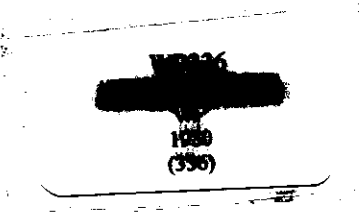


Working Paper



**INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD**

**INNOVATIONS IN INDIAN TEXTILE INDUSTRY:
THE FORMATIVE YEARS**

By

Dwijendra Tripathi

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INNOVATIONS IN INDIAN TEXTILE INDUSTRY: THE FORMATIVE YEARS

Dwijendra Tripathi

Indian Institute of Management, Ahmedabad

The Indian Cotton textile industry on modern lines, as is well known, has developed during the last one century and a quarter. Even though, India had a long tradition of cotton manufacturing before the establishment of the British domination, the traditional method of production could not withstand the challenge of a new technology generated in the wake of the Industrial Revolution in England. The traditional manufacturing processes and techniques symbolised by small establishments in the large British colony, gradually yielded place to large factories using sophisticated machines and equipments imported from the mother country. The process began in 1854 and made very rapid progress inspite of a series adverse factors including the unsympathetic attitude of an alien government. That India by 1913 had come to possess as many as 259 mills with about 6,600,000 spindles, 94,000 looms, and more than 250,000 workers¹ is a tribute to the Indian entrepreneurial initiative and determination. Before the First World War gave an unexpected, though bloody, boost to the fortunes of the Indian industry, Bombay and Ahmedabad had already emerged as the major centres of textile production; a few mills had been set up in some other parts of the country as well.

The growth of the Indian industry is sometimes referred to as a case of "adaptive innovation".² There is no denying the fact that the textile industry in India originated and developed under inspiration from England, that the Indian entrepreneurs during the formative years of the industry were wholly dependent on the British suppliers for plants and machinery, and that the physical layouts and technical features in the early Indian factories were closely patterned after those in Lancashire. Placed as they were in a colonial set up, and as they had easy access to a sophisticated technology, it was neither possible nor necessary for the Indian entrepreneurs to commit their resources and skills to technological discovery or advancement. But the considerable entrepreneurial courage and wisdom that they displayed in adopting a new and rather unfamiliar technology in an uncertain environment for their own use should not be overlooked. In the absence of more sophisticated and now familiar techniques to gauge the profit potential of a new venture, they had nothing but their intuitive judgment to guide them; the hope of any positive help from an alien government would have been unrealistic; and the threat of a stiff competition from Manchester, with the enormous political leverage that the British manufacturers enjoyed, could have daunted the most determined of spirits.³ Under these conditions, the introduction of a new method of production had all the risks and dangers inherent in what is considered to be a "primary innovation." In fact in as much as the adaptation of a new production function to a milieu different from the one which gave its

birth is an act of innovation, the distinction between the "primary" and "adaptive" innovation, to my mind, is meaningless. It is even more so in the case of the Indian experiment in textile production.

It is also worth mentioning that it was not always that the early Indian entrepreneurs emulated Lancashire in the choice of technology. The introduction of the ring spinning is a case in point. Even though the Rabbeth Ring Spindles had been invented in the United States a few years before the birth of the Indian industry, they had received at best a cold reception in Lancashire when J.M. Tata decided in 1853 to give a fair trial to the new device in the face of the general British disapproval. It was the experiments carried out at his Empress Mills at Nagpur and several improvements effected at the instance of his technicians that the superiority of the new spindles over the mules was established, at least for spinning the coarse counts on which most of the Indian mills concentrated. It was an accomplishment of no mean significance as the ring method had not till then given sufficiently promising results even in the United States where it had been invented. Though the English firms continued to remain skeptical about the suitability of the ring spindles, and Tata had some difficulty in persuading the Platt Brothers of Oldham, the principal machinery supplier to India, to manufacture the necessary plant, he went ahead with his plan to equip his mill wholly with the new machines. The Empress Mill, thus, was among the first textile companies in the world to ~~make~~ make a large scale

commercial use of a technology with revolutionary consequences for the industry.

