

Dictionary of Textile Terms.

Round Top: A heavy fustian cord made from good quality yarns about 20's/16's. The pattern is on 14 or 16 ends and 10 or 12 picks with a larger number of picks than ends per inch. Much used for suitings for hard wear.

Roving Frame: This machine reduces the slubbing to a finer thread or roving, makes it more regular and even, puts more twist in, and winds it upon a smaller tube. From this machine the material goes to the spinning frame.

Royal Axminster Carpets: See Axminsters.

Royal Ribs: An all cotton cloth, plain weave, with the whole of the warp threads working in pairs. The picks are about twice the number of ends per inch. Fair samples are 36 in. 100 yards, 72 ends 140 picks, 28's/32's—50 in. 90 yards, 68 × 136, 30's/36's. When dyed and finished the effect is that of a rib down the piece.

Russian Cloth: An all wool costume cloth, plain weave, made in widths from 50 to 74 inches. The cloth is well shrunk.

Russian Cords: A combination of plain stripes with bold cords from $\frac{1}{4}$ to $\frac{1}{2}$ inch apart. The plain effect is of a different color to the cords. The cords form a very bold solid color rib down the piece and are made by working three thick cords together with a doubling thread of same color crossing from side to side at every pick. This crossing thread is about three times the length of the ordinary warp.

Dead Wool: Wool that is shorn from the dead or killed sheep.

About one-seventh of the United States wool production is dead wool and comes from the packing houses. The yarn produced from it is not quite as strong as from the live sheep. Its clinging qualities are hurt by the shock of death to the sheep. Strictly speaking and in the west, dead wool is applied more particularly to sheep which have died on the ranch, and pulled wool, while being dead wool, is more particularly applied to the packing house product.

Pulled Wool: Strictly the packing house product and is the same as dead wool.

Scoured Wool: Clean wool and almost chemically pure.

Tub Wool: A term that is not very well known, but is used in some Eastern States for wool which is washed after it comes from the sheep's back.

Washed Wool: Wool that has been washed on the sheep's back. The grease remains in the wool and a good deal of dirt also.

Wool in the Grease: This is wool which is shorn from the sheep without any washing.

Shrinkage in Wool: The percentage of loss by wool at scouring.

Yield of Wool from Sheep: There is no way of telling accurately what the average clip from one sheep would bring as it depends on where the sheep are raised and other conditions, but generally it might be roughly figured from 7 to 8 pounds to the sheep.

Imported Wool: About the same amount of wool as produced in the United States is imported. The United

States product is about $\frac{1}{4}$ th of the world's product. Very little carpet wool is produced in this country, it nearly all being imported, and in the imported figures carpet wool is sometimes included and sometimes not, so that importation figures are misleading, unless this is known. Most of our carpet wool comes from China and Turkey. Australia is the country from which we import most of our wool.

Wool-carder: A person who cards wool.

Wool-classing: A process of separating the fleeces, as a whole, into several classes, each even in quality, regular in length and color.

Wool-dyed: A term applied to colored fabrics in which the color was originally dyed on the wool in either the loose or top form, as distinct from fabrics in which the color has been placed on the wool by either yarn-dyeing or piece-dyeing.

Woolen: Made of woolen, as distinguished from worsted. The difference between woolens and worsteds lies in the different arrangement of the fibres composing the yarn. For worsteds, these fibres are straightened and made to lie parallel, while for woolens just the reverse arrangement is desired, and they are crossed and roughened. The beauty of worsted is to have as few of these loose fibres as possible, and at the same time to have a round level thread, because the thread is seen in the woven fabric. On the other hand, as the woolen cloth is generally intended to be fulled and giggered, the fibres must be arranged in such a way as to assist these operations. Worsteds goods are such as are made from wool, yarns on which the last process before spinning has been the combing. Woolen goods are such, of which the yarn has, in its last stage before spinning, undergone the process of carding.

Woolen Count: See Count.

Woolen Fabric: The typical woolen is a full handling fabric in which structure and coloring cannot readily be defined on account of the threads and even the fibres having become thoroughly intermingled in passing through the operations of finishing. To insure a typical woolen fabric, the material selected, the method of preparation of spinning and weaving and of finishing, must all be applied with the woolen type of fabric in view. Strictly speaking, a woolen fabric should be made of fine wool (possibly noils included), but in the Law Courts a definition of woolen fabrics as being composed of mungo, shoddy, cotton, etc., has been accepted.

