

DICTIONARY OF TEXTILE TERMS.

S (Continued)

Straight Gate: This is equivalent to straight draft.

Straiken: A linen fabric made in Scotland.

Strand: The immediate composite part of rope, thread and ply yarn.

Stranfa: A substitute for jute, produced from straw by a chemical process, the invention of a German Textile Expert. If mixed with jute and used in the manufacture of a woven fabric like bagging, only an expert would be able to detect its existence. The process of converting straw into fibre is very simple and inexpensive; the fibre itself is treated in the same way as jute, that is to say, it is batched, softened, carded and stretched, and finally spun. It is used for string, cord rope, bagging, etc.

Strass: Refuse of silk left in throwing, when making it up into skeins.

Strazza: Waste of silk in Italy.

Stretch: The longitudinal traverse of a mule carriage.

The length of spun yarn, between the spindles and the roller-beam, which is wound upon the spindles each time the carriage is run towards the roller-beam; also called *draw*.

Ratio of the elongation of a yarn in the drawing.

Striatore: A silk term used in Europe meaning striations, appearances of fibrillæ, ribbiness, channelling.

Strick: A lock of flax or hemp after scutching, commonly $\frac{1}{2}$ stone of flax.

Strickle: A striking tool used in flax hand-scutching (see Scutching Knife); the emery grinder of cylindrical knives; the hand-tool of the card clothing sharpener.

String: A length equivalent to 10 feet. Warps are sometimes calculated (in England) by the string.

Stringy Cotton: The cotton which is struck off by the beater blades of the scutcher, should be removed away from the beater's course immediately; any delay at this stage may cause the fibres to become contorted into very curious shapes, and such cotton is then termed *stringy*. This cotton is very difficult to work up in the subsequent processes; it is often irregularly damaged, and cannot be made into a good yarn, except for the lower counts.

Stringy Wool: Wool, partially matted in fibre, and drawn into a slightly ropy form; usually due to imperfect scouring.

Strip: In carding, to clean the teeth of the various cylinders of carding engines and the flats in connection with the revolving flat card, from short fibres.

Stripe: A term applied to patterns running longitudinally with the warp in textile fabrics, produced by employing a special weave or two or more colors of warp specially arranged.

Stripes: Coarse yarn colored goods, in twilled stripes, commonly blue and white, and brown and white; made largely into shirts and pants in certain sections of the country. Also called *Hickory Stripes*.

Stripper: One who strips, in any sense; specifically, in carding, one who cleans cards. Any implement or device for stripping something.

In wool carding: A small cylinder covered with card clothing for stripping the stock from its companion roller, known as worker, re-delivering it to the swift or main cylinder.

A bleaching or decoloring agent.

Stripper Rods: The rods on the flax hackling sheets which keep the gills clean.

Stripping: Removing the imbedded impurities from card clothing.

Taking color out of fabrics.

Removing the sericin from silk by boiling-off.

Strong Wool: This has reference to quality of wool, denoting thickness and low quality of fibre.

Strouing: A coarse cloth; a make of blanketing used in trading with North American Indians.

Struntain: A narrow, coarse, worsted, braid.

Strussa: Double cocoons which, in spite of the difficulty in reeling, were formerly used for special purposes. Now such cocoons are converted into waste.

Stud Ewe: A pure-bred ewe, kept for breeding stud stock.

Stuffer Warp: An extra warp, added to produce bulk to the fabric.

Stuffs: Dress and lining cloths, produced from cotton warp and worsted filling.

Stumba: See Bourrette Silk.

Styler: The styler of the selling house receives, or is touch with all the latest styles abroad, and in turn then supplies the designing department of the mill, either with samples or suggestions necessary in getting out new lines.

Subtile: Having fine structure; delicately woven, or dainty formed; made of light, tenuous material.

Suffolk Down: A hornless sheep, a native of England, possessing a bright, clear, shiny black face. It is not large in body, and its wool is perhaps hardly equal to the fine Southdown wool.

Sugar: Used to some extent, especially on colored goods in finishing of cotton cloth, to give it a transparent, full, stiff and crisp feel. It is advisable always to buy the sugar in the form of crystals, which are mostly very pure.

Sugar of Lead: See Lead Acetate.

Suint: A compound of potash and animal fat found in wool. The fatty secretion from the skin of the sheep which is always associated with the wool, and which prevents wool from felting while on the sheep. Also called *Yolk*.

Suiting: Cloth for making a suit of clothes, especially in the plural, as fashionable suitings.

