery Manufacturers would probably replace tin rollers at present produced by small workshops or those produced by mills themselves. Imports of tin rollers are small and irregular. Taking all factors into account we estimate the annual demand for tin rollers at 3,000 as against the previous estimate of 6,000.

(vi) *Looms.*—(a) Since only plain looms are included in the existing scheme of protection, the estimates of demand received by us relate only to this type of looms. The annual demand for plain looms has been estimated by the Development Wing, Ministry of Commerce and Industry, at 2,547 and by the Millowners' Association, Bombay, at 20,000. The Engineering Association of India has stated that there is not much scope for installation of new looms in the near future, because the cotton textile industry has already reached the target of production envisaged by the Planning Commission and the present economic situation is also not favourable to installation of additional loomage except by way of balancing. As regards replacement, the Association is of the view that the demand is not likely to be large as old looms can easily be reconditioned by replacing worn out components by new ones manufactured in the mills' workshops or in other small workshops. The demand for power loom is also said to be adversely affected partly by the recession in the textile trade and partly by the shortage of electric power in South India and certain parts of the Bombay State.

(b) During the three years 1951 to 1953 only 2,047 plain looms were produced annually on an average. The average value of imports of plain looms during the period from January, 1951 to November, 1953 worked out to about Rs. 92·05 lakhs per annum. On the basis of an approximate c.i.f. value of Rs. 1,494 per plain loom of the most popular type (52″ reed space, overpick), the average number of plain looms imported during this period may be estimated at about 6,160 per annum. These figures indicate that the annual demand for plain looms during the last three years was in the neighbourhood of 8,000 only. According to the Statistics published by the Millowners' Association, Bombay, the number of additional looms installed in the cotton textile mills during 1951 to 1953 averaged 2,492 per annum. It is not known how many of these were plain looms. In view of the shortage of yarn, Government have imposed restrictions on the installation of looms and this has seriously affected the demand for and production of looms. Another factor which is likely to influence the demand for plain looms in future is

the growing tendency on the part of mills to replace plain looms by automatic looms. The Millowners' Association, Bombay, has expressed the view that as a necessary means of reducing production costs, the use of automatic looms has recently made rapid strides in other textile producing countries and that India cannot afford to ignore this trend, since nearly 20 per cent. of her production of cotton piecegoods has to be sold in overseas countries in competition with the rest of the world. According to the figures cited by the Association, the percentage of automatic looms to the total looms installed is 31·6 in West European countries, 11·5 in U.K., 100 in U.S.A.. 51·8 in North American countries other than U.S.A., 34·3 in South American countries, 66·7 in Japanese mills which are federated to the All Japan Cotton Spinners' Association and 2·7 in the small mills outside that Association, while it is only 4·7 in India. The installation of automatic looms, however, has met with strong opposition from labour in this country and there is considerable uncertainty as to the extent to which mills will be permitted to resort to this method of reducing their production costs. We recommend that Government should give a clear indication to the textile industry as early as possible of their policy regarding the installation of automatic looms, since the present uncertainty is hampering the development of this section of the textile machinery industry. So long as this uncertainty persists, the demand for looms is likely to be on a restricted scale. As pointed out by the Engineering Association, it is possible for mills to carry on with old looms for a considerable length of time by replacing worn out components. In these circumstances, we consider that the domestic demand for plain looms would probably be only about 7,000 per annum during the next three years. No estimate can be made at this stage about the demand for automatic looms.

Capacity and production

7. (a) A brief history of the cotton textile machinery industry in India will be found in paragraph 5 of the 1949 report and paragraph 6 of the 1951 report. The present position regarding the domestic capacity for the manufacture of different items of cotton textile machinery and their actual production in recent years is described below:—

(i) *Spinning ring frames.*—At the time of the 1949 inquiry the following four factories, namely, Texmaco, Calcutta, Textool, Coimbatore, Acme Manufacturing Co., Ltd., Bombay and Ramakrishna Industrials, Coimbatore, were engaged in the manufacture of spinning ring frames. The aggregate capacity of these four units was then estimated at 382 spinning ring frames. Acme Manufacturing Co. have since stopped the manufacture of ring frames. A new unit called National Machinery Manufacturers, Bombay, has come into production with an annual capacity of 300 ring frames. The aggregate capacity, on single shift basis, of the four units now engaged in the manufacture of ring frames is estimated at 672 ring frames per annum. We understand that Lakshmiratan Engineering Works Ltd., Bombay, in collaboration with a Japanese firm, propose to set up a new unit at Kanpur for manufacture of 300 super high draft ring frames per annum and that this scheme is at present under consideration of Government. If this scheme is approved and implemented, the total capacity for manufacture of ring frames will increase to 972 per annum. We may add that in the First Five-Year

Plan the target fixed for the capacity for manufacture of ring frames is 800 per annum by 1955-56. The actual production of spinning ring frames since 1950 is as follows:—

1950	..	186
1951	..	307
1952	..	303
1953	..	215

(ii) *Spindles.*—There are at present 8 units engaged in the manufacture of spindles, namely, Texmaco, Calcutta, Textool, Coimbatore, National Machinery Manufacturers, Thana, Lakshmiratan Engineering Works, Bombay, Parmar Mechanic Works, Surendranagar, Sewing Machine Parts Making Works, Surendranagar, Textile Equipment Co., Bombay, and Indian Textile Supply Co., Bombay. The combined capacity of these units on single shift basis is 619,000 per annum. No estimate of the domestic capacity for spindles was made at the 1949 inquiry. The actual producion of spindles since 1950 was as follows:—

1950	..	143,976
1951	..	394,412
1952	..	349,733
1953	..	362,959

The above figures are inclusive of the number of spindles utilised in the complete ring frames produced in the country.

(iii) *Spinning rings.*—Spinning rings are produced by only three units, namely, Texmaco, Calcutta, National Machinery Manufacturers Ltd., Bombay and Textool, Coimbatore. The total rated capacity of these three units is 529,000 per annum on single shift basis. No estimate of the domestic capacity for spinning rings was made at the last inquiry The production of spinning rings since 1950 was as follows:—

1950	..	184,700
1951	..	273,654
1952	..	419,658
1953	..	601,422

The above figures include the number of spinning rings utilised in the complete ring frames produced in the country.

(iv) *Fluted rollers.*—At the time of the previous inquiry held in 1951, only three units, namely, Texmaco, Calcutta, Star Textile Engineering Works, Bombay and Textool, Coimbatore, were engaged in the production of fluted rollers. Acme Manufacturing Co., Ltd., were also reported to have a capacity for manufacture of fluted rollers and three other units, namely, National Machinery Manufacturers, Lakshmiratan Engineering Works and Ramakrishna Industrials were expected to take up the production of this item. Neither Acme Manufacturing Co. nor Ramakrishna Industrials have reported any production since 1950. Lakshmiratan Engineering Works also have not yet commenced production on any appreciable scale. The combined production capacity of the five units including National Machinery Manufacturers Co. and Lakshmiratan Engineering Works is

now estimated at 252,500 fluted rollers on single shift basis. At the previous inquiry, the Board had estimated the domestic capacity for fluted rollers at 129,400 (for 5 units) for 1951, 175,400 (for 6 units) for 1952 and 217,400 (for 6 units) for 1953. The production of fluted rollers since 1950 was as follows:—

1950	..	73,632
1951	..	86,576
1952	..	106,957
1953	..	186,386

These figures are inclusive of the number of fluted rollers utilised in the complete ring frames produced in the country.

(v) *Tin rollers.*—At the time of the 1951 inquiry, only 3 units, namely, Texmaco, Calcutta, Textool, Coimbatore and Acme Manufacturing Co., Bombay were reported to have a capacity for production of tin rollers. The total capacity of these three units was estimated at 6,576 rollers per annum. Tin rollers were also sold by Star Textile Engineering Works, but these were manufactured for them by their sub-contractors. The information received at the present inquiry shows that tin rollers are now produced by Texmaco, Calcutta, Textool, Coimbatore and National Machinery Manufacturers, Bombay, the combined capacity of which, on a single shift basis, comes to 3,800 rollers per annum. National Machinery Manufacturers have started production of tin rollers only recently. Acme Manufacturing Co. have stopped production of tin rollers and Ramakrishna Industrials produced a few rollers in 1952 and 1953. Production of tin rollers since 1950 was as follows:—

1950	..	1,666
1951	..	1,945
1952	..	2,124
1953	..	1,935

The above figures are inclusive of tin rollers utilised in the complete ring frames produced in the country.

(vi) *Looms.*—At the 1949 inquiry, the domestic capacity for manufacture of plain looms was estimated at 5,390 per annum. There were 5 firms manufacturing looms at that time, namely, Texmaco, Gwalior, Cooper Engineering Works, Satara, Indian Machinery Co., Ltd., Howrah, Achalapur Engineering Works, Ellichpur and Mysore Machinery Manufacturers, Ltd., Bangalore. Achalapur Engineering Works seems to have gone out of production. Cooper Engineering Works, who were producing looms only intermittently, had stopped production for some time owing to paucity of orders, but we understand that they have recently resumed production. The combined productive capacity, on single shift basis, of the 4 units, excluding Achalapur Engineering Works, is estimated at 6,640 looms per annum. We understand that Lakshmiratan Engineering Works Ltd., Bombay, have submitted a scheme to Government for manufacture of 2,400 looms per annum. If this scheme is approved and implemented the total capacity will amount to 9,040 per annum. It may be mentioned that the target fixed by the Planning Commission in

the First Five-Year Plan, for plain and automatic looms taken together, is only 8,000 per annum. Production of plain looms since 1950 is given below:—

1950	..	2,059
1951	..	2,576
1952	..	1,633
1953	..	1,932

Texmaco, Gwalior, is the only unit producing automatic looms. Its capacity for automatic looms is interchangeable with that for plain looms. The firm has estimated its capacity at 4,000 looms, if only plain looms are produced and 3,500 looms, if only automatic looms are produced. Production of automatic looms by this firm was 222 looms in 1951, 930 looms in 1952 and 178 looms in 1953. Owing to the restrictions on the installation of new looms and other factors, the demand for looms has shrunk considerably in recent years and consequently the industry has not been able to utilise more than a small proportion of its capacity.

Details of capacity and production of individual units in respect of the different items of cotton textile machinery enumerated above are given in Appendix III.

(b) On the basis of the paid-up capital of 13 units for which information is available, the total capital invested in the industry is estimated at about Rs. 5 crores. The average number of workers employed daily in 12 units for which information is available was 4,669 in 1953.

