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THE DEVELOPMENT OF THE MADRAS HANDKERCHIEF AND LUNGY OR KAILY INDUSTRY

IN THE

MADRAS PRESIDENCY

BY

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MADRAS

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DEVELOPMENT OF THE MADRAS HANDKERCHIEF AND LUNGY OR KAILY INDUSTRY IN THE MADRAS PRESIDENCY.

The manufacture of these special lines of coloured hand-woven fabrics, which find a large sale outside India, forms a very important section of the hand-loom weaving industry and affords a means of support to a very large number of hand-loom weavers of this Presidency. Judging from the extent of the export trade alone, which amounted to 37,888,066 yards of cloth valued at Rs. 2,45,42,894 in 1923-24, this industry must necessarily employ more than 40,000 hand-loom looms and help to support nearly a lakh of persons including winders, warpers, sizers, dyers, weavers, contractors and middlemen. It was therefore thought that it would be of interest to the public to give an account of the present position of the industry as well as of the scope which it affords for further development. For convenience, the two branches of manufacture have been considered separately.

MADRAS HANDKERCHIEFS

2. *Early history.*—The term “ Madras Handkerchief ” is a trade name given to a class of goods made from grey and coloured warp and weft yarns. Their peculiarity is that certain warp yarns are caused to bleed during weaving and to tint the grey weft with the colour of the warp, thus producing solid effects in those colours. The manufacture of these fine coloured fabrics goes back to the days of the East India Company. Up to a quarter of a century ago, public sales were held in London every three months at which these handkerchiefs were sold by public auction. The prices of ordinary plain weave then ruled from 4 s. to 8 s. a piece depending upon the number of colours employed in both warp and weft. A very small demand also existed for goods woven with simple extra warp effects and decorated with embroidery which realized from 10 s to 20 s. a piece. Some 4,000 trunks valued at £80,000 were shipped annually to London and thence principally to the West Coast of Africa and the West Indies.

3. *Present position.*—Of late years auction sales have no longer taken place as several European and Indian firms in Madras have entered into direct business relations with firms in London, Manchester, Liverpool and other places. The production of these goods, as a result of many generations of experience, has led to the acquisition of a considerable knowledge of the various details pertaining to the treatment of yarn, dyeing and weaving, so that the hand-loom weaver engaged on this class of goods is a highly skilled craftsman and is far removed from the ordinary plain goods weaver, as the sculptor is from a common stone mason. The weavers chiefly engaged in this trade are known as *Devangas*. The chief centres, where the cloths are manufactured, are Arni, Kavarapettai, Gummidipundi, Sattiyavedu, Palipeta, Madarapakam, Palamenapetta, Kancherapalam, Illam Naidupeta, Lingam

Naidupalam, Talarettu, Marathwada, Mambothu, Ugunidi, Dama Nellore, Karipakam, Andagundala, Sulurpet, Polur, Methe, Coodali, Kalahasti, Cherlopalli, Anakapallur, Chittoor, etc. From the figures given below, which are derived from the Customs returns, it will be seen that the export trade in this variety of hand-loom woven fabrics amounted to more than 33 lakhs of rupees in 1923-24.

Madras Handkerchiefs.

	Quantity. (Yards.)	Value. (Rs.)
1914-15	1,443,993	8,20,565
1915-16	2,203,096	13,73,642
1916-17	786,004	4,18,521
1917-18	275,918	1,84,729
1918-19	474,418	5,01,810
1919-20	1,277,556	15,87,941
1920-21	1,990,886	28,64,555
1921-22	405,733	5,71,506
1922-23	1,792,440	22,15,769
1923-24	2,642,107	32,98,372

Several attempts have been made in recent years to produce these genuine handkerchiefs on the power looms in Europe. It is however gratifying to note that these attempts, although successful up to a point, have resulted in the production of a quality of cloth which compares very unfavourably with properly prepared hand-woven products of the old standard of quality both in regard to feel and durability. Exact figures of the quantity and value of the inferior variety of the handkerchiefs produced on power looms are not available. Unfortunately now, however, there has been gradual deterioration in the quality of the handkerchiefs made on the hand-looms and the present day products are not greatly superior to the products of the power looms. This is likely to check the progress and development of the industry which, in time, may even decay if the deterioration in quality is not arrested.