Several other Indian producers followed Tata's lead with the result that more than a million ring spindles were in use in various Indian mills when the century turned. The output of the new machines was substantially larger than that of other types, their technical features were less complicated, and labour requirements less exacting. They were, thus, more suitable to Indian conditions and labour efficiency. The introduction and large scale application of the new device was no insignificant factor in giving the kind of advantage to the Indian mills which they so badly needed in their unequal fight against Lancashire.⁴

All said and done, however, easier acceptance of the ring method or at least far less resistance against it, in India than in Lancashire was one of the very few departures made by the Indian entrepreneurs from the prevailing British practices relating to technology. By and large, they followed Lancashire in this respect. In several other spheres, however, they displayed remarkable sense of independent judgement. And in assessing the innovative ability of the Indians, or for that matter any group of entrepreneurs, technological matters alone should not be the only data

Innovation in other managerial functions and processes must be given due attention, for, technology alone cannot determine the future of an enterprise.

In this context, it is important to point out that the form of ownership that the Indians chose for their textile enterprises had nothing in common with the system under which the British textile companies had developed or were then operating. While analysing India's debt to Britain it is scarcely noticed that at the time of the birth of the Indian textile industry, most of the British companies were partnership firms and continued to be so well until after the First World War.⁵ In contrast, the very first Indian textile mill, founded by Cowasjee Nanabhoy Davar and inaugurated in 1854, had several elements usually associated with a joint stock concern. It was not a full fledged joint stock company, but with more than fifty share holders with limited liability, it was more than a partnership. S.D. Mehta has called it a "co-partnership." The third Indian mill, established in 1858, was converted into a joint stock company within a year after its birth, and joint-stock became the basis of establishing practically all subsequent undertakings in the field. A few which started as partnership were soon converted into joint stock firms.⁶

Statistics bear this out. In 1860, out of 5 cotton textile companies in existence all were registered as joint stock firms. In 1880, there were 62 mills operating in various parts of the country out of which only 9 were private mills. Two decades later, the number of companies had grown up to 190, but the net addition to the private companies was limited to 2 since as many as 179 out of the total were operating as joint stocks. Precise figures of the registered companies in the entire country immediately before the beginning of the First World War are not readily available, but out of 33 Ahmedabad concerns for which the details are known, only 3 were under partnerships or sole proprietorships in 1914. On a rough reckoning, a similar situation seems to have prevailed in Bombay, the other principal textile centre.⁷

The full significance of the adoption of joint stock principle by the Indian textile manufacturers would be still more clear if we remember that joint stock was yet to become the widely accepted basis of business organization in India when the modern industry made its beginning. Indubitably, the Indians were aware of the joint stock principle and had in fact practised it on a limited scale and at least in a few regions in the 17th century. Some scholars have drawn our attention to the "joint stock associations" formed in the last quarter of the 17th century by the Indian merchants on the Coromandel Coast "for the purposes of managing the supply of textiles to the European Companies" trading with India.⁸ These, most probably, were the associations of brokers or

middlemen who organized themselves into ongoing concerns at the instance of the trading companies wishing to minimise the danger, of frequent increase in prices resulting from competition among individual bidders. These quasi joint-stock organizations had fallen into disuse by the end of the 18th century. Perhaps the sole raison de etre of their existence was the need of the buyer companies, and as the need declined, so did the organizations satisfying it. It is no surprise, therefore, that these associations failed to advance to the next logical stage of evolution. In any case, there is no evidence of such business formations existing in the other parts of India.

The Indian business horizon in the last quarter of the 18th Century and the first quarter of the 19th was dominated by the operations of the British free merchants and the agency houses on one hand, and Indian traders and Indigenous bankers on the other. The free merchants operated either individually or in partnership with their compatriots, and Indian traders and moneylenders were the sole proprietors of their businesses. When the agency houses came to grief following the financial crisis of 1829, the organizations that emerged on their ruins were all partnership firms. We know of at least 17 such partnerships emerging in Bengal alone between 1832 and 1847. Simultaneously the Indian traders and bankers continued their operations on individual basis as the general

environment offered them little incentive to come together.⁷ True, a few banking and insurance companies were formed on joint stock lines, but they lacked some of the essential features of joint stock undertakings. The Union Bank of Calcutta, for instance, could not sue or be sued through its officers until 1845. The concept of limited liability was absent, and the failure of a company could cause consternation in the entire share market as it actually happened when the Union Bank of Calcutta failed in 1848.¹⁰ For all practical purposes, there was little difference between a partnership firm and a joint stock company during this period.

