

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

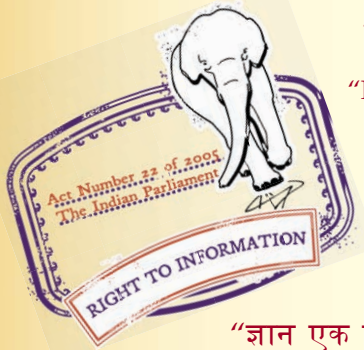
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

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SP 45 (1988): Handbook on Glossary of Textile Terms [TXD 1: Physical Methods of Tests]



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“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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SP 115

**HANDBOOK
ON
GLOSSARY
OF
TEXTILE
TERMS**

BUREAU OF INDIAN STANDARDS

**HAND BOOK
ON
GLOSSARY
OF
TEXTILE TERMS**

**BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
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F O R E W O R D

Bureau of Indian Standards (formerly known as Indian Standards Institution) has been formulating national standards in a variety of disciplines having direct relevance to industry, trade, commerce and consumer. The work so far carried out in the field of textiles, covers different sectors of the industry and 986 standards have been formulated covering various aspects like specifications of products, methods of test, codes of practice, glossary of textile terms etc. The standards relating to glossary of textile terms have been brought out with a view to enabling the technologists, users and those concerned with enforcement to have easy access to clear and widely used definitions for easy interpretation in day-to-day working.

For some time now, a strong need has been felt to make available various glossary standards in the form of easy to handle Handbook. Recognising the need, Textile Division Council (TDC) of BIS decided to compile the various glossary on textile terms brought out by the Sectional Committees working under TDC in the form of a Handbook. The Handbook has been compiled with the assistance of BIS Computer Centre in order to arrange the terms alphabetically and to provide for the most acceptable definition for a given term. It includes 19 Indian standards on glossary brought out by the 12 Sectional Committees and covers definitions of more than 3300 textile terms.

The Handbook is a single collection of most commonly used textile terms in the textile industry. It does not include the glossary dealing with textile machinery and it is proposed to cover the same under a separate Handbook in due course. Similarly, the two standards on glossary dealing with (a) Textiles - Stitch Types (IS:10789-1983) and (b) Textiles - Seam Types (IS:11121-1987) brought out by Apparels (Ready - Made Garments) Sectional Committee, TDC 43, have not been included in the Handbook as these have been issued under dual numbering system, by adopting standards issued by the International Organization for Standardization (ISO). For easy reference and use, it is necessary that these standards should continue as such.

For better understanding, 127 illustrations have been included in the Handbook. Similarly for better usefulness, SI Units - basic as well as those recommended for textiles and conversion factors for yarn counts have been included for use and information of the users.

The Handbook will satisfy the long felt need of textile technologists, users and others engaged in the profession. It is hoped that it will contribute to a better understanding and usage of the terms. The Handbook is expected to be of immense help as this would :

(a) avoid ambiguity and misinterpretation of terms;

- (b) provide better information regarding fibres, yarns, fabrics, finishes, processes etc.;
- (c) assist the manufacturers in identifying various defects and their principal causes;
- (d) guide and educate the organized purchasers and the consumer;
- (e) serve as a teaching and learning aid for teachers, students and technologists.

**COMPOSITION OF EXPERTS PANEL FOR COMPILATION OF HANDBOOK
OF GLOSSARY OF TEXTILE TERMS**

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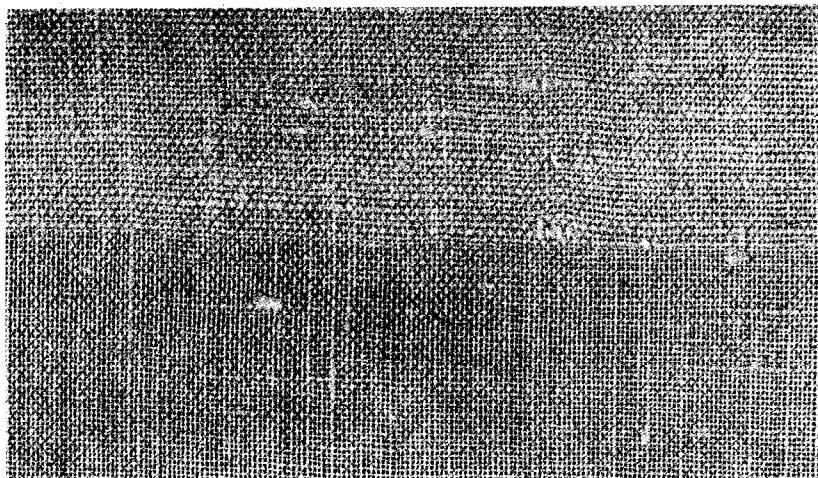


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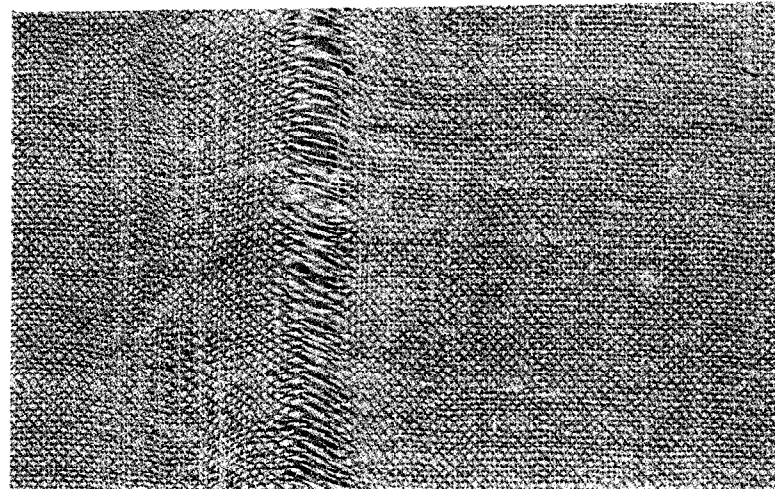


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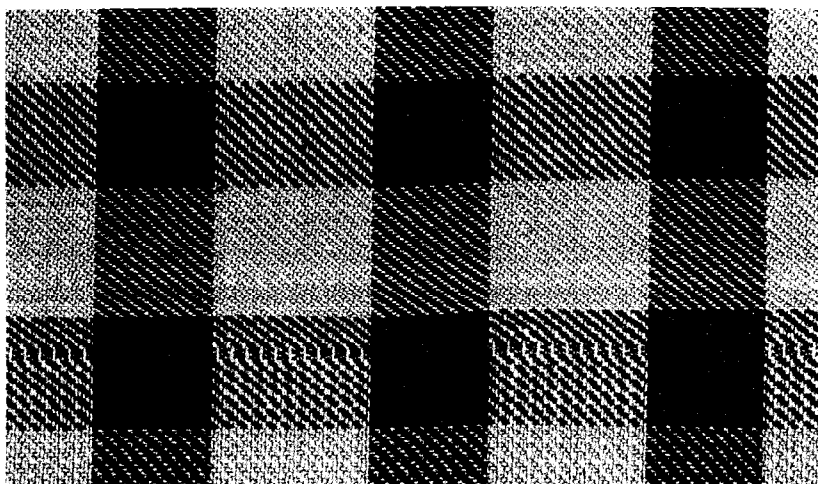


