

DICTIONARY OF TEXTILE TERMS.

(Continued from January issue.)

Combing (Commission): A branch of the wool trade. The commission comber is equipped with the plant, but receives his material from either the wool merchant or the spinner, and delivers it in the form of top and noil, simply receiving a commission for his work.

Combing Dry: The preparing and combing of wool to which no oil has been added to facilitate the combing operation. Dry combing is said to yield better results in the dyed fabric.

Combing in Oil: The preparing and combing of wool to which oil has been added, with the idea of controlling the fibres and obtaining an easier passage through the pins of the gill box and comb.

Combing Machine: The type of machine most frequently used for combing wool is known as the *Noble comb* (so named after its inventor, James Noble) while the types of machines used for combing cotton are the *Heilmann comb* (so called after its inventor, Josué Heilmann), the *Alsation*, the *Nasmith* and the *Momfort's comb*, the latter two being also named after their inventors.

Combing Wool: Of a length sufficiently long for combing purposes, say two inches and over. Whiteness of fleece is of less importance in the combing wool than in the clothing wool, provided it be free from gray hairs. Sometimes, however, the fleece has a dingy brown color, a *winter stain*, which is a sure indication that the wool is not in a thoroughly sound state. Such fleeces must be thrown out by the wool sorter, being suitable only for goods that are to be dyed black.

Come-back: A wool produced by the crossing of two breeds of sheep (to produce a half-bred) and then crossing the half-bred with one of original breed. It is thus a come-back to the original breed. *Merino Come-back* is most commonly produced on account of mutton requirements, and also to gain fineness and softness in wool grown.

Common Salt: The same is made from rock-salt, brine, sea-water, etc. It crystallizes without water of crystallization, but ordinarily contains some moisture, and frequently also some sodium sulphate, calcium sulphate or magnesium chloride. The solubility of common salt is about the same at any temperature, and varies only between 35.5 parts common salt at 0 deg. C. up to 39.2 parts at 100 deg. C. in 100 parts of water. Little used in the textile industries; it is added to the bath in dyeing with azo dyestuffs; as a dressing. For the latter purpose it is to be used with caution, since almost all dyes are injured by it, and being hygroscopic, it gives rise to the formation of mould spots. Also called *Sodium Chloride*.

Common Wool: One of the lower grades of wool.

Compart-board: See Comber-board.

Compass-board: See Comber-board.

Complementary Colors: Colors, the combination of which produce white light. A knowledge of the various complementary colors is of great im-

portance to every dyer and colorist, as it enables him to produce the finest effects of color harmony and contrast. It is also of much service in studying the various phenomena observed in matching colors.

Compound Twill: A twill composed of two or more weaves which weave well together, each weave, however, maintaining its individuality in its particular section of the design.

Compressed Bale: See Cotton Press.

Comptah Cotton: An Indian cotton which contains large quantities of leaf, etc., broken up into fine particles; of a brown tint, and fibres rather weak. Mean length of fibre $\frac{7}{8}$ inches. Suitable for spinning up to 15's filling.

Condenser: That part of the finisher card of a set of woolen cards which separates the film when it comes off the doffer into a number of small roving strands, slightly rubbing them, in order to impart sufficient strength for handling them for spinning.

Condenser Yarns: Cotton yarn spun by the woolen principle.

Condition: The hygroscopic character or moisture holding condition of textile materials.

Conditioning: All textile fibres contain moisture in their normal condition. Since this amount of moisture present can be increased, with a consequent loss to the buyer, up to twice its normal percentage, in 1875 an international congress met at Turin, Italy, and when the following allowances or reprises were adopted as the normal amount of moisture allowable in the various textile fibres: Silk 11 per cent; Wool—carded 17 per cent; Wool—combed 18 $\frac{1}{4}$ per cent; Tops—oil combed 19 per cent, dry combed 18 $\frac{1}{4}$ per cent; Noil 14 per cent; Cotton 8 $\frac{1}{2}$ per cent; Flax 12 per cent; Hemp 12 per cent; Tow 12 $\frac{1}{2}$ per cent; Jute 13 $\frac{3}{4}$ per cent. of the absolute dry weight of the fibres. To-day every prominent textile centre in Europe has a conditioning establishment, the decision of which is final in law. For the purpose of conditioning the skeins of yarn, after having been reeled, measured and weighed, at first together and then separately, are, for the purpose of conditioning, then dried in ovens, and when perfectly dry a certain amount of water is added to the yarn equal to the permissible percentage (normal amount) of moisture, for each fibre previously referred to. The count of the yarn thus treated is termed its conditioned count.

After woolen and worsted fabrics have passed through a process involving the application of dry heat (such as singeing) they are unnaturally dry, and as a consequence are very weak. To give back the natural moisture, goods in such a condition are passed through a machine which sprays them, and thus causes the fabric to quickly regain the moisture and often the strength lost.

Cone Drawing-box: One of the preparatory machines in worsted spinning. In a cone-box the material is positively wound on to suitable sized bobbins with practically no strain upon it, while in the case of the ordinary drawing-box, twist must be put into

the sliver to give it sufficient strength to pull the bobbin round. A cone-box thus permits the slivers to be drawn much softer, as well as permitting larger bobbins to be used, resulting in better and more economical working.