Sulphate of Alumina: See *Aluminium Sulphate*.

Sulphate of Copper: See *Copper Sulphate*.

Sulphate of Magnesium: This substance ($Mg SO_4$) is one of the most important of the bodies that a cotton finisher uses. It is found naturally in small quantities in certain natural springs, notably in those near Epsom, from which is derived its name of Epsom salts. It is also found in the large natural deposits of salts at

Stassfurt, in Germany. Sulphate of magnesium is used by the finisher in two forms:

Epsom salts, a more or less pure quality, and kieserite, a crude and impure quality.

Magnesium sulphate, whether in the form of Epsom salts or kieserite, is used both as a stiffener and for giving weight to cloths.

It is a good weighting agent.

Sulphate of Soda: A most useful substance for the cotton finisher. (Na_2SO_4).

Sulphate of Zinc: This substance ($Z SO_4$) is sold in the form of small, pearly, needle-shaped crystals, readily soluble in water. It contains 22.65 per cent. of zinc, 11.15 per cent. of sulphur, 22.30 per cent. of oxygen, and 43.90 per cent. of water. Although perhaps not quite equal to the chloride in this particular, it may be used in those stiff finishes for cotton goods, where the chloride, owing to its deliquescent properties, could not be employed.

Sulphur: Sulphur is marketed either as sulphur in sticks, in large pieces, or as crystalline powder in the shape of sublimated sulphur (flowers of sulphur). The bleaching effect of sulphur on wool, silk, straw and the like is due to the production of this gas when burning the sulphur in stoving chambers. The burning of the sulphur should be so regulated as to prevent heat developing in excess and to thus avoid the sublimating of sulphur on the goods. The sulphur, when used for bleaching, or stoving, is best ignited by means of red-hot iron or coal.

Sulphurator: An apparatus, by means of which sulphuration is accomplished; usually the apparatus in which fabrics are bleached by exposure to the fumes of sulphur.

Sulphur Colors: A group of direct dyeing colors made by fusing various organic bodies with sulphur and alkalis. They include mostly blacks and browns, others being dark greens, blues and yellows. They are characterized by a high degree of fastness to light and washing and are of great importance. The sulphur colors are, as a rule, insoluble in water, and for this reason are dissolved with the aid of sodium sulphide; some sodium carbonate and Glauber's salt being also frequently used in the dye-bath, which must be used warm, and the dyeing must take place below the surface of the liquor. Most sulphur colors require an after-treatment to develop the color. Sulphur colors are used mainly on cotton, when with the exception of aniline black, they are the chief dyes used to produce fast colors.

Sulphur Dioxide: A gas produced by burning sulphur and its solution in water is known as sulphurous acid.

Sulphuric Acid: A thick, oily liquid without color or smell when pure; but the commercial acid is generally colored more or less, due to organic matter which has been charred by the acid. It has a specific gravity of about 1.83 and boils at 338 deg. C. It, however, decomposes somewhat before it

reaches this temperature. Sulphuric acid absorbs water with great avidity and with evolution of great heat. The greatest care has to be observed in mixing it with water, that it does not boil up. Water should never be poured into strong sulphuric acid. The acid should always be allowed to flow into the water slowly and in a thin stream with stirring and even then the water must not be hot. A product of the combustion of sulphur (H_2SO_3). Cold water dissolves over 30 times its volume of sulphurous oxide; the solution contains hydrogen sulphite, or sulphurous acid, and may be kept unchanged so long as air is excluded. Excess of oxygen alters sulphurous into sulphuric acid. Also called *Oil of Vitriol*.

Sulphurizing: Bleaching wools and silks by means of burning sulphur.

Sultana: Light-weight, striped dress fabric, made of mohair; used for summer dresses in the 60's of the last century.

Sultanabad: A standard make of a Persian rug made partly of wool and partly of cotton.

Sultane: Twilled cloth of silk and wool; finished in the rough, not singed or sheared.

Sultani: One of the best varieties of Egyptian cotton, grown in lower Egypt. It is of a very long and silky variety and has some of the characteristics of the Sea Island cotton. The plant requires much attention and is easily affected by climatic conditions. Very little of this variety is grown, and it is probable that its production will remain small.

