

called 6 lbs., 5 lbs., 4 lbs., etc., meaning that the fibre is suitable for yarns weighing 6 lbs., 5 lbs., or 4 lbs. per spindle respectively. In addition to the above classification for fineness, the strength of the flax may be denoted by the numbers 1, 2, and 3, or in any other suitable way. If the flax has an impure end, the hackler, instead of only squaring the piece, is often called upon to break off a considerable portion of the end. These broken-off ends are made into pieces by themselves, and go to make a low sort. There is a great knack in breaking the ends of the piece upon the touch-pin. If loosely wrapped round without twist, so that when tightened the end is caught underneath the lap, a straight jerk separates the end with comparative ease. If the top end be "nappy," it must be well worked upon the switch to extract the naps. For dressing the cut-off top ends of Courtrai flax, the sorter is often provided with a third tool, called a "nap-extractor," which is a fine single row of pins, about 13 in. long and 50 pins per inch. The pins in this tool being of strong wire and so closely set, it is necessary to solder their root ends between two strips of brass, since the usual method of driving them into a wooden stock would not stand. The coarser tools used by the sorter are called "tens" or "eighteens," the former having about 26 pins in the row of $7\frac{1}{2}$ in., and the latter 38. The breadth of the tool is about $2\frac{3}{8}$ in., a "ten" having 17 or 18 rows in this breadth, and an "eighteen" 19 rows. In a "ten" the pins are usually $4\frac{1}{2}$ in. long over all, and in an "eighteen" an inch shorter, their thickness at root being about 13 B.W.G. In the "switch" the area of stock set with pins is much the same. The pins are $1\frac{3}{8}$ in. to $1\frac{1}{2}$ in. long over all, protruding $1\frac{1}{2}$ in. to $\frac{3}{4}$ in. above the stock, and of thickness equal to 22 to 26 B.W.G. The fineness of the tool is gauged by the number of pins in the row of $7\frac{1}{2}$ in. Those commonly in use run from 180 to 280. The following table gives particulars.—

No. of pins in row of $7\frac{1}{2}$ in ..	180	200	230	250	280
Size of wire	22	23	24	25	26
Length of pin over all.....	$1\frac{3}{8}$ in	$1\frac{1}{2}$ in	$1\frac{3}{8}$ in	$1\frac{3}{8}$ in	$1\frac{3}{8}$ in
Pins per inch	25	$27\frac{1}{2}$	32	$34\frac{1}{2}$	$38\frac{1}{2}$

The sorter's tools are screwed to a wooden block which is bolted to the beam which runs along the top of the berths, and are usually set at an angle of about 30° to the horizontal. In sorting fine nappy flax, in order to extract the naps it is sometimes advantageous to set the switch at a larger angle than 30° in order that the front row of pins may be more used than the others, rendering it possible to put the fibre into the root of the pins where there is less room for the nap to pass. In the switch where a long pin is used, a guard is sometimes applied to strengthen the outer rows of pins. It is formed by two bands of steel about $\frac{1}{4}$ in. broad and rather longer than the tool. These bands are placed, one in front of the first row and the other behind the second or third row, and then tightened together by means of screws. The "nipping" which we referred to is very severe upon the corners of the switch, and in order that the pins may not be broken away, it is usual to put pins of stronger wire into the rows at the point where this strain comes on. Coarse flax for low numbers is often

wrought as 'touch 'im,' getting only one or two blows over the ten and switch and bunched without breaking the ends.

(To be continued.)

LONDON WOOL SALES.

The first series of the wool auction sales for this year opened Jan. 16th with a large attendance. Competition at the opening was rather quiet, but improved later in the session, especially with continental buyers, who secured the bulk of better greasy merinos. The bidding on scoureds was not so good, owing to the inactivity of the home buyers. There was a larger representation of American buyers than usual, and they operated in crossbreds quite freely, paying December rates for all grades suitable for their requirements. The home trade absorbed the bulk of the greasy, and slips ruled in buyers' favor, with lower qualities occasionally selling at five per cent. decline. Cape of Good Hope and Natal greasy was in large supply, and showed a decline of 5 per cent., although most of this class was withdrawn. The prices realized for scoureds showed little change. The number of bales offered to-day was 9,025. Following are the sales in detail. New South Wales, 1,400 bales; scoured, 8d. to 2s. $2\frac{1}{2}$ d., greasy, 10d. to 1s. 3d. Queensland, 1,100 bales, greasy, $11\frac{1}{2}$ d. to 1s. 4d. Victoria, 600 bales; scoured, 10 $\frac{1}{2}$ d. to 2s., greasy, $7\frac{1}{2}$ d. to 1s. $4\frac{1}{2}$ d. South Australia, 1,100 bales, scoured, 1s 10d. to 1s. 11d., greasy, 8d. to 1s. 2d. New Zealand, 1,600 bales, scoured, 6d. to 1s 4d.; greasy, $6\frac{1}{2}$ d. to 11d. Cape of Good Hope and Natal, 1,300 bales, scoured, 10d. to 2s.

On the 12th, the offerings were 9,495 bales, prices for good wools showed a small improvement, and a large quantity of Queensland merinos was in demand. The American buyers purchased the best Golong clipped. Crossbreds were fairly represented, the home trade taking the bulk. New clipped Puente Reinas, in good condition, showed a small decline under the December rates. The catalogues offered were active and good. The French and German buyers purchased the most of the merinos.

—The bulletin of the National Association of Wool Manufacturers just published shows that Canada exported to the United States combing wools to the value of \$147,030 in 1899 as against \$2,728 in 1898; of carpet wools there was no export in 1899 and only \$135 in 1898.

—The population of Toronto has greatly increased in the past five years and there is said to be a chance of a further very great addition taking place in the near future. C. T. Grantham, formerly manager of the Yarmouth Duck and Yarn Co. of Yarmouth, N. S. is negotiating with the Toronto City Council for the establishment of a cotton duck factory in Toronto to employ some four hundred hands. As these will be almost exclusively French Canadians, and their families are larger than the average, we can safely assume that three thousand of these industrious and economical people will be settled in Toronto, where at present there is no supply of labor suitable for a cotton mill,