ribbon. This will reduce the number of ribbons to be treated at one time compared to larger machines and where one run through the machine is all that is re-

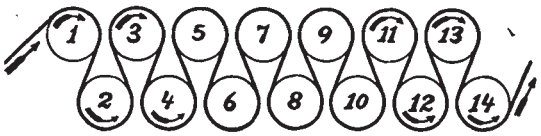

Fig. 38

quired. The number of ribbons that at one time can be run through a machine also depends on the width of the ribbons handled.

In connection with some kinds of narrow ware, like for instance narrow elastics, a machine equipped

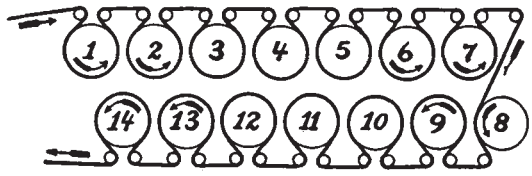

Fig. 39

with one drying cylinder only is often met with; Fig. 41 illustrates subject. This then gives us a very small finishing machine to deal with, the ribbon or the elastic running in screw layers around the drying cylinder, being taken off at the opposite end from that

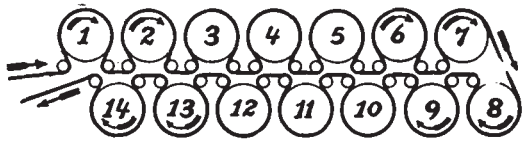

Fig. 40

fed to. On account of the screw layers, the ribbon or elastic is apt to run crooked; to prevent this, there is placed above the cylinder a guide roller *a,* which enlarges every round of the ribbon or elastic. This

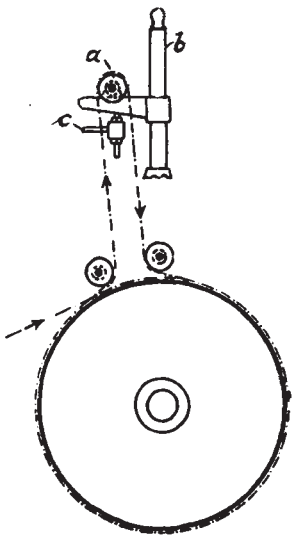

Fig. 41

guide roller can be raised or lowered on standard *b;* the wider the fabric the higher said guide roller must be placed. For its sidewise movement at the various rounds, the ribbon or elastic is guided by fork *c.*

From the last tin of the drying section, the now dry ribbons in most cases pass between 2 or 3 drafting rollers, as shown in Figs. 25 and 27.

Narrow ribbons are delivered in proper receptacles whereas wider ribbons are wound on reels, a specimen of which was shown in Fig. 1 and which now can be added here also. Other machines, like for instance the "Buhlmann" machine shown and described previously in connection with Fig. 26, has suitable devices attached for winding the ribbons on spools. Six of these individual winding-up arrangements are shown in connection with that illustration, the same being individually driven by ropes direct from the gearing of the dryer; more or less of these drives can be furnished.

(To be continued.)

DICTIONARY OF TECHNICAL TERMS RELATING TO THE TEXTILE INDUSTRY.

(Continued from September issue)

Wool Staple:—Wools are classified according to staple into clothing wools, combing wools, and delaine wools etc.

Clothing Wools:—Wools to be carded.

Combing Wools:—Wools to be combed so as to leave the fibres parallel.

Delaine Wools:—Practically combing wools of merino blood, and may be called fine (X and above), or medium (half-blood).

Felting Wools:—The semi-annual clips of portions of Texas and California are sometimes so designated.

Noils:—The refuse, short-stapled wool resulting from combing.

Wool Stapler:—The old-fashioned English term for a wool merchant; a dealer in wool; a wool factor.

Wool Tree or Cork Tree:—This plant is a native of Jamaica, where it grows into a large tree remarkable for its numerous branches and large leaves. Some slight efforts have been made to utilize these vegetable wool fibres for the purpose of felt hat-making, but so far without success. The want of marginal dentations on the fibres has been adduced as the main reason why they are not suitable for this purpose. Nevertheless some use should be made of them, inasmuch as they will take a good dye, and have been blended with silk in hat-making mainly on that account.

Woolen:—Made of woolen, as distinguished from worsted. The difference between woolens and worsteds lies in the different arrangement of the fibres composing the yarn. For worsteds, these fibres are straightened and made to lie parallel, while for woolens just the reverse arrangement is desired, and they are crossed and roughened. The beauty of worsted is to have as few of these loose fibres as possible, and at the same time to have a round level thread, because the thread is seen in the woven fabric. On the other hand, as the woolen cloth is generally intended to be fulled and gigged, the fibres must be arranged in such a way as to assist these operations. Worsted Goods are such as are made from wool, yarns on which the last process before spinning has been the combing. Woolen goods are such, of which the yarn has, in its last stage before spinning, undergone the process of carding.