Cone Duster: A machine used for freeing wool from impurities, as shives, dyestuffs, dust, etc., used more particularly with wools which are very dusty, excepting the very long-stapled carpet wools, which remain a longer time in the duster, and for which a modification of it is used, by changing the character of the teeth and feeding device.

Cone-pulleys: A pair of pulleys set in opposed positions in the bobbin-and-fly frame which, in conjunction with the differential motion, change the speed of the bobbins as the latter fill up.

Congo Red: A member of a class of dyestuffs known as direct or substantive cotton colors, dyeing cotton, wool and silk without the aid of other substances. Since it was the first artificial dye (discovered in 1884) known to have this property, dyes of the same kind discovered since then are frequently called congo colors. It is a red-brown powder, readily soluble in water, its solubility decreasing if salts (sodium chloride or sodium sulphate) are added, causing more of the dye to adhere to the fibres. Wool will exhaust the dye bath, whereas cotton will not, for which reason in the latter case the dye bath is used over again, always adding fresh dyestuff and salts after each dyeing.

Constant: A kind of short arithmetic most frequently met with in cotton spinning, denoting a known dividend which at any time can be divided by some required quantity or condition, the quotient obtained being the gear, draft, twist, etc., necessary to be used to give the required condition; again, the converse of this rule may be used. For this reason, a constant number for change pinion is a number which if divided by any required draft will give the necessary change pinion; or vice versa, if divided by any change pinion will give the draft. A constant number for twist is a number, which if divided by any desired turns of twist per inch will give the requisite twist gear; again, if divided by any particular twist gear, will give turns of twist per inch put into the slubbing or roving. It will be readily seen that where a number of machines are running in a mill with certain gears that are seldom changed, while at the same time the counts of the sliver, slubbing or roving are frequently varied, that in this case constant numbers are very useful, it giving us a kind of short hand arithmetic, similar to the slide rule.

Constitutions: A standard variety of corduroys.

Convent Cloth: An extremely light-weight dress fabric made with a silk warp and wool filling, the weave resembling that of linen mome cloth.

Cook: A cotton plant, originated by W. A. Cook, of Newman, Miss., from a single stalk found in a field of common cotton. Plant very vigorous and prolific; limbs irregular, not long;

bolts large and long, sometimes $2\frac{1}{2}$ inches in length, maturing late; lint 26 to 28 per cent; staple 35 to 40 mm. Similar to the Allen, and one of the best varieties for rich, low ground.

Coothay: A variety of striped satin.

Cop: The cylindrical coil of yarn accumulated on the spindle of a mule, or, in the case of two-fold yarn, at the twiner.

Cop bit is that part which is spun during the first few minutes after doffing.

Chase of cop is the length of top cone of cop.

Nose of cop is the apex of the top cone.

Shoulder of cop is the joining of the chase to the thickness.

Body of cop is the distance between the top and bottom cones.

Crossing thread of cop is that part of yarn wound upon each cop at the beginning of each run-in, while the top faller wire is descending from the highest to the lowest point of the chase.

Coping: A heavy cloth made of either worsted or woolen yarns for gentlemen's wear, with various weaves and colorings applied.

Copper Acetate: The same is used in blue-printing and in calico-printing to fix logwood. "French verdigris" is the basic salt. The percentage of copper is estimated as in copper sulphate, the basicity as in ferric sulphate, the acetic acid by distillation with phosphoric acid, as in other acetates.

Copperas: The same is obtained by dissolving iron in diluted sulphuric acid, and on a large scale from iron pyrites. It forms bluish-green crystals which easily decompose when exposed to the air and become brownish by oxidation. It is easily soluble in water, but quickly oxidizes on exposure to the air, separating red ferric hydrate. Copperas is used in dyeing chiefly as a mordant and fixing agent for dye-woods and for the preparation of the copperas vat (1 part of indigo, $3\frac{1}{2}$ to 4 parts copperas, 4 parts of lime). It further serves for the weighting of silk. Also called *Green Vitriol*, or *Ferrous Sulphate*.

Copper Sulphate: Its value is according to the percentage of pure copper sulphate; the salt should also give a clear solution in water, and not contain too much iron, lime and alkali salts (or zinc). It is used as an oxidizing agent for aniline black (copper sulphide is also used, it is prepared from the sulphate); in dyeing browns with catechu (25 parts of copper sulphate to 100 parts of catechu); in dyeing a blue from acid green + acid violet; for "Jäger" green; in mordanting wool for logwood blacks; for an after-treatment of many direct-dyeing coloring matters, such as benzoazurine, in order to increase the fastness to light; for "chrome" black. Also called *Cupric Sulphate* or *Sulphate of Copper*, *Bluestone* or *Blue Vitriol*, or *Roman Vitriol*.

Copping Motion: The term given to the following parts of the mule: the copping rail, the copping plates, the shaper wheel, the shaper catch and worm, and the trail lever, or the part which connects the locking lever to the copping rail.