Among the factors that inhibited the growth of joint stock companies in the first half of the 19th century was the absence of a company law. There was no legislative sanction to back up the concept of limited liability and a single shareholder could be considered liable for the debts of a company. It was not always possible for the companies to raise finances on the basis of their own credit and there were occasions when a company had to raise funds against the guarantee of individual shareholders. Preference shares and debentures could not be issued as they were hardly compatible with the concept of unlimited liability. Above all, there was no provision in the law requiring the registration of a company, and without registration a company could not enjoy the privileges which a handful of companies, incorporated under special and separate acts, enjoyed.¹¹

The Indian company Act of 1850 removed some of the disabilities from which the companies suffered. But it was the act of 1857 that introduced the system of limited liability and made registration compulsory for a certain class of companies. While the act of 1850 was based on the then existing English laws, the 1857 legislation was patterned identically after the company law passed in England a year before. The idea behind common legal frameworks for governing the company operations in the mother country as well as the colony was to ensure that those "desirous of carrying on either the whole or a portion of their business in India might know that the law in both countries was substantially the same, and that they would incur no greater risks in India than they would in England."¹² And yet while the new legal provisions encouraged an unmistakable shift in the approach to company formation in India, in England they made little impact atleast on the textile manufacturers.

Why the English manufacturers chose to cling to the older form of ownership even after the legislation of 1856 is not my concern, nor is it easy to discern the motive behind the adoption of joint stock system by the Indian producers. Perhaps the partnership pattern was too entrenched in England to be easily disturbed merely by legislative changes. And it is possible that the Indian pioneers, unencumbered by any indigenous precedence of ownership pattern in large factory establishments, found it easier to embrace a system which had the potential

to attract investors who, with too small resources or too little ability or willingness to participate actively in floating or managing a large and complex system, would have been reluctant to join a partnership. That such investors did not come forward at the initial stages to acquire shares in the joint stock textile companies is beside the point. It is well known that the early promoters distributed the shares of their concerns among their own close relatives and friends. But what is pertinent is that the pioneers might have calculated that once their manufacturing enterprises would register progress, the initially cautious and hesitant parties would feel encouraged to join their capital structure. At later stages of the development of the Indian industry, it actually did happen so that a number of cotton companies could dilute the family holdings of the promoters in their share capital.¹³

Embarking on the joint stock system rather than the partnership, so successfully tested by the British producers, was, thus, an act of some foresight on the part of the Indian pioneers. It was also consistent with the Indian environment in which both capital and managerial ability were scarce. Undoubtedly, the promoters of industrial companies in other fields also adopted the joint stock concept for their own purpose, but it was the cotton manufacturers who were the first to make use of it at a large scale and thus establish its viability as an instrument of industrialization. The idea of joint stock was, by no means, new when

the first mills came into being, but the credit for applying it effectively in the industrial field at a scale sufficient to win for it a general acceptability must belong to the early promoters of factory based textile production. And it is in this sense that the Indian departure from the time honoured British convention was an innovation.

The Indian approach to management structure also differed radically from that in vogue in the British mills when the Indians started their own industry. While the Lancashire mills were managed by salaried managing directors who worked under the overall control of the board of directors,¹⁴ the Indian pioneers, on the other hand, adopted for their purpose a structure almost unique to India. The concept of the managing agency system of management, under which the Indian cotton textile developed, like that of the joint stock principle, was not unknown when the first mills were born, and some scholars trace it as far back as the 18th century, but the origin of the system is still shrouded in mystery.¹⁵ One thing, however, is certain. The system as a form of corporate management was yet to establish itself when the early Indian pioneers embarked on textile ventures. A few companies in Bengal were all that could be deemed to have come, by some stretch of logic, under the managing agency structure.¹⁶ Thus, without any meaningful precedence, whether in India or abroad, the adoption of the new form of management involved some degree of risk and required a great deal of imagination.