Woolen Yarn: Yarns spun from wool in which anything but a parallel position of the fibres is noticeable as distinct from worsted yarn in which the wool fibres are markedly parallelized. For calculating the size of woolen yarn there are two systems in use: (a) *Cut-system*, having 300 yards to one cut (16 ounces), and (b) the *Run-system*, having 1600 yards to one run (16 ounces). The same number of yards are added to each successive number of cut or run, also to be balanced by the original 16 ounces. Runs are again divided into $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ run, i. e., 800, 400 and 200 yards respectively.

Wool Extract: Wool (Shoddy or Mungo) recovered from rags com-

posed of wool and cotton by subjecting them to a chemical process which destroys, i. e., carbonizes the cotton.

Wool Extracting: The removal of the burs and other spinose members of plants that are found in the wool staples is sometimes done by the bur picker, whereas other times a chemical process is substituted, which is known as carbonizing or extracting. In process of extracting, these vegetable impurities are destroyed by chemical agents. The wool is for this reason first steeped in dilute sulphuric acid and then dried, so that the vegetable material may be thoroughly killed. The wool is afterwards steeped in a solution of soda, so that the acid may be neutralized, and it is then washed in the ordinary way.

Wool Fat: The natural grease which is removed from sheep's wool in the washing process. Also called "Suint."

Wool Grading: The arrangement of fleeces into qualities without untying the string as holding it together to facilitate handling, baling and shipping.

Wool Grease Yolk or Suint: This grease is very variable in different wools as regards quantity, but the nature is similar in all breeds. The soluble part of it is produced by the secretion of the sweat; the insoluble is the product of the soil and surrounding circumstances. Some wools contain from 50 to 75 per cent of their weight in grease, others only from 15 to 20 per cent. To rid the wool of this grease without attacking the fibre with the chemicals employed, is one of the secrets of success in wool scouring. Used as a basis for ointments; lanolin.

Wool-grower: A person who raises sheep for the production of wool.

Wool in the Grease: See Unwashed Wools.

Wool Moire: A fabric of silk and wool similar to Bengaline, and watered.

Wool Monger: A dealer in wool.

Wool Oiler: An attachment to a mixing picker or breaker card, for adding oil to the wool while passing through the machine, to prevent the fibres from becoming felted together in the process of spinning.

Wool Picker: A machine for freeing wool from foreign matters by beating it with rapidly revolving blades; a wool cleaner. Also frequently termed "mixing picker," a machine by which the stock is opened. It consists, first, of the feed apron, upon which the stock to be picked and mixed is deposited either by hand or a self feed; second, the feed rolls, which take the stock from the apron, and deliver it to the action of, third, the main or picking cylinder. The stock is thrown out of the rear of the machine by the current of air produced by the fan-like action of the main cylinder. The wool after being picked, is ready for the carding engine.

Wool Qualities: The qualities are Picklock, XXX, XX, X, No. 1 (or half-blood), No. 2 (or three-eighths), No. 3, or quarter-blood, and coarse or common. These qualities are liable to variation in many wool-houses, according to the varying demand.

Picklock (now very scarce) is the quality produced from a pure Saxony sheep.

XXX.—The first cross of the *Merino* with the *Saxony*.

XX.—The true standard is the quality of a *Full-Blood Merino*.

X.—Is three-quarter *Blood Merino*. No. 1, No. 2, etc., indicate the variations in purity of blood from the pure merino, from crossing with common sheep.

Coarse Wool.—The product of sheep with but little trace of merino blood.

Braid Wool.—The clip of bright-haired (lustrous) woolled sheep, almost pure, as Lincoln, Cotswold, and Leicester.