FIG. 14 BROKEN PATTERN (P. 36)

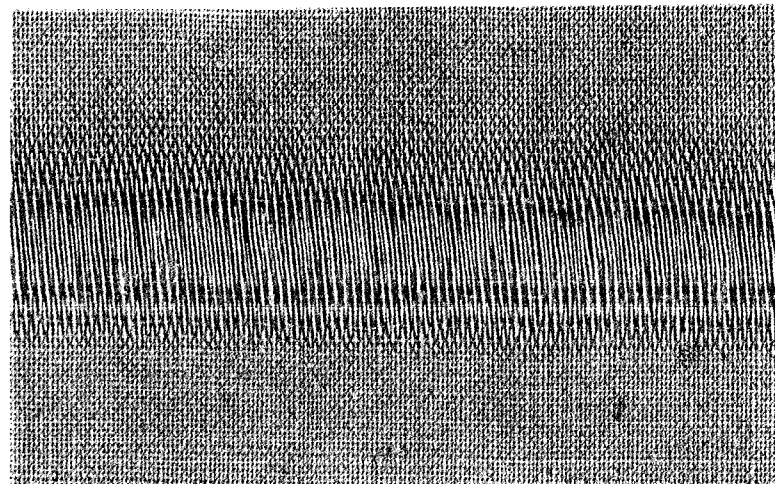


FIG. 19 CRACK (P. 66)

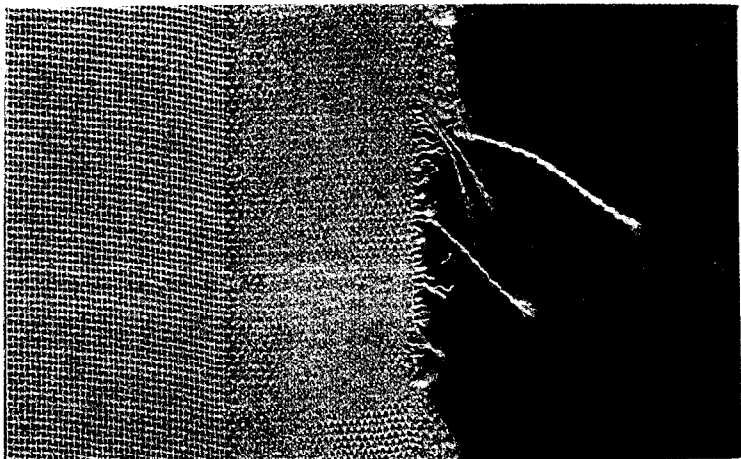


FIG. 22 TORN SELVEDGE (P. 76)

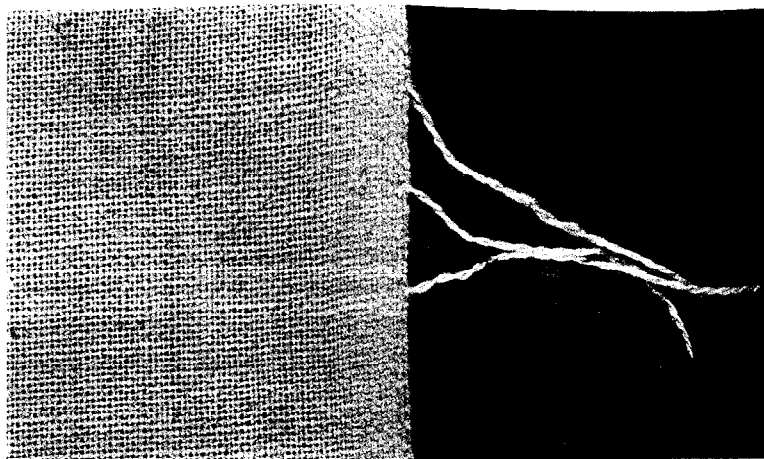


FIG. 23 LOOPY SELVEDGE (P. 76)

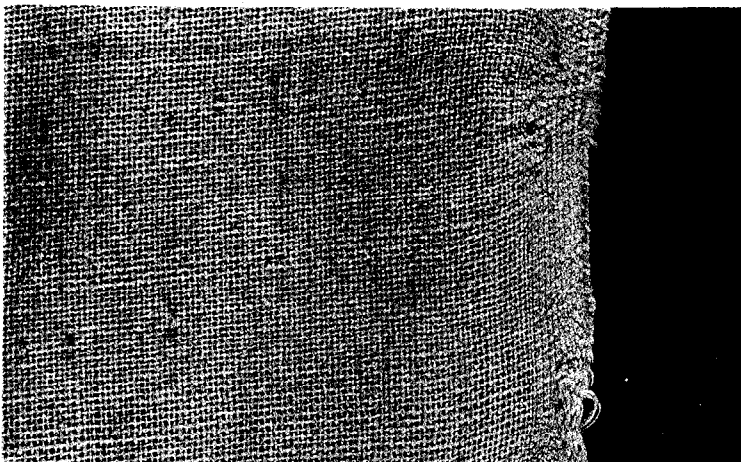


FIG. 24 SLACK SELVEDGE (P. 77)

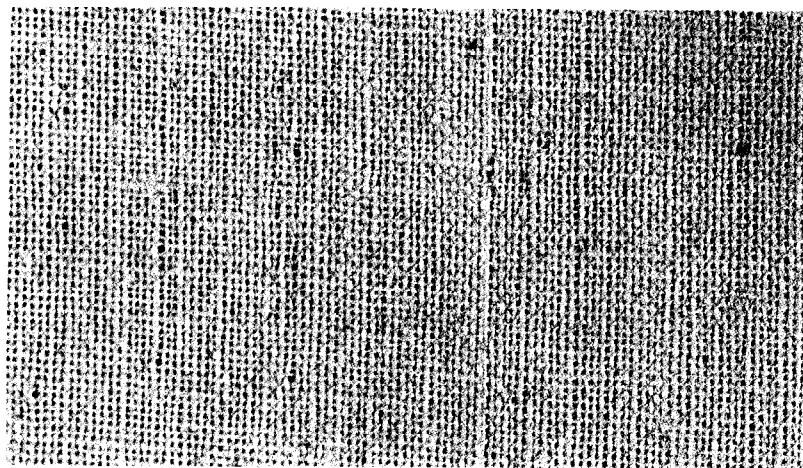


FIG. 27 DOUBLE ENDS (P. 83)