Raw materials

8. The manufacturers of cotton textile machinery have experienced difficulties mainly with regard to supplies of graded pig iron required for castings, hard-drawn bright flats and bars required for warp stop motions and steel sections required for fluted rollers and spindle steel. Adequate supplies of pig iron of No. 1 and No. 2 grades are essential for production of good castings. The manufacturers have not been able to obtain their requirements of such grades and have, consequently, been forced to use off-grade pig iron. They have stated that off-grade pig iron not only does not give satisfactory results, but is also expensive, because of the ferro-alloys which necessarily have to be used with it. This question was discussed at the public inquiry, when the representative of the Iron and Steel Controller stated that in anticipation of the shortage of pig iron likely to develop when some of the blast furnaces of the Indian Iron and Steel Co. will be closed for re-lining, arrangements were going to be made for building up stocks of pig iron with the controlled stockists and that the textile machinery manufacturers would be able to obtain their requirements from such stockists. The Iron and Steel Controller has also expressed his willingness to plan large orders from the textile machinery manufacturers directly on the Iron and Steel producers. As regards hard-drawn bright flats and bars, Texmaco, Gwalior, have stated that although they have now installed the necessary plant for the manufacture of complete warp stop motions, including serrated bars, they have not been able to start actual production, because of the non-availability of the required sizes of bright flats from the domestic steel producers. The representative of the Iron and Steel

Controller, however, stated at the public inquiry that he would be prepared to issue import licences for such flats and bars directly to the textile machinery manufacturers. The manufacturers of fluted rollers are at present using indigenous steel. Though such steel is of satisfactory quality, both in respect of its composition and free cutting quality, it is available only in hot rolled black form, whereas bright drawn steel is considered more suitable for the manufacture of fluted rollers. Indigenous steel, however, is much cheaper than imported steel. While the hot rolled fluted roller steel manufactured by Tatas is priced at Rs. 495 per ton, the same kind of steel imported from abroad costs Rs. 850 per ton and the cost of imported bright drawn steel is nearly Rs. 1,100 per ton. Moreover, while the manufacturers of fluted rollers require sections varying by 1/16", the sections rolled by Tatas vary 1/8". Nearly 50% of the requirements of Star Textile Engineering Works are for 15/16" sections and Tatas have recently expressed inability to supply such sections in future. This point also was discussed at the public inquiry. The representative of the Iron and Steel Controller promised to examine the matter in consultation with the iron and steel producers with a view to meeting the requirements of the fluted roler industry for 15/16" and other non-rationalised sections to the maximum extent possible. Spindle steel is manufactured in the country by certain special steel producers like Mukand Iron and Steel Works and National Iron and Steel Co. We understand from National Machinery Manufacturers and other producers of spindles, however, that indigenous production of spindle steel has been very irregular and this has caused considerable inconvenience to them. Manufacturers have also complained that there have been inordinate delays in obtaining deliveries of mild steel from the major producers and that unless the machinery manufacturers are allowed to maintain adequate stocks of steel, it would be difficult for them to implement their production programme. We feel that the cotton textile machinery industry deserves high priority in the allocation of materials and we, therefore, recommend that the industry should be given all possible assistance in obtaining adequate supplies of the materials mentioned above and, especially in building up reasonable stocks of graded pig iron and mild steel.

Quality of indigenous cotton textile machinery

9. (a) The manufacturers have furnished us with details of the steps taken by them to improve the quality of their products. As regards spinning machinery, Texmaco, Calcutta have informed us that they have installed a fully mechanised foundry and other modern equipment such as plane grinders, rotary grinders, circular grinders, special purpose core grinders, etc. The firm is now in a position to supply ring frames with any of the following high draft systems manufactured by it, namely, 4 roller saddle weighting, 4 roller self weighting, Casablanca 500, 500A and E10B. In collaboration with SKF Bearing Co. and Indian Casablancas High Draft Co., Ltd., Texmaco, Calcutta are now manufacturing roller bearing spindles and the Casablanca drafting equipment respectively. Further improvements have been made in the design, materials and method of manufacture of a number of components. Texmaco frames are now fitted with all steel creel and ball bearing jockey pulleys with bakelite shells either of SKF's or Platts' design both manufactured by the firm. Textools, the other manufacturers of ring frames, have a laboratory in their works to test the quality of materials

before use. National Machinery Manufacturers have entered into an agreement with Platt Brothers, whereby the latter have agreed to make available to the Indian firm the results of their researches into textile machinery manufacture for the next 15 years. Both Star Textile Engineering Works and Laxmiratan Engineering Works have introduced a system of checking their products at various stages of manufacture with the help of special gauges. In addition, Laxmiratan Engineering Works carry out a drop test and lapping of spindle blades at bearing portion. They also test the spindle blade by projecting the foot point on Hilger Projector. Star Textile Engineering Works have a hardness tester which they use to test the hardness of a few rollers from every charge. As regards looms, Texmaco, Gwalior, claim to have carried out several improvements in the model first produced by them and have supplied us with copies of letters from several mills to the effect that their looms have been found satisfactory in actual service. With their new plant, they are now in a position to supply underpick or overpick plain looms and fully automatic, cop-change, loose-reed looms. Texmaco, Gwalior claim that their automatic looms are equal to the best imported looms of the same type in appearance and efficiency. The Mysore Machinery Manufacturers also have modified their loom from time to time in order that it may be capable of giving higher production by faster speed. They claim that their loom is now of heavier construction, has a stronger picking motion and can accommodate warp beams upto 22″ and shuttles upto 15½″.

(b) On the other hand, we have received divergent views about the quality of indigenous cotton textile machinery from Government departments and textile mills and their associations. The Directors of Industries with the Governments of Madras and West Bengal and the Chief Secretaries to the Governments of Madhya Bharat and Saurashtra have stated that the quality of cotton textile machinery or of the components of such machinery produced in their States is reported to be satisfactory. Similarly, the Development Wing of the Ministry of Commerce and Industry, Government of India has informed us that no complaint was received by that office from actual users during the past three years about the quality of any of the protected items of cotton textile machinery produced in the country. Several textile mills and their associations, however, have expressed dissatisfaction with the quality of indigenous spinning ring frames, spindles, fluted rollers and looms. The Millowners' Association, Bombay, for example, have given a detailed criticism of indigenous ring frames in their memorandum. The specific defects pointed out by them, together with the explanations offered by Texmaco, Calcutta and our comments are mentioned below:—

(i) Creel guide rods, in short lengths, become loosened after a short time of run.

Texmaco, Calcutta, have now removed this defect by changing the size of the rods, each one of which is fastened by screws, so that there is no possibility of their getting loose.

(ii) No tin roller guards are provided.

We understand that since 1951, Texmaco, Calcutta have been fitting their ring frames with tin roller guards. Moreover, in a tape driven frame where only one set of tin rollers is used, no tin roller guard is necessary.

(iii) No locking arrangement for gearing covers is provided.

This defect also no longer exists, since Texmaco, Calcutta now provide a locking arrangement for gearing covers.

(iv) One shot lubrication: It has two pieces of rubber tubes for oiling the change pinions on either side inside the brass tubes. The tubes have to be frequently renewed.

One shot lubrication is a proprietory item obtained from Messrs. Tecalmit (U.K.) who have already changed over to metallic tubes. Texmaco ring frames are now fitted with metallic tubes in the one-shot lubrication equipment.

(v) The fixed part of the roller gearing covers does not allow free approach for changing the back roller wheels.

Texmaco Calcutta have explained that they are now providing a single cover for the roller gearing in their latest model. They maintain that even in the old type the change of back roller wheels could be effected without any difficulty.

(vi) The separator boss has to be taken behind for inserting washers and fixing screws at the back of the ring rails.

Texmaco, Calcutta have stated that this is a minor difficulty and that it can be got over by a slight adjustment of one of the parts of the frame.

(vii) The underclearer springs are of too soft material and do not allow proper removal of bonda waste taken up by the rollers.

Texmaco, Calcutta have always been using imported springs. We consider, however, that they should look into this matter further and try to remove the defect pointed out by consumers.

(viii) Gearing and main bearings are fixed to the inside of the small gearing end which means removal of the small gearing end (the complete unit) every time when the change in the pulley's drive has to be made for speed change.

Texmaco, Calcutta claim to have removed this defect as far back as 1949.

(ix) The starting handle screw does not allow quick movement of belt from fast to loose pulley and *vice versa*. Besides, there is no brake pulley provided.

Texmaco's standard design since 1950 is that of a crank type shifter as provided in English frames.

(x) The arbor springs of the loose bosses inside the 'Casablanca' apron are in many cases too tight, and these have to be filed off to fit well.

Texmaco, Calcutta maintain that the loose bosses manufactured by them and the circlip springs fitted to such bosses are according to the specifications of the Indian Casablancas High Draft Co., Ltd., and have been approved by the latter. We consider, however, that this is another defect which needs attention from the manufacturers.

(xi) The spindle driving tapes fall off and have a tendency to wrap round the tin roller.

Although this defect is due to several factors besides the design of the equipment, Texmaco, Calcutta have recently altered their design to some extent to suit Indian conditions.

(xii) The copping mechanism is provided with no cover with the result that fluff accumulates in between the wheels.

Since 1951, Texmaco have been providing a cover for the copping mechanism in their frames.

(xiii) The pocker tops touch the bobbins on both sides of pockers, and this necessitates the use of smaller size ratchet wheel.

While not admitting this defect, Texmaco, Calcutta have stated that where it does exist, it can be remedied by a slight adjustment. We suggest that the producers should provide their customers with more technical service facilities so that operational defects can, as far as possible, be rectified on the spot.

(xiv) Ring frames supplied as 2-3/4″ gauge are reported to be really of 2-5/8″ gauge.

Texmaco, Calcutta maintain that they have never received any such complaint. No specific case has been cited in the evidence received by the Commission and we are unable to see why the producers should have any difficulty in manufacturing ring frames to the correct gauge required by the customer.

(c) At the public inquiry, the representatives of the Millowners' Association, Bombay, admitted that the defects mentioned above were of a minor nature and that they did not affect the output, cost or quality of yarn to any significant extent. Their chief complaint related to the quality of spindles and fluted rollers not dealt with above. The efficiency of a ring frame can be seriously affected by the quality of these two components. As regards spindles, the Millowners' Association have stated that although several factories have recently taken up the manufacture of spindles, only a few of them have succeeded in producing spindles of the required degree of precision to work at optimum speed without causing breakage of yarn. The representative of the Ahmedabad Millowners' Association voiced a similar complaint in his oral evidence before the Commission. The Bangalore Woollen Cotton and Silk Mills Co., Ltd., Bangalore have informed us that in 1951, they fitted a frame with 420 indigenous spindles, but that after three months, the spindles began to run badly and yarn breakages increased. It was discovered that there was marked frame vibration at spindle speeds in excess of 9,500 r.p.m. and the speed had, therefore, to be limited to 8,600 r.p.m. Texmaco, Calcutta, on the other hand, maintain that they are manufacturing spindles in technical collaboration with SKF Bearing Co., and that they are fully adhering to the SKF specifications in regard to the design, raw material composition, manufacturing tolerances, heat treatment, etc. They have stated, further, that their spindles are tested at the SKF Laboratories at regular intervals and found satisfactory in all respects. The steps taken by Textools Ltd., Laxmiratan Engineering Works Ltd., and Parmar Mechanical Works for inspection and testing of their products have already

been mentioned above. As regards fluted rollers, the Millowners' Association, Bombay have stated as follows:—

> "With the exception of the fluted rollers manufactured by one indigenous manufacturer, the indigenous fluted rollers have not been found to be of uniform quality. The flutes, when observed under optical lens, exhibits, in the case of indigenous manufactures, pronounced roughness and want of parallelisation. Also, the dimensions of the boss adjacent to the roller neck are not accurate, and do not permit of correct fit to the cradle in the case of 'Casablanca' drafting. Besides, the sawteeth are not cut to precision, and the roller joints, when put together, do not result in true line, but exhibit slight eccentricity. The case-hardening also is not quite uniform on all roller sections. A large number of flutes of accurate fitness, which is a characteristic of foreign articles, ensures better drafting."