Woolen Fabric:—The typical woolen is a full handling fabric in which structure and coloring cannot readily be defined on account of the threads and even the fibres having become thoroughly intermingled in passing through the operations of finishing. To insure a typical woolen fabric, the material selected, the method of preparation of spinning and weaving and of finishing, must all be applied with the woolen type of fabric in view. Strictly speaking, a woolen fabric should be made of fine wool (possibly noils included), but in the Law Courts a definition of woolen fabrics as being composed of mungo, shoddy, cotton, etc., has been accepted.

Woolen Yarn:—Yarns spun from wool in which anything but a parallel position of the fibres is noticeable as distinct from worsted yarn in which the wool fibres are markedly parallelized. For calculating the size of woolen yarn there are two systems in use: (*a*) Cut-system, having 300 yards to one cut (16 ounces), and (*b*) the Run-system having 1600 yards to one run (16 ounces). The same number of yards are added to each successive number of cut or run, also to be balanced by the original 16 ounces. Runs are again divided into ½, ¼ and ⅛ run, *i.e.*, 800, 400 and 200 yards respectively.

Woolsey:—A material made of cotton and wool, as distinguished from linsey, which is made of linen and wool; same as Linsey-woolsey, of which it is an abbreviation.

Wiry Wool:—Wool that is thick, straight, and hard in fibre. This characteristic indicates a very objectionable type of badly-bred wool.

(*To be continued*)

COTTON STATISTICS
For the Year 1914.

This report, on account of the European war, will prove of special interest.

Spindleage.

	1914.	1913.
Great Britain	56,900,000	56,800.000
Continent	43,200,000	43,000,000
Total Europe	100,100,000	99,800.000
United States North	18,900,000	18,800,000
United States South	12,940,240	12,416,592
Total United States	31,840,240	31,216,592
East Indies	6,700,000	6,596,862
Japan	2.400,000	2,300,000
China and Egypt	1,015,000	950,000
Total India, etc	10,115,000	9,846,862
Canada	965,000	961,067
Mexico	762,149	762,149
Total other	1,727,149	1,723.216
Total world	143,782,389	142,586,670

Consumption.

Figures of the world's annual cotton consumption in the 1914 cotton year, are as follows. The appended table embraces substantially the entire distribution or consumption (expressed in bales of 500 pounds net weight each) of the commercial cotton crops of the world, and the portion taken by each country:

Countries:	1913-14. Bales.	1912-13. Bales
Great Britain	4,300,000	4,400,000
Continent	6,000,000	6,000,000
Total Europe	10,300,000	10,400,000
United States North	2,689,437	2,681,804
United States South	2,959,443	2,849,524
Total United States	5,648,880	5,531,328
East Indies	1,730,000	1,642,287
Japan	1,600,000	1,500,000
Canada	147,581	144,693
Mexico	28,476	25,990
Total India, etc	3,506,057	3,312,970
Other countries, etc	450,000	398,000
Total world	19,904,937	19,642,298
Average weekly	382,787	377,736

Raw Cotton Production.

Countries:	1913-14. Bales 500 lbs. net.	1912-13. Bales 500 lbs. net.
United States	14,259,290	13,943,220
E. Indies (*a*)	5,010,000	3,468,407
Egypt	1,435,000	1,416,352
Brazil, etc. (*b*)	390,000	370,000
Total	21,094,290	19,197,979
Cons'pt'n, 52 weeks	19,904,937	19,642,298
Surp. from yr.'s crop	1,189,353	*144,319
Visible and invisible stock:		
Sept. 1, beg'ning y'r	6,364,608	6,808,927
Sept. 1 ending year	7,553,961	6,364,608

(*a*) Includes India's exports to Europe, America and Japan and mill consumption in India, increased or decreased by excess or loss of stock at Bombay.

(*b*) Receipts, into Europe from Brazil, Smyrna, Peru, West Indies, etc., and Japan and China cotton used in Japanese mills.

*Deficiency in the year's new supply.

Comparative Crop Statistics.

The relation of the gross weights this year to that of recent years may be seen from the following comparison:

1913-14	14,609,968
1912-13	14,128,902
1911-12	16,043,316
1910-11	12,132,332
1909-10	10,650,961

The total value of the crop, compared with the previous five years, is as follows:

	Bales.	Values.
1913-14	14,588,591	$957,902,336
1912-13	14,167,115	870,035,059
1911-12	16,138,426	810,280,764
1910-11	12,120,095	917,355,589
1909-10	10,609,668	778,894,095