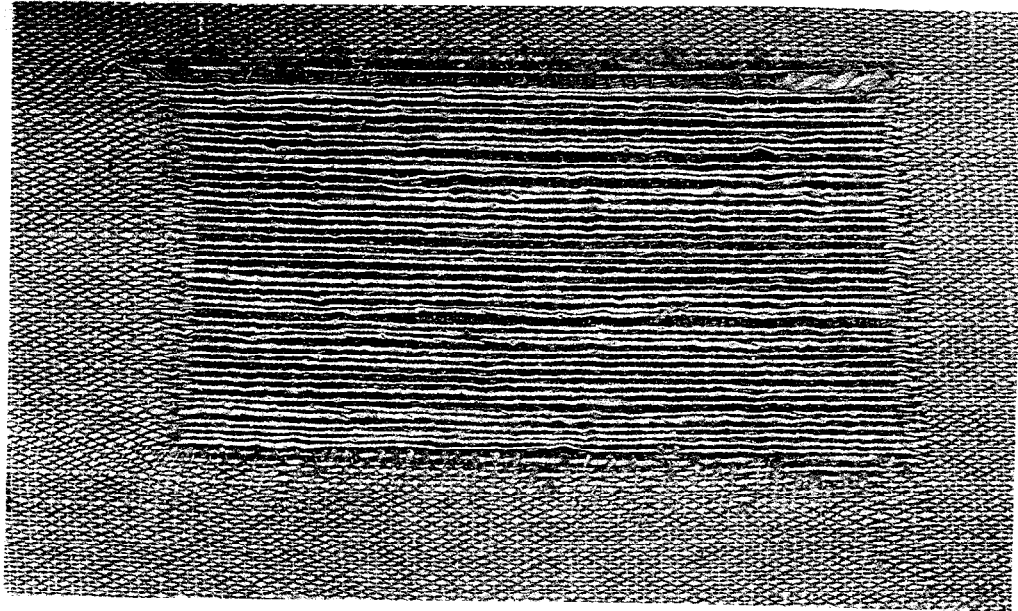


FIG. 32 FLOAT (P. 109)

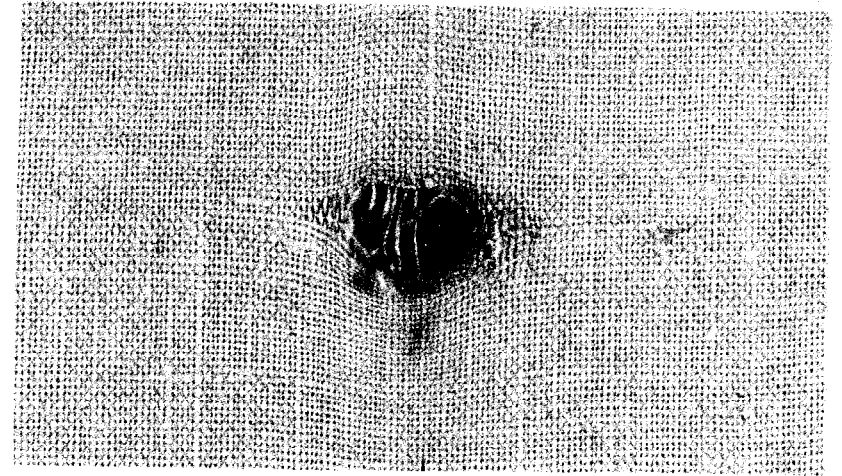


FIG. 35 GOUT (P. 119)

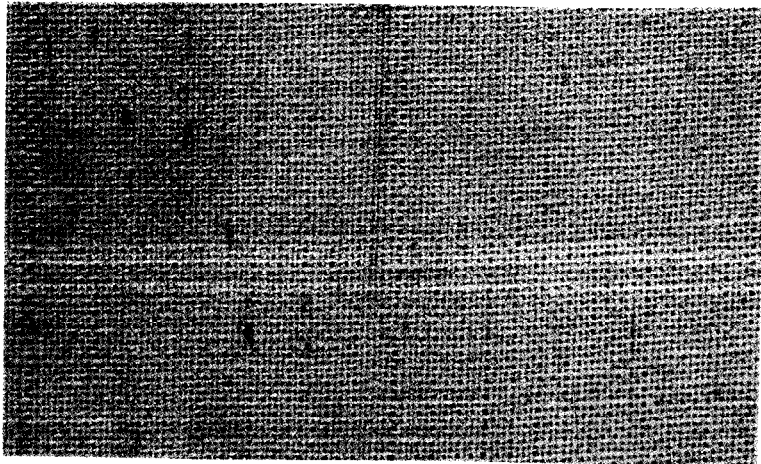


FIG. 72 REED MARK (P. 207)

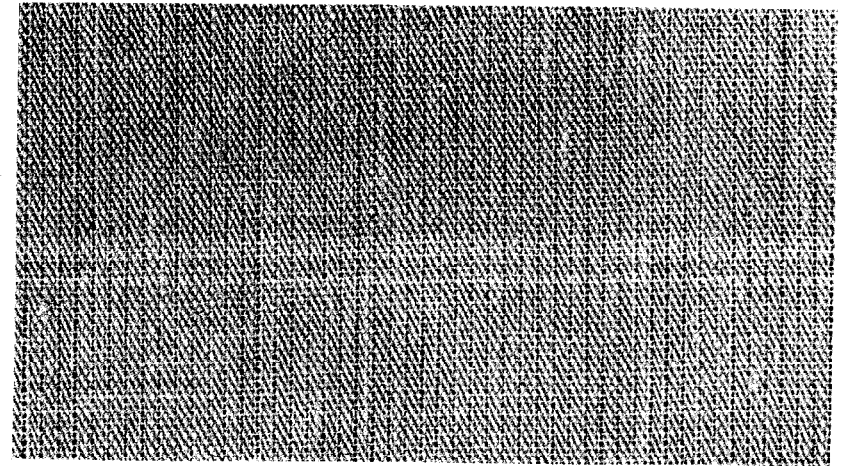


FIG. 73 REEDINESS (P. 208)

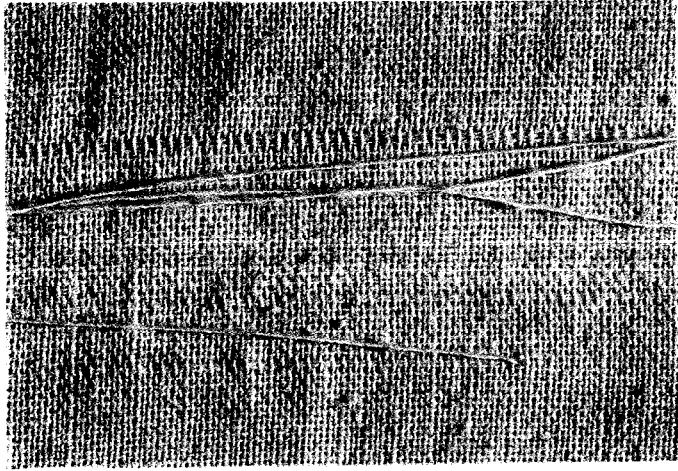


FIG. 93 SHUTTLE FLY (P. 231)

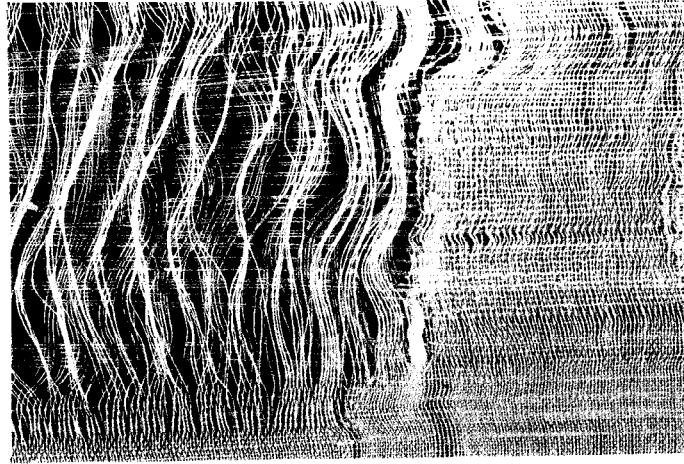


FIG. 99 SMASH (P. 239)