The Madhya Bharat Millowners' Association have informed us that one of their member mills has found indigenous fluted rollers to be of inferior quality as compared with imported rollers, though another member has reported the quality of indigenous cotton textile machinery and its components to be quite satisfactory. The Nagri Mills Co., Ltd., Ahmedabad have expressed satisfaction with indigenous fluted rollers which they have used to a small extent. Texmaco, Calcutta have admitted that their initial efforts to manufacture fluted rollers were not successful, but that they have now overcome their handicaps by employing skilled technicians from abroad and by suitably training their own workers. They have also supplied a large number fo Casablanca type saw toothed rollers to the Indian Casablanca High Draft Co., Ltd., and no complaint has been received from the latter firm about roughness, want of parallelisation or difficulty in fitting or assembling. The steps taken by the Star Textile Engineering Works Ltd., for inspection and testing of their products have already been mentioned above. With regard to tin rollers, the Millowners' Association, Bombay, have pointed out the following defects, namely, that they are heavier than imported rollers and consequently consume more power, that soldering is defective and often gives way at joints, and that they vibrate at high speeds and consequently go out of alignment. Shri Krishnarajendra Mills Ltd., Mysore also have found the quality of indigenous tin rollers to be unsatisfactory. Texmaco, Calcutta have stated that while they manufacture tin rollers in specified weights, if so required by any clients, their tin rollers are not heavy and do not suffer from any of the other defects pointed out by the Millowners' Association, Bombay. Texmaco balance their tin rollers statically and dynamically and run them at speeds about 1,100 r.p.m. As regards spinning rings, the Millowners' Association, Bombay have informed us that the use of indigenous spinning rings has commenced only recently in India and it is, therefore, difficult to express an opinion about their performance until further experience has been gained. Some of the consumers have expressed their views on indigenous spinning machinery as a whole, without commenting on individual components. Tata Industries have described Texmaco ring frames as not so good as imported frames in respect of the material used, workmanship and finish, but have found them satisfactory so far as the working and output are concerned. The Laxmi Mills Co., Coim-

batore and the J. C. Mills, Birlanagar, have found the indigenous ring frames installed by them to be very good. The Binod Mills Co., Ltd., Ujjain, the Jehangir Vakil Mills Co., Ltd., Ahmedabad, Rajkot Spinning and Weaving Mills Ltd., Rajkot and the Elgin Mills Ltd., Kanpur, however, have expressed the view that the indigenous machinery is still below the requisite standard.

(d) The Millowners' Association, Bombay, have criticised the quality of indigenous looms also. The specific defects mentioned by them are that (a) indigenous looms are much heavier than imported looms, (b) they do not run equally smoothly, (c) the castings used are inferior, (d) the component parts are not properly tuned and not even properly machined, when delivered for erection, with the result that machining has to be done by the mills in which the looms are to be installed and (e) indigenous looms are not suited for the production of fine fabrics, with high speed and pick. The Association have not expressed any opinion about the durability of indigenous looms on the ground that they have been in service for a short period only. Shri Krishnarajendra Mills Ltd., Mysore have complained that indigenous looms wear out much earlier than foreign looms. Vasant Mills Ltd., Singanallur, have stated that indigenous looms installed by them in 1950 had to be replaced in 1951 with improved type looms, also of indigenous make, because there were large breakages of parts. Tata Industries Ltd., Bombay, on the other hand, have informed us that indigenous plain looms meant for plain weave cloths were found good, although the tappet and picking nose and warp protector motions and crank and tappet gears required frequent replacements. The steps taken by Texmaco, Gwalior and Mysore Machinery Manufacturers to improve the quality of their looms have already been referred to above. With regard to the specific complaints made by the Millowners' Association, Bombay, Texmaco, Gwalior maintain that in many instances the parts of their looms are lighter than those of foreign looms, while Cooper Engineering Ltd., Bombay, admit that some of the looms are heavy but explain that mills prefer heavier sections, because they feel that heavier looms would give longer life and could also be run at higher speeds than specified. Texmaco, Gwalior, have expressed their readiness to satisfy any customer about the quality of their castings by disclosing the exact specifications of the metal used and have stated that many of the items, particularly those which are affixed to the running part of the machine, are made with ferro-chrome alloys. Cooper Engineering use mechanite metal to ensure durability. Both Texmaco, Gwalior, and Cooper Engineering have assured us that their looms are fully erected and run for a few hours in their factory for testing before being dismantled for packing. Cooper Engineering, further, claim that the component parts of their looms are standardised and are, therefore, inter-changeable. As regards the complaint that indigenous looms are not suited for the production of fine fabrics with high reed and pick, Texmaco, Gwalior, have pointed out that 426 of their underpick looms are running satisfactorily on the finest quality of high reed and pick in a mill in Ahmedabad and that their automatic looms are being used for production of a very heavy Dosooti fabric in another mill in Delhi. Cooper Engineering similarly claim that several of their looms are working satisfactorily in many mills.

(e) We have carefully considered the evidence received by us about the quality of indigenous cotton textile machinery. Much of

the criticism made by the consumers relates to indigenous ring frames, looms and their components purchased more than two years ago and it does not, therefore, take full account of the various improvements recently made by the manufacturers. Some of the critics have not mentioned the names of the manufacturers from whom the machinery was purchased and since the standard of efficiency is likely to vary from one manufacturer to another, it would not be fair to judge the quality of indigenous machinery in general from the opinions expressed by such critics. Moreover, the element of compulsion involved in the existing system of import control has created a sense of grievance on the part of certain important sections of consumers and has accentuated the prejudice against the machinery produced by some of the units. There is undoubtedly considerable scope for improvement in the quality of indigenous machinery and while the manufacturers deserve credit for the efforts already made by them to improve the quality of their products, further efforts in this direction are required to bring indigenous machinery to the requisite standard. In order that the manufacturers may be encouraged to make such efforts, it is necessary that they should receive due co-operation from the consuming industry. The cotton textile industry in India is no doubt conscious of the importance of developing local sources of supply for the plant and machinery needed by it, and has participated in the establishment of a unit for the production of such machinery in collaboration with well-known foreign manufacturers. The dissatisfaction on the part of a section of the textile industry with the present system of import control, however, arises mainly from the fact that adequate arrangements have not yet been made for an independent inspection of the quality of indigenous textile machinery. We are of the opinion that the desirability of making such arrangements deserves urgent consideration by Government. Such arrangements are necessary not only to ensure a steady improvement in the quality of indigenous machinery, but also to promote cordial relations between the producers and the consumers, and thus create a healthy atmosphere for the development of the domestic textile machinery industry. We understand that this question was considered at a meeting of the representatives of the textile industry and of the merchants and manufacturers of textile machinery held at New Delhi on 24th February, 1953 by the Minister of Commerce and Industry. It was decided at the meeting to set up three advisory committees, (1) for spinning machinery from the blow room upto and including ring frames, (2) for weaving machinery commencing from winding and warping upto and including looms and (3) for finishing machinery dealing with all processes from the loom stage upto packed bales, to advise Government on the desirability of approving indigenous machinery of these types for purchase by mills. The Committees were to consist of textile experts and administrative experts actively engaged in the textile industry. The Committees were to receive full lists and specifications of machinery manufactured indigenously and, where necessary, to examine the actual working of such machinery. It was agreed that the Government of India should take the findings of these Committees into account in the formulation of their import policy for textile machinery, accessories and spares of all kinds. It was proposed to appoint an inspectorate to inspect the performance of machinery actually installed in mills and to report to the Committees. In accordance with these decisions, the Textile Commissioner requested the Millowners' Association, Bombay in March,

1953 to nominate a panel of experts from which persons could be selected by Government to serve on the above Committees, but we understand that, although the Millowners' Association has already nominated its panel, no Committee has yet been constituted. The decisions referred to above were accepted by all the interests present at the meeting held on 24th February, 1953 and, at the Commission's public inquiry, the representatives of both the textile machinery industry and the mill industry were unanimous in their demand that early action should be taken to constitute these Committees. We are aware that no standard specifications have yet been formulated for the various items of the textile machinery manufactured in the country, but we feel that the proposed arrangements for carrying out a general inspection of the quality of the indigenous machinery should not be deferred until standard specifications have been formulatd. An item like a ring frame or a loom consists of numerous components and considerable time may elapse before detailed specifications are formulated for all these components. Even at present, various tests are carried out by the manufacturers and users to judge the quality of the textile machinery and an expert judgment about the suitability of indigenous machinery even on the basis of such tests can be helpful to both the producers and consumers. While affording due protection to the domestic machinery industry, it is essential to ensure that the intersets of the cotton textile industry which has to sell nearly one-fifth of its output in the export market and has consequently to maintain itself at the optimum level of efficiency do not suffer. We, therefore, recommend that suitable arrangements should be made as early as possible to obtain expert technical advice on the quality of textile machinery which the mill industry is required to purchase from indigenous sources by reason of import control. The voluntary co-operation of the textile industry is essential for the healthy growth of the textile machinery industry and this cannot be ensured unless adequate arrangements exist for an impartial investigation of all complaints from the consuming industry about the quality of the indigenous products. The widespread prejudice against the quality of indigenous textile machinery, which has persisted inspite of the efforts by the various units to improve their manufacturing efficiency, cannot be fully overcome without such arrangements. We recommend, further, that a Special Officer for cotton textile machinery should be appointed in the Ministry of Commerce and Industry to keep a continuous watch over the progress of the cotton textile machinery industry as a whole and to recommend suitable measures to promote its development on sound lines. The Special Officer should be an expert of high standing with considerable experience in dealing with technical problems connected with the production and use of cotton textile machinery. This Officer should collaborate with any advisory Committees that may be appointed in this connection and should also be able (by frequent visits to the manufacturing units and the mills where indigenous machinery is installed) to make a technical assessment of the manufacturing standards attained by the various units and the performance of their products in actual service. In order to attain the requisite standard of quality and to expand output, the domestic industry needs special assistance in the matter of raw materials and other facilities and we feel that the appointment of a Special Officer will help the expeditious disposal of all requests for such assistance. The cotton textile machinery

industry in other countries is making rapid strides in technical development, and various improvements have been made recently in the design and the technique of manufacture of imported cotton textile machinery. It is necessary that the domestic industry should keep pace with such developments. In collaboration with such advisory Committees as may be appointed, the Special Officer should make a continuous study of such developments and advise both Government and the domestic industry as to any special measures, including research, which may be necessary to ensure the production of up-to-date machinery in the country. The National Machinery Manufacturers have entered into an arrangement with Platt Brothers for technical collaboration for the next fifteen years, but it is necessary to ensure that some of the other units which may not have similar facilities are also able to follow up the technical developments in other countries. We recommend, moreover, that the Indian Standards Institution should expedite the formulation of standard specifications for the various components of cotton textile machinery manufactured in the country.

Imports & import and export control policy

10. (a) The following table gives the available statistics of imports of the protected categories of cotton textile machinery as furnished by the Director General of Commercial Intelligence and Statistics, Calcutta.

	1950 (July-Dec.)	1951	1952	1953 (Jan-Nov.)
	Rs.	Rs.	Rs.	Rs.
Spinning ring frames	1,16,31,485	1,54,54,154	2,37,34,968	2,24,37,769
Spinning rings	2,08,611	5,70,591	9,78,110	6,94,186
Spindles	17,62,486	36,63,738	39,15,634	17,88,652
Fluted rollers	N.A.	*39,285	2,12,409	4,24,895
Tin rollers	N.A.	*2,498	4,387	13,755
Plain looms	19,94,471	92,79,537	1,14,11,980	61,57,805

We recommend that in future the Collectors of Customs and the Director General of Commercial Intelligence and Statistics should, wherever practicable, record imports of spinning ring frames, spinning rings, spindles, fluted rollers, tin rollers and plain and automatic looms, in numbers as well as value. It will be observed that despite import restrictions which have been in force during the major part of the period covered by the above statement, substantial imports of spinning ring frames, spindles, spinning rings, fluted rollers, tin rollers and plain looms have taken place. The consensus of opinion at the public inquiry was that a large part of these imports were effected against import licences issued before the import restrictions came into force.

(b) *Import control policy.*—The import control policy in respect of spinning ring frames, spindles, spinning rings and plain looms for the licensing periods from January-June, 1949 to January-June, 1954 and that in respect of fluted rollers and tin rollers for the licensing periods from January-June, 1951 to January-June, 1954 is briefly described below:—

*for 1951 (August to December).

January-June and July-December, 1949.—Licences for spinning ring frames, spindles and spinning rings were granted liberally on the advice of the Textile Commissioner. As regards looms, licences were granted freely to actual users for automatic, drop-box and high speed multiple head tape looms during January-June, 1949 and July-December, 1949 on the advice of the Textile Commissioner.

