

work, etc., to those of a very heavy description. While heavily-weighted cloths are being woven in lightly constructed looms, the working parts and often the framework also are soon worn out; and when light goods are being woven on heavy looms, owing to the slow speed at which the looms must be run, the amount of cloth produced cannot be satisfactory. In heavy looms a considerable amount of strain is put upon the lower shaft of the loom owing to the shedding and picking being directly accomplished from this shaft, but in light and quick running looms the chief strain is put upon the crank shaft, owing to the fact that the strain of oscillating the sley some 200 or more times per minute is put entirely upon the crank shaft. The shedding of a loom must be so timed and arranged that the sheds are level when the cranks are on the top centre, so that when the sley is at the front or fell of the cloth, the sheds are about half open for the following pick. This locks the preceding pick and prevents it from springing back. In very heavy cloths the healds are often set a little earlier than this, that is, they are level a little before the cranks reach the top centre; this still more effectively locks the picks. The size of the shed is a great consideration. The shed should not be any larger than is necessary to allow the shuttle to pass through without breakage of yarn, or danger of shuttle being thrown out, or riding over slack ends. The yarn may be allowed to touch the top of the shuttle when the reed is at its furthest point from the fell of the cloth. In the weaving of plain goods the front breastplate and the back rest are often level, and the line of warp when the healds are level is brought below the horizontal at the healds. This throws the top shed (when open) comparatively slack, so causing the cloth to have a full appearance. When the cloth is required to be still further improved in cover, it is customary to raise the back rest. The motion of shedding is not perfectly even or regular, as, in order to reduce the strain upon the yarn, healds and working parts, the healds in the traverse must commence slowly, increasing in speed till the middle is reached, then gradually decreased in speed till the pause is reached, during which the shuttle passes across the loom. The duration of this pause depends principally upon the width of the loom, and may be from one-third to two-thirds of a revolution of crank shaft. Longer the pause or dwell, the better is the cover of the cloth. A long pause, however, necessitates a short time in which the traverse of the healds takes place, and consequently the motion given to the healds is somewhat jerky.

The timing of the picking mechanism must be arranged so that there is as little jerking or vibration or waste of power as possible, and, generally speaking, the quicker the loom runs, the earlier should the pick be set. For narrow, quick-running looms the shuttle should commence leaving the box a little before the crank reaches its lowest point. Slow-running looms may be set with cranks at the bottom point, or a little later. Later the pick is set, the greater is the perk given to the shuttle, this being caused to some extent by the backward movement of the sley taking up some of the length of the picking band or strap. The motion of the picking mechanism should be such that the shuttle commences to move slowly at first, and increases in speed till it leaves the shuttle box. The shuttle should not be thrown with more force than is necessary to enable it to reach the opposite end easily, as too strong a pick is apt to break the cops, and is also very detrimental to the picking mechanism, and also the whole of the loom.—Textile Excelsior.

Foreign Textile Centres

Bradford.—Market firm. Confidence felt in the situation.

Belfast.—Tendency all round towards improvement.

Spinning end brisk with good enquiry and substantial business. Tow yarns active at top prices. White goods for home market selling easily. Shipping trade a little stronger. Manufacturers holding for better prices.

Dundee.—Jute firm. Yarns quiet. Heavies unchanged. Hessians quiet. Jute fancy goods in fair request, but prices unsatisfactory. Ropes and twines wanted and makers all well employed.

Leeds.—Merchants in the higher woolen and worsted branches only buy for immediate requirements in the expectation of some concession, while producers maintain values, owing to the firmness of the London sales. Medium and lower class fabrics have a fair demand for the low-priced skirt trade. Men's clothing factories fully employed.

Leicester.—Yarn is active and stocks extremely low. Cashmere sells freely and rules strong, and business in lambs' wool and fancy yarns is good. Hosiery deliveries larger.

Kidderminster.—Carpet trade active. Volume of business being done considerable, and many orders being received. Spinners well employed, and all their machinery running full time.

Manchester.—Little change to note and conditions uncertain owing to state of raw cotton market.

Rochdale.—Orders for flannel being placed freely, but manufacturers not obtaining an advance commensurate with the price of wool.

South of Scotland.—Recent improvement in linen trade maintained. Linoleum and floor cloth trade active with considerable demand from abroad.

Prices for flax in Great Britain did not, as expected, ease off at the coming in of the new crop, on the other hand, they appear to be advancing. Linen goods are held at extreme firmness in the United States and Canada, as well as in Great Britain.

Several of the boot and shoe manufacturers of Canada say the only class of English shoes imported into Canada to any extent is felt slippers. In hosiery the wholesale dry goods merchants are inclined to smile at the expectations of the Leicester hosiers that they may shortly do a large business in Canada, owing to the advantages conferred by the preferential tariff. One well-known buyer who is intimately acquainted with the hosiery trade of Leicester, says that the days when the manufacturers of that industrious English city could do a large trade with Canada are gone, never to return. Cashmere hosiery was the only line in which Leicester ever figured in the Canadian market, and our merchants bought these because they had to, not being able to buy cashmere in Canada. But ever since the Penman people of Paris, Ont., the Kingston Hosiery Co., and the Universal Knitting Machine Co., of Toronto, have been turning out a first-class article in this line, the Leicester trade has been doomed, and has gradually declined. It may be interesting to any person with feet to furnish to know that hosiery is one line in which American competition does not figure. We import no woolen hose at all from across the line, and only about one per cent. of cotton hose.