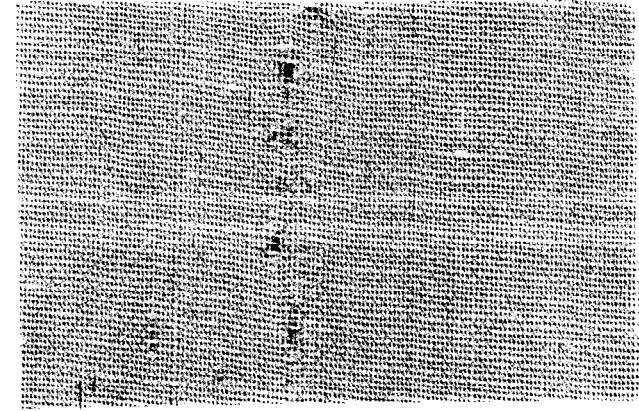


FIG. 111 TEMPLE MARK (P. 259)

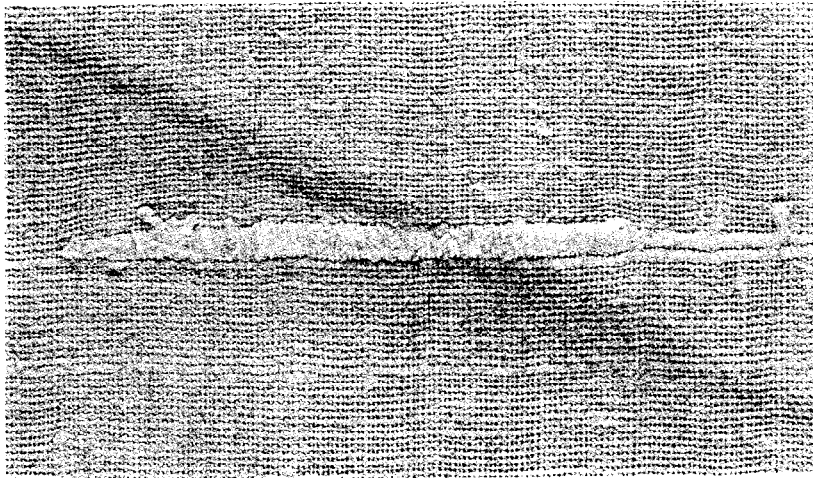


FIG. 124 WEFT SNARLS (P. 284)

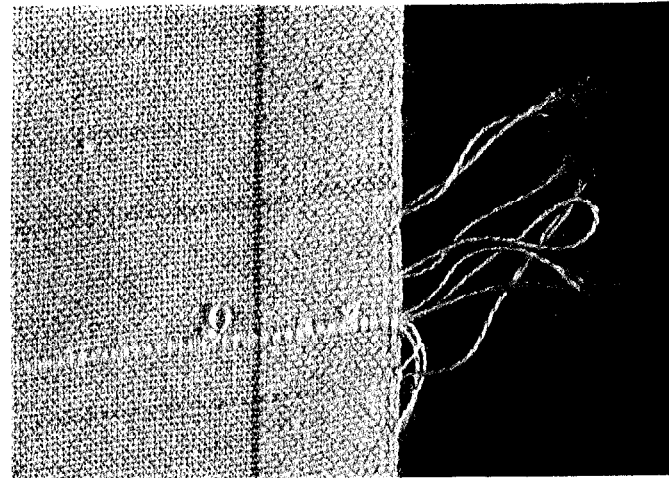


FIG. 125 WEFT TRAIL (P. 285)

**LIST OF INDIAN STANDARDS ON GLOSSARY OF TEXTILE TERMS INCLUDED IN
THE HANDBOOK**

SL NØ.	SECTIONAL COMMITTEES	INDIAN STANDARD(S)	TITLE
1.	Physical Methods of Test Sectional Committee, TDC 1	i) IS:232-1985	Glossary of Textile Terms - Natural Fibres (<u>second Revision</u>)
		ii) IS:2364-1987	Glossary of Textile Terms - Woven Fabrics (<u>Second Revision</u>)
		iii) IS:4125-1987	Glossary of Terms Pertaining to Defects in Fabrics (<u>First Revision</u>)
		iv) IS:4910 (Part VI)-1970	Methods of Test for Tyre Yarns, Cords and Tyre Cord Fabrics Made from Man-Made Fibres: Part VI Definitions of Terms.
		v) IS:11265-1985	Glossary of Terms Pertaining to Defects in Yarns Made from Natural Fibres.
2.	Jute and Jute Products Sectional Committee, TDC 3	i) IS:5476-1986	Glossary of Terms Relating to Jute (<u>First Revision</u>)
3.	Wool and Wool Products Sectional Committee, TDC 4	i) IS:11206-1984	Glossary of Textile Terms - Wool and Other Animal Fibres, their Processing and Products.
4.	Chemical Methods of Test Sectional Committee, TDC 5	i) IS:9603-1980	Glossary of Terms Pertaining to Textile Processing.
		ii) IS:9603 (Part II)-1985	Glossary of Terms Pertaining to Textile Processing : Part 2.
		iii) IS:9603 (Part III)-1986	Glossary of Terms Pertaining to Textile Processing : Part 3.
5.	Silk, Man-Made Fibre and Products Sectional Committee, TDC 10	i) IS:1324-1966	Glossary of Textile Terms Relating to Man-Made Fibre and Fabric Industry (<u>First Revision</u>).
		ii) IS:6239-1971	Generic Names for Man-Made Fibres.
6.	Cordage Sectional Committee, TDC 14	i) IS:3871-1984	Glossary of Terms Relating to Fibre Ropes and Cordage (<u>First Revision</u>).

7. Hosiery Products (Other than Yarn) Sectional Committee, TDC 15 i) IS:3596-1967 Glossary of Terms Relating to Hosiery.
8. Narrow Fabrics, Webbing and Braids Sectional Committee, TDC 25 i) IS:12111-1987 Glossary of Terms Relating to Narrow Fabrics.
9. Textile Materials for Aerospace Purposes Sectional Committee, TDC 27 i) IS:11367-1985 Glossary of Terms Relating to Textile Materials for Aerospace Purposes.
10. Textile Floor Coverings Sectional Committee, TDC 36 i) IS:11205-1984 Classification and Terminology of Textile Floor Coverings.
11. Textile Materials for Marine/Fishing Purposes Sectional Committee, TDC 42 i) IS:4402-1967 Glossary of Terms Relating to Netting for Fishing-Basic Terms.
12. Apparels (Ready-Made Garments) Sectional Committee, TDC 43 i) IS:12110-1987 Glossary of Terms used in Apparel Industry.

