

Dictionary of Technical Terms Relating to the Textile Industry.

(Continued from page 74)

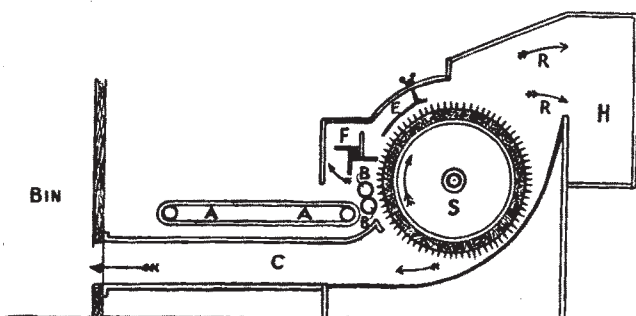
SCOTCH BLACK FACE SHEEP:—A distinctive type of sheep found on the Scottish hills and the elevated and unsheltered places in the English counties of Cumberland, Westmorland, Lancashire, and



SCOTCH BLACK-FACE RAM.

Yorkshire. In its pure or crossed state it forms the basis of the flocks owned by the Yorkshire moorland farmers. Usually the mutton is of fair weight and quality, but the wool is poor, being long, thick in fibre, well intermixed with kemp, and light in weight of fleece. Generally, it does not cross well, though distinct improvement has been wrought in it by carefully selected types of the Cheviot, Lustre, and Down varieties.

SHODDY PICKER:—The machine used for transforming rags, *i. e.*, all kinds of woven or knitted fabrics made of wool, back into fibre. They may have been made up into cloth and worn, or some, like



SHODDY PICKER. (Section showing operation.)

A, Endless Feed Apron, varying in traverse from 20 inches per minute for merino rags to 30 inches for worsted or hosiery; B, Two Feed Rollers, conforming in surface speed to that of feed apron; S, Cylinder, 36 inches diameter, 18 inches wide. 700 r. p. m.; F, Fan, 12 inches. 1000 r. p. m.; E, Guard; R, Direction of throwing unopened pieces of rags into H, Hopper; C, Flue for delivering the shoddy fibres to the bin.

tailors and mill clippings, samples, etc., have never been in actual use. They all come to the woolen or to the shoddy mill to be reduced by the shoddy picker to their original condition, when every fibre was separate from the others. The construction of a shoddy picker is extremely simple, the rags being fed by a feed apron to two feed-rollers

which deliver them to the action of the picker-cylinder, which has its periphery covered with steel pins. The latter must be made to beat (not to cut or tear) the rags, as fed to them, into the original fibre state, rejecting, *i. e.*, throwing out any pieces beyond their power to be opened, and which in turn are fed again to the machine. Thin feeding means often more output to a mill. Correct cylinder speed is absolutely essential for quality and quantity of production. The feed to a newly clothed or a new cylinder should be different to that of one which is partially worn, and if possible, the nature of the material to be picked should be selected to suit the case. In practice, the cylinder is taken out and reversed about once in a week or two so its pins will wear away on both sides. The cylinder is at its best when two or three weeks old, the pins then being almost at their full length but all roughness at the point is rounded off and the shafts are smaller, presenting the fullest beating power, with little tendency to cut the fabric.

SHOGGING:—The horizontal motion of needles or guide bars by which loops are shifted to right or left on knitting frames; a motion in the old lace loom by which the filling carriages were transferred horizontally.

SHOOT:—The filling thread of a web; also the weft, woof or tram.

SHORT HOSE:—The stockings of the Scottish Highlander, reaching nearly to the knee.

SHORTS:—Technical term for short wool; also called brokes. Taken out in sorting wool for combing purposes.

A long noil removed from silk during the process of dressing; it is the result of making the various drafts.

SHORT STAPLE COTTON:—Cotton fibre $\frac{3}{8}$ to $1\frac{1}{8}$ inches in length.

SHOT:—Scotch term for pick; a single thread of filling carried through the shed at one run of the shuttle.

A defect of the nature of a streak in a fabric, caused by the interweaving of a thread or threads differing from others in color, quality or counts.

A class of patterns showing a changeable color if viewed at different angles; like that produced in weaving certain silk fabrics, having all the warp-threads of one color and all the filling of another.

SHOT ABOUT:—The alternate exchange (filling ways) of figure-up and ground-up in two-ply ingrain carpet.

SHOVE:—The woody centre of flax; the boon.

SHOW END:—That end of a piece of cloth which forms the outside of the roll to be shown to customers. It is sometimes ornamented and lettered with silk or other thread woven into the piece, other times stamped; also called Heading or Head-end.

SHOWER-PROOFING:—Various finishes, such as cravenette, pirlé, etc., to which cloths are subjected, rendering them shower, rain or spot-proof.

SHRINKAGE:—The amount of contraction which most cloths are subjected to from the loom to the finished state.

The loss of wool in scouring.

SHROPSHIRE DOWN:—Wool of good quality, with strong, fine, lustrous fibre, of good length. This breed is somewhat larger than the Southdown, also hardier and more thrifty. Most likely this has been developed from an old Morfe Common sheep—named after the land in Shropshire, Eng., on which they are reared—by the introduction of the Southdown and also the Leicester and the Cotswold long-wool types. From all standpoints



SHROPSHIRE DOWN SHEEP.

