

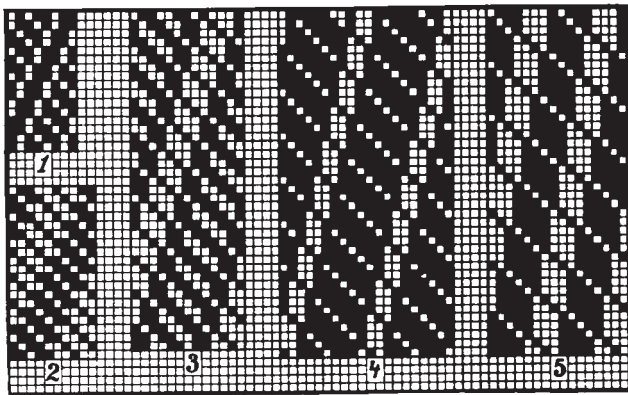
Fabric Analysis (Continued).

$56 \times 36 = 2016$ square inches.
 $2016 \div 12 = 168 \times 40.5 = 6804 \div 437.5 = 15.55$
Answer: $15\frac{1}{2}$ oz. weight of fabric per yard.
Example: Cotton Dress Goods, 36 inches wide; cut sample 2 by 3 inches, equal 6 square inches; to weigh 10.54 grains.
 $36 \times 36 = 1296$ square inches.
 $1296 \div 6 = 216 \times 10.54 = 2276.64 \div 437.5 = 5.204$
Answer: $5\frac{1}{2}$ oz. weight of fabric per yard.
Example: Silk Dress Goods, 24 inches wide, cut sample 2 by 2 inches, equal 4 square inches, to weigh 3.268 grains.
 $24 \times 36 = 864$ square inches.
 $864 \div 4 = 216 \times 3.268 = 705.888 \div 437.5 = 1.614$
Answer: 1.614 oz. weight of fabric per yard.
 If dealing with narrow ware fabrics, Ribbons, Edgings, etc., and provided less than one yard is submitted, count length of sample expressed in inches and fractions of inches, next weigh it as before and ascertain its weight per yard (36 inches) by proportion.
Example: Ribbon, sample furnished $3\frac{1}{2}$ inches long; to weigh 15.126 grains.
 $3.5 : 15.126 : : 36 : x$
 $15.126 \times 36 = 544.536$
 $544.536 \div 3.5 = 155.58$
Answer: One yard of this ribbon weighs 155.58 grains.
 $7000 \div 155.58 = 45$ yards of this ribbon weigh one pound.
 (To be continued.)

DICTIONARY OF TECHNICAL TERMS RELATING TO THE TEXTILE INDUSTRY.

(Continued from October issue.)

- 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.
- Wool Yolk:**—The natural matter including potash, salts, grease, etc., surrounding the wool fibre while on the sheep's back.
- 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 Diagonals:**—Are characterized by prominent



SPECIMENS OF WORSTED DIAGONALS.

weave effects running diagonally of the cloth. The goods are usually of a solid color, 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 Spinning:—There are two different systems of worsted spinning practiced, viz: The Bradford or English system and the French system. The principle difference rests in the drawing and 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 Yarn:—Yarn spun from wool with the fibres combed parallel during the process of manufacture; most often two single threads are twisted into one



WORSTED THREAD (Magnified).

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 if $(2 \times 560 =)$ 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.

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 Crossbred wools of the United States, the lustre wools of pure English blood; Mohair from Asiatic Turkey and Alpaca from the Andes.

DYESTUFFS FOR SILK

ARTIFICIAL SILK AND MERCERIZED COTTON

CASSELLA COLOR COMPANY :: NEW YORK

HARRY T. ROUNDS,
President

HERBERT BENTLEY,
Treas. & Sec'y.

SUSSEX PRINT WORKS

Textile Dyeing and Printing

NEW YORK OFFICE

95 Madison Avenue Telephone 7316 Madison Square

MILLS: NEWTON, N. J.

CARL H. HAUSMANN T. J. FITZPATRICK GUS H. UHLIG

SMITH & UHLIG

INCORPORATED

The Largest Independent Silk Finishing House in America

Silk Finishers and Refinishers Of All-Silk and Mixed Silk Fabrics

OUR SPECIALTIES:

Princess Finish on *Peau de Cygnes* Chiffon Finish on *Taffetas*
New Messaline Finish Satin *Duchess*
Cotton Back Satins

ALL GOODS INSURED AGAINST LOSS BY FIRE
Prompt Deliveries Telephones Chelsea 7560-1-2

NEW PLANT LOCATED AT

515-519 W. 26TH ST. :: NEW YORK

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 care-

lessness 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.

X.

Xerga:—The Spanish name for a peculiar woolen blanket. Our common market term "serge" is derived from this word.

Y.

Yacht Cloth:—An all wool fabric, twilled like serge, and finished with a rough surface; usually employed in the manufacture of men's summer suits. It is heavier than ordinary serge and piece-dyed in shades of dark blue.

Yamamai Silk:—Silk obtained from the Japanese oak leaf moth of this name; compared to the other wild silks it most nearly resembles cultivated silk, though

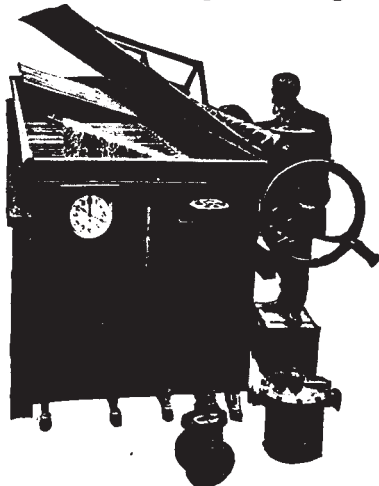


YAMAMAI SILK. (*Magnified*)

it is somewhat coarser than the average, its diameter being about 0.001 inch. This silk worm spins an unusually regular cocoon of a beautiful pale green color, and from which the silk can be readily reeled.

SCHMID FRERES

Soap Foam Silk Degumming Process



Side view of Soap Foam Degumming Machine

Preserves Lustre in Silk
Improves : Winding, Quilling and Weaving
Economy of : 30% of Soap—30 to 50% of Labor
Pays for Itself Inside of 2 Years

FOR INFORMATION WRITE TO

ALFRED SUTER TEXTILE ENGINEER
200 Fifth Avenue :: :: New York