4. *Description and estimates.*—Madras Handkerchiefs are made to measure 36 inches in width and eight yards in length on the counter. The cloth contains 80 ends and 128 picks per inch. The warp is usually made of 60s grey, turkey red, yellow, chocolate and 50s indigo and green. The count of weft of both the grey and coloured yarn is 40s. A piece of cloth of eight yards in length weighs 26 oz. A light wooden trunk, generally covered with green paper, is employed to pack 64 pieces of these handkerchiefs, which weigh 112 lb. Each trunk contains an assortment of a large range of patterns. The reed used on the loom is 76s (Stockport system) with two ends drawn in a dent. The single thread break test (18 inches) of 60s and 40s grey is 4·8 oz. and 4·1 oz., respectively, whilst the elongation is 5·25 per cent. and 4·5 per cent, respectively.

Estimate for 2 pieces of 16 yards of cloth—

	Rs.	A.	P.
Weight of warp 20 oz. of 60s grey at Rs. 2-0-0			
per lb.	2	8	0
Weight of weft 38 oz. of 40s grey at Rs. 1-4-0			
per lb.	3	0	0

	RS. A. P.
Charges for winding, warping and sizing	1 0 0
Dyeing warp and weft (50 per cent. of which is coloured)	2 0 0
Wages for weaving at Rs. 3-4-0 per piece of eight yards	6 8 0
	15 0 0

Exporting houses contract with Dubashes or contractors at Rs. 8 per piece	16 0 0
Gross profit of contractors per piece	1 0 0
Middlemen's charges per piece	0 8 0
Net profit of contractors per piece	0 8 0

5. *Dyeing*.—The yarns employed in the manufacture of these fabrics are generally imported from Europe. With the exception of Turkey red, all other colours are dyed locally by indigenous methods. The process of dyeing with indigo is carried out with natural dyes by the usual crude Indian methods. The chocolate effects are produced by topping Turkey red yarns first with a solution of a bark of *Saritee* prepared with castor oil and then with myrobalan extract. Effects of yellow are produced by topping indigo yarns with powdered turmeric.

6. *Warp preparation*.—Yarns are generally issued to weavers in bundles, each weighing 5 lb. Grey warp yarn is soaked in rice kunjee and then wound on the bobbins. Coloured yarns are wound straight away on flangeless tin bobbins, since only very short lengths of warps are prepared at a time. They are then taken to a horizontal single-thread warping mill containing a circumference of 11 yards, where the required number of strands of individual colours of warp is prepared. An allowance of 3 inches for every yard is made for contraction and of 12 inches for each warp is made for the waste produced during the operation of twisting-in. Hence warps are made to measure 11 yards so as to yield a cloth of 8 yards. It is however the practice to prepare a warp of 22 yards at a time for the requirements of the two pieces. This length is obtained by one forward and one backward revolution of the warping mill. Only monocoloured warps are sized in open streets in the form in which it is removed from the mill and in lengths of 11 yards. The folded warp is then held at the point where the ends are reversed in the mill and opened out to form a length of 22 yards. The warp is next twisted, according to the coloured scheme desired, to the old set of warp threads on the loom. The operation of dressing the warp is performed last, since the bulk of the weavers do not use a loom beam, and this work is carried out in a somewhat crude form in open streets.