ABBREVIATIONS AND SYMBOLS USED

approx	-	approximately
cN/tex	-	centi Newton per tex
cP	-	centi Poise
CSP	-	Count Strength Product
dia	-	diameter
DW	-	Double Warp
e.g.	-	for example (Latin : <i>exempli gratia</i>)
fm	-	fathom
i.e.	-	that is (Latin : <i>id est</i>)
mPa s	-	milli Pascal second
m/s	-	metre per second
n	-	noun
Nm	-	Newton metre
Nm	-	Metric Count
psi	-	pound per square inch
rev/min	-	revolution per minute
RH	-	Relative Humidity
s	-	second
syndet	-	synthetic detergent
temp	-	temperature
tpm	-	turns per metre
tpi	-	turns per inch
°Tw	-	degree Twaddle
v	-	verb
viz	-	namely (Latin : <i>Videlicet</i>)

DEFINITIONS OF TEXTILE TERMS

A-Twill Bag - Bags made from A-Twill cloth, the standard dimensions being 112 x 67.5 cm and weighing 1190 g (see also IS:1943-1964).

A-Twill Cloth - A double warp, 2/1 twill weave sacking jute cloth having 102 ends/dm and 35 picks/dm and weighing 760 g/m².

Aba (also Abaya, Abba) - Sleeveless outer garment, made from camel or goat hair, worn by Arabs.

Abaca - See 'Manila Hemp'.

Abraded Yarn - Continuous filament yarn in which the outer filaments have been purposely cut or abraded at intervals to bring about a certain degree of hairiness. Abraded Yarns are usually plied with other yarns before using.

Abrasion - The wearing away of any part of a material against another surface.

Absolute Humidity - The mass of water vapours present in unit volume of air. This is expressed in g/m³ (see also 'Relative Humidity').

Absorbent Cotton - Cotton fibre chemically treated after removing as completely as possible all fatty and other non-cellulosic ingredients, to render it adequately absorbent. Absorbent Cotton may be sterilized for certain end uses, e.g. medical purposes.

Accelerant - A substance, which, when added to a treatment bath, speeds up the processing treatment.

Accordion Fabric - A weft-knitted fabric showing a figure design in two or more colours, which is produced on one set of needles by knitting, tucking and missing; and in which tuck loops are introduced to eliminate long lengths of floating thread at the back.

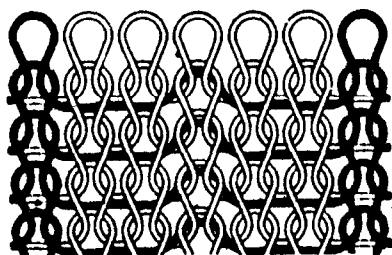


FIG. 1 ACCORDIAN FABRIC

Accordion Pleats - Narrow straight pleats usually parallel to one another.

Acetate - A specific term used for man-made fibres, monofilaments and continuous filament yarns of acetylated cellulose, with less amount of non-fibre forming material or without it.

Constitution : Secondary cellulose acetate.

Characteristic : Cellulose acetate, wherein less than 92 but at least 74 percent of the hydroxyl groups are acetylated.

Acetate Modified - Acetate products composed principally of cellulose acetate and containing a certain amount of other fibre-forming material.

Acetylation - The process of introducing an acetyl radical into an organic compound/polymer containing hydroxyl group.

Note 1 - The term acetylation is used to describe the process of combining cellulose with acetic anhydride.

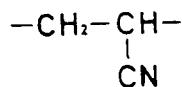
Note 2 - A partial acetylation is sometimes applied to cotton in the form of fibre, yarn or fabric to give it special properties.

Acid Ageing - Ageing in which a volatile acid is present in the vapour.

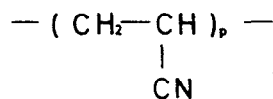
Acid Dye - An anionic dye characterized by relatively high substantivity for protein fibres and usually applied from an acid dyebath.

Acrylic

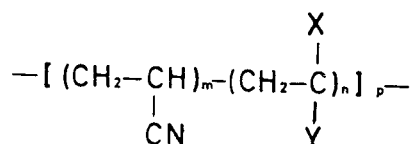
Constitution : Linear macromolecules comprising at least 85 percent (by mass) in the chain of the recurring unit :



Examples : Polyacrylonitrile :



and acrylic copolymer :



Adhesion - The property of treated tyre yarns or cords by which they tend to adhere to the rubber. It is expressed in terms of kgf for a fixed denier of the yarn.

ADHI - An Indian term for light-weight fabric in plain weave. It is used as shirting in tropical countries, and also as the ground fabric for CHIKAN, KAMDANI, etc. (see also 'CHIKAN and KAMDANI').

Aeolian - A warp rib dress material made of cotton warp and silk,

man-made fibre or worsted weft. The cloth is light in weight, has a glossy finish, and is piece dyed.

Aerated Yarn - A special type of viscose yarn, in which is enclosed a small amount of air or some inert gas. It is also known as 'hollow filament', 'tubular yarn' or 'macaroni yarn'.

Aerospace - Pertaining to the properties of and activities in both the earth's atmosphere and space.

Affinity - The quantitative expression of substantivity. It is the difference between the chemical potential of the dye in its standard state in the fibre and the corresponding chemical potential in the dyebath.

Afgalaine (Afghalaine) - Originally, cloth made from Afghan wool, now the term covers plain-weave all-wool dress fabric containing:

(a) woollen warp with woollen weft, or

(b) worsted warp with woollen weft. In both types, the warp is usually S and Z twist, arranged end and end, while the woollen weft is S twist.

After Glow - Persistence of glow in a material under specified test conditions, after the removal of an external ignition source or after the cessation (natural or induced) of flaming of the material.

After Treating - Usually a process to fix/remove/improve the colour/resin on previously treated material.

After-Chrome Process - A method of dyeing in which the fibre is first dyed with the dye and then worked in a separate bath containing the chromium mordant or in the same bath by adding the mordant after exhausting the dye.

After-Welt - A band on a stocking, following the welt, in which there is a variation of quality, stitch or yarn or both. Also known as 'Anti-ladder Band', 'Anti-Run-Down Courses', 'Garter Band', 'Ladder Stop', and 'Shadow Welt'. (see Fig. 49).

Ageing - A process in which fabric is exposed to moist, or saturated steam in absence of air.

Ager - A chamber used for ageing.

Agricultural Twine - A sisal twine used mainly for agricultural purposes. It is also known as 'Hay Baler Twine'.

Air Permeability - The rate of air flow through fabric under differential pressures between the two fabric surfaces. Expressed generally in cubic metres of air per minute per square metre of fabric at a stated pressure difference between the two surfaces of the fabric.

Air Ventilated Suit - A suit designed to keep the body temperature within a comfortable range by discharging conditioned air from the suit over the body surface.

Air Wicking - It is air permeability in the plane of the fabric. The passage of air longitudinally along or through yarns in a fabric that has been encased and cured, e.g. in rubber or other elastomers.

Airflow - A method of measuring the average fibre diameter of a sample of wool.

ALAPAT Yarn - See (a) under 'Coir Yarn'.