January-June, 1950.—No licences were granted for spinning ring frames, spindles and spinning rings. The policy in respect of looms remained the same as in January-June, 1949.

July-December, 1950.—Import licences for spinning ring frames required for expansion purposes were issued only for specifications not manufactured in the country, namely, spinning ring frames with more than 7" spindle length or 420 spindles per frame. Imports of spinning ring frames required for replacement purposes were licensed only to the extent of the difference between (a) the estimated demand and (b) the estimated output of the indigenous industry available for meeting the replacement demand after allowing for orders placed with the indigenous manufacturers by new or existing mills for expansion purposes. Licences were granted to actual users freely for complete ring frames with more than 7" lift or 420 spindles per frame. Licences for ring frames upto 7" lift but with more than 420 spindles were issued for 75 per cent. of the total quantity applied for, the balance of 25 per cent. being required to be obtained from the indigenous industry. Licences for spindles and spinning rings were granted upto 70 per cent. of the total requirements subject to certification by the Textile Advisory Committee No. 3 and the balance was required to be met from the indigenous industry. The licensing policy for looms was the same as in July-December, 1949.

January-June and July-December, 1951.—As regards spinning ring frames required for expansion purposes licences were granted in full only for ring frames with more than 7" lift irrespective of the number of spindles and for ring frames having more than 420 spindles irrespective of the lift but no licences were granted for other types of ring frames. Imports of ring frames required for replacement purposes were allowed to the full extent of the number applied for in the case of ring frames having more than 7" lift irrespective of the number of spindles per frame and to the extent of 75 per cent. of the number applied for (the balance of 25 per cent. being required to be obtained from the indigenous industry) in the case of ring frames having 7" or less lift and more than 420 spindles per frame. With regard to other categories, imports were allowed to the extent of the difference between (a) the estimated demand and (b) the estimated output of the indigenous industry after allowing for the number of ring frames required for expansion purposes. In the case of spindles, spinning rings, fluted rollers and tin rollers licences were granted for 70 per cent. of the quantity applied for, subject to the condition that the applicants produced evidence of having placed orders for the balance of 30 per cent. with the indigenous manufacturers. Import licences for looms were granted to actual users only for automatic, drop-box, high speed, multiple head, tape and webbing, light metal treadle looms and a semi-automatic looms.

January-June, 1952.—Spinning ring frames having more than 7" lift were licensed freely for expansion purposes as well as for replacement purposes, but ring frames having 7" lift or less were

allowed to be imported on the condition that for every ring frame imported, the importer placed an order for two ring frames with the indigenous manufacturers. Imports of spindles and spinning rings were regulated on the basis that for every spindle ordered from the indigenous manufacturers, one spindle was allowed to be imported and for every two spinning rings ordered from the indigenous manufacturers, three spinning rings were allowed to be imported. No licences were issued for plain looms, drop-box looms, automatic looms of cop change type or loose-reed semi-auto looms. Actual users, however, were allowed to import automatic looms of shuttle change type and fast reed-cop-change type, fast reed semi-automatic looms, high-speed multiple head, and webbing looms, light metal treadle looms and blanket looms. Imports of fluted rollers were restricted during this period on the basis that for every fluted roller ordered from the indigenous manufacturers, two were allowed to be imported. No licences were granted for tin rollers.

July-December, 1952.—No licences were granted for ring frames having 7″ or less lift, but ring frames having more than 7″ lift were licensed both for expansion and for replacement. Spindles required by actual users for use in ring frames having more than 7″ lift were licensed, but no licences were granted for spindles required for use in ring frames having 7″ or less lift. The policy in respect of spinning rings and plain looms was the same as in January-June, 1952. No licences were granted for fluted rollers or tin rollers.

January-June and July-December, 1953 *and January-June*, 1954.—No licences were granted for spinning rings, frames, spindles, fluted rollers, tin rollers or looms. Licences were granted for spinning rings on the basis that for every three rings for which orders were placed with the indigenous manufacturers, two spinning rings were allowed to be imported.

(c) *Export control policy.*—Upto 7th January, 1949, exports of cotton textile machinery and mill work of indigenous origin and parts thereof were allowed in consultation with the Textile Commissioner, Bombay. From 8th January, 1949 to 23rd March, 1949 exports of cotton textile machinery of indigenous origin were licensed freely to all permissible destinations, provided the value covered by each application for the export licence did not exceed Rs. 5,000. Where the value exceeded this limit the application was considered on merit. From 24th March, 1949 to 7th August, 1953 exports of cotton textile machinery of indigenous origin were licensed freely, provided the articles to be exported did not contain components imported from hard currency countries, or components imported from soft currency countries and exceeding 50 per cent. of the total value of the articles concerned. Applications for export of cotton textile machinery which did not satisfy these conditions were considered on merit. Since 8th August, 1953, exports of indigenously produced textile machinery are licensed freely, subject to the condition that where the value of the imported components used exceeds 50 per cent. of the total value, the application will be considered on merit.

(d) At the public inquiry, the representatives of the cotton textile industry strongly represented that Government's import control

policy had favoured the textile machinery industry to an undue extent and was detrimental to the interests of the mill industry. It was urged that the arrangement whereby imports of certain items of machinery were linked with purchases from indigenous sources had actually deterred certain mills from carrying out desirable replacements and additions because of their apprehensions about the quality of machinery produced by certain units. We feel that there will be no cause for such apprehensions in future if adequate arrangements are made as recommended in paragraph 9 above for a periodical inspection of the quality of indigenous textile machinery. As regards the severity of import restrictions, it will be seen from the statistics of imports given in paragraph 10(a) above that actual imports of several items of textile machinery during the last three years were on a fairly substantial scale. In view of the strong prejudice which prevails against indigenous machinery, we have no doubt that the incidental protection afforded by import control is helpful to the development of the domestic industry, but we suggest that the data given in this Report about domestic requirements, capacity and production should be taken into account in deciding the scope and extent of import control. The millowners also contended that the textile industry was entitled to certain freedom of choice in the matter of its equipment which was denied to it as a result of the present ban on imports of ring frames. Some of the mills were anxious to install ring frames having more than 7″ lift or certain improved types like M II produced by Platt Brothers. The representatives of the textile machinery industry opposed this contention on the ground that since it was usually necessary to operate ring frames having more than 7″ lift at lower front roller and spindle speeds, the output of yarn per hour obtained from such machines was lower than that obtained from 5″ lift machines. They admitted, however, that the larger package machine provided a longer yarn length on each bobbin and was definitely advantageous in regard to the labour and stores cost factors. They also pointed out that the use of such frames would entail changes in the lay-out of the plant and in the equipment of other departments, such as the winding department, the latter involving additional capital cost and some displacement of labour. The representatives of the mill industry, on the other hand, urged that in view of the rising cost of labour, their efforts were now directed towards increasing the output per man-hour rather than the output per spindle and that the progressive mills would like to install ring frames of the improved types mentioned above despite the high cost of such frames. We consider that the demand put forward by the mill industry for permission to install improved types of ring frames deserves to be examined by Government from the point of view of its likely effects on the efficiency and cost of manufacture as well as on employment. We are of the opinion that while imports of textile machinery should be carefully regulated so as to assist the development of the textile machinery industry, the mill industry should be allowed reasonable freedom to experiment with such improved types of machinery as are not yet manufactured in the country.

Existing rate of duty

11. All the protected items of cotton textile machinery, namely, spinning ring frames, spindles, spinning rings, fluted rollers, tin rollers and plain looms are at present assessed to duty under Item 72(34) of

the First Schedule to the Indian Customs Tariff (38th Issue), the relevant extract from which is given below:—

Item No.	Name of article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rate of duty
				The United Kingdom	A British Colony	Burma	
72(34)	The following cotton textile machinery and apparatus and parts thereof, by whatever power operated, namely, spinning ring frames, spinning rings, spindles and plain looms.	Protective	10½ per cent *ad valorem*.	..	..	Free	*December 31st, 1953.

*The duration of the protective duty has been extended upto 31st December, 1954 by the Indian Tariff (Third Amendment) Act, 1953.

Commission's estimates of the fair selling prices of indigenous cotton textile machinery, landed costs of imported machinery and the measure of protection required by indigenous industry

12-A. (i) *Spinning ring frames.*—(a) *Fair selling price.*—Our Cost Accounts Officer has examined the costs of production of ring frames of Texmaco, Calcutta and Textools, Coimbatore. After a careful examination of the cost data for both these units, we have decided to take the cost of production at Texmaco, Calcutta, as representative of the industry as a whole. Texmaco, Calcutta, have a much larger capacity than Textools and their actual production of ring frames has also been higher. As compared with Textools, Texmaco have to sell their ring frames over a wider area. Textools, owing to the smaller scale of their operations and other factors, are able to manage with comparatively lower overhead, but this cannot be regarded as typical of the industry as a whole. Texmaco's cost data are also available in fuller details. We have, therefore, based our estimate of the fair selling price of ring frames on the cost of production of Texmaco, Calcutta. We have adopted for the purpose of costing a ring frame of 400 spindles, plain bearing, 5/6″ lift, 2 5/8″ gauge, 4 roller, high draft. During the first half of 1953, Texmaco, Calcutta, produced 78 complete ring frames and components equivalent to 22 ring frames, *i.e.*, 100 ring frames in all. The cost data compiled by the Cost Accounts Officer relate to this period and to an annual output of 200 ring frames, as compared with an output of 260 ring frames on which the previous estimate was based. The principal features of the cost data are explained below:—

(i) *Materials.*—These comprise chiefly of cast iron parts, steel parts, and certain purchased components. In the Board's estimate for 1950, the cost of manufacturing cast iron

parts was included in "materials" while it is now included in "manufacturing expenses". After adjustment for this factor, the cost of materials shows a small increase as compared with the Board's estimate. The weight of castings now used per frame is 7·32 tons as against 7·92 tons estimated previously. The quantities of M.S. parts, spindle alloy steel and other materials have been allowed at the actuals shown by the firm's records.

(ii) *Manufacturing expenses.*—Comparison of the current costs with the previous estimates shows that the firm has effected substantial saving in the cost of labour, but this has been largely offset by increases in overheads and depreciation charges. The latter increase is due to additions to equipment combined with lower output. Interest on working capital has been calculated at 4½ per cent. per annum on 4½ months' cost of production, excluding depreciation.

(iii) *Packing charges.*—The increase in packing charges as compared with the previous estimate is due to the improved method of packing adopted by the firm since the last inquiry.

(iv) *Return on Block.*—At the previous inquiry the gross block was taken at Rs. 70 lakhs and return per ring frame was calculated at 10 per cent. on this block, distributed over an output of 260 ring frames per annum. It worked out to Rs. 2,692 per frame. The firm has since mechanised its foundry and also made substantial additions to its equipment in other departments with the result that the total block now amounts to Rs. 93 lakhs. Since our estimate of cost is based on an output of 200 ring frames per annum as compared with 260 ring frames on which the previous estimate was based, a return of 10 per cent. on the increased block results in an increase in the return per frame to Rs. 4,661. We have allowed this return because in our view the new equipment installed by the firm was necessary to improve its manufacturing efficiency.

(v) *Selling expenses.*—As at the last inquiry selling expenses have been allowed at 5 per cent. on the cost of production excluding packing charges.

(vi) *Freight disadvantage.*—The firm's claim for an adequate allowance to cover its freight disadvantage has been examined in the light of the geographical distribution of its sales and an allowance of Rs. 604 per frame has been added to the fair ex-work price.

(vii) *Insurance-in-transit.*—An allowance of 1 per cent. on the fair ex-works price for insurance-in-transit is considered adequate.