Wool Scouring: The mechanical and chemical process of cleansing wool from all its impurities, to bring it into a workable condition for spinning. Raw wool is naturally covered with a preservative greasy matter, termed yolk or suint, to which also adheres a considerable quantity of sand, dirt, and other foreign matter; the amount of pure wool varies from 25 to 80 per cent of the weight of raw wool. The scouring or washing of raw wool has the object of removing these impurities, and the process is carried out by treating the wool with warm (not hot) solutions of soap, with the addition of ammonia and carbonate of soda. This emulsifies the yolk, the sand, etc., being then readily washed away. Scoured wool is usually oiled before carding or combing, and this oil, together with dirt, etc., contracted during the various stages of manufacture, must be removed by a second scouring operation, before yarn or piece dyeing.

Woolsey: A material made of cotton and wool, as distinguished from linsey, which is made of linen and wool; same as Linsey-woolsey, of which it is an abbreviation. Used for Dresses by English country folk.

Wool Sorter: One who sorts wool, especially one skilled in dividing wool into lots according to its quality, as length and fineness of fibre.

Wool Sorter's Disease: Blood poisoning, probably *anthrax* (although there is not always an external lesion), occurring in those engaged in handling and sorting alpaca, mohair and other varieties of similar wools which have not been previously disinfected. A disease caused by "Bacillus Anthracis," which may enter the system either by the skin or by the internal organs. In the former case it gives rise to pustules, which become painful and cause perspiration, fever, delirium and other disorders. In the latter case it produces the most serious ailments, such as blood poisoning and inflammation of the lungs, which often prove speedily fatal.

Wool Sorting: Dividing a fleece into different qualities or sorts, according to fineness, length and strength of staple, whiteness, etc., in order to be able to spin the required yarn as to quality, count, cost and evenness of thread, and is the first process of manufacture in a woolen and worsted mill, also the most important.

Sorting is done by the tearing off of each staple of wool separately by the hand, and it is generally intrusted to an expert who understands the grading of wool staples. The finest and most even drawn staples are found on the shoulders and the sides of the fleece. A staple of fairly good

quality resembling that from the shoulders is got from the lower part of the back. On the loin and the back of the sheep the staple is shorter and of a more tender nature. The upper parts of the legs give a wool of moderate length that is often suspended in loose open locks; it is this part that is useful to the bur plant by brushing off the spinose fruit and so acting as a disperser of the seeds. The staple so charged with bur fruit or leaves becomes the burry wool of commerce, and the presence of the burs reduce the price of such staples. The wool from Buenos Ayres is often charged with burs of the Medick. The upper part of the neck gives an irregular staple that is often infested by the spinose leaves of wild prairie plants and seeds. In the central part of the back the wool is similar to that of the loins of a delicate staple. The belly portion includes the wool from the fore and hind legs. The staple is deficient in quality and of a tender nature. The tail of the sheep has a coarse, short and glossy staple, often intermixed with kemps. The woolly fibres from the head, chest and shins is of a stiff and straight nature. The fibres from the shins are often termed "the shanks."

The discrimination of the staple from a fleece gives rise to a great many names, see "Wool Qualities" given before. Some mills, more particularly those abroad use different terms.

Such as used with reference to the grading for *Woolen Spinning* are: 1 Picklock, the finest, most elastic and strongest staple, 2 Prime, 3 Choice, 4 Super, 5 Head, 6 Downrights, 7 Seconds, 8 Abb and 9 Breech.

In connection with the Worsted Industry the grades made are given as follows: 1 Blue, 2 Fine, 3 Neat, 4 Brown Drawing, 5 Breech, 6 Cow-tail and 7 Brokes.

Superfine, middling and common are applied accordingly as the quality of the staple is determined in Botany wools, and this grading is dependent on the adaptability to spin certain counts of yarn either up or down.

Port Philip, Sydney and Adelaide are the three principal kinds of staples that were introduced into the wool market from Australia. These wools are used for either woolen or worsted goods, according to their character, quality and length of staple.

Wool Staple: Wools are classified according to staple into clothing wools, combing wools, and delaine wools, etc.

Clothing Wools: Wools to be carded.

Combing Wools: Wools to be combed so as to leave the fibres parallel.

Delaine Wools: Practically combing wools of merino blood, and may be called fine (X and above), or medium (half-blood).

Felling Wools: The semi-annual clips of portions of Texas and California are sometimes so designated.

Noils: The refuse, short-stapled wool resulting from combing.

Wool Stapler: The old-fashioned English term for a wool merchant; a dealer in wool; a wool factor.