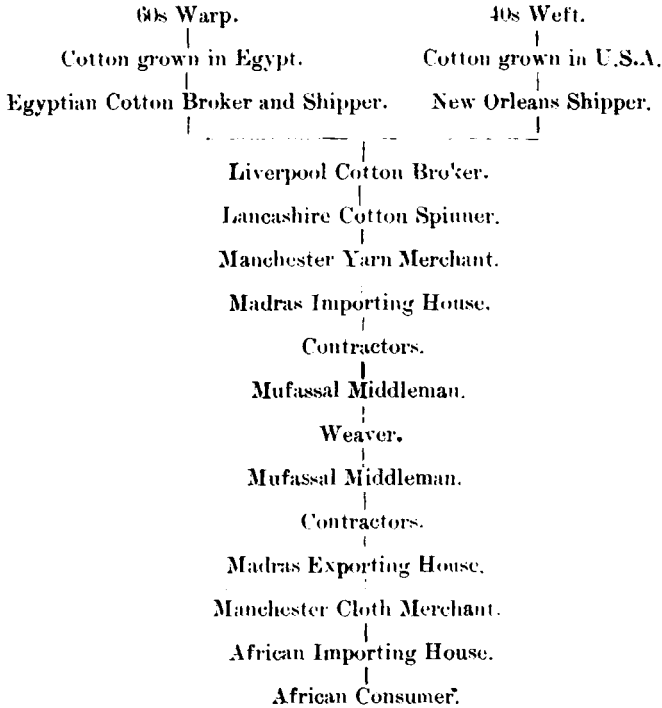
7. *Weaving*.—These fabrics are produced on the country pit-loom with the warp stretched out in sheet form. Nearly 95 per cent of the cloth is produced on hand-loom fitted with fly shuttle slays. Only very recently several weavers have taken to the use of weaver's beams. Weavers, who do not employ beams, are compelled to tie knots to groups of warp threads with pieces of strings at a distance of 2 yards from the fell of the cloth. These are removed and fresh knots tied as weaving proceeds. The claim put forth by the weavers is that it enables

them to place uniform tension on warp threads and to put the high number of picks required in the fabrics. The grey weft is boiled several times with a solution of washing soda in order to remove all fatty matter thus enabling the yarn to absorb the colour from indigo, green, and chocolate coloured warp yarns. The pirns containing the weft are always immersed in water and the weft is woven wet. On an average, a weaver can put 25 picks per minute with a single-box fly shuttle slay and using four colours of weft. If he keeps to the loom, he can produce $2\frac{1}{2}$ yards of cloth per day of 8 hours and earn fifteen annas.

8. *Defects in quality.*—Hand-woven genuine Madras Handkerchiefs are costlier than the best power-loom products. Still, cheapness has never been the secret of success in this particular trade. Whilst machine-made handkerchiefs are better woven, that is to say, they are uniform in respect of ends and picks per inch throughout the piece, are also faster in colour and cheaper and possess better effects of warp bleeding, yet there is a peculiar feel and smell and liking for wavy selvages, which results in the maintenance of the demand for the hand-woven fabric. The time has now arrived, however, when mill-made goods are gaining ground, day by day, as the quality of the hand-loom products is deteriorating, and, it is feared, that this particular line of manufacture, which in the past enjoyed practically a monopoly, will hereafter have to face the intense competition of the machine-made handkerchiefs. It is sometimes said that the deterioration in the quality of the handkerchiefs is attributed to the introduction by the Madras Department of Industries of the fly shuttle slay as the weaver does not produce a cloth consistent with the required number of picks and the proper effects of warp bleeding. The closeness of the texture of the cloth, however, is not connected with the use or otherwise of the fly shuttle slay. If a firm beat-up cannot be obtained with so heavy an appliance as the fly shuttle slay, then it is equally impossible to get it with a light hand shuttle slay, having no slay sword, but merely suspended from the roof by a cord. The exporting firms contend that, whilst in the case of the hand shuttle slay the weaver was accustomed to give two beat-ups for every pick of weft so as to drive the weft "home" or hard into the fabrics, they now give only one beat-up with the fly shuttle slay. They do not, on the other hand, deny that it is impossible to produce good results with a single beat-up of a fly shuttle slay, provided the weaver is *prepared to beat hard*. The fact has been proved that during a stationary or a downward market, the quality of goods received from the weavers employing fly shuttle slays is more or less satisfactory. They consider that this labour-saving appliance, the fly shuttle slay, which enables the weaver to propel his shuttle with half the exertion and twice the speed, has indirectly had bad effects upon the weaver. Clearly, however, a reversion to the methods of hand shuttling is out of the question as the weavers have without much exertion on the part of the Department of Industries, Madras, freely taken to the fly shuttle slay, because they were not able to meet the demand for their products with the antiquated methods of hand shuttling. Again, reversion to hand shuttling would not be a business proposition, because the weavers would demand the same remuneration for a lower output. The pre-war rate for coolie weavers was Rs. 2-4-0 per piece. The present rate is Rs. 3 per piece. In fact, it is doubtful whether the exporting firms would have been able to meet the increased demand during the last decade if the

weavers had not taken to the general adoption of the fly shuttle slay. The reasons for the deterioration must therefore be sought elsewhere.