The managing agency structure facilitated the promotion and management of one or several companies, though separate and independent legal entities, by a single controlling firm which, in turn, was usually controlled by a single family. The modus operandi was simple. A family with considerable financial strength would launch a company and allot to its own members or near relatives and close friends sufficient number of shares necessary to control the new concern. Simultaneously, those holding the controlling interests in the new company joined to form a managing agency firm, usually a partnership or sole proprietorship, to which the management of the new company was entrusted under an agreement stipulating the terms and conditions between the shareholders and the managing firm. The remuneration of the managing agency was usually fixed in terms of a certain percentage of annual sale or profits. Technically speaking, thus, the managing agents did not own the company; they only managed it for which they were remunerated. But in practice all critical and strategic decisions about the managed company were taken by the managing firm. Even though the company in question did have a board of directors, since its members were handpicked by the managing agents, they were no better than mere decoration.

The Indian pioneers of textile ventures were the first to embrace the managing agency system for managing industrial concerns. It is clear from the earliest extant deed of agreement between the shareholders

of a company and its promoters, which anticipated several essential features of such agreements of later dates. Significantly, this agreement relates to the first cotton mill company in India. Written originally in Gujarati (an English rendering is enclosed as an appendix to this paper) the document makes it clear that the managing agency system was still in an infant stage. It does not use the phrase "managing agent" even once and refers to the appointment of Cowasjee Davar, -- the promoter of the mill, as the "arhatiya or Broker". But the right and privileges conferred on him were those which became the usual features of all managing agency agreements in later years.

Other mills that were established in the 1950's followed the pattern of Davar's company, and in 1860 an agreement signed between the shareholders of the Oriental Mills and the firm of Messers Merwanji Framji & Company used the word agent for the latter. This, according to a competent contemporary observer, was the formal inauguration of the agency system of management in Bombay.¹⁷ The system proved so effective that barring a few stray cases, all mills in Bombay as well as in the up country centres were started and developed under the agency structure. The companies producing other industrial goods also emulated the examples of the textile manufacturers.

The development of managing agency system was due to "the peculiar circumstances prevailing in India".¹⁸ Among the factors that are often considered responsible for its origin and gradual evolution was the scarcity of capital and managerial abilities.¹⁹ Sociological factors, however, were no less significant. The managing agency framework was nothing but the adaptation to industrial management of the time honoured family system which was still a prominent feature of the Indian social structure. The head of the family controlled the purse, exercised authority over the junior members, and had a dominant, almost decisive, voice in matters affecting the family. Prior to the emergence of the industrial organizations in India, there was little qualitative difference between the role played by the heads of commercial families and those of nonbusiness families in managing their respective affairs. In other words, the business management structure was coterminous with the family management structure. Since in a majority of the cases it was the commercial families which initiated the industrial concerns, they found it easier to adopt the managing agency framework for managing their industrial undertakings as the system entailed little or no threat to the authority of the head of the family, forming the managing agency firm, in managing the industrial undertaking floated by it. Whatever the origin of the system, there is no doubt that it flourished because of economic and social realities in the 19th century India.²⁰

The role of the managing agency form of management in the industrial development of India has been commended by a number of scholars. True, the system was open to abuses, and some of the managing agents actually did misuse their power and privileges for which they came under vigorous attack in the Indian press - particularly in the two major centres of textile production - during the closing years of the 19th century.²¹ The attack intensified in the 20th century which eventually led the government of free India to abolish it recently. During the initial stages of India's industrialization, however, the system undeniably provided for an effective instrument to promote and manage industrial undertakings in the Indian milieu. A government report published in 1888 unhesitatingly conceded that the management of the Bombay mills was in no way inferior to that of Lancashire factories, and about the same time Japan recognized the same fact by sending a delegation "to study and learn from management and technical practices" in the Indian mills.²²

The ability of the Indian cotton producers to innovate did not remain confined to the forms of ownership, control, and management. They displayed some degree of originality in the functional areas as well. Their approach to raising working capital through public deposits is a case in point. Some features of the Indian strategy, of course, were similar to the methods adopted by the Lancashire manufactures. In both cases, for instance, the quantum of total public deposits in a mill was usually much higher than its total paid up capital. But the Indians

made significant departures from the British practice, and it was due to these departures that their method acquired a greater endurance quality than was the case in England. One of these departures lay in the fact that whereas in Lancashire, a person buying shares of a mill could pay off only a part of the value of the shares and leave the balance as deposits with the company, in India this kind of combination was not possible. Since the sine qua non of the deposit system was public confidence, the Lancashire method was fraught with danger, as the partial shareholders were likely to withdraw their deposits to pay for the unpaid portion of their shares when the company found it necessary to call up for additional capital to meet a sudden financial crisis. This is actually what happened during the crisis of 1922-23. The withdrawal of deposits during difficult times was a phenomenon in the Indian mills too, but their suffering was no where as acute as that of the Lancashire mills on this account.²³