(viii) *Fair-selling price.*—Our estimate of the fair selling price per standard ring frame is given below:—

	Tariff Board's estimate for 1950	Commission's estimate for 1953
1	2	3
	Rs.	Rs.
(*i*) Raw materials	6,343	3,836
(*ii*) Manufacturing expenses including interest on working capital	13,619	14,320
(*iii*) Packing charges	966	1,335
(*iv*) Return on block	2,692	4,661
(*v*) Fair ex-works price	23,620	24,152
(*vi*) Selling expenses	1,133	1,141
(*vii*) Freight disadvantage	600	604
(*viii*) Insurance-in-ransit	248	242
(*ix*) Fair selling price	25,601	26,39

(b) *C.i.f. prices and landed costs of ring frames.*—Although the United Kingdom is the principal source of supply, considerable competition is also expected from Japan, particularly because of the lower prices quoted by exporters in that country. We have, therefore, obtained the c.i.f. prices of ring frames of both British and Japanese origin. The current c.i.f. prices of British and Japanese ring frames (400 spindles, 2 5/8" gauge, 5/6" lift, 4 roller, high draft), as reported by the Indian Textile Engineers and the Association of Merchants and Manufacturers of Textile Stores and Machinery respectively, are as follows:—

(Per ring frame)

	U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	28,920·0	23,809·5
(*ii*) Customs duty at 10·5%	3,036·6	2,500·0
(*iii*) Clearing charges	289·2	238·1
(*iv*) Landed cost with duty	32,245·8	26,547·6
(*v*) Landed cost without duty	29,209·2	24,047·6

(c) *Comparison of landed costs of imported ring frames with the fair selling prices of indigenous ring frames.*—A comparison of the landed costs without duty of British and Japanese ring frames with the fair selling price of indigenous ring frames is given below:—

(Per ring frame)

	U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	28,920·0	23,809·5
(*ii*) Landed cost ex-duty	29,209·2	24,047·6
(*iii*) Fair selling price	26,139·0	26,139·0
(*iv*) Difference between (iii) and (ii)	−3,070·2	2,091·4
(*v*) Difference (iv) as a percentage of c.i.f. price	..	8·8

(d) *Measure of protection required for ring frames.*—It will be seen from the comparative figures given in the preceding sub-paragraph that the fair selling price of indigenous ring frames is lower than the landed cost of British ring frames, but is higher than that of Japanese ring frames. The rate of duty required to protect the domestic industry against competition from Japan would appear to be 8·8 per cent. In the course of this inquiry, we have received ample evidence to show that the sales of ring frames produced by one of the major units, namely Texmaco, Calcutta, are at present seriously hampered by the strong preference (which is at least partly due to prejudice) on the part of certain sections of the cotton textile industry for British ring frames, in spite of the higher prices of the latter. So long as important sections of the cotton textile industry continue to have a strong preference for British ring frames which they are accustomed to use for a long period, we consider that indigenous ring frames will continue to need protection against competition from U.K. as well as from other countries. Since, however, import restrictions on ring frames are likely to be maintained for balance of payments reasons during the next few years and certain other measures have been recommended by us in paragraph 9 above to overcome the consumers' prejudice, we have not considered it necessary to determine the allowance for prejudice which will have to be made in calculating the protective duty on ring frames under conditions of free imports. We consider that the requirements of this case will be adequately met by continuing the protective duty at the existing rate of 10½ per cent. *ad valorem* and accordingly recommend continuance of the existing duty. In order to make this duty fully effective, parts of ring frames should also be subject to the same rate of duty.

(ii) *Spindles and spinning rings.*—(a) *Fair selling price.*—As in the case of ring frames, we have taken the cost data for Texmaco, Calcutta as representative in this case also. The estimates of fair selling prices for these items have been prepared by us on the same principles as have been followed in the case of complete ring frames. Plain bearing spindles 5/6" lift and reversible, double flanged, rings of 1 5/8" dia. and 2 5/8" gauge were selected for costing. The fair selling prices for these items, as determined by us, are given below. The fair selling prices estimated at the last inquiry were Rs. 8,431 per spindle and Rs. 1,485 per spinning ring. A detailed break-down of these estimates was not furnished at the last inquiry.

	Commission's estimate for 1953.	
	Spindles (400 Nos.)	Rings (400 Nos.)
	Rs.	Rs.
(*i*) Raw materials	400·0	63·6
(*ii*) Manufacturing expenses including interest on working capital	1,689·2	405·9
(*iii*) Packing charges	153·6	34·5
(*iv*) Return on block	609·4	130·8
(*v*) Fair ex-works price	2,852·2	634·8
(*vi*) Selling expenses	134·9	30·0
(*vii*) Railway freight disadvantage	48·5	10·8
(*viii*) Insurance-in-transit	28·5	6·3
(*ix*) Fair selling price	3064·1	681·9
(*x*) Fair selling price per piece	7·660	1·705

(b) *C.i.f. prices and landed costs of spindles and spinning rings.*—The following statement shows the c.i.f. prices of spinning rings and spindles imported from United Kingdom and Japan as reported by the Indian Textile Engineers and the Association of Merchants and Manufacturers of Textile Stores and Machinery respectively.

Spindles	(per spindle) U.K. Rs.	Japan Rs.
(*i*) C.i.f. price*	7·063	4·763
(*ii*) Customs duty at 10½%	0·741	0·500
(*iii*) Clearing charges	0·071	0·048
(*iv*) Landed cost with duty	7·875	5·311
(*v*) Landed cost without duty	7·134	4·811
C.i.f. price for 5″ lift	6·875	4·286
C.i.f. price for 6″ lift	7·250	5·240
C.i.f. price for 5″/6″ (average)	7·063	4·763

Rings	(per ring) U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	1·453	1·047
(*ii*) Customs duty at 10½%	0·152	0·110
(*iii*) Clearing charges	0·014	0·010
(*iv*) Landed cost with duty	1·619	1·167
(*v*) Landed cost without duty	1·467	1·057

(c) *Comparison of landed costs of spindles and spinning rings with the fair selling prices of the corresponding indigenous products.*—A comparison of the landed costs without duty of imported spindles and spinning rings with the fair selling prices of the corresponding indigenous products is given below:—

Spindles	(per spindle) U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	7·063	4·763
(*ii*) Landed cost without duty	7·134	4·811
(*iii*) Fair selling price	7·660	7·660
(*iv*) Difference between (iii) and (ii)	0·526	2·849
(*v*) Difference (iv) as a percentage of the c.i.f. price	7·44	59·81

Spinning rings	(per ring) U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	1·453	1·047
(*ii*) Landed cost without duty	1·467	1·057
(*iii*) Fair selling price	1·705	1·705
(*iv*) Difference between (iii) and (ii)	0·238	0·648
(*v*) Difference (iv) as a percentage of the c.i.f. price	16·38	61·89

(d) *Measure of protection required for spindles and spinning rings.*—The rates of duty required to equate the landed costs of imported spindles with the fair selling prices of indigenous spindles work out to 7·44 per cent. in the case of spindles imported from the United Kingdom and 59·81 per cent. in the case of those imported

from Japan. Similarly, in the case of spinning rings, the rates indicated above are 16·38 per cent. for British spinning rings and 61·89 per cent. for Japanese spinning rings. Both spindles and spinning rings, however, are important components of spinning machinery and a marked rise in the prices of these items may adversely affect the programme of replacement and modernisation in the cotton textile industry which it is necessary in the wider national interest to encourage. An increase in the rates of import duties is not, therefore, the right form of protection for this section of the domestic cotton textile machinery industry. We accordingly recommend that the protective duty on spindles and spinning rings be continued at the existing rate of 10½ per cent. *ad valorem*. At the previous inquiry, the Tariff Board had recommended the grant of subsidies to the domestic manufacturers of ring frames in the event of import control being withdrawn. If the imports of spindles and spinning rings were free from control, the desirability of granting a subsidy on the manufacture of these items would have had to be considered. As in the case of the other items, however, the domestic industry is at present receiving a measure of additional protection through import control on spindles and spinning rings and this, combined with the existing protective duty, would be adequate to safeguard the position of the industry.

(iii) *Fluted rollers.*—(a) *Fair selling price.*—Our Cost Accounts Officer has examined the costs of production of fluted rollers during 1953 at the works of Texmaco, Calcutta and the Star Textile Engineering Works, Bombay. Since the production of fluted rollers by the latter firm was very small in 1953, the cost data relating to that firm do not provide a satisfactory basis for estimating the fair selling price for the industry as a whole. We have, therefore, worked out the fair selling price of fluted rollers on the basis of the data relating to Texmaco, Calcutta only. Our estimate relates to fluted rollers of 7/8" dia. and 21" staff length and is based on an output of 55,376 per annum as compared with 62,000 on which the Tariff Board's estimate was based. The following points regarding the cost data may be noted:—

(i) *Raw materials.*—Texmaco, Calcutta use steel rounds of 1" dia. for the manufacture of 7/8" fluted rollers. The actual consumption of steel, as shown by the firm's records, has been allowed. Our estimate of cost of materials is lower than the previous estimate.

(ii) *Manufacturing expenses.*—The small increase in cost over the 1951-52 estimates is chiefly due to increases in overheads and depreciation. While the block has increased from Rs. 8 lakhs to Rs. 10·75 lakhs, the output has declined as stated already. Interest on working capital has been allowed at 4½ per cent. on 4½ months' cost of production.

(iii) *Return on block.*—Return has been allowed at 10 per cent. on the gross block valued at Rs. 10·75 lakhs.

(iv) *Other items.*—As at the last inquiry, selling expenses have been allowed at 5 per cent. on the fair ex-works price, excluding packing, and insurance-in-transit at 1 per cent. on the fair ex-works price. The freight disadvantage has been estimated at Rs. 0·188 per roller.

(v) *Fair selling price.*—Our estimate of the fair selling price per fluted roller of 7/8" dia. and 21" staff length is given below:—

	Board's estimate for 1951-52	Commission's estimate for 1953
	Rs.	Rs.
(*i*) Raw materials	1·210	1·090
(*ii*) Manufacturing expenses including interest on working capital	7·612	7·800
(*iii*) Packing charges	0·208	0·222
(*iv*) Return on block	1 290	1·962
(*v*) Fair ex-works price	10·320	11·074
(*vi*) Selling expenses	0·506	0·543
(*vii*) Freight disadvantage	0·175	0·188
(*viii*) Insurance-in-transit	0·103	0·111
(*ix*) Fair selling price	11·104	11·916

(b) *C.i.f. prices and landed costs of fluted rollers.*—The c.i.f. prices and landed costs of fluted rollers from the United Kingdom and Japan, as furnished by the Indian Textile Engineers and the Association of Merchants and Manufacturers of Textile Stores and Machinery respectively, are given below:—

	(per fluted roller) U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	13·584	9·877
(*ii*) Customs duty at 10½%	1·426	1·037
(*iii*) Clearing charges	0·136	0·099
(*iv*) Landed cost with duty	15·146	11·013
(*v*) Landed cost without duty	13·720	9·976

(c) *Comparison of landed costs of imported fluted rollers with the fair selling price of indigenous fluted rollers.*—In the following statement the landed costs without duty of imported fluted rollers are compared with the fair selling price of indigenous fluted rollers.

	(per fluted roller) U.K. Rs.	Japan Rs.
(*i*) C.i.f. price	13·584	9·877
(*ii*) Landed cost without duty	13·720	9·976
(*iii*) Fair selling price	11·916	11·916
(*iv*) Difference between (*iii*) and (*ii*)	(−)1·804	1·940
(*v*) Difference (*iv*) as a percentage of c.i.f. price	..	19·6

(d) *Measure of protection required for fluted rollers.*—It would appear from the comparison given in the preceding sub-paragraph that indigenous fluted rollers need protection at the rate of 19·6 per cent. *ad valorem* against Japanese imports, but no protection against

British imports. As in the case of ring frames, however, we have to take into account the existence of consumers' prejudice on the one hand and the possible continuance of import control during the period of protection, as well as the effects of certain measures recommended by us in paragraph 9 above, on the other. Considering the additional protection which the industry is receiving from import control, we think that its requirements will be adequately met by the continuance of the existing protective duty at 10½ per cent. *ad valorem* on fluted rollers. This duty should apply to fluted rollers of all kinds, and not only those used in spinning ring frames. A new tariff item "fluted rollers of all kinds" should, therefore, be introduced with a protective duty of 10½ per cent. *ad valorem*.

