

Dictionary of Technical Terms Relating to the Textile Industry.

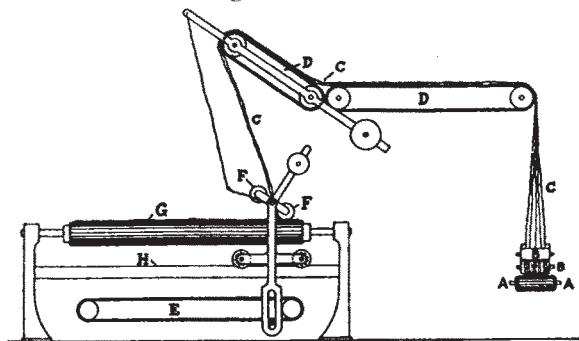
(Continued from page 41.)

RIBBED HOSIERY:—The opposite from fine-gauge.

This class of hosiery is produced on a machine having two sets of needles, one set on the cylinder and the other on the dial, the number of needles being less than those used on a fine-gauge machine. The rib stitch is produced by arranging the cams so that certain needles, instead of knitting a single stitch, combine several together, in this way securing greater elasticity and thickness than with the plain stitch, knitting a fabric the surface of which is covered with ridges or wales at regular intervals.

RIBBON:—A narrow web of silk, cotton, or any other fibre. The shuttle of the ribbon loom is not thrown, but is governed by a positive motion. It is in this particular method of the shuttle motion, and other necessary arrangements for narrow webs, that the ribbon loom differs from the other looms.

RIBBON FEEDING SYSTEM:—One of the intermediate systems of feeding a set of woolen cards; also known as the Scotch feed. By the same the film is combed off the doffer cylinder by means of the doffer comb, is laid upon an endless apron traveling the width of the card parallel to the doffer, and is drawn off in a flat sliver (about four inches wide) by means of two rollers. This sliver is then conveyed, overhead, from the doffer end of one card to the feeding apron of the next card in the



RIBBON OR SCOTCH FEEDING SYSTEM.

A Endless Traveling Apron of First Breaker Card; B Pair of Side Drawing Rollers; C Film of Wool; D Endless Overhead Traveling Aprons; E Motion which moves the Distributing Rollers F to and fro on the Endless Feed Apron; G of the Second Breaker Card; H Rail on which the Motion Travels.

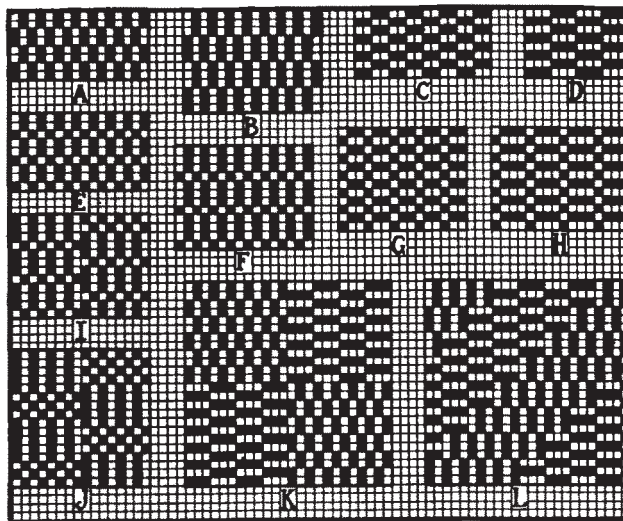
set, upon which it is passed, flat side down, to and fro, parallel with the feeding rollers. Each ribbon is laid in such a way that each crossing overlaps the preceding one about $1\frac{1}{2}$ inches, thus producing a continuous lap for the feed rollers of the receiving carding engine to work on.

RIBBON LAP MACHINE:—The machine used in cotton spinning (such as is combed) for converting the lap of cotton, as coming from the sliver lap machine, into a more uniform lap for the combing machine, (process).

RIB-TOP MACHINE:—A knitting machine, adapted to make a rib knitted fabric, such as is used in hosiery, underwear, sweaters, etc.

RIB WEAVES:—One of the sub-divisions of the plain weave and which may be either a uni or a combination of warp and filling effects. In warp effects the latter forms the face and back of the fabric with the ribs or ridges running cross-ways in the fabric, the filling resting imbedded, not

visible on either side of the fabric. The reverse is the case with filling effects. The respective system of threads which forms the face of the fabric,



VARIOUS RIB WEAVES.

A 2 by 2, and B 3 by 3, Plain Warp Rib; C 2 by 2, and D 3 by 3, Plain Filling Rib; E 1 by 2, and F 1 by 3, Fancy Warp Rib; G 1 by 2, and H 1 by 3, Fancy Filling Rib; I 1 by 3, and J 1 by 1 by 5, Figured Warp Rib; K Checker-Board Effect: 3 by 3 Filling and 2 by 2 Warp Rib; L Oblique Effect: 3 by 3 Warp and Filling Rib.

whether it is the warp or the filling, or both in figured rib weaves, must have a high texture, in order to present a full, close rib effect.