A major factor in the relatively greater success of the deposit strategy in India, at least during the formative years of the industry, was the underdeveloped state of modern banking. The Indians had not adopted this strategy in imitation of Lancashire, but because of the age old tradition of the indigenous bankers who used to accept public deposits on rates of interest lower than the one on which they gave loans to needy parties. As most of the promoters of the Indian mills were either merchants or bankers or both in whom the public had come to

place of a great deal of confidence, they adapted the traditional custom to raise industrial finance. The Report of the Indian Central Banking Enquiry Committee rightly pointed out: "In its origin, the system of deposits with industrial concerns was undoubtedly a reflex and transformation of the old system of money being kept in safe custody with the Mahajans."²⁴ As the modern banking developed, the system of deposits declined in Bombay where the deposits were mostly for short periods and where no steps had been taken to retain its attractiveness for the public.

The Ahmedabad industrialists had already insulated the system of deposits against these dangers perhaps because the tradition of indigenous banking in their city was much longer. Not only did they accept deposits for longer duration, usually for 5 to 7 years, but also introduced a system under which the depositors could share a small part of the agency commission. By these methods they precluded, or considerably reduced, the possibility of sudden withdrawals of deposits to which the Lancashire and Bombay mills were exposed. It is not precisely known when and by whom were these innovations made. It is possible that Becharadas Laskari, the founder of the second textile company in the city, initiated the practice. He was a partner in a banking firm before he branched off into the mill industry. But it is more likely that the Jain and the Vaishnava bankers of Ahmedabad, who took to textile production

in a big way after 1877, perfected the system. ²⁵ In any case, the Ahmedabad method of raising industrial capital had been firmly established by the end of the century and remained in vogue even after the deposit system had declined in its vigour in Bombay and elsewhere in India. ²⁶

The Ahmedabad innovation was partly due to the fact that almost from the very inception, the mill industry in the city employed a small amount of equity capital. In fact the most common pattern in Ahmedabad before the First World War was to start a mill with a paid up capital of Rs.500,000. The strategy of raising working finance through deposits enabled the Ahmedabad industrialist, as elsewhere, to pay higher dividends on the equity capital than would have been the case if additional finances were raised through new issues. For, the rates of interest paid on deposits were lower than the rates of dividends. If the policy of low equity investment was to be enduring, it was necessary for the Ahmedabad mill magnates to devise the method to retain the depositors' interest in keeping their savings with the textile companies and discourage them from withdrawing their money at will. The system of long term deposit along with the depositor's privilege to share in the agency commission was the answer.

The Ahmedabad industrialists showed greater imagination in yet another area of management. In the matter of maintaining industrial

peace in their city, they were much more successful than their counterparts in Bombay. This is evident from the fact that whereas Bombay witnessed a series of labour strikes in the 1890's, there was only one strike in Ahmedabad. Also the attempts to organize textile labour in Bombay preceded those in Ahmedabad by at least two decades.²⁷ It is possible that the difference in the behaviour pattern of the labour force in these two cities was partly due to the difference in the character of labour market and the nature of work force. There is no doubt at the same time that a very long trading tradition had created a certain kind of ethos in Ahmedabad which abhorred conflict. In comparison to Ahmedabad, Bombay had a much shorter history as a centre of trade and commerce. The Jain and Vaishnava values of peace was deeply entrenched in the former city; the business life was much less complex in Ahmedabad than in Bombay; and the textile magnates, most of whom came from the Jain and Vaishnava stock, were a more cohesive group. Traditionally the Ahmedabad millowner had been, by and large, more accessible to his employees of all categories than in Bombay, and this generated much better personal rapport between the employers and the employees.²⁸ It was, perhaps, due to these factors that the industrial life in Ahmedabad was generally peaceful during the formative years of the city's cotton textile industry. It lay in the logic of history, however, that the industrial culture would eventually overpower the trading ethos, paving the way for greater conflict between the capital and labour. Before this could happen, however, the Ahmedabad industrialists devised a novel system to settle labour disputes peacefully which is sometimes referred to as the