(iv) *Tin rollers.*—(a) *Fair selling price.*—Our estimate of the fair selling price of tin rollers is based on the cost data for Texmaco, Calcutta for 1953 which have been taken as representative of the industry as a whole. The estimate relates to an annual output of 1,506 tin rollers as against an output of 1,800 rollers on which the Tariff Board's estimate was based. The following statement shows our estimate of the fair selling price per set (of 44·6 feet length) of tin rollers of 10" dia.:—

	Board's estimate for 1951-52	Commission's estimate for 1953
	Rs.	Rs
(*i*) Raw materials	178·160	152·0
(*ii*) Manufacturing expenses including interest on working capital	297·375	292·7
(*iii*) Paking charges	150·000	165·0
(*iv*) Return on block	30·000	94.1
(*v*) Fair ex-works price	655·535	703·8
(*vi*) Selling expenses	25·277	26·9
(*vii*) Freight disadvantage	62·000	66·8
(*viii*) Insurance-in-transit	6·555	7·0
(*ix*) Fair selling price	749·367	804·5
(*x*) Fair selling price per running foot	17·031	18·0

The above estimate has been worked out on the same lines as the estimate made at the last inquiry. The value of the block engaged in the production of tin rollers has increased from Rs. 0·9 lakhs to Rs. 2·36 lakhs since the last inquiry and this combined with the fall in output accounts for the higher return per tin roller.

(b) *C.i.f. prices and landed costs of imported tin rollers.*—The following statement shows the c.i.f. prices and landed costs of tin rollers imported from the United Kingdom as furnished by Indian Textile Engineers.

	(Per foot) Rs.
(*i*) C.i.f. price	26·30
(*ii*) Customs duty at 10½%	2·76
(*iii*) Clearing charges	0·26
(*iv*) Landed cost with duty	29·32
(*v*) Landed cost without duty	26·56

(c) *Comparison of the landed cost of imported tin rollers with the fair selling price of indigenous tin rollers.*—The landed cost ex-duty of imported tin rollers is compared below with the fair selling price of indigenous tin rollers.

	(Per foot) Rs.
(*i*) C.i.f. price	26·30
(*ii*) Landed cost without duty	26·56
(*iii*) Fair selling price	18·00
(*iv*) Dfference between (*iii*) and (*ii*)	(—)8·56

(d) *Measure of protection required for tin rollers.*—The indigenous production of tin rollers is well established, though further efforts need to be made to improve the quality of the indigenous product. Indigenous tin rollers are cheaper than foreign tin rollers and this section of the industry is not affected by foreign competition to any material extent. The domestic industry, therefore, no longer needs protection in respect of this item. Tin rollers, however, are not separately specified in the Indian Customs Tariff and consequently deprotection of this item will not entail any amendment to the tariff.

(v) *Looms.*—(a) *Fair selling price.*—We have examined the cost of production of both automatic and plain looms produced by Texmaco (Gwalior) Ltd., and of plain looms produced by Mysore Machinery Manufacturers Ltd. The cost of production of looms at Texmaco, Gwalior, however, has been taken as representative since it is the largest unit in the industry both in respect of capacity and actual production. In the case of looms, the industry meets with competition principally from Japan and since Texmaco's looms are modelled on Japanese looms, the fair selling price for those looms is suitable for comparison with the c.i.f. price and landed cost of Japanese looms. At the previous inquiry, plain looms of 48" reed-space were selected for costing. On the present occasion, however, we have examined the cost of production of automatic and plain (overpick and underpick) looms of 52" reed-space which now account for an appreciable proportion of the total output. The principal features of the cost data are mentioned below:—

(i) *Materials.*—These consist of cast iron parts, M.S. parts and certain purchased items. In the case of cast iron parts the allowance for wastage has been assessed at 12½ per

cent. as against 15 per cent. allowed at the last inquiry. The wastage allowance for M.S. parts, however, has been increased to 20 per cent. as the company is now compelled to use black bars instead of bright drawn bars available previously.

(ii) *Manufacturing expenses.*—In respect of all items except depreciation and interest on working capital, the actual cost as shown by the company's books has been adopted. The company has made substantial additions to its equipment in all departments and has now wholly mechanised its foundry, with the result that its rated capacity has increased to 8,000 looms per annum on three shift basis. Actual production during January-June, 1953 was 716 looms or less than 18 per cent. of the capacity. In view of the large disparity between capacity and production, we consider that the company can reasonably expect to recover only 50 per cent. of the total depreciation at this stage. We have, therefore, allowed depreciation on this basis. Interest on working capital has been allowed at 4½ per cent. on 4½ months' cost of production excluding depreciation.

(iii) *Packing charges.*—The increase in packing charges, as compared with the previous estimate, is due to the improved packing adopted by the company.

(iv) *Return on block.*—The present value of the block engaged in the production of looms is estimated at Rs. 67·24 lakhs as compared with Rs. 17·2 lakhs estimated at the previous inquiry. As in the case of depreciation, we consider it reasonable that the firm should receive on its present output only one-half of the return calculated at 10 per cent. on the gross block.

(v) *Selling expenses and insurance-in-transit.*—As at the last inquiry, selling expenses have been allowed at 5 per cent. on the fair ex-works price, exclusive of packing, and the charges for transit insurance at 1 per cent. on the fair ex-works price.

(vi) *Freight disadvantage.*—We have examined the distribution of sales among the principal consuming centres and consider that an allowance of Rs. 52·6 per automatic loom and Rs. 25·2 per plain loom should be adequate on account of freight disadvantage.

(vii) *Yarn beam and flanges.*—The cost of yarn beam and flanges has been added to the fair-ex-works price of indigenous looms in order to make it comparable with the c.i.f. price of imported looms which is inclusive of the cost of these items.

(viii) *Fair selling prices.*—The fair selling prices of indigenous automatic and plain (overpick and underpick) looms of 52" reed-space, as determined by us are given below. The fair selling price estimated at the previous inquiry is also

given, but it relates to plain looms of 48" reed-space and is, therefore, not strictly comparable.

	Board's estimate for plain looms 48"	Automatic 52" R.S. (cop.changing)	Plain Calico 52" R.S. Under pick	Plain Calico 52" R.S. Over pick
	Rs.	Rs.	Rs.	Rs.
(*i*) Raw materials . . .	620·6	703·2	520·9	371·4
(*ii*) Manufacturing expenses including interest on working capital . . .	584·4	1,234·5	776·2	773·7
(*iii*) Packing charges . .	60·0	100·0	90·0	90·0
(*iv*) Return on block . .	87·2	258·4	161·9	161·9
(*v*) Fair ex-works price . .	1,352·2	2,296·1	1,549·0	1,397·0
(*vi*) Selling expenses . .	50·0	109·8	72·9	65·3
(*vii*) Freight disadvantage . .	36·0	52·6	25·2	25·2
(*viii*) Insurance-in-transit . .	14·2	23·0	15·5	14·0
(ix)) Yarn beam & flanges . .	(not furnished).	98·0	75·0	75·0
(*x*) Fair selling price . .	1,452·4	2,579·5	1,737·6	1,576·5

(b) *C.i.f. prices and landed costs of looms.*—The c.i.f. prices and landed costs of looms imported from the United Kingdom and Japan, as reported by Greaves Cotton & Co. Ltd., and the Association of Merchants and Manufacturers of Textile Stores and Machinery respectively are given below:—

	U.K.		Japan	
	Plain overpick 52" R.S.	Plain overpick 52" R.S.	Plain underpick 52" R.S.	Automatic cop-changing 52" R.S.
	Rs.	Rs.	Rs.	Rs.
(*i*) C.i.f. price . . .	1,494·0	1,476·2	1,476·2	2,490·0
(*ii*) Customs duty at 10½% .	156·9	155·0	155·0	261·4
(*iii*) Clearing charges at 1% .	14·9	14·8	14·8	24·9
(*iv*) Landed cost with duty .	1,665·8	1,646·0	1,646·0	2,776·3
(*v*) Landed cost without duty .	1,508·9	1,491·0	1,491·0	2,514·9

(c) *Comparison of landed costs of imported looms with fair selling prices of indigenous looms.*—The landed costs ex-duty of imported looms compare as follows with the fair selling prices of indigenous looms:—

	Plain overpick (U.K.)	Plain overpick (Japan)	Plain Underpick (Japan)	Automatic Cop-changing (Japan)
	Rs.	Rs.	Rs.	Rs.
(*i*) C.i.f. price . . .	1,494·0	1,476·2	1,476·2	2,490·0
(*ii*) Landed cost without duty .	1,508·9	1,491·0	1,491·0	2,514·9
(*iii*) Fair selling price . .	1,576·5	1,576·5	1,737·6	2,579·5
(*iv*) Difference between (*iii*) & (*ii*)	67·6	85·5	246·6	64·6
(*v*) Difference as a percentage of the c.i.f. price . .	4·5	5·8	16·7	2·6

(d) *Measure of protection required for looms.*—While the existing rate of protective duty on plain looms is 10½ per cent. *ad valorem* the rates of duty required to equate the landed costs of imported looms with the fair selling prices of indigenous looms work out to 4·5 per cent. for plain overpick looms from U.K., 5·8 per cent. for plain overpick looms from Japan, and 16·7 per cent. and 2·6 per cent. for plain underpick looms and automatic cop-changing looms from Japan respectively. The above analysis, however, takes no account of the substantial measure of consumer's prejudice which exists in respect of indigenous looms of all types. The existing duty of 10½ per cent. is helpful to the domestic industry since it results in the landed costs of imported automatic and plain overpick looms being maintained at a higher level as compared with the fair selling prices of the corresponding types of indigenous looms. Indeed, in the absence of import control, the price difference between indigenous and imported looms would have had to be much higher in order to offset the consumer's prejudice. Having regard to the additional protection which the industry is receiving from import control, however, we recommend that the protective duty on looms should be maintained at the existing rate of 10½ per cent. *ad valorem*. This duty should apply to all types of looms. Since the domestic industry manufactures silk and rayon looms also which differ but slightly from cotton looms, there should be no differentiation of duty between these types. Plain looms should, therefore, be excluded from the Tariff Item 72(34) and a new tariff item should be introduced for "looms of all kinds" with a protective duty of 10½ per cent. *ad valorem*.

12-B. Although the cotton textile machinery industry will have enjoyed protection for nearly 5 years by 31st December next, it has not yet acquired a firm foothold in the Indian market. We consider that the industry will need protection for a further period of at least three years and we, therefore, recommend that the rates of protective duties recommend above should remain in force upto 31st December, 1957.

Summary of conclusions and recommendations

13. Our conclusions and recommendations may be summarised as under:—

(i) The scope of the inquiry includes spinning ring frames, spinning ring spindles, spinning rings, fluted rollers, tin rollers and plain and automatic looms. [Paragraph 41.

(ii) The annual domestic demand for these items during the next three years is estimated as follows:—

Ring frames 750, spindles 1 million, spinning rings 1·1 million, fluted rollers 250,000, tin rollers 3,000 and plain looms 7,000. No estimate can be made at this stage about the demand for automatic looms. [Paragraph 6].

(iii) Government should give a clear indication to the textile industry as early as possible of their policy regarding the installation of automatic looms, since the present uncertainty is hampering the development of this section of textile machinery industry. [Paragraph 6 (vi) (b)].