Wool Top: Highly purified scoured wool that has had the short fibres and inferior particles, called noils, re-

moved by the process of combing. The long fibres are laid parallel with each other, and when drawn through the comb become wool top, which is subsequently drawn and spun into any kind of worsted yarn.

Wool Tree or Cork Tree: This plant is a native of Jamaica, where it grows into a large tree remarkable for its numerous branches and large leaves. Some slight efforts have been made to utilize these vegetable wool fibres for the purpose of felt hat-making, but so far without success. The want of marginal dentations on the fibres has been adduced as the main reason why they are not suitable for this purpose. Nevertheless some use should be made of them, inasmuch as they will take a good dye, and have been blended with silk in hat-making mainly on that account.

Wool Yolk: The natural matter including potash, salts, grease, etc., surrounding the wool fibre while on the sheep's back.

Woosie: Short Chinese wool with a glossy and soft fibre.

Worker: The roller on a carding machine working in conjunction with the swift and stripper in opening or combing out the fibrous masses of wool, cotton, etc., presented to it. (See *Stripper*.)

Worsted Coating: Cloths for men's wear, made from fine crossbred or botany yarns. A double cloth in which the stitching is arranged to form designs.

Worsted Count: See Count.

Worsted Diagonals: Are characterized by prominent weave effects running diagonally of the cloth. The goods are usually made in 2 and 4 and are given a finish which brings the weave into prominence. Used for suitings.

Worsted Fabric: The typical worsted is a clear, smooth handling fabric in which structure and color are clearly defined, owing to the smoothness and clearness of both the yarns and the interlacing, finishing in this case often developing clearness rather than otherwise. Of course there is every conceivable variety of fabric between the woolen and the worsted.

Worsted: A large variety of fabrics made of long, combed wool.

Worsted Spinning: There are two different systems of worsted spinning practiced, viz: The Bradford or English system and the French system. The principal difference rests in the drawing and the spinning process, and where a different class of machinery is used in either instance. The combing process is practically the same in both cases, but the wool is combed dry for the French system, whereas by the Bradford system the stock is thoroughly oiled before being combed. The result of the English method is the production of a smooth level yarn in which the fibres lie nearly parallel to each other. The yarn made according to the French system is more woolly. On account of the absence of oil, the shrinkage of French spun worsted is considerably less than that made by the Bradford system.

Worsted Tops: The slivers of wool from the comb, after having been run in turn through at least two finishing gill boxes, the first of which was a can gill box, leave the last box, and

which had a balling head attached, in the form of balls, or what are technically known as *tops*, ready for the drawing process. Many worsted spinning mills send their wool sorted or unsorted to a combing mill where they manufacture it into tops, sometimes at a lower price than that at which spinning plants can do their own combing, at the same time save the latter plants the expense of a preparatory, up to and including the combing department. In the manufacture of tops all varieties of combing wools are used; Australian, Merino and Crossbred wools; South American Merino and Crossbred wools; Cape Merino wools; Merino and Cross-bred wools of the United States, the lustre wools of pure English blood; Mohair from Asiatic Turkey and Alpaca from the Andes.

Worsted Yarn: Yarn spun from wool with the fibres combed parallel during the process of manufacture; most often two single threads are twisted into one compound thread. Used in making cloth for men's and women's wear in their greatest variety, carpets, knit goods, etc. Worsted Yarn has for its standard 560 yards to one pound; the number of times these 560 yards are required to balance one pound indicating the count of the yarn in question, hence it ($2 \times 560 =$) 1120 yards weigh one pound, such yarn is 2's count, etc. Two ply yarn thus weighed calls for twice the count for the single yarn, or single 20's worsted and 2 ply 40's (2/40's) worsted require the same number of yards ($20 \times 560 = 11200$ yards) to

balance one pound. In a similar way proceed with 3 ply yarn; for example single 20's equals ($3 \times 20 =$) 3/60's worsted yarn.

Wraith, Wrathe, or Rathe: The reed comb used for guiding the yarn to the beam.

Wrap Reel: A mechanism for winding or measuring from cops or bobbins or hanks, so that the relationship of length to weight may be definitely ascertained.