"Ahmedabad experiment".²⁹ Under an agreement effected in 1918, to which the millowners and the labour union is bound in perpetuity, all disputes between them are referred to arbitration. The agreement institutionalized, as it were, the peaceful approach that characterized the industrial relations in the city before the First World War. And it is because of this that the Ahmedabad mills have never been closed on account of the grievances of the employees against their employers. Much of the credit for establishing the system belongs, of course, to Gandhi's initiative and leadership, but its continuance even after the industrial environment in Ahmedabad ~~became~~ much more complex than in the early decades of this century is largely due to the socio-cultural factors.

I do not propose to discuss in this paper why the Ahmedabad methods of raising working capital and dealing with labour disputes did not inspire similar experiments elsewhere in the country. I also do not wish to dwell on the imaginativeness of the Indians to produce goods like dhoties and saris suited to Indian market, or their marketing aggressiveness which resulted in wresting a sizeable share of the China market in the last decade of the 19th century. What I have tried to point out are some of the distinctive methods adopted by the Indian textile manufactures in a few crucial areas of management. Their inability to invent new technological processes during the formative phase of their industry is understandable, but their ability to look for and adapt for their own purpose technologies developed elsewhere, and evolve distinctive managerial processes consistent with their needs and

environment is in no way unimpressive. --Technology is not the only index of innovation, and the innovative ability of a community cannot be properly assessed without reference to the possibilities of innovation in a given milieu.

INNOVATIONS IN INDIAN TEXTILE INDUSTRY: THE FORMATIVE YEARS

Appendix I

Deed of Agreement between Cowasjee N. Davar

and

the shareholders of the Spinning and Weaving Company

To Parsee Cowasjee Nanabhoj Davar. We who have placed our signatures below address you that you have decided to open here a factory for the manufacture of yarn and cloth with the help of machinery and that you have named the said factory as Spinning and Weaving Company. It has been decided to make 100 shares thereof so that each share is of Rs. 5,000 (Rupees five thousand). The document in connection with these arrangements is passed by us in accordance with the undermentioned details.

1. Firstly, for the above mentioned purpose, you shall secure the buildings or premises here and import machineries from England and arrange for their erection. You shall build the necessary buildings, you shall do all things necessary for the purpose and engage men for the same. Whatever expense has to be incurred for the purpose may be incurred by you. The entire management of these matters is entrusted by us, of our own will and pleasure, to you, and you will continue to do so in the course of your lifetime.

2. Secondly, against shares which we have taken up from the above-mentioned 100 parts or shares, we have placed our signatures and stated the number of shares taken up by each one of us. And all those who have signed this Agreement have paid Rs.1,000 (Rupees one thousand) per each share to you and have taken for the same a receipt bearing your signature.

3. Thirdly, whatever expenses are involved in the construction of the building and the erection of the machinery should be taken from us, the shareholders, in equal contributions according to shares held by each, and for that purpose, as and when necessary, you may make calls which we shall pay up within a period of 15 days therefrom. If, however, in that period of 15 days the amount called for by you is not paid, the defaulting shareholders shall lose their rights on Rs. 1,000 per each share, or whatever other additional calls have been paid thereon, and the money already paid in by the shareholders shall be credited to the profit account of the above Company. Of those who have placed their signatures below, any shareholder might transfer his share or shares to any individual or make it over to any individual, but the subsequent owner or owners shall be regarded as being bound by the stipulations made herein.

4. Fourthly, we all shareholders have, of our own will and pleasure, resolved that in recompense of the trouble taken by you in the floatation of the factory, you are appointed Arhatiya or Broker of the said factory during your lifetime, that is to say, that whatever cotton is

required for the said factory should be purchased by you and whatever yarn and cloth are manufactured in the said factory should also be sold by you, and on whatever sales you effect on account of the said Company a commission of 5%, that is, five per cent, shall be taken by you in your lifetime; but on purchases you will not charge anything to the said Company. In the event of the Company selling goods directly you shall still be entitled to your commission of 5% on the sale proceeds in your lifetime.*

5. Fifthly, with regard to the purchase of any building or land on behalf of the Company and the importation and erection of machinery and the construction of any building you are entrusted with the sole management thereof. So we all partners hereby give it to you in writing that any damage caused in any manner to the abovementioned building and machinery shall be taken over by us as shareholders in proportion to our share or shares. Secondly, whatever deposit you make for bringing out machinery from England and if it entails any risks and results in any loss, we all shareholders agree to take it up in the same way as mentioned above.