(iv) The domestic capacity, on single shift basis, for the production of the above items of textile machinery is estimated as follows:—

Ring frames 672 per annum (the capacity is likely to increase to 972 ring frames if the project undertaken by Laxmiratan Engineering Works Ltd., Bombay for manufacture of super high draft ring frames is approved and implemented), spindles 619,000 per annum, spinning rings 529,000 per annum, fluted rollers 252,500 per annum, tin rollers 3,800 per annum and looms 6,640 per annum. (The capacity is likely to increase to 9,040 looms per annum if the scheme submitted by Laxmiratan Engineering Works Ltd., Bombay for manufacture of looms is approved and implemented). [Paragraph 7(a)].

(v) The domestic production of the above items in 1953 was as follows:—

Spinning ring frames 215, Spindles 362,959, spinning rings 601,422, fluted rollers 186,386, tin rollers, 1935 and plain looms 1932. [Paragraph 7 (a)].

(vi) The cotton textile machinery industry deserves high priority in the allocation of materials. The industry should be given all possible assistance in obtaining adequate supplies of the materials required by it and especially in building up reasonable stocks of graded pig iron and mild steel. [Paragraph 8].

(vii) The quality of indigenous machinery has improved considerably since the last inquiry. However, further efforts in this direction are required to bring indigenous machinery to the requisite standard. [Paragraph 9].

(viii) Government should make suitable arrangements as early as possible to obtain expert technical advice on the quality of textile machinery which the mill industry is required to purchase from indigenous sources by reason of import control. The voluntary co-operation of the textile industry is essential for the healthy growth of the textile machinery industry and this cannot be ensured unless adequate arrangements exist for an impartial investigation of all complaints from the consuming industry about the quality of the indigenous products. A Special Officer for cotton textile machinery should be appointed in the Ministry of Commerce and Industry to keep a continuous watch over the progress of the cotton textile machinery industry as a whole and to recommend suitable measures to promote its development on sound lines. The duties of the Special Officer should be as stated in paragraph 9(e). [Paragrpah 9 (e)].

(ix) The Indian Standards Institution should expedite the formulation of standard specifications for the various components of cotton textile machinery manufactured in the country. [Paragraph 9 (e)].

(x) The Collectors of Customs and the Director General of Commercial Intelligence and Statistics should, wherever practicable, record imports of spinning ring frames, spinning ring spindles, spinning rings, fluted rollers, tin rollers and plain and automatic looms, in numbers as well as in value. [Paragraph 10 (a)].

(xi) While imports of textile machinery should be carefully regulated in order to secure a fuller utilisation of domestic capacity, the mill industry should be allowed reasonable freedom to experiment with such improved types of machinery as are not yet manufactured in the country. [Paragraph 10 (d)].

(xii) The existing protective duty of 10½ per cent. *ad valorem* on spinning ring frames, spinning ring spindles, spinning rings and fluted rollers should be continued upto 31st December, 1957. Parts of spinning ring frames should be subject to the same rate of duty, as at present. The existing protective duty of 10½ per cent. *ad valorem* on plain looms also should be continued and made applicable to looms of all kinds and parts thereof for the same period. Tin rollers no longer require protection. [Paragraph 12].

(xiii) Fluted rollers and plain looms should be excluded from the Tariff Item 72(34) and two new tariff items "fluted rollers of all kinds" and "looms of all kinds and parts thereof" should be introduced with a protective duty of 10½ per cent. *ad valorem* in each case. [Paragraph 12].

Acknowledgements

14. We wish to acknowledge the co-operation received from the representatives of producers, importers and consumers of cotton textile machinery and various Government Departments in carrying out this inquiry. Our thanks are also due to Shri S. K. Sinha, Deputy Development Officer (Industrial Machinery), Development Wing, Ministry of Commerce and Industry, Government of India, for his assistance in connection with this investigation.

M. D. BHAT, *Chairman.*

B. N. ADARKAR, *Member.*

B. N. DAS GUPTA, *Member.*

D. K. MALHOTRA, *Secretary.*

BOMBAY,

23*rd August*, 1954.

APPENDIX I

[*Vide* paragraph 3]

List of persons or bodies to whom the Commission's questionnaires and letters were issued and from whom replies or memoranda were received.

(*) Indicates those who have replied or sent memoranda.
(@) Indicates those who are not interested in the inquiry.

(A) *PRODUCERS:*

1. Achalpur Engineering Works, Ellichpur Camp (Berar).
@2. Acme Manufacturing Company Ltd., Antop Hill, Wadala, Bombay-19.
3. Annapura Engineering Works, Bangalore.
4. Cooper Engineering Ltd., Satara Road (Southern Rly.).
*5. India Machinery Company Ltd., 29, Strand Road, Calcutta.
6. Indian Textile Supply Co., Bruce Street, Bombay.
7. Indo Engineering Works, Hornby Vellard, Opp. Gwalior Palace, Worli, Bombay-18.
@8. Kirloskar Bros. Ltd., Kirloskarwadi, (Satara Dist.).
*9. Lakshmiratan Engineering Works Ltd., Empire House, Hornby Road, Fort, Bombay.
@10. Machinery Manufacturers Corporation Ltd., Gateway Building, Apollo Bunder, Bombay.
*11. Mysore Machinery Manufacturers Ltd., 5th Mile, Mysore Road, Bangalore-2.
*12. National Machinery Manufacturers Ltd., Kalwe, Thana.
*13. Parmar Mechanic Works, Vadi Pura, Surendranagar (Saurashtra).
*14. Ramakrishna Industrials Ltd., Peelamedu Post, Coimbatore.
15. Ravi Industries Ltd., Nawapada, Bombay-Agra Road, Thana.
*16. Sewing Machine Parts Making Works, Surendranagar (Saurashtra).
*17. Star Textile Engineering Works Ltd., 509, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay-1.
*18. Texmaco (Gwalior) Ltd., P.O. Birlanagar, Gwalior.
*19. Textile Machinery Corporation Ltd., 8, Royal Exchange Palace, Calcutta.
*20. Textool Company Ltd., Post Box No. 221, Coimbatore.
*21. Textile Equipment Co., 11-A, Sitalfalwadi, Mount Road, Mazagaon, Bombay-10.
@22. Vasant Industrial & Engineering Works, "Vasant Vijay", 470-71, Worli Road, Bombay-18.

(B) *PRODUCERS' ASSOCIATION:*

*1. Engineering Association of India, 23-B, Netaji Subhas Road, Calcutta-1.

(C) *IMPORTERS:*

@1. Associated Textile Engineers, 43, Forbes Street, Fort, Bombay-1.
@2. Begg, Sutherland & Co., Ltd., Post Box No. 11, Kanpur.
@3. W. H. Brady & Co., Churchgate Street, Bombay.
@4. Consolidated Mill Supplies Ltd., Co-operative Insurance Building, Sir P. M. Road, Fort, Bombay.

IMPORTERS—contd.

@5. Duncan Stratton & Co. Ltd., 29, Bank Street, Fort, Bombay-1.
6. Eastern Electrical Co. Ltd., "Rose Bed", Avanashi Road, Coimbatore.
@7. Elgin Mills Co. Ltd., Post Box No. 11, Kanpur.
@8. Engineering & Agencies Ltd., Post Box No. 1291, Bombay.
*9. Gannon Dunkerley & Co. Ltd., Chartered Bank Building, Esplanade Road, Bombay.
*10. Greaves Cotton & Co. Ltd., 1, Forbes Street, Bombay-1.
*11. Indian Textile Engineers Ltd., 143, Medows Street, Fort, Bombay.
*12. Industrial Engineering Co., 45, Apollo Street, Fort, Bombay.
13. T. Maneklal Ltd., 35, Dalal Street, Fort, Bombay.
14. Marketing Corporation of India, Bombay Life Building, Connaught Circus, New Delhi.
15. Modi & Modi, 11, Linghe Chetty Street, Madras.
@16. Ormerods (India) Ltd., Bank of India Building, Apollo Street, Fort, Bombay-1.
17. H. M. Patel & Co., 105, Apollo Street, Fort, Bombay.
18. A. N. Sayal & Sons, 76, Ramnagar, New Delhi.
*19. Sizing Materials Co. Ltd., Jerro Building, 137, Mahatma Gandhi Road, Bombay-1.
20. Soorajmal Nagarmall, 8, Dalhousie Square (East), Calcutta.
@21. Swastic Textile Trading Co. Ltd., Motilal Hirabhai Market, Railwaypura Post, Ahmedabad-2.
22. Textile & General Supplies Ltd., Flora Fountain, Fort, Bombay.
@23. Textile Supplies Syndicate (India) Ltd., Kermani Building, Sir P. M. Road, Fort, Bombay.
@24. Textile Works Ltd., 49—55, Apollo Street, Fort, Bombay.
@25. Volkart Bros., Graham Road, Ballard Estate, Bombay.

(D) *CONSUMERS*:

@1. Attherton West & Co. Ltd., Post Box No. 67, Kanpur.
*2. Bangalore Woollen, Cotton & Silk Mills Co. Ltd., Bangalore-2.
3. Bengeshwari Cotton Mills Ltd., Serampore, Hooghly (W. Bengal).
*4. Binod Mills Co. Ltd., Ujjain (Madhya Bharat).
*5. Bombay Dyeing & Mfg. Co., Ltd., Elphinstone Road, Parel, Bombay.
*6. Central India Spg., Wvg. & Mfg. Co., Ltd., "The Empress Mills", Nagpur.
*7. Century Spg. & Mfg. Co. Ltd., Queens Mansions, Prescott Road, Bombay-1.
*8. The Elgin Mills Co. Ltd., P.B. No. 11, Kanpur.
*9. India United Mills Ltd., Indu House, Dougall Road, Ballard Estate, Bombay.
*10. Shri Jagdish Mills Ltd., Padra Road, Baroda.
*11. Jehangir Vakil Mills Co. Ltd., Delhi Gate, Ahmedabad.
*12. Jiyajeerao Cotton Mills Ltd., P.O. Birlanagar, (Madhya Bharat).
*13. Khatau Makanji Spg. & Wvg. Co. Ltd., Laxmi Building, 6, Ballard Pier, Fort, Bombay.
*14. Kohinoor Mills Co. Ltd., Home Street, Fort, Bombay-1.
*15. Sri Krishnarajendra Mills Ltd., Sri Krishnarajendra Mills P.O., Mysore.
*16. Lakshmi Mills Co. Ltd., Pappanaickenpalayam, Coimbatore.
17. Madura Srinivas Mills Ltd., Madura (South India).
*18. Madura Mills Co. Ltd., Madurai.
19. Mahalaxmi Cotton Mills Ltd., 135, Canning Street, Calcutta-1.
*20. Maharana Mills Ltd., Post Box No. 11, Porbunder (Saurashtra).
*21. Model Mills Nagpur Ltd., Umrer Road, Nagpur City.
22. Morarji Goculdas Spg. & Wvg. Co. Ltd., Parel, Bombay.

*23. Nagri Mills Company Ltd., Post Box No. 36, Ahmedabad.
24. Phoenix Mills Ltd., Imperial Bank Building, Bank Street, Bombay.
*25. Rajkot Spinning & Weaving Mills Ltd., Karansingji Cross Rd., Rajkot.
@26. Shree Sajjan Mills Ltd., 28, Apollo Street, Fort, Bombay.
*27. N. Sirur & Co., Ltd., Temple Bar Building, 70 Forbes Street, Fort, Bombay.
*28. Sree Meenakshi Mills Ltd., Post Box No. 1, Madurai.
*29. Surat Cotton Spg. & Wvg. Mills Ltd., 29, Veer Nariman Road, Fort, Bombay.
*30. Tata Industries Ltd., Bombay House, Bruce Street, Fort, Bombay.
*31. Vasant Mills Ltd., Singanallur. (Coimbatore Dist.).
32. Shri Vivekananda Mills Ltd., Gomatipur Road, Ahmedabad.
@33. Walchandnagar Industries Ltd., Walchandnagar, Dist. Poona.