Wrong Draw: A defect in weaving, caused by carelessness of the drawer-in, or the weaver at the loom, when an end breaks or runs out in not properly placing the threads in the proper heddle eyes or dents in the reed.

Wyper or Wiper: The Scotch term for tappets or cams.

Unemployment in Heavy Woolen District.

Unemployment in the Yorkshire heavy woolen district has considerably increased of late, largely as a result of the curtailment of work at the mills owing to the coal strike. Last week the number of unemployed and underemployed on the registers at the Dewsbury Employment Exchange increased by 100, the totals being 3,500 men, slightly over 4,000 women, and 500 young people. At Batley the numbers last week-end were 1,956 men, 2,450 women, 80 boys, and 250 girls; and at Birstall 454 men, 720 women, 30 boys, and 60 girls.

Oldham Creelers' Wages.

The creeler difficulty in the Oldham district has been too much for the Oldham master spinners and the local operative cotton spinners, and as a result the long drawn out negotiations were on Monday dealt with by the Master Cotton Spinners' Federation and the Spinners' Amalgamation in Manchester.

A strong recommendation is to be made to the Oldham district that the employer's contribution towards creelers wages, paid by the operative spinners, should cease in October next. A war-time emergency, the employment of creelers in spinning rooms has never been popular, and the system is now fast dying out, and by October it will probably cease entirely.

Unemployment at Roubaix-Tourcoing.

Reports from Roubaix-Tourcoing show that the crisis in the textile industry in the North of France has become accentuated. Staffs have been cut down everywhere, and most mills are working only one or two days weekly. In the Roubaix-Tourcoing district, which during last year had attained an output of about 60 per cent of its pre-war production, the output has been reduced by two-thirds. At Roubaix alone there are 10,000 workers out of employment.

Milowners complain of a complete absence of orders, and fear that before long they will be obliged to close their mills entirely.

Novelties in Design.

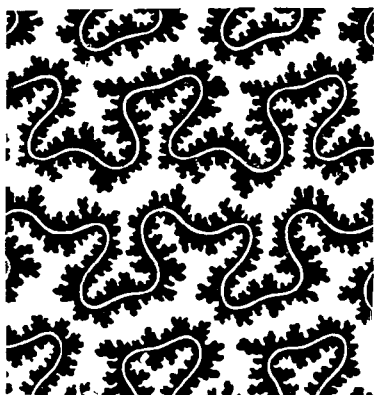


Fig. 1

Fig. 1 is a coral design for jacquard weaving. This design is specially suitable for colored zephyrs.

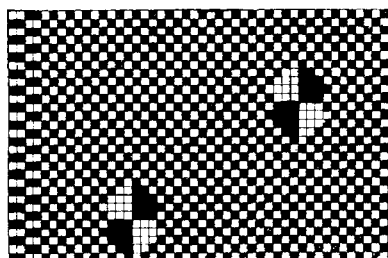


Fig. 2

Fig. 2 is a dobby pattern requiring for its execu-

tion in the loom, 16 harnesses. It is a very neat style, much in vogue at present.

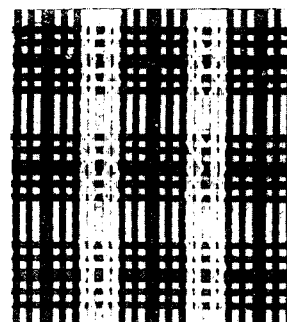


Fig. 3

Fig. 3 is a design for a neat leno colored check effect. The idea may be worked out in either a fine or coarse fabric, but probably about an 80-reed with about the same number of picks per inch would give the best effect.

South of Scotland.

GALASHIELS.

There are plenty of orders for the tweed factories in the Border districts. The prospect is that all looms will be kept running for several months. Wool is to be had by manufacturers in better supplies, and this aids business. Saxonies and fine Cheviots are still in request, and fancy cloths are more according to the public taste than the plainer makes. Manufacturers' representatives have been in London showing patterns for next spring, and customers generally are on a rationing basis. So far as prices are concerned quotations range from about 30 to 45 per cent more than last spring. In the hosiery and underwear trade factories are well employed. High prices are not facilitating winter business. Dyers are all keeping their employes fully engaged, orders being plentiful.