* One sentence in the end of Clause four defies translation, even in a broad sense, partly due to illegibility of the document and partly due to lack of clarity in the framing of the sentence.

6. Sixthly, for the purposes of the above Company you shall circulate a circular a few days prior to and all shareholders shall remain present on the appointed day. If however despite such warning any partner or partners, due to any reason whatsoever, is unable to attend the meeting, the absentee partner shall be bound by whatever resolution has been passed by those shareholders who were present at the meeting. Moreover, no other person shall be allowed to attend the meeting on behalf of the said partner or partners.

7. Seventhly, if from among us the shareholders any sells his share or shares, then the purchaser shall give it to you in writing that all the terms of this Agreement are accepted by him and only then would the share or shares be transferred to his name.

8. Eightly, any partner who acts in contravention of the conditions and stipulations laid down in this document shall pay to you a penalty of Rs. 4,000 (Rupees four thousand) without any objection, which penalty you shall collect and credit to the profit account for the benefit of all the partners.

9. Ninthly, that all stipulations penned in this document have been read by us and considered by us by our own will and pleasure and we have agreed thereon with you and these are acceptable to us and to our heirs, assigns, executors and administrators.

hri Bombay dated 7th in the year 1854 of the Christian era.

(Quaintness of expression and oddities of style, which have disappeared even from Gujerati, the original language of the Deed of Agreement, have precluded a verbatim translation in the exact sense of the word. Maximum effort, however, has been made to preserve the tenor and tone of the original document)

Source: S.D. Mehta, Cotton Mills of India, 1854 to 1954 (Bombay, 1954), 26-27.

FOOTNOTES

1. S.D. Mehta, Cotton Mills of India: 1854 to 1954, (Bombay, 1954), 233. Some other works give slightly different figures.

2. Entrepreneurial theorists generally make distinction between "creative" and "adaptive" or "primary" and "derivative" innovations. See Yusif A. Sayigh, Entrepreneurs of Lebanon (Cambridge, Mes., 1962), 19-20; James J. Borna, Industrial Entrepreneurship in Madras State (Bombay, 1960), 6; I have also benefitted from an unpublished paper, "On the Study of Entrepreneurship in India" by my colleague, H.N. Pathak.

3. For the difficulties of early pioneers, S.D. Mehta, Cotton Mills of India, 1-25; M.J. Mehta, "Rauchohdal Chhotala and the Ahmedabad Cotton Textile Industry: An Entrepreneurial History" (Ph.d thesis, Gujarat University, Ahmedabad, 1979), 130-478. For government policy and Manchester's influence, Peter Harnetty, Imperialism and Free Trade: Lancashire and India in the Mid-Nineteenth Century (Vancouver, 1972); C.J. Hamilton, The Trade Relations between England and India (Calcutta, 1919); Dwijendra Tripathi, "Opportunism of Free Trade: Lancashire Cotton Famine and Indian Cotton Cultivation" Indian Economic and Social History Review IV (September 1967), 255-63.

4. F.R. Harris, Jamsetji Nusserwanji Tata: A Chronicle of His Life (Bombay, 1958), 31-32; S.S. Rutnagar(ed.), Bombay Industries: The Cotton Mills (Bombay 1927), 19; S.D. Mehta, Cotton Mills of India, 43-45.

5. Textile Institute, Management in the Textile Industry (Manchester, 1969), 2.

6. S.D. Mehta, Cotton Mills of India, 13; Rutnagar, Bombay Industries, 9. Occasionally a joint stock company was converted into a partnership as was the case with the second mill in Ahmedabad. However it was again changed into a joint stock company. Another Ahmedabad mill, the Maneklal Harilal spinning and Manufacturing Company, established in 1888, started as a partnership but became a public limited concern at a later date. See Natvarlal N Desai, Directory of Ahmedabad Mill Industry, 1929-1955, (Ahmedabad, 1958), 38-39, 98-99.