Sumac: Next to pure tannic acid, sumac is the tannin most generally used in dyeing. The sumac from *rhus coriaria* is the best, and contains gallo-tannic acid. The finest quality, and at the same time the least colored, is the Sicilian sumac; next to it comes American sumac, as well as the Greek, Spanish and Portuguese sumac. Of less value are the sumacs from *coriaria myrtifolia* and *rhus cotinus* obtained in Hungary, the Tyrol and the Provence. Commercial sumac usually consists of the whole, broken-up or sometimes also powdered leaves of the plant; the stalks of the leaves and small twigs are very often mixed up with the rest. The good kinds have an olive-green color and a fresh, agreeable smell; they contain 15 to 20 per cent., and sometimes more than 20 per cent. tannin. Sumacs, which are dull in color, and have a musty smell, have deteriorated by moisture and too long storing. Sumac is used principally as a tannin for dark shades; the dull red color which the sumac contains usually interferes rather with light and brilliant shades.

Sumac Extract: A thick dark brown liquid of about 52 deg. Tw. or of a solid state. Decolorized sumac extracts may, as a rule, replace the tannic acid, even for bright shades. Liquid sumac extract is rather apt to ferment, losing thereby in strength.

Summa Silk: Trade name given to a selected habutai silk of close, smooth weave and high lustre, claimed to be spot and waterproof.

Suningchow: Soft silk serge, in solid colors, made in China; is about 32 inches wide.

Sunn Hemp: Also called *India* or *Jubbulpore Hemp*. The plant is a native of India, the Malay Islands and Australia, and belongs to the Natural Order Leguminosæ. It is a cordage fibre plant.

Sun Wheel: The gear of the differential motion in fly-frames, which according to the direction of its rotation imparts to other gears of the same motion, either an increased or decreased speed. (See Differential Motion.)

Super: The fourth grade made in sorting a fleece for woolen spinning; next to choice.

A two-ply ingrain carpet, constructed with 960 warp-threads (36 inch. wide fabric) exclusive of sel-vage.

Super Carpet: See Ingrain Carpet.

Super Combing: The finest quality wool of the clip. (Wool Classers' term.)

Super Quality: A quality of any quality number, but of a type superior to that quality number. Super qualities of tops will yield a yarn much nearer in count to the quality count than will the unqualified quality number.

Suples: Silk yarn dyed with only part of the gum removed.

Surah: A soft, twilled silk fabric, usually of plain color and without pattern; used for women's garments.

Surah-de-laine: A fine woolen and silk fabric for ladies' summer wear.

Surah Ecossais Quadrillé: A surah in design and coloring of Scotch squares, or shepherd checks.

Surah Silk: A variety of silk, woven with a fine, flat twill; similar to serge in woolen goods.

Surat Cotton: Collective name for the cottons of India, belonging to the same species as that grown in China. The staples of these two are very short, and the least desirable of any grown. Distinguished in the market by the name of the district where grown.

Surepach: East Indian cotton muslin.

Surette: Very coarse and open French tué basting, interlaced with 2 by 2 Basket Weave.

Surface Print: Printing on the face of a fabric.

Surinam: Variety of raw cotton from Guyana; the fibre is white or yellowish, lustrous and strong.

Surtout: An upper coat; an overcoat; a riding coat; a great coat.

Susha: Plain woven ecru silk fabric, made in China, about 21 inches wide.

Susienchow: Solid colored silk gros-de-Naples with wavy ribs, made in China; is about 24 inches wide. The warp is of organzine and the filling of spiral yarn.

Sutton: Early maturing commercial variety of upland cotton, same as Peerless.

Suttringee: East Indian thick and stiff cotton rug.

Suzeni Embroidery: Persian needlework, consisting of couched silk or gold threads.

Svilluppata: A silk term used in Europe, meaning developed, unfolded.

Swans-down: The down of a swan, often used for a dress-trimming, as on opera-cloaks. A thick cotton cloth with a soft pile or nap on one side, more often called Canton or cotton flannel. The simplest form of a regular twill.

Swanskin: A soft, nappy, fine twilled flannel.

Swatch: A sample or strip of material.

Sweater: A knitted woolen jacket or jersey, extensively worn by athletes.

Sweating: The removing of wool from the skins of slaughtered sheep. The fleeces are well steeped in water and afterwards hung in a chamber heated to a high temperature, with the result that the pores of the skin open and the wool drops off, or admits of very easy removal.

Swell: A friction plate placed at the side of the shuttle box to check the motion of the shuttle.

Swift: The main cylinder of a carding engine.

That part of a wrap reel or reeling machine, upon which the yarn is wound so as to form the hank.

Swiss Appliqué: A very light, sheer cotton fabric, having small, separate (not continuous) patterns printed in only one color. These patterns are raised and consist of finely ground cotton fibres which are stuck to the cloth with glue.

