

Dictionary of Technical Terms Relating to the Textile Industry.

(Continued from page 39)

PERUVIAN COTTON:—A South American variety of *Gossypium arboreum*, producing a considerable amount of cotton. Three varieties are brought into the market, respectively: Sea Island, Rough and Smooth. The *Rough Peruvian* is the most important variety, having a strong, rough, woolly, crinkly staple, about $1\frac{1}{4}$ to $1\frac{1}{2}$ inch long, and is usually very clean and well handled. Its chief use is for mixing with wool in the manufacture of Merino yarns, for which reason it is called *vegetable wool*, and when carded its resemblance is so close and its characteristics so strikingly similar to wool that it could readily be sold as wool, even to a dealer. When woven into goods along with wool, the cotton fibres cannot be determined with any certainty except by using chemical tests. This cotton is extensively imported and chiefly sold to manufacturers of woolen goods, for the purpose of mixing with wool, although some is used by itself in the manufacture of cotton yarns. When mixed with wool, it reduces the tendency of the goods in which it is used to shrink, makes them more durable, lessens their cost of production, besides giving them a better lustre and finish; hence it is frequently used in the manufacture of underwear and hosiery. For dyed goods it is equally suitable, as it takes the dye very well, *i.e.*, it makes fast colors. This peculiarity of the Peruvian cotton is probably the result of soil and climate, and its cultivation is therefore likely to be restricted to that country. It would be very difficult to find a section in the United States that would furnish a uniform and high heat during the ten months necessary for the development of the plant, or the other conditions which contribute to the successful cultivation of this cotton. Some of this cotton is highly colored and some actually *red*, a feature explained by means of the copper soil on which raised. The *Smooth Peruvian* variety is somewhat shorter and resembles our Gulf cotton; whereas the *Peruvian Sea Island* resembles our Florida Sea Island, although by no means being as clean as the latter.

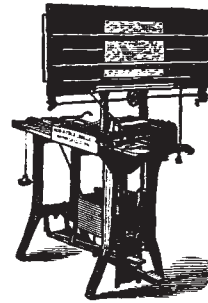
PETANELLE:—A material composed of specially prepared peat fibres incorporated with wool fibres. The former gives the cloth certain antiseptic properties. Petanelle is typical of the animal and vegetable fibres, and is made into various articles of clothing.

PETIT GULF:—One of the oldest varieties of cotton; originated by Col. H. W. Vick, the originator of the Jethro, about 1840. In 1848-49 large quantities of the seed were sent to Georgia and Alabama, and as the shipments were all made from Petit Gulf the variety became known under that name. The plant is large, long limbed, and long jointed, not very prolific; bolls medium in size, ovate, not maturing early; lint 30 to 32 per cent; staple $\frac{7}{8}$ to 1 inch. *Boyd Prolific* and *Dickson* are probably descended from this variety.

PIANO FEED:—The feeding mechanism for scutchers; its object being to automatically regulate an even supply of lap of cotton fed.

PICCADILLY:—A standing collar the points of which are turned over; first worn in London about 1870.

PIANO MACHINE:—The machine which perforates Jacquard cards with a piano motion; card stamping or card cutting machine.



"Royle" Piano Card Stamper.

PICK:—The insertion of a thread of filling in the loom; the propulsion of the shuttle through the shed; the time occupied in the opening of the shed, the picking of the shuttle and the beating up of the filling. A unit of measurement for the speed of a loom.

PICK COUNTER:—The person who goes about the weave room counting the picks is, in some mills, honored with this title. The instrument, *i.e.*, gauge, used in counting the picks, either at the loom, at the perch, or by the designer. In its crude form, it is a common steel templet with two protruding points placed one inch apart. In its approved form it is a three part folding pocket microscope, the base of which has a square either $\frac{1}{2}$, $\frac{3}{4}$ or 1 inch, cut out, which is placed over the fabric to be examined; the lense (as is secured to the top) is then folded over and the number of picks in the known space conveniently counted.

PICKER:—A machine for opening, cleaning and mixing cotton or wool, as a wool-picker, a burr-picker, a cotton-picker; also a shoddy or rag picker as used for reclaiming the wool fibre from yarns, waste, as well as from woven and knitted clippings or worn fabrics.

That part of, or attachment to, a picker stick in a loom, which strikes and thus sends the shuttle through the shed.

PICKER-MOTION:—The parts of a power loom that drive the shuttle through the shed.

PICKER-STICK:—A lever, of wood, used in the picker-motion of a loom to impart motion to the shuttle by means of the picker, as is connected to its upper end.

PICKING:—In most cases this is the first process of cotton spinning, whereas, in other instances it follows mixing, proceeded, when heavily pressed bales are used, by opening, *i.e.*, by running the matted cotton first through a bale breaker.

Cleaning the cotton from foreign impurities as well as opening the tufts, *i.e.*, preparing it in the best possible condition for the next (scutching) process.

In wool spinning the process of preparing the wool for the carding engine. See Burr-picking, Mixing and Wool-picking.

The movement by which the shuttle is propelled through the shed in the loom.

PICKING CONE:—The small conical roller secured to

the picking shaft, being acted upon by the tappet, or the nose of the bottom shaft cam of the loom.

PICKING OUT:—A common term for dissecting woven fabrics.

The operation performed by the weaver when he has to pick back, to take filling out, on the loom.

PICKING SHAFT:—A shaft extending along the inner side of the loom, the agent of the picking motion.