Copping Rail: The rail on which the bobbin of a spinning machine rests. By the configuration of the rail and

the peculiar action imparted to it by the copping plates upon which it rests, the cops are made of the special and necessary shape.

Cop Reel: A machine used for winding spun yarns from cops or bobbins into hanks.

Cop Tube: Paper tubes on which the cop of yarn is wound in spinning.

Cop-winder: A machine which takes yarn from a skein and winds it upon a bare spindle in the shape of a cop, to be used in turn in the shuttle in weaving.

Coquillé: Shell-like fluted or scalloped.

Coquita Fibres: A tall palm tree, a native of Chili, with rudimentary scale-like structures at the base of the petioles. From the bark, a fibre of considerable strength is obtained, which is much used for cordage purposes. Cables have been made from these bark fibres, and are reputed to be more durable than hemp cables.

Corah Silk: A light, creamy-white, undyed, washable silk fabric.

Cord: A strong ribbed fustian; corduroy.

Cord-de-Chin: A light fabric made from botany warp and silk filling in which two threads are combined as one to form a lightly defined cord lengthwise in the piece.

Corded Alpaca: A fabric showing cords running lengthwise in the piece, made with a cotton warp and alpaca filling, the latter producing the face and back of the fabric, the cotton warp forming the core of the cord or rib.

Corded Muslin: Muslin having in its texture thick, raised cords, forming striped patterns.

Cordillas: A variety of Kerseys.

Cordoncillos: A kind of common calico used largely by the Indian population of Mexico, for garments of the lower class.

Cordonnet: The somewhat raised edge in a point lace pattern.

Cordonnet Silk: Used for braiding, knitting, etc. In its formation, four to eight threads are loosely twisted with a left-hand twist to form the minor threads, three of which are then twisted together with a right-hand twist, to produce the characteristic compound silk thread required.

Cordova Wool: A species of South American wool.

Cords: Rib effects in fabrics which run longitudinally, or in the direction of the lengths of the fabric. The opposite to repp in which the ribs run filling ways in the cloth.

SIMPLE CORDS are produced by running several threads of either warp or filling together in the weave.

HAIR CORDS are plain-woven, and have thick threads on a ground of fine warp and filling.

Cordurette: A variety of woolen dress goods having corded effects.

Corduroy: A cloth made with a filling pile (which is cut in the finishing operation) the bindings of the filling with the warp-threads being done in one continuous line, warp ways, so that, upon being cut in the finishing process, the pile projects from this line and forms the characteristic dense pile cord; the back of the cloth is usually a twill weave. Corduroys are cotton fabrics noted for their wearing qualities, being used extensively for

this purpose for servant's livery. The name is from the French *Cor du Roy*, i. e., king's cords. They are also used for upholstering furniture, in which case they are often finished with fancy patterns. Also known as *Fustians*.

In connection with knit goods, commonly known as two-and-two-rib, i. e., two ribs alternating on face and back of children's stockings.

Cordylone: A plant belonging to the asphodel family *Liliaceæ*. A garment formed of cordylone fibre and dyed with the bark of a species of *Fargus* or Beech, can be seen in No. 2 Museum at the Royal Gardens, Kew, England.

Cork Lace: Formerly the older sorts of Irish lace made in the City of Cork; now Irish lace in general.

Corkscrew Fabrics: The same require a high warp texture, since the warp forms (more or less) both the face and the back of the cloth, the filling resting more or less imbedded between the warp-threads, being only partly visible on either the face or the back of the fabric. The warp-threads, on account of over-lapping from one twill into the other, give to the face of the cloth the appearance of over-lapping spirals—hence the name. Made in piece-dyed as well as fancy worsteds. Also used in combination with other weaves in the manufacture of worsted trousers.

Corkscrew Weave: A weave based upon the 7, 9, 11 or 13-harness satin, which presents a peculiar appearance, best described as that of a warp rib running at a low angle; a double twill.

Corkscrew Yarn: Occurs in doubled yarn when one of two or more folded threads is imperfectly twisted, and (not clinging closely to its neighbor) coils loosely around in a corkscrew fashion; hence it derives its designation. The same fault may arise from imperfect tension on some of the threads.

Corporal Cloth: The cloth used to cover the altar during the communion.

Corsage: The bodice or waist of a dress.

Cortical: The cellulo-fibrous part of the hair structure.

Cosmos Fibre: The name given to an imitation of wool produced from vegetable fibre in 1880 by A. E. Neuman, Düsseldorf, Germany.

Cot: The leather covering of drawing rollers as used in spinning machinery.

A fleece of wool matted together; a lock of wool or hair clung together. Also called *Wedgwood Cots*.

Côte Cheval: Corded cloth for riding costumes, such as Bedford cord, etc. Derived from *cheval*, the French word for horse, and *côte*, that for ribbed or lined.

Coteline: A variety of white corded muslin.

Cotswold Sheep: This breed originated in Gloucestershire, England, and received its name from the hills of the same name. The Cotswold sheep produces a large, white, coarse, long, lustrous wool; the average weight of the fleece is about 7 pounds.

Cotton: The soft, woolly, fibrous material which adheres to the seeds of the cotton plant, belonging to the genus *Gossypium*.