RICE STARCH:—Rice is used in the finishing and sizing of cotton cloth (also in the sizing of yarn) in two forms, *viz.*, rice flour and rice starch. Rice flour is simply the grain ground up. Boiled with water, rice flour makes a very mucilaginous paste, rather thicker than that obtained with wheat flour. It has not, however, the same adhesive properties, and hence cannot carry so much china clay, barytes or mineral. It is therefore not much used for heavy finishes, but for light finishes it is in request. Rice flour imparts a peculiar crisp feel to cloth, and is therefore serviceable in those finishes which are not heavily weighted, and which are highly calendered and must be somewhat stiff. To distinguish between rice flour and rice starch, place a little of the sample in a test tube, and add a small quantity of nitric acid; if flour, it will become colored a bright yellow; if starch, it will remain white.

RICHARDSON'S REAGENT:—An ammoniacal solution of nickel oxide. 25 grams of nickel sulphate crystals are dissolved in 300 c.c. of boiling water and precipitated with a slight excess of a 10 per cent solution of sodium hydroxide. The precipitate is carefully filtered and washed, then rinsed into a 250 c.c. flask containing 125 c.c. of ammonia (sp. gr. = 0.88). The whole is now made up to 250 c.c. with water.

RICHELIEU-RIB:—The term applied by the hosiery trade to drop stitch hosiery. It refers to the manner of knitting; the plain rib or stitch of the fabric is interspaced with drop stitches, forming a design or pattern on the stocking.

RICK-RACK:—Openwork trimming made with serpentine braid.

RIGOLETTE:—A light wrap, sometimes worn by women upon the head; a head covering, a scarf rather than a hood, and usually knitted or crocheted of wool.

RIM SHAFT:—The main shaft of the mule.

RING:—An adjunct to the ring frame, secured to the ring rail over the holes provided in it for this purpose. Through its centre extends spindle and bobbin; onto its upper flange is sprung a small



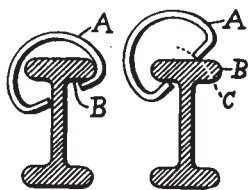
RING (Mirror Finish.)
Draper Co.

piece of bent steel wire, known as the *traveler*, and which is revolved by the action of spindle and yarn, around said ring, at a speed slightly less than that of the spindle, this lag being the means for winding the yarn onto the bobbin.

RING FRAME:—The spinning frame, an American invention, in which spindles revolve within rings, the winding of the thread being governed by passing the latter through the eye of a small steel loop, called a traveler, one of which revolves around each spindle in the machine. These rings are secured in a horizontal bar, known as the ring rail, which moves as directed by the builder motion, up and down, in such a manner as to give respectively what is known as a warp or filling shape to the bobbin or the cop as spun on the spindle.

RING SPINNING:—Spinning by means of rings and travelers.

RING TRAVELER:—The small steel loop which forms



RING TRAVELER.

Showing Adjustment of Ring.

A Traveler; B Upper Flange of Double Flange Ring. C Amount of Clearance Traveler has to overcome to prevent flying off the Ring.

the winding-on drag of the thread, on the bobbin or cop, in the ring frame.

RIO GRANDE:—An early name for the original form of many of the upland short-staple varieties of cotton, yielding 34 to 36 per cent. lint, with a staple of about $\frac{3}{16}$ inch.

RIPPLE:—A comb of steel through which flax is drawn to clear off the bolls from the stem. The ripple is a kind of large comb composed of iron teeth about 18 inches long, and $\frac{1}{2}$ inch square, tapering slightly towards the apex, placed $\frac{3}{8}$ of an inch apart at the bottom and screwed down to the centre of a 9 foot plank, resting on two stools. This comparatively great length and small-

ness of the iron teeth allows them to spring lightly, and so yield to the pull of the stalks, instead of presenting a rigid surface, which would act too roughly upon them. After pulling, flax is submitted to rippling, which has for its object the separation of the bolls from the stems, and is performed by drawing, by hand, successive bundles of flax through the upright prongs of the ripple. The bolls being greater than the distance apart of the rods, they are stripped off. As each handful of flax is rippled, it is deposited on the ground, one being placed diagonally over the other until a sheaf is completed, when it is bound up and removed for retting.

RISING-BOX:—See Drop-box.

RIVER PLATA WOOLS:—Merino wools of the Argentine Republic and Uruguay, known also as *Buenos Ayres* and *Montevideo* wools, according to port from which they are shipped. They are of fairly fine fibre, but lack in strength and elasticity, and are characterized by the great amount of (screw) burrs they contain. They come rather carelessly graded and packed in the market. The best grades are spun into, up to 60's worsted yarn, the bulk however being destined for 20's to 36's worsted for the hosiery trade as well as for the spinning of woollen yarns for fine face finished goods.

ROBOZO:—A cotton shawl made in Mexico, being greater in length than in its width, and largely used by women as head-coverings.

ROCKY MOUNTAIN GOAT:—A true antelope in all its essential features, though having something of the



ROCKY MOUNTAIN GOAT.

aspect of the goat, from which it gets its name. Similar to the Cashmere Goat, the woolly fibre of this goat forms an abundant coat beneath long and coarse exterior hairs. The wool, or as it is called *pushm*, is of a pure white, but inferior to that of the Cashmere Goat.

ROCOCO EMBROIDERY:—A kind of openwork made with filosele upon an ecru linen foundation; also embroidery made by sewing China ribbons upon a satin or velvet foundation.

ROCOCO LACE:—Italian lace, bearing the rococo design.