PICKING TAPPET OR CAM:—The cam on the bottom shaft of the loom which actuates the picking motions.

PICKLOCK:—One of the grades made in sorting a fleece for woolen spinning. The very choicest qualities of wool as regards fineness, elasticity, and strength of staple.

PICOT:—A loop-stitch used in fancy embroideries.

A row of little points at equal distances on the edges of lace, etc.

The looped edges of ribbon, also called pearl edge.

PICRIC ACID:—Called also trinitrophenic acid. An organic acid produced by the action of nitric acid on phenol and other organic substances.

PIECE-DYED:—Cloth dyed after weaving, as distinguished from that made of wool dyed before weaving, known respectively as wool-dyed and yarn-dyed.

Piece-dyed fabrics may be distinguished from stock and yarn-dyed fabrics by unravelling threads of each fabric. In the case of the latter, the dyestuff has penetrated through the yarn, while in the case of piece-dyed fabrics the dyestuff has not the chance to penetrate the yarn as completely as is the case with stock and yarn-dyed fabrics. Such difference is so much more noticeable if dealing with heavy-weight fabrics, fulled considerably.

PIECE GOODS:—All kinds of cotton, wool, worsted, silk, linen, etc., fabrics which are woven in lengths suitable for retail sale by the usual linear measure.

PIECERS:—Assistants to the mule spinner, with the special duty of keeping the frames filled with roving. They derive their name from their work of piecing up the broken ends.

PIECING:—The joining of the ends or laps, slivers, roving, yarns, to make continuous lengths, or repair breaks.

PIERROT:—A large, loose fitting, white or white striped costume with long sleeves, worn by masqueraders.

PIGMENT:—A colored paint, as distinguished from a dye.

PIGMENT PRINTING:—Applied to calico printing, the colors are the same pigments as used by painters, and being quite insoluble in water, are, as we might say, cemented (fixed) to the fabric by an albumin, which coagulates when the cloth is strained and imprisons the fibre with the coagulum. These colors, though not altered in shade by soap, are detached in part by severe treatment, such as rubbing, etc.

PIG'S FOOT:—This term is sometimes given to the diagonal steadying slot for the copping rail of the mule.

PILCH:—A fur coat, any coarse garment worn for warmth.

Errata: In connection with definition "Peroxide of Sodium," on page 38 of the August issue, right hand column, line 28 from the top, read "catalysers" in place of "crystal-lizers," as printed.

A Microscopical Comparison of Flannel and Flannelette; Their Burning Effects.

By James Scott.

There is an erroneous idea current that flannelette is an inferior flannel, whereas, of course, it is simply an imitation made chiefly of cotton. If this fact were better known there would be far less risk of burning than is now the case, as people, knowing that flannel is not readily ignited or consumed, suppose that flannelette is also not so liable to catch fire. If they were all aware that the material is a cotton fabric, fluffed up to produce a soft, cosy surface, they would probably be more careful in handling it, and might accept the oft-repeated advice to wash it in chemicals which, while they are not injurious to the fibres, would be a protection against sudden ignition.

The compound microscope proves exceptionally useful in the determination of the contrast between flannel and flannelette. The identity of both cotton and wool strands can be instantly discovered by its means, without any preparation whatever of the substance to be observed. It will afford interest to manufacturers to point out the distinction between the fibres and the manner in which they burn.

In Fig. 1 is shown the appearance presented when a piece of common flannel is folded and the upstanding fluff is examined. We can then note the structure which places wool to the front as a textile fibre. All wool consists of modified hairs whose surfaces are covered with loose, irregularly-shaped overlapping

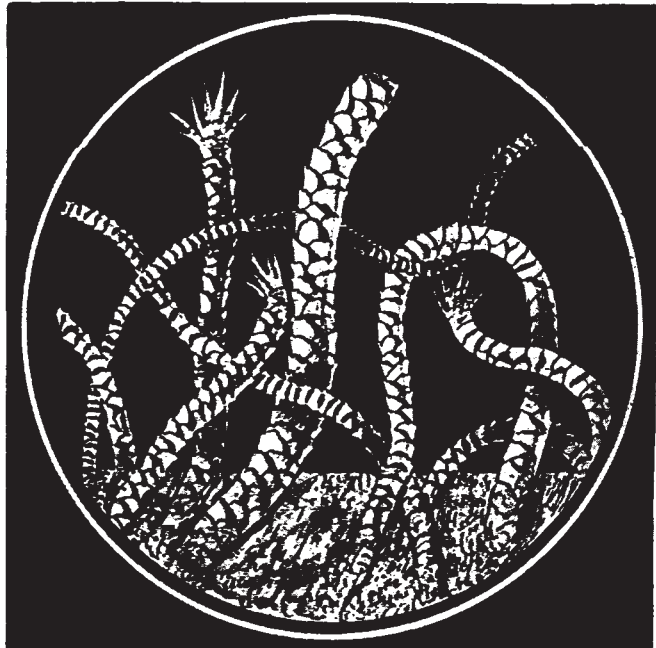


Fig. 1.—A magnified pinhole showing the fluff of flannel folded on to itself. Wool fibres are covered with scales which are capable of separation. The fibres burn in the manner shown in Fig. 3.

scales, the edges of which project upwards. It is by the interlocking of these scales, by means of edges opposed to each other as different fibres cross and entwine, that felting is possible, and it is their presence which is partly responsible for shrinking.

The original basis of wool is a substance called