Alaska Yarn - Same as Merino Yarn.

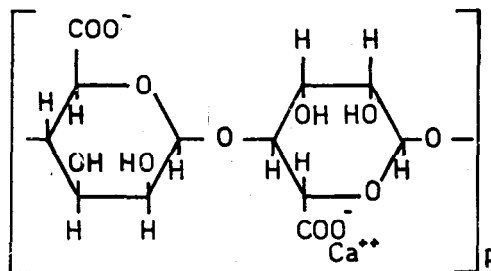
Albacore Line - A 3-strand line primarily intended for albacore fishing. The line is made of hemp, cotton or synthetic yarns.

Albatross - A fine light-weight plain weave wool fabric with a pebbly surface created by crepe yarn.

Alginate

Constitution : Metallic salts of alginic acid.

Example: Calcium alginate.



All-Wool - A textile material comprising wool fibres only subject to the tolerances given below :

- 1) Manufacturing tolerance up to 3 percent of inadvertent impurities, and
- 2) An allowance up to 5 percent of material other than wool fibres used to provide a decorative or ornamentation effect.

Note 1 - All reference to the percentage content means percentages by mass calculated from the mass of materials when in standard condition, namely, their oven dry mass plus the appropriate regain.

Note 2 - In all cases the more detailed description of the contents of the material shall be given by indicating the percentages of the wool and other fibres in descending order used in the manufacture of the textile material. However, such a description should not be misleading.

Allowance (Body Tolerance) - The extra dimensions allowed on garment measurements over body measurements [see also 'Seam Allowance (Seam Margin)'].

Aloe - Leaf fibre obtained from the Aloe plants ('Furcraca foetida' and 'Furcraca gigantea willemettiana'), a native of Brazil, but cultivated on commercial scale in Mauritius and India.

Alpaca - Denotes an animal fibre, yarn as well as fabric.

(a) Yarn - Worsted or woollen spun yarn made from alpaca fibres.

(b) Fabric - A fabric made from Alpaca Fibres.

Note - The term has been used to describe fabrics made from black cotton warp and alpaca weft, and subsequently piece-dyed. This usage is deprecated.

Alpaca Fibre (Hair) - Fibre from the fleece of the semi-domesticated animal of the same name, or of the llama, both of which inhabit the high mountain regions of South America. It is soft, lustrous and of various colours and of fine quality with a length of 18-30 cm.

ALWAN - An Indian term denoting fabric in plain weave made from pashmina or merino wool, or other fibres and used as shawl.

Amazon - A fine, lightly milled and raised dress fabric, generally woven in 5 thread warp satin with worsted warp and woollen weft.

Ambhar CHARKHA - A simple hand-operated wooden frame contrivance for spinning yarn from natural fibres, working on principle of ring spinning with roller drafting.

American Mink (Mink) - A most valued fur fibre (genus: Mustela-Lutreola Vision).

Ammonia Process - A process used for cotton for increased dye uptake, lustre and strength in which the cotton material is treated in liquid ammonia at -33°C.

Anchor Fall - Manila Rope used for hoisting anchor to the deck.

ANGAVASTRAM - A superfine fabric, mildly scoured or bleached, approximately 2 m long and 1 m wide with colour woven or jari-borders and cross borders, generally worn over the shoulders as part of the traditional dress in South India.

Angel Lace (Knitting) - A warp-knitted fabric made on a bearded-needle or compound-needle machine. The fabric is made with separating threads, usually of secondary cellulose acetate, which are dissolved out to leave narrow strips for trimmings.

Angle of Lay - The angle which a strand of the rope makes with the axis of the rope.

ANGOCHA - An Indian term for a cotton handloom fabric used as towel.

Angle of Wind - The angle contained between a wrap of yarn on the surface of a package and the diametrical plane of the package.

Note - Other angles are yarn-crossing angle and yarn-reversal angle.

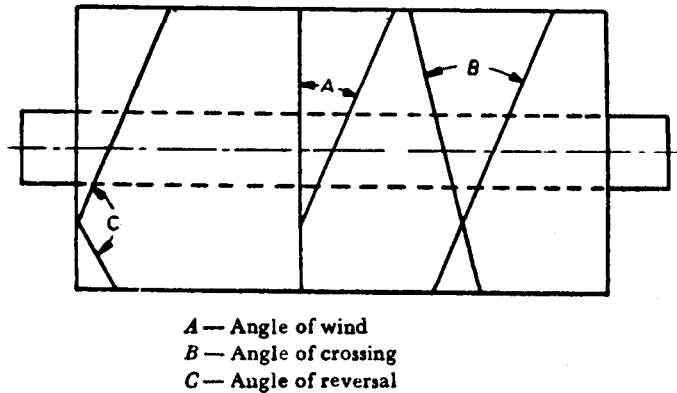


FIG. 2 ANGLES MADE BY YARN WRAPS ON THE SURFACE OF A PACKAGE (CHEESE)

Angola - Denotes yarn as well as fabric:

- (a) Angola Yarn - Yarn made from wool and cotton, or wool and man-made fibres, blended together.
- (b) Angola Fabric - A plain or twill weave fabric made from angola yarn warp and angola yarn weft.

Angora

- (a) Angora Fibre - The hair of Angora rabbit [genus: (Lepus caniculus)].

Note - The hair of Angora goat is referred to as mohair.

- (b) Angora Yarn - An extremely soft yarn made from the hair of Angora rabbit. It may contain a small proportion of other fibres to facilitate spinning.
- (c) Angora Fabric - A fabric woven from Angora yarn.

Note - The use of this term to refer to union fabrics containing to mohair weft is not recommended.

Angora Goat - An ancient breed of goats originally from Asia minor but now largely grown in Texas, Turkey and South Africa. They range from 35 to 60 kg in mass and grow a long curly fleece which often reaches the ground. The commercial name for the fibre is Mohair.

Aniline Black - A fast black colour produced by the oxidation of aniline on a textile material.

Aniline Salt - Chemically known as aniline hydrochloride.

Animal Fibres - Fibres derived from domesticated animals such as sheep, goat, rabbits, camel and other fur-bearing animals primarily for use as textile fibres.

Animalizing - A chemical process designed to confer on man-made fibres an affinity for dyestuffs normally used on wool. The process is carried out during or after the manufacture of the fibres.

Anionic Dye - A dye that dissociates in aqueous solution to give a coloured, negatively charged ion.

ANJENGO Yarn - See (b) under 'Coir Yarn'.

Ankle Socks - See (a) under 'Anklet'.

Anklet

- (a) A knitted footwear where the length of the leg portion just covers the ankle. It has either a turn-over top, elastic top or rib top. Also known as 'Ankle Socks' and 'Tennis Socks'.
- (b) A tubular band knitted on round machines with elastic threads laid-in; used by sportsmen for support and protection to the ankle.



FIG. 3 ANKLET

Anorak - A lined and hooded hip length jacket designed to give a degree of protection from inclement weather.

Anti-Chlor - A chemical used to remove residual traces of active chlorine from materials that have been bleached, chlorinated, or otherwise treated by means of hypochlorite or other oxidizing liquors containing active chlorine. Examples are sodium bisulphite or thiosulphate, sulphurous acid and peroxides.