9. *Marketing conditions.*—The following chart, which is somewhat amusing, will show the various agencies through which the trade is carried on :—



It is customary for an exporting house to contract with a dubash for their requirements, which vary from a couple of trunks to a hundred trunks for delivery within 2 to 9 months. The exporting houses do not carry on direct business with the weaver. These dubashes or contractors engage other middlemen or sub-contractors, who are capitalist weavers or weavers who have acquired influence over a weaving community of a particular locality and have intimate knowledge of a particular group of weavers from whom they are hopeful of getting goods made. It is usual for an exporting house to give one-third of the cost as advance, the next payment falling due after one-third of the order has been completed. When trade is depressed, contract time is usually kept and the quality of goods is reported to be good. When trade is good and the markets are rising, contract time is often exceeded as the weavers secretly sell their products to competitors at higher prices and are then forced to deteriorate the quality of the cloth. Frequently, special designs, which have been ordered at the request of the African traders in anticipation of an expected season demand, are disposed of to competitors, whilst late delivery is made against contract and the buyer may only hear of this several months later from the irate indenter in Africa, and more often than not it is impossible to obtain any satisfaction. During the good seasons of the year an exporting house can hardly

claim a rebate from the middlemen for really inferior quality stuff nor can he afford to let goods pass in the hands of his competitors, nor insist upon re-manufacture as the competitors would get in first with his designs in the consuming markets. Thus it will be seen that, during the busy months of the year, the exporters are prepared to overlook the slight deterioration in quality, but in slack seasons a reasonable standard of quality is rigorously enforced. The weaver is penalized in his turn by the middlemen, but the former consoles himself with the gain he has made by surreptitiously saving the weft yarns and selling them for higher prices to other merchants and replacing them by cheap Indian mill-made yarns, by the increased production he has obtained by putting coarse weft and fewer picks, by capping or making the outside handkerchief of the piece of better quality than the inside and by reducing the weight of the piece to 24 oz. The middleman is more than indemnified although the firm might claim a small rebate owing to the supply not being up to the standard. The exporting houses do not afford continuity of employment to the weavers throughout the year. They do not take the risk of accumulating stocks which may lead to severe losses in the event of a falling market. The weavers are thus left to drift and to look after themselves, and during the dull months of the year they are forced to take to the manufacture of *kailies* or *lungies* and others to the manufacture of coarse wearing apparel which does not find a ready local sale.

10. *Improvements.*—The Department of Industries have been in recent years persuading the weavers to take to weaver's beams in order ultimately to accustom them to the use of long warps, which can be prepared and distributed through a weavers' co-operative society. The use of the weaver's beam saves them the trouble of tying the knots to the warp threads during weaving as already explained, and helps to increase their output. The cost of the beam is only Rs. 8. Such persuasions were not of much avail and there was no appreciable progress until very recently, when owing to an unexpected rise in the demand for the Madras Handkerchiefs, as evinced from the figures already given, a number of weavers eagerly took to these beams and gave up their old method of stretching out the warps with the intention of providing two looms in the place of one and getting an additional member of the family to take to weaving. The way to their introduction on a larger scale has now been paved, and it is hoped that ultimately the use of these beams will be adopted by the majority of the workers. The Textile Branch of the Department of Industries is now persuading the weavers to take to multiple box slays. As all the pit looms are fitted with square cloth roller, the firms contend that the edges of this roller leave behind a clear watermark in the cloth during the wet season which degrades the quality of the cloth. The Department is now attempting to replace them by round cloth rollers, which can be fitted at little extra cost. At a recent conference conducted by the Government, a representative of one of the leading export houses in Madras pointed out that the economic condition of the Madras Handkerchief weavers had greatly improved since they had taken to the fly shuttle slay, and in support of his statement, quoted instances where the weavers paid up most of their debts and were gradually becoming independent of money-lenders. In the interest of the industry, a combination of the leading exporting firms in Madras is essential in order to ensure honest

co-operation on the part of the hand-loom weaver, supplier and exporting houses. The chief dealers in Madras are :—