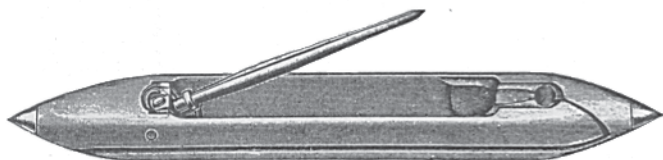
it is highly satisfactory as a breed, and is most extensively reared in England, its colonies, as well as here. As a cross on the Merino type it is especially serviceable. The average weight of the fleece is seven pounds. It is used chiefly in the manufacture of dress goods.

SHROUD-LAID:—Rope made by twisting four strands round a core.

SHUNIA:—A cotton or silk robe of the toga type, the national garb of Abyssinia.

SHUSU:—A kind of satin made in Japan.

SHUTTLE:—A wooden carriage tapering at each end, and hollowed out in the middle for the reception of the bobbin or cop containing the filling, which unwinds from this bobbin or cop as the shuttle is driven to and fro through the shed, formed by the warp. In ribbon looms the shuttles are called swivels or swivel shuttles, and are driven (by



HAND THREADING SHUTTLE.
Shambow Shuttle Co.

suitable gearing) positive through the shed. The Fly shuttle was invented in 1738 by John Kay.

SHUTTLE BINDER:—In a loom, a device in a shuttle box to prevent (by means of friction) the recoil or rebound of the shuttle after it is thrown by the picker; also called shuttle check.

SHUTTLE BOX:—A receptacle at each end of the lay of a loom containing one or more compartments, each devised for holding a shuttle (if so desired by the pattern) at the end of its race or movement through the shed.

SHUTTLE GUARD:—A class of contrivances designed to



THE SULLIVAN SHUTTLE GUARD.
Draper Company.

prevent the shuttle from flying out of the loom.

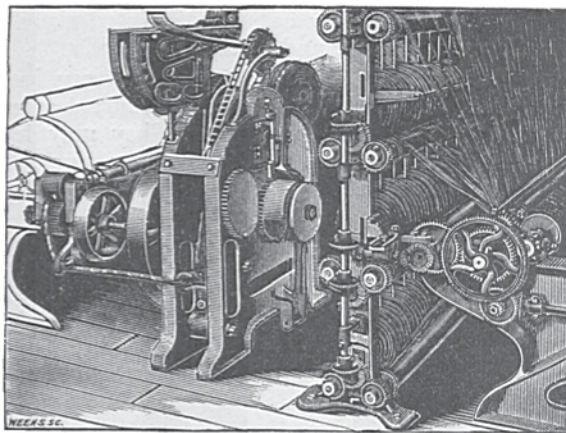
SHUTTLE-RACE:—The shelf or track at the base of the reed in a loom, formed by the body of the lay, for the shuttle to pass over; also called shuttle race-way.

SICILIAN:—A cloth made from a fine cotton warp and a thick mohair filling, interlaced with the plain weave, producing a rib effect.

SICILIENNE:—First made in the Island of Sicily as a heavy ribbed silk fabric. Sicilienne, Ottoman, crystals and bengalines, for cloaking purposes, are all very similar. They are silk warp goods with wool or cotton filling, a little heavier than the same articles used for dresses, and with a pronounced rib running in the direction of the filling.

SICKNESS:—The period of molting, in the life of the silkworm.

SIDA:—A genus of plants from which fine rope fibres are derived. It is a lustrous silky fibre like jute, but much finer and brighter and whiter. It is altogether much superior to jute, and could be grown in the same field and under the same con-



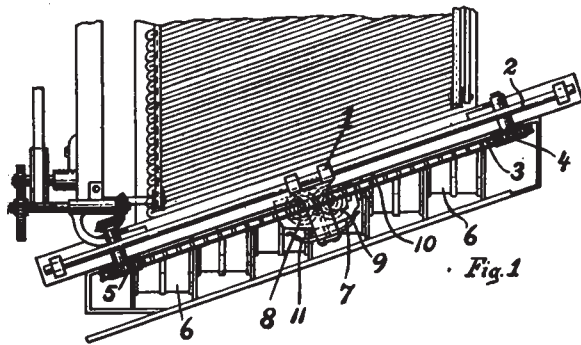
SIDE DRAWING SYSTEM.
Showing Balling Machine attached to First Breaker, and Creel filled with Balls for feeding Second Breaker.

ditions. The fibre is separated from the stalk by the same process as jute, but has not as yet come to any consequence into the market, simply through the enormous success of jute.

SIENNA:—A natural yellow pigment similar to ocre, but containing also manganese oxide; used for tinting purposes in the finishing of cotton goods.

SIDE DRAWING SYSTEM:—This is the system mostly used in this country for feeding between the various carding engines of a set of woolen cards. Two methods for it are in use: (a) by means of balls and creel feed, and (b) the Apperly feed.

The first mentioned method is mostly used between the first and second breaker, whereas the latter method is generally employed between the second breaker and the finisher.