Anti-Crease Process - A chemical or mechanical treatment or both of fabric to increase its capacity of recovery from wrinkling or mussing.

Anti-G Suit (G-Suit) - A suit that exerts pressure on the abdomen and lower parts of the body to prevent or retard the pooling of blood in these areas under positive acceleration.

Anti-Ladder Band - See 'After-Welt'.

Anti-Run-Down Courses - See 'After-Welt'.

Anti-Shrink - Descriptive of textile materials that are dimensionally stable under normal conditions of usage. However, in case of fabrics of yarns containing wool, the term anti-shrink or shrink-resistant denotes non-felting.

Anti-Shrink Fabric (Pre-shrunk, Shrink-Resistant Stabilized Fabric) - A fabric which has dimensional stability of ± 1 percent both in warpway and weftway.

Anti-Shrink Treatment - Treatment designed to prevent fabrics from shrinking when subjected to wetting or laundering.

Anti-Static Agent - A substance capable of preventing, reducing, or quickly dissipating electrical charges that might otherwise be produced.

Antidiazotate - A stabilized diazonium compound which is obtained by stabilization of the diazonium salt in a strong solution of sodium hydroxide (106°Tw).

Antique Satin - A heavy, dull-lustered fabric, woven with fancy yarns.

Apex - The highest point in canopy of a parachute in a vertical descent.

Applique - A cutout design or shape attached to the face of a material for ornamentation, frequently of a different type and/or shade of material.

ARATORY Yarn - See (c) under 'Coir Yarn'.

Argyle - A term describing a style of hosiery which features diagonal effects in different colours.

Argyle Gimp - A woven figured narrow fabric having three series of wefts and warp. Two series consist of three gimp cords laid flat, the round or third series consists of two gimp cords and forms a plain weave. The two series of three gimp cords form a double weave raised pattern by passing through the warp every sixth pick alternately and returning over the top of the warp. The overall width is about 15 mm. The warp is usually of rayon.

Armure - A dress fabric in modified or broken warp rib weaves exhibiting horizontal wavy lines. The wave effect is rendered conspicuous by using in the warp, mohair and merino wool or merino wool and cotton yarns, in S and Z twist arranged end and end.

Arrasene - A cord of man-made fibre used for embroidery purpose.

Artificial Wool - Jute or other type of non-wool fibres which have been given a chemical finish to impart a woolly handle.

Asbestos - A naturally occurring mineral of fibrous texture.

Asbestos Yarn - A twisted assemblage of:

- (a) Asbestos fibre;
- (b) Asbestos and other fibres;
- (c) Asbestos, other fibres and wires; and
- (d) Asbestos and other fibres with an insert of cotton or other yarn.

ASHTAMUDY Yarn - See (d) under 'Coir Yarn'.

Associated Air Mass - The mass of air which moves relative to the air stream at the same velocity as the canopy.

Assortment (Jute) - The selection and classification of raw jute according to grades prior to packing or baling (see 'Grading of Jute').

Astrakhan - Pelt along with the curled wool of a stillborn or very young lamb from the Middle East. Typical example is black Karakul lamb skins.

Astrakhan (Knitted) - A soft thick weft-knitted fabric with curled or crimped yarn in-laid on a tuck-miss basis.

Astrakhan Fabric, Woven - A curled-pile fabric made to imitate the fleece of a still-born or very young Karakul Lamb. The effect is obtained by special manufacturing processes or by a pretreatment of the pile yarn, which is set while held in the form of a helix.

Atmospheric Conditions for Testing (Standard) - The atmosphere in which physical tests on textile materials are performed. It has a relative humidity of 65 \pm 2 percent and a temperature of 27° \pm 2° C (see also IS:6359-1971).

Atmospheric Fading - The fading of colour of dyed or printed textile material by the action of certain acidic gases.

Australian Bran Bag (or A-Bran Bag) - A selvedged hessian bag with 47 ends/dm and 47 picks/dm normally measuring 124.5x76 cm and weighing approximately 565 g.

Atlas

- (a) Atlas (Single) - A warp-knitted fabric characterized by having one set of threads progressively traversing in a diagonal direction for a number of courses and returning

ultimately in similar manner to the original wale. Also known as 'Single Atlas' and 'Single Vandyke'.

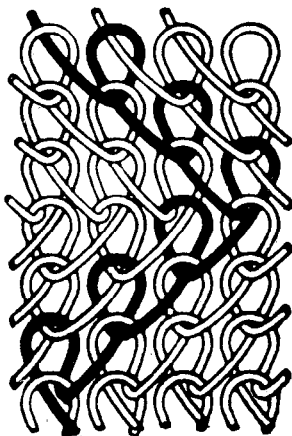


FIG. 4 ATLAS (SINGLE)

- (b) Atlas (Double) - A warp-knitted fabric characterized by having two sets of threads making single-atlas traverses, course by course, in opposite direction. Also known as 'Double Atlas' and 'Double Vandyke'.

Australian Cornsack - A double-warp hemmed twill sacking bag (without stripes), measuring about 104 x 58.5 cm (normally with 102 ends/dm and 35 picks/dm), weighing approximately 1020 g (see also IS:2875-1964). (See also 'Cornsack Bag').

Australian Cornsack Cloth - See 'Cornsack Cloth'.

Australian Woolpack - See 'New Jute Woolpack'.

Autolevelling - Automatic and continuous adjustment of draft in accordance with changes in the thickness of the incoming sliver in worsted processing with a view to obtaining uniformity in the linear density of the sliver.

Avivage - The after treatment of desulphurized and rinsed rayon yarns in order to give a soft hand to the stock.

Axial Cord - A central rigging line joining the apex of a parachute to the lower extremities of the rigging lines.

Axminster Carpet - Cut pile carpets, woven on machines, by inserting successive weft-wise rows of piles (Tufts) according to a pre-determined arrangement of colours. There are four different types of Axminster Carpets as given below. For further details, (see IS:11205-1984).

- (a) Chenille Axminster - A carpet in which the pile is composed of so-called 'Chenille' yarns ('Chenille Fur') manufactured on a special machine and then inserted during fixed weaving.
- (b) Gripper Axminster - A carpet manufactured on jacquard loom in which the tufts of yarn, cut after selection

from appropriate creels, are inserted at the point of weaving by grippers.

- (c) Spool Axminster - A carpet manufactured on a loom on which yarns of each weft row are wrapped on a separate spool, according to the required design. The tufts are separated from the yarns presented at the point of weaving after inserting in the substrate.
- (d) Gripper-Spool Axminster - A carpet manufactured on a loom in which the yarns for each weft-wise row is wound on a separate spool as for spool axminster weaving. Tufts severed from the yarns are inserted at the point of weaving by 'grippers' as in 'gripper Axminster weaving'

Azlon - A generic term for fibres or filaments manufactured from modified proteins or derivatives thereof, with less amounts of non-fibre forming material or without it.

Azoic Dyeing - The production of an insoluble azo compound on a substrate by interaction of diazotized amino (azoic diazo component) and a coupling component (azoic coupling component).