7. Rodhey Shyam Rungta, Rise of Business Corporations in India, 1851-1900 (Cambridge, 1970), 46, 153, 298. The figures of partnership firms in Ahmedabad in 1838 are based on information given in Desai, Directory of Ahmedabad Mill Industry. For Bombay data see, Rutnagar, Bombay Industries, 97-243

8. S. Arasratnam, "Indian Merchants and Their Trading Methods (circa 1700)" Indian Economic and Social History Review III (March 1966), 85. Also see John Irwin and P.R. Schwartz, Studies in Indo-European Textile History (Ahmedabad, 1966), 31-33.

9. Dwijendra Tripathi, "Indian Entrepreneurship in Historical Perspective" Economic and Political Weekly, VI (May 29, 1971), M59-M62. For the career of a free merchant see Hilton Brown, Parrys of Madras (Madras, 1954). S.B. Singh European Agency Houses in Bengal (Calcutta, 1966) is a comprehensive account of its subject matter. N.K. Sinha, "Sources and Problems of Business History in India in the First Half of the 19th Century", Indian Historical Records Commission, Proceedings of the 37th Session, XXXVII (Delhi, 1966), 75-79 discusses the Bengal partnerships during 1832-47.

10. Rungta, Rise of Business Corporations in India, 33

11. Ibid, 18-35

12. Government of India, Proceedings of the Legislative Council of India for the year 1857 (Calcutta, 1858), 603

13. This observation is based on the perusal of the financial records of a number of mill companies in Ahmedabad. The dilution of the family holdings in the mill companies took place mainly after the First World War. Also the companies which started after the war had much larger public participation than was the case previously.

14. Rutnagar, Bombay Industries, 49

15. H.N. Sinha, Early European Banking in India (Allahabad, 1927),
4. While most writers trace the origin of the managing agency system
to the British enterprise, Blair B. Kling, "The Origin of the Managing
Agency System in India" Journal of Asian Studies, XXVI (November 1966)
37-47 holds that an Indian firm, Carr Tagore Co., was the first example
of the system.

16. In addition to the Carr Tagore Company, which Blair B. Kling
thinks contained the elements of managing agency structure, some in-
surance companies, in Bengal, according to Rungta, were managed under
system similar to managing agency. See Rungta, The Rise of Business
Corporation in India, 223-26. Rungta, however, stands on questionable
ground.

17. Rutnagar, Bombay Industries, 9

18. Vera Austey, Economic Development of India, (London, 1957), 11

19. P.S. Lokanathan, Industrial Organization in India (London, 1935),
13-40; 214-233. Other works which stress this point are Raj K. Nigam,
Managing Agencies in India (Delhi, 1957); S.K. Basu. The Managing
Agency System (Calcutta, 1958); Andrew F. Brimmer, "The Setting of
Entrepreneurship in India", Quarterly Journal of Economics, LXIX
(November 1955), 551-576.

20. For a fuller discussion see Dwijendra Tripathi, From Trade to Industry: Kasturbhai Lalbhai, the Entrepreneur (New Delhi, forthcoming)

21. For a sample see, "The Bombay Cotton Mills: Their Defects in Management and How to Remedy Them" Indian Textile Journal V (November 1894 to June 1895); Between 1898 and 1903 Prajabandhu, published from Ahmedabad, published a number of articles alluding to the alleged misdeeds of the mill agents.

22. S.D. Mehta, Cotton Mills of India, 52.

23. Lokanathan, Industrial Organization in India, 179-80.

24. Government of India, Minority Report, Indian Central Banking Enquiry Committee (Delhi, 1931), Vol I, Pt.II, 329.

25. M.J. Mehta, "Ranchhodlal Chhotalal and the Ahmedabad Cotton Textile Industry", 148-251.

27. S.D. Mehta, Cotton Mills of India, 82; 133-35.

28. For a discussion on social-cultural ethos of Ahmedabad see. Kenneth L. Gillion, Ahmedabad: A Study in Indian Urban History (Berkeley 1968)

29. A.K. Rico, Productivity and Social Organization: The Ahmedabad Experiment (London, 1958), 18-22.