SIDE DRAWING SYSTEM.

Top view of *Apperly Feed*: 1, Carrier which travels back and forth on guide rod 2, being actuated through chain 3 passing around sprockets 4 and 5 which are driven positively. 6, endless apron, feeding the sliver placed diagonally on it to the card. 7, a rocking plate carrying gears 8 and 9, in mesh with each other, one of which is always in contact with the stationary rack 10. 11, retaining spring.

SIGHTENING:—In calico-printing, a fugitive color added to paste to enable the operator to judge of the pattern.

SILESIA:—A twilled cotton fabric, quite firm, with a gloss finish upon the face side, used for linings, for both men's and women's wear. Silesia is woven of yarn in the gray state, and is dyed in the piece in such colors as black, dark blue, brown, drab, slate, steel, etc.

SILESIA LINEN:—Linen made in Silesia, Germany; it is a very superior fabric.

SILESIA MERINO SHEEP:—Native sheep crossed with pure Spanish merino sheep, producing a fine grade of wool, highly valued for textile purposes. This wool together with that of Saxony and Hungary, constitutes the best classes of continental wools. The fibres are highly imbricated, possess great fineness of staple, are strong, and have great felting properties. They are well adapted for the spinning of yarn for high-class woollen fabrics where good felting properties are essential, like superfines, and dress-faced fabrics. Felt cloth for piano hammers is also made from yarns of these fibres.

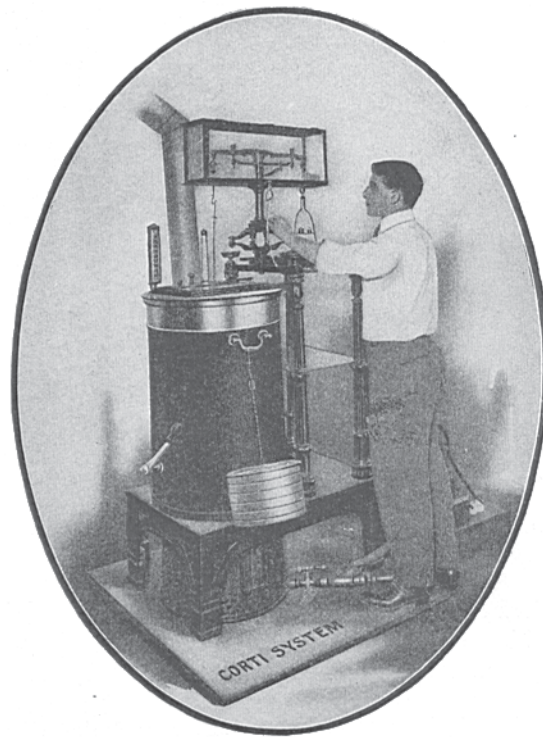
SILICATE OF SODIUM:—Soluble glass, waterglass. A compound formed by melting together sand with carbonate of soda ($\text{SiO}_2 + \text{Na}_2\text{CO}_3 = \text{Na}_2\text{SiO}_3 + \text{CO}_2$). It is used as an addition to soaps, as a sizing and as a mordant. It combines the properties of soap and caustic alkali, and is well adapted to some operations where the soda-ash is not strong enough, and where the alkali is too keen.

SILK:—The fine fibre spun around about itself by the caterpillars of moths belonging chiefly to the *Bombyx* genus, when entering the pupa or chrysalis state; the material forming the cocoon of commerce; silk yarn, thread or cloth.

SILK CLEANING:—In this process the silk thread is simply transferred from one bobbin to another, passing during the transfer through the cleaner, which consists of two parallel plates sufficiently close to catch any irregularity upon the silk, and at the same time arrest the motion of the spindle until the operator removes the cause.

SILK COTTON:—Silk cotton or vegetable silk consists of the hairs from the seed pods of various trees and plants. The most common commercial silk cotton is Kapok, from the pods of a large tree which grows throughout the tropics. It is used for stuffing pillows and in upholstery. Silk cotton differs from the true cotton in that its cells are thin walled, straight and smooth, while those of true cotton are thick walled, have corded edges, and are twisted many times throughout their length. Because of its smoothness and straightness, silk cotton cannot be spun.

SILK CONDITIONING:—By its very nature, raw silk is an article which is capable of lending itself successfully to misconception or deception. Its weight varies according to climatic conditions. In rainy weather, for instance, the same silk will automatically increase in weight as much as 3% over its weight in ordinary dry weather. Because of its power to absorb moisture its weight can be still further increased through artificial means, as much as 30%. Silk conditioning, so called, determines the absolute dry weight of silk, and to this weight so ascertained 11% is added as the universal standard to represent the usual absorption of



SILK CONDITIONING OVEN (Corti System).
U. S. Silk Conditioning Company, New York.

moisture from the normal atmosphere. Silk conditioning establishments are to be found in the centres of silk industry all over the world, whose business is to ascertain the amount of moisture in a lot of silk given for testing. The apparatus used for the purpose is called *Silk Conditioning Oven* or *Desiccator*.

SILKETTE:—A fabric composed of silk and cotton, used for linings.