Messrs.	W. A. Beardsell & Co., Ltd., 2nd Line Beach, Madras.
„	A. Brunnschweiler & Co., Armenian Street, Madras.
„	Muhammad Khaleel Shirazi & Sons, Angappa Naik Street, Madras.
Mr.	Muhammad Raza, Angappa Naik Street, Madras.
Messrs.	Haji Muhammad Badsha Sahib & Co., Madras.
„	Abbas Ali & Co., Madras.
„	Virabhadra Chetty & Co., Madras.

The custom of giving advances has to a great extent been abolished. But no means have been devised whereby a penalty can be insisted on for the imperfect fulfilment of contract. Government have now sanctioned the appointment of a special officer of the Inspector Grade in the Co-operative Department to be attached to the Department of Industries to organize weavers' co-operative societies, and experiments will soon be started with the object of organizing such societies so as to enable the firms to obtain their supplies through a reliable organization.

11. *Lungies or kailies*.—*Lungies, kailies* or *kambavams* are trade names, which are applied to fabrics or *tartans* made from coloured warp and weft yarns. These *tartans* are very popular among Muhammadan men, who use them as dhoties and head-wear. They are also cut up and made into dresses by Hindu women. The chief centres, where these cloths are manufactured, are Madras, South Arcot, Trichinopoly, Tanjore and Chingleput. The trade is chiefly in the hands of *Nattukottai Chetties* or *Labbais*. The principal markets for these products are Penang, Singapore, Burma and the Malay States.

The customs returns shown below give some idea of the extent of the export trade. Figures of the quantity of cloth consumed in India are not available. Although large quantities of coloured checked goods are manufactured on power looms, this Presidency has been fortunate in retaining a comparatively large export trade amounting to more than two crores of rupees per annum. The reason for this is that the wide range of patterns in warp and weft of short lengths can be produced more economically by hand-loom than on the power looms.

		<i>Lungies.</i>	
Year.		Quantity. (Yards.)	Value. Rs.
1914-15	19,266,050	72,04,189
1915-16	25,866,413	1,03,49,658
1916-17	25,646,629	1,08,54,564
1917-18	20,929,702	97,02,441
1918-19	21,419,343	1,29,70,016
1919-20	22,430,463	1,48,87,241
1920-21	20,527,743	1,49,82,200
1921-22	27,771,347	1,84,08,516
1922-23	25,029,086	1,61,23,737
1923-24	35,245,959	2,12,44,522

12. *Quality particulars*.—*Lungies* are made to measure 29 inches in width and $9\frac{1}{2}$ yards in length on the counter. The ends and picks

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differ greatly. The number of threads in the warp ranges from 88 to 92 per inch and the picks from 80 to 84. The count of warp is 60s and weft 40s. The weight per piece of cloth varies from 17 oz. to 28 oz. The yarns employed are mostly imported and the wages paid to weavers for weaving *kailies* is about half the rates paid for weaving Madras Handkerchiefs. On an average, a weaver can weave five yards per day of ten hours employing four colours in weft. The chief dealers in Madras in *lungies* or *kailies* are :—

- Messrs. Binny & Co., Ltd., Armenian Street, Madras.
- .. A. K. G. Ahmad Thambi Maricair & Sons, Negapatam.
- .. C. H. Kizar Mubammad & Co., Angappa Naik Street, Madras.
- Mr. B. M. Hussain Meah, Angappa Naik Street, Madras.
- .. S. E. S. Abdul Kareem, Angappa Naik Street, Madras.
- Messrs. A. Hussain Meah & Co., Marica Labbai Street, Madras.
- Mr. Periyamayaga Mudaliyar, Washermanpet, Madras.