B-Bottom - Indicates a quality of Jute (see 'Grading of Jute')

B-Twill Bag - A bag made from B-Twill Cloth, the standard dimensions and mass being as given in IS:2566-1984.

B-Twill Cloth - A double warp 2/1 twill weave sacking jute cloth with 76 ends/dm and 31 picks/dm and weighing 643 g/m². (see also IS:3667-1984).

Baby Flannel - A light-weight flannel used for children's garments.

Baby Hood - A round headwear for babies with or without sun shade.

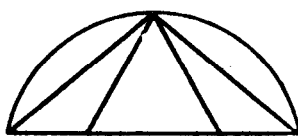


FIG. 5 BABY HOOD (WITHOUT SUN SHADE)

Baby Suit - A set of knitted outerwear for babies consisting of coat or frock and two or more of the following:

Headwear, Trousers or nickers, Bootees or socks, Gloves or mittens.

Back Beam - A beam from which yarn is fed during the sizing process.

Back Coating - The operation of depositing a bonding agent on the back of a textile floor covering to ensure its penetration into the substrate of the textile floor covering without reaching the use-surface.

Back Greige (Seam Impression) - This is a seam impression from the back greige or cushion fabric against which the fabric runs during printing.

Back Grey - Absorbent undyed cloth used to support and carry fabric being printed, and also to protect the blanket from contamination by surplus print paste.

Back Rise - The distance on a garment from the crotch to the centre back of the waist line.

Back Stitch - A hand stitch used to seam garment parts. So called because the needle, on emerging, goes back to be inserted at the end of the previous stitch.

Back Strap - A strap across the back of a garment usually fitted with a buckle, or other method of adjustable fastening, and used to adjust the fit of the garment, within limits, to the wearer's requirements.

Back Tacking - Sewing and reverse sewing at the beginning or end of a seam to secure the stitching.

Back Warp (or Weft), Backing Warp (or Weft) - Additional warp (or weft) on the back of a fabric, bound or stitched to the ground structure so that it does not interfere with the appearance of the face, giving greater weight, thickness, warmth, etc.

Back-and-Fore Stitch - A hand stitch employed for sewing linings and pockets. It involves taking a back stitch and then a running stitch before the needle is removed.

Backing - A strip of material placed on the under side of part of a garment to act as a reinforcement.

Backing Fabric, Secondary Backing - A fabric which forms an additional stabilizing layer in the substrate of a textile floor covering and which often forms the final coating or layer.

Backing Yarn - Yarn used on the back of fabric for plated hosiery.

Backs - A trade term used in Australia to denote wool removed from the back region of the fleece when it is unsound, has a very perished tip or extreme amount of dust and sand, and is distinctly different from the rest of the fleece.

Backwashing - The continuous washing of dyed or undyed wool (or man-made fibre) slivers before or after gilling and/or combing.

Note - Usually, in the Bradford system of wool top-making, it is done before combing, and in the French system after combing. In case of dyed sliver, backwashing is always done before recombining.

Backwashing Machine - A chain of two or more bowls set up with

provision for continuous washing of dyed or undyed worsted slivers and having provision for drying the washed slivers (either by hot air or by contact with heated cylinders), and for gilling them after drying.

Backwinding - A term describing the process of unravelling a knitted fabric and winding the yarn for re-using.

Bad Cast - An abruptly increased diameter in a raw silk thread. Usually caused by the improper joining of a single cocoon filament to the thread during the reeling operation.

Bad Cover

- (a) A fabric appearance in which the spaces between the threads are more pronounced than required. The amount of cover can be affected by loom adjustments, sett, or count of reed, or by the construction of the yarns used.
- (b) The appearance of a finished fabric in which the surface is not covered or the underlying structure concealed by the finishing materials used to the degree required.

Principal Causes - This defect often occurs in an undersett fabric or through poor finishing.

Bad Odour - An objectionable smell such as of some fats, oils, fermented starch, mildew, chemicals or contamination of cloth from any other source.

Bad Place - Localized places where the weave has been severely disturbed.

Note - This term is convenient to use for defects that sometimes defy description.

Badger - Fur fibre of badger (genus: Mele mele).

BAFTA - An Indian term for a fabric made with silk warp and cotton weft, used as dress material.

Bagging (Finishing) - Tacking together of two selvages of a fabric to form a tube in order to prevent the selvages from curling during wet processing.

Bagging (Jute) - A single or double-warp, heavy jute cloth usually in plain weave.

Bagging (Wool) - Sewing a piece of cloth along the selvedge before milling.

Bagging Out - A method of joining facings and/or linings to the outer material of a garment by sewing them together face to face in the form of a bag and then turning the garment out to the right side.

Baize - A plain woven, heavily milled, woollen spun, fine merino wool fabric with raised pile surface, piece dyed in bright colours, usually red or green, and used for covering tables, screens, lining for instrument boxes and the like.

Bal Collar - A high military collar on a Balmacaan coat. It can be worn turned up and bottomed or lying flat.

Balaclave Cap - A long knitted headwear made or tailored out of plain or rib-knitted tubular fabric. Also known as 'TOPA'.

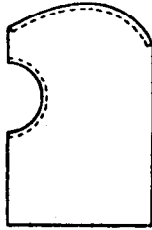


FIG. 6 BALACLAVE CAP

Balance - The relation of one section of a garment to another in harmony with the natural attitude of the figure, especially that of back and front lengths.

Balance Marks - Notches or threads in garment parts, which help to preserve the balance of the garment by serving as guides during assembly. They are generally put at side seams, in the scye, shoulder seams, hind arm and forearm seams and elsewhere as necessary.

Balanced Cloth - A fabric having the same count of yarn in warp and weft and the same number of ends and picks per unit length.

Balanced Twist - The twist in a plied yarn (or cord) is said to be balanced if the yarn or cord does not twist on itself when held in the form of an open-loop.

Balbriggan - A light-weight plain-knitted cotton fabric generally used for underwear. This name originates from the town Balbriggan in Ireland.

Bale - A compressed package of defined quantity of textile material in a form convenient for transit.

Bale (Gunny) - A rectangular or square shaped compressed rigid package containing jute fabrics or bags wrapped with bale covering with outer layer stitched and bound by metal hoops.

Bale (KUTCHA) (Jute) - A package of raw jute consisting of various heads (or MORAHs), usually weighing 150 or 130 kg and sometimes only 55 kg. It is compressed in a hand or steam-operated press and is bound with jute ropes.

Bale (Loose) or BORAHS - A partly-pressed (also called half-pressed) package containing textile material.

Bale (PUCCA) (Jute) - It is hydraulically pressed bale of raw

jute usually bound with jute ropes. Its standard size is 120x45x50 cm and its nominal net and gross mass are 180 and 185 kg respectively.

Bale (Silk) - A defined quantity of raw silk carefully packed in a cotton 'shirt' and 'gunny cloth'.

Baler Twine - Twine manufactured out of natural or synthetic fibre intended for agricultural purposes.

Baling Hoops - Hot rolled steel strips used to fasten or tie bales.

Baling Rope - Rope made from natural or synthetic fibre used for binding bales.

Ball (Yarn) - A package of hand-knitted yarn wound in the shape of a