(E) *CONSUMERS' ASSOCIATIONS*:

*1. Ahmedabad Millowners' Association, Lal Darwaja, Ahmedabad-1.
*2. Bengal Millowners' Association, 2, Church Lane, Calcutta.
3. Madhya Pradesh Millowners Association, Dhanwaty Chambers, Gita Grounds, Sitabuldi, Nagpur.
*4. Madhya Bharat Millowners' Association, 9, South Tukoganj, Indore.
*5. Millowners Association, Elphinstone Building, Veer Nariman Road, Bombay-1.
*6. Southern India Millowners' Association, Race Course, Coimbatore.

(F) *GOVERNMENT DEPARTMENTS*:

(i) *Central Government*:

*1. Chief Controller of Imports & Exports, Ministry of Commerce and Industry, New Delhi.
*2. Industrial Adviser (Engineering), Ministry of Commerce and Industry, Development Wing, Shahjahan Road, New Delhi.
3. Textile Commissioner, Ministry of Commerce and Industry, Hararwala Building, Wittet Road, Ballard Estate, Bombay.
*4. Iron and Steel Controller, 33, Netaji Subhas Road, Calcutta.

(ii) *State Governments*:

*1. Director of Industries, Government of Bombay, Old Custom House Yard, Fort, Bombay.
*2. Director of Industries, Government of West Bengal, 7, Council House Street, Calcutta.
*3. Director of Industries & Commerce, Government of Madras, Cathedral P.O., Madras.
*4. Director of Industries, Government of Madhya Pradesh, Nagpur.
*5. Secretary to the Government of Mysore, Development Department, Bangalore.
*6. Secretary to the Government of Madhya Bharat, Department of Industries and Commerce, Indore.
*7. Secretary to Government of Saurashtra, Department of Industry and Supply, Rajkot.

(G) *COLLECTORS OF CUSTOMS/CENTRAL EXCISE*:

*1. Collector of Customs, Bombay.
*2. Collector of Customs, Calcutta.
*3. Collector of Customs, Madras.
*4. Collector of Customs, Custom House, Willingdon Island, Cochin.
*5. Collector of Central Excise & Land Customs, Calcutta.
*6. Collector of Central Excise, Delhi.

1. *ORS OF CUSTOMS/CENTRAL EXCISE*—contd.
Collector of Central Excise, Baroda.

*2. Collector of Central Excise, 15, Chapel Road, Dinapore Cantt., Patna.

*9. Collector of Central Excise, Shillong.

*10. Assistant Collector of Central Excise, Puri.

H) *OTHERS:*

1. Association of Merchants & Manufacturers of Textile Stores and Machinery, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.

*2. Indian Standards Institution, 19, University Road, Civil Lines, Delhi-8.

*3. Victoria Jubilee Technical Institute, Matunga, Bombay-19.

APPENDIX II

[*Vide* paragraph 3]

List of persons who attended the Commission's public inquiry on 29th and 30th April, 1954 and gave evidence.

(A) *Producers* :		
1. Captain T. P. Rajan	Representing	Textile Machinery Corporation Ltd., 8 Royal Exchange Place, Calcutta.
2. Shri S. C. Kela		
3. Shri E. Williamson		
4. Shri S. C. Nundi		
5. Shri R. L. Makhania	"	Texmaco (Gwalier) Ltd., P.O. Birlanagar, Gwalior.
6. Shri J. S. Cornoll		
7. Shri K. Sundaram	"	Textool Co. Ltd. Post Box No. 221, Coimbatore.
8. Shri O. P. Dhanda	"	Lakshmiratan Engineering Works Ltd., Empire House, Hornby Road, Bombay.
9. Shri M. K. Kale		
10. Shri K. M. D. Thackersey		National Machinery Mfrs. Ltd., Kalwe Thana.
11. Shri J. C. Morton	"	
12. Shri H. Taylor		
13. Seth Purushotamsing L. Bajaj		
14. Shri K. Umanatha	"	Mysore Mahcinery Manufacturers Ltd., 5th Mile, Mysore Road, Bangalore.
15. Shri N. Lakshminarayan		
16. Shri A. Gardner		
17. Shri M. D. Mehta	"	Star Textile Engineering Works Ltd, 509, Sir Vithaldas Chambers, 16, Apollo St., Fort, Bombay.
18. Shri K. M Shah		
19. Shri M. C. Sheth	"	Parmar Mechanic Works and Sewing Machine Parts Making Works, Surendranagar.
20. Shri B. B. Shah		
21. Shri N. C. Mukherjee	"	India Machinery Co., Ltd., 29, Strand Road, Calcutta.
22. Shri K. P. Shah	"	Textile Equipment Co., 11-A. Sitafalwadi, Mount Road, Mazagaon, Bombay.
23. Shri T. M. Desai	"	Cooper Engineering Ltd., Satara Road (Southern Rly).
(B) *Producers Association*:		
1. Shri M. D 'Melo	"	Engineering Association of India 23-D, Netaji Subhas Road, Calcutta.
(C) *Suppliers of raw materials* :		
1. Shri S. C. Biswas	"	Mukand Iron and Steel Co. Ltd. 51, Mahatma Gandhi Road, Bombay.
(D) *Importers* :		
1. Shri S. K. Mani	"	Gannon Dunkerley and Co. Ltd., Chartered Bank Building, Esplanade Road, Bombay.
2. Shri H. P. Mather	"	Greaves Cotton and Co. Ltd., Forbes Street, Bombay.
3. Shri H. Leech		
4. Shri P. Brewer		Indian Textile Engineers, Ltd., 143, Medows Street, Bombay.
5. Shri H. A. Dundne	"	Sizing Materials Co., Ltd., Jerro Building, Mahatma Gandhi Road, Bombay.
6. Shri K. S. Campbell		
7. Shri V. P. Telang		
8. Shri G. A. Kulkarni	"	Consolidated Mill Supplies Ltd., Co-operative Insurance Building, Sir P.M. Road, Bombay

(E) *Consumers*:

1. Shri Neville Wadia	Representing	Millowners' Association, Elphinstone Building, Veer Nariman Road, Bombay.
2. Shri A. N. Mafatlal		
3. Shri Babulal Bubna		
4. Shri D. F. Kapadia		
5. Shri N. S. V. Iyear		
6. Shri Surottam P. Hutheesing	"	Ahmedabad Millowners Association, Lal Darwaja, Ahmedabad.
7. Shri S. N. Hada	"	Bengal Millowners Association, 2, Church Lane, Calcutta.
8. Shri G. B. Zalani	"	Madhya Bharat Millowners Association, 9, South Tukoganj, Indore.

F) *Government Departments* :

1. Shri S. K. Sinha	"	Industrial Adviser (Engineering), Development Wing, Ministry of Commerce and Industry, Shahjahan Road, New Delhi.
2. Shri R. N. Dutt	"	Iron and Steel Controller, 33, Netaji Subhas Road, Calcutta.
3. Shri A. N. Das	"	Textile Commissioner, Government of India, Ballard Estate, Bombay.
4. Shri D'Souza	"	Collector of Customs, Bombay.
5. Shri C. S. Ramu	"	Director of Industries and Commerce, Government of Madras, Cathedral P.O., Madras.
6. Shri D. C. Savkur		Director of Industries, Government of Bombay, Old Custom House, Yard, Bombay.

(G) *Others* :

1. Shri B. C. Munshaw	"	Association of Merchants and Manurfactuers of Textile Stores and Machinery, 16, Apollo Street, Sir Vithaldas Chambers, Fort, Bombay.
2. Shri R. K. Modi	"	Victoria Jubilee Technical Institute, Matunga, Bombay-19.

*The representative of the Ahmedabad Millowners Association could not attend the Public inquiry on 29th April, 1954. However, the Commission had a separate discussion with him on 7th May, 1954.

APPENDIX III
(*Vide* Paragraph 7)

Statement showing rated capacity and production of protected items of cotton textile machinery (Spinning ring frames, spinning rings, fluted rollers, tin rollers and plain looms from 1950 to 1953

Sl. No.	Name of the manufacturer	Rated capacity (Nos.)	Actual production in 1950 (Nos.)	1951 (Nos.)	1952 (Nos.)	1953 (Nos.)	
1	2	3	4	5	6	7	8
		(A) *Spinning ring frames*					
1.	Textile Machinery Corporation Ltd., Calcutta	300	151	250	215	141	
2.	Textool Co. Ltd., Coimbatore	48	24	46	68	59	
3.	National Machinery Mfrs. Ltd., Thana	300	..	..	..	..	
4.	Ramakrishda Industrials Ltd., Coimbatore	24	11	11	20	15	
	TOTAL	672	186	307	303	215	
		(B) *Spindles*					
1.	Textile Machinery Corporation Ltd., Calcutta	150,000	94,865	186,233	158,912	117,481	
2.	Textool Co. Ltd., Coimbatore	19,000	2,944	8,154	17,122	19,528	
3.	National Machinery Mfrs. Ltd., Thana	180,000	..	160	29,360	135,180	
4.	Laxmiration Engineering Works Ltd., Bombay	90,000	22,000	109,503	82,537	22,356 (upto June)	
5.	Parmar Mechanic Works, Surendranagar	72,000	16,031	50,218	25,657	45,152	
6.	Sewing Machine Parts Making Works, Surendranagar	60,000	3,000	17,213	12,673	20,762	
7.	Textile Equipment Co. Ltd., Bombay	18,000	5,136	6,931	5,472	2,500	
8.	Indian Textile Supply Co. Bombay	30,000	N.A.	16,000	18,000	N.A.	
	TOTAL	619,000	143,976	394,412	349,733	362,959	

1	2	3	4	5	6	7	8
			(C) *Spinning rings*				
1.	Textile Machinery Corporation Ltd., Calcutta	150,000	184,656	188,721	164,578	177,750	
2.	National Machinery Mfrs. Ltd., Thana	360,000	Nil	83,169	235,156	415,145	
3.	Textool Co. Ltd., Coimbatore	19 000	44	1,764	19,924	8,527	
	TOTAL	529,000	184,700	273,654	419,658	601,422	
			(D) *Fluted rollers*				
1.	Textile Machinery Corporation Ltd., Calcutta	60,000	57,808	60,970	51,163	66,888	
2.	Textool Co. Ltd., Coimbatore	9,500	4,938	9,275	14,031	12,946	
3.	Laxmiratan Engineering Works Ltd., Bombay	45,000	..	..	..	..	
4.	National Machinery Mfrs. Ltd., Thana	90,000	Nil	4,400	25,150	91,675	
5.	Star Textile Engineering Works Ltd., Bombay	48,000	10,886	11,931	16,613	14,877	
	TOTAL	252,500	73,632	86,576	106,957	186,386	
			(E) *Tin rollers*				
1.	Textile Machinery Corporation Ltd., Calcutta	2,000	1,630	1,918	1,587	1,525	
2.	Textool Co. Ltd., Coimbatore	300	..	..	381	277	
3.	National Machinery Mfrs. Ltd., Thana	1,500	..	..	..	..	
4.	Star Textile Engineerings Works Ltd., Bombay	..	36	27	102	77	
5.	Ramakrishna Industrials Ltd., Coimbatore	..	..	..	54	56	
	TOTAL	3,800	1,666	1,945	2,124	1,935	
			(F) *Plain looms*				
1.	Texmaco (Gwalior) Ltd.	4,000	1,694	1,851	979	1,502	
2.	Cooper Engineering Works Ltd., Satara Road	1,200	..	..	170	40 (upto June)	
3.	Mysore Machinery Co. Ltd., Bangalore	720	248	422	151	259	
4.	India Machinery Co. Ltd., Calcutta	720	117	303	333	131	
	TOTAL	6,640	2,059	2,576	1,633	1,932	

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