Swiss Brussels: Curtains with patterns outlined in chain stitch by the tambour machine.

Swiss Cambric: A fine variety of Swiss muslin.

Swiss Embroidery: Embroidery worked with white cotton upon fine linen or muslin.

Swissing: In the finishing of cotton fabrics, running the latter at the calendering straight through the nips in series; it represents the normal process of calendering when it is desired to smooth and brighten the cloth and more or less close up the threads by flattening and produce a hard, bright finish, or the finish may be comparatively mellow and silky with less closing and flattening. In either case there is no gain in width nor rounding of the threads, as is the case by beetling.

Swiss Lace: Swiss embroidered net, in imitation of Brussels.

Swiss Mull: See Mull.

Swiss Muslin: A thin, sheer muslin, striped or figured in weaving.

Switch: A fine hackle, used in preparing flax for spinning.

Swivel Effects: Small figures, produced by the use of small, special constructed shuttles, used in connection with a swivel loom in figured weaving. These shuttles may carry threads of various shades, with the object of obtaining special effects, as in the shading of figures, etc., again, one color effect may only be desired, and then the loom may be equipped with single shuttles only.

Swivel Loom: A form of loom for figured weaving, having swivel shuttles on the batten for producing spotted figures upon otherwise regular woven cloth.

Swivel Shuttles: An arrangement of small, special shuttles, for forming figures on a fabric, somewhat after the manner of embroidery.

Swivel Silks: Any of the ordinary silk fabrics, such as faille, grenadine, satin, etc., in which are woven small figures by the swivel process.

Swivel Weaving: A weaving process in which special shuttles, driven by racks and pinions, weave filling figures into a material.

Swords: The bars supporting the batten or lathe of the loom.

Sydney Wool: Australian merino wool of a moderately fine fibre, of medium length, but rather deficient in strength,

uneven in color, contaminated frequently with yellow locks, the latter making it undesirable for dyeing light colors. Inferior to Port Phillip wool. Good felting properties. Used for fine-faced goods.

Synthetic Color: A dyestuff compounded chemically, as distinguished from a natural coloring matter.

Synthetic Indigo: See Indigo.

Syra Gaza: Registered trade name for a rough silk, woven with open mesh, and designed for use as lining.

Alkali Chemicals in Urgent Demand.

The alkali chemicals continue to attract the most attention and the sensational advances taking place indicate how great is the scarcity of materials.

The extensive needs of Europe now when most manufacturers are sold ahead show how short the world is on the leading chemicals. England is in the market for 20,000 tons of caustic soda to fill requirements for the year and the demands of Europe indicate that 70,000 tons of caustic soda and 100,000 tons of soda ash will be required to meet all trade inquiry.

English interests at the beginning of the season took on many contracts at prices below the American qualities, but these they were unable to fill owing to the advance in coal and the great industrial unrest. Consequently these buyers turned to the American markets and the enormous orders that followed simply flooded manufacturers, and the present level of values is the result.

The American Alkali Association has received a bid of \$4.25 per hundred-weight for the caustic soda from these large English interests. Sales have been made right along at \$4.50 per 100 pounds on the spot and prominent interests in the trade expect to see a \$5 level established before the end of this month. Goods for export are exceedingly difficult to obtain in the open market. Some producers are out of the market for future shipment, nearby delivery, and contracts for the remainder of the year are up to \$3.30 per 100 pounds, basis 60 per cent, works.

Soda ash is in just as tight position. Business reached a high of \$2.45 per 100 pounds, consumers willingly paying the price to obtain supplies. Stocks on the spot are greatly reduced and little is being offered in nearby shipment. For delivery over the remainder of the year manufacturers still quote from \$1.62½ to \$1.72½, basis 48 per cent, works, including single bags and barrel lots, respectively.

For bichromate of soda 22½ and 23c per pound has been paid on the spot; stocks offered are small. The recovery of this market in the last few weeks has been sharp, prices rising from a low of 16½c per pound. Export trade is heavy, with England leading in the buying movement. February delivery is being held close to this figure, while business during March could be done at about 21c per pound.

Prussiate of soda has firmed, with business hardly possible below 26½c per pound. Resale lots have been pretty well cleaned up, while on the buying movement demand was well taken care of.

Alum and the ammonia products were decidedly strong and business has been good. The coal shortage and various manufacturing difficulties have reduced

the spot supply. Bleaching powder is another commodity scarce on the spot. Producers are contracted for well ahead and making efforts to deliver. There continues a good demand for epsom salts at unchanged prices. All the potash qualities are strong and naturally will remain so in view of the scarcity of the basic materials.

