

are oiled; wipe off all black oil as it appears at bearings and apply plenty of new oil to all parts. A good plan is to scour a new frame after running a few weeks and wipe out all bearings.

Care must be taken in adjusting the saddles, levers and weights, so there will be no undue friction or loss of leverage. The Speakman lever screw is the best means for keeping the weights in proper action. Top rollers, if dented or jammed in shipping, are unfit for use and should be rejected. Look out for undue friction in lifting rod bushings and cylinder bearings, and see that these parts are properly adjusted. The speed of the traverse motion should be regulated so as to get as much yarn as possible on a bobbin by laying the coils close together on its barrel. Travelers must be in good condition, using one or two numbers lighter when starting a new frame than afterwards, the first set will soon wear out, however, every successive set put on will wear longer. Do not oil the rings. Every new bobbin should be tested to see that it fits the spindle and runs true. Rings and thread guides must be properly adjusted.

The frame itself, including samsons, head and foot ends, should be perfectly leveled, otherwise the settings cannot be made accurately, or, if they are made they soon will work out of alignment later on from the vibration of running. Unless the frame is well constructed with all its joints milled, so as to fit closely together and all parts made accurately, it cannot be expected to remain in good condition and retain accurate setting.

Rings and spindles cannot be properly set, and when started cannot give satisfaction, unless the frame is built right and set up in the mill so that the different parts are fitted properly, made level and plumb, especially such parts as relate to the spindles and rings, the most vital parts, especially when running at high speed. The manufacturers of spinning rings are blamed many times when the fault is wholly with the machine, either in the adjustment at the mill or the imperfections left by the machine builder. Often the men sent out to set up machinery are deficient in ability, or the amount of labor required of them is so great that they are obliged to scamp their work, in order to turn off an amount that will be satisfactory to their employers.

(To be continued.)

Cotton was first cultivated in Argentina in 1902 in the Province of Chaco at the time of the crop crisis in the United States. Since that time little or nothing has been done toward promoting or encouraging the cultivation of this product. A decree from the agricultural office now provides for the formation of the first cotton-growing colony in Argentina. Twenty leagues of land in the Chaco Territory on the Resistencia-to-Metan Railway is set aside for this purpose, and will be subdivided into small farms of 125 to 250 acres and offered to immigrants who at the conclusion of the present harvest season desire to remain in Argentina, with the express proviso that the cultivation of cotton alone must be undertaken thereon. The colony is to be known as La Cooperación.

## DICTIONARY OF TECHNICAL TERMS Relating to the Textile Industry

(Continued from page 18.)

**RED PERUVIAN COTTON:**—A variety of South American cottons, belonging to the order of *G. Peruvianum*; it does not mix well with other varieties of cotton, hence there is only a limited demand for it.

**RED PRUSSATE OF POTASH:**—Technically known as potassium ferricyanid; a salt of prussic acid.

**RED SILK COTTON OR SEMAL COTTON:**—These flossy silk fibres are the seed-coverings of a large tree found growing in India, the *Bombax malabaricum*. The capsular fruit is inversely cone-shaped, and when ripe it opens longitudinally into four lanceolate segments. The fibres have not, so far, been used for textile purposes, but they have received some attention from hat-makers, with a view of their utilization for felting purposes. Structurally they are flattened and tapering, but as they dry there is a tendency to curl up. If this curliness was more marked, the fibres might be used for felting purposes. These vegetable fibres will take a good dye.

**REDUCING AGENT:**—Any agent which deprives another of oxygen.

**REDWOOD:**—See Brazil-wood.

**REED:**—That part of a loom whose function is to drive or beat up the filling against the fell of the woven cloth.

Flat steel wires set closely and secured between two supports, placed in a vertical position on the back of the lay of the loom. Each distance between two wires is called a dent. The number of these dents to one inch is the number of the reed. Fractions up to  $\frac{1}{4}$ th dent are made use of in practical work. Through these dents the warp-threads pass from the heddles to the fell of the cloth; hence the number of ends in one dent, multiplied by the number of the reed used, multiplied by the width of the reed entered, gives us the number of ends in the warp.

**REED-HOOK:**—The instrument for entering the warp threads through the dents of the reed.

**REGENERATED WOOL:**—The products met with in trade



SHODDY.

under the names of Shoddy, Mungo, and Extract. The fibres vary in length from one-fourth to one inch. They are obtained from spinning, weaving

and knitting mill wastes, from tailor clippings, from old clothes, etc. Shoddy is obtained from



Mungo.

fabrics which have not been felted, Extract from union (cotton, wool) fabrics, and Mungo from goods which have been fullled. Examined under the microscope, a variety of colors can frequently be observed; the ends of the fibres are, in most cases, frayed, and the scales of the wool fibre either missing or corroded. These products are sometimes termed carbonized wool, as the cotton is removed from the rags by treatment with sulphuric acid followed by heat, by which process the vegetable fibres are destroyed and carbonized, and in turn dusted from the wool.

**REEDY CLOTH:**—A fault in woven cloth, caused by imperfect dents of the reed.

**REEL:**—A revolving frame upon which yarn is wound to form it into hanks, skeins, etc.; the frame on which raw silk is wound from the cocoon.

**RE-INFORCED or SPLICED:**—Strengthening or re-inforcing those parts of an article where the greatest wear or strain comes. In hosiery, for instance, the knee and garter top is usually re-inforced, while the heel and toe are spliced. In this case it is accomplished by knitting a second or strengthening thread in with the primary thread used in knitting the hose, both threads being delivered to the needles as one thread, and in turn form the same stitches. To prevent the re-inforced parts becoming harder, and consequently less elastic, the stitches are lengthened mechanically to compensate for the difference.

**RELIEVING MOTION:**—A device of the mule. By its action the down strap is moved upon the loose pulley just before the carriage reaches the holding-out catch. By this means, backing-off is accomplished more quickly. This motion cannot be applied where twisting at the head is required.

**REMBRANDT-RIBBED:**—The name given to hosiery which has several drop-stitches, usually five, separated by a strip of plain-rib web, an inch or so wide, both effects extending the full length of the sock or stocking.

**RENAISSANCE LACE:**—Modern lace, made of narrow tape or braid, formed into patterns, held together by brides, the latter forming subsidiary designs.

**RENTER:**—In tapestry, to sew together, edge to edge, without doubling, so that the seam is hardly noticeable.

**REP OR REPP:**—A transversely ribbed cloth, as distinct from cords, which are of similar structure, but with longitudinal ribs. Produced by weaving three or more picks in one shed.

**REPELLENT:**—A kind of waterproof cloth, used for ladies' rain-proof cloaks, wraps, etc.

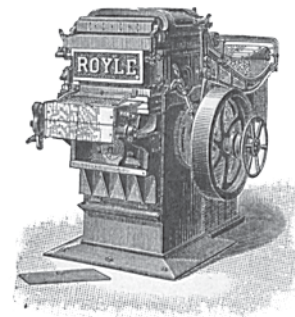
**REPOUSSÉ:**—A pattern that has the effect of being pressed in.

**RESEAU:**—Lace ground composed of regular meshes; net ground.

**RESERVE OR RESISTANT:**—The preparation applied to cotton or silk cloth that has to be printed or dyed, to prevent color or mordant from affecting those portions to which said reserve has been applied.

**RETTING:**—To steep, soak, or macerate, as flax and other fibrous plants, in order to cause decay of the woody matter and facilitate the separation of the fibres. The process may be carried out either by dew, tank or river retting.

**REPEATER:**—The machine invented to duplicate sets

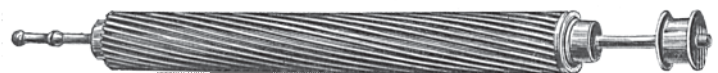


REPEATER.  
John Royle & Sons.

of Jacquard cards upon which the design or weave has been cut by a Piano Card Stamper.

**REVERSIBLE:**—Any textile fabric in which either side can be considered face.

**REVOLVER:**—The shear cylinder, covered with spiral cutting-blades, against which the cloth to be sheared



REVOLVER.  
Curtis & Marble Machine Co.

is brought in contact, by being run over what is known as the fixed or ledger blade. The blades of the revolver remove, by cutting, the exposed portions of the nap of the cloth.

**REVOLVING SHUTTLE BOX:**—A cylindrical receptacle, secured to the end of the lay, for holding four or more shuttles, and which revolves so as to bring the shuttles, one at a time (pick) to the level of the race, in rotation as is required by the filling pattern.

**RHADAMÉ:**—A twilled silk fabric of a satiny nature and finish.

**RHADZIMER SURAH:**—A surah with a modified rib or twill across the face.

**RIB:**—A form with elevated lines and depressions. A raised stripe or wale in cloth or knit goods.