The mixed fertilizer materials showed no change. With heavy demand both for foreign and domestic consumption, the railroad embargoes at the important terminal centres, which makes it hard for producers to receive raw materials, the export cargo problem and the labor difficulties, are factors which promise to result in high prices being maintained for many of the leading products this coming season.

Short Trade Lengths

The Ironware Silk Mills Co., Allentown, Pa., is building a fireproof mill.

The Lafayette Cotton Mills, Lafayette, Ala., have applied for a charter of incorporation, with a capitalization of \$500,000.

The Federal Wool Manufacturing Co., San Francisco, has been incorporated with a capital stock of \$2,800,000. A large plant is to be built at Melrose for the manufacture of tops and yarns.

The Killingly Worsted Co., Danielson, Conn., is to increase its capacity by making changes in its mechanical equipment, including the removal of broad looms and installing 100 narrow looms.

The plant of the Greene & Daniels Co., Pawtucket, thread yarns, twine and chain warp, has been sold to the Mingret Mills Co., Boston, a newly formed corporation. It is understood that the price paid was about \$200,000.

It is reported that work on a building which is to replace the mill of the Empire Silk Co., Scranton, Pa., will be started soon. The new plant will contain about 30,000 square feet of floor space and have 150 looms.

The Woodworth Mill, Paterson, has been purchased by Ernest Meredith, a silk thrower of Paterson. It is reported that the new owner intends to build an annex, making it one of the largest throwing plants in that vicinity. Up to a few weeks ago this mill was used by the Woodward Co. for commission warping and winding.

It has been announced that Charles A. McGowan, formerly of Philipsburg, now of Beaver Meadows, Pa., is about to retire as the head of the McGowan Silk Co., Inc., operating mills at Audenried, Beaver Meadow, McAdoo, Weatherly and Martin's Creek, Pa. With the exception of the McGowan Mills at McAdoo and Weatherly, to be operated by Mr. McGowan's sons, the company interests have been purchased by Michel & Kreiger, silk manufacturers, of New York.

George R. Goebel is to erect a silk mill in Wilkes-Barre, Pa.

J. T. Justice is contemplating starting a new hosiery mill in Bennettsville, S. C.

The Harbred Silk Co. has started the erection of an addition to its plant at Shickshinny, Pa.

J. P. Grey, of Johnson City, Tenn., will build a hosiery knitting mill on the Virginia side of Bristol.

THE CLINTON WOOL COMFORT Co., of Clinton, Mass., is a new concern for the manufacture of comforts.

The Manchester Silk Co., Inc., Paterson, has filed articles of incorporation, giving \$35,000 as the capital stock.

The Sydney Worsted Co., Woonsocket, R. I., has awarded the contract for the erection of a two-story brick mill.

The Philmont Worsted Co., Woonsocket, has advised that it will have completed its plant and installed machinery by October.

Madison Ribbon Co., of Paterson, has purchased the Maryland Ribbon Co., and will build a plant for throwing silk at Williamsport, Md.

The capital of the Packard Dress Co., New York, has been increased from \$4,000 to \$12,000. L. Silverman has been taken into the firm.

The Sharp Manufacturing Co., is to erect a private hospital building at its plant at New Bedford, and work will be started in the course of the next few weeks.

The Alpha Silk Company, with a plant in Alpha, N. J., and main offices at No. 404 Fourth avenue, has purchased a plot of land at Du Bois, Pa., and will erect a silk mill to cost \$150,000 on it.

Charles and Harry Fine have purchased the church at 28 Van Houten street, Paterson, and will make alterations for the accommodation of their silk business.

THE TOMPKINS COMPANY, INC., distributors of Artsilk Sylvanette fabrics, crystal jersey cloth, clothiers' silk linings and dress silk Georgettes, has taken over the Pompton Silk mills, at Pompton Lakes, N. J., and states that the product of the new mill, ladies' dress silks, will be ready soon. The Tompkins Company also announced that the Crystal and Artsilk lines were open for the months of September and October.

JAPAN is profiteering in raw silk, some mill men in the United States declare. The visit of the Japanese Silk Commission here some time ago is pointed out as a visit to find out the scale of prices being paid for silk, with a view to boosting them. Although wages and cost of production in Japan have kept in step with the rise in other countries, mill men here do not believe the rise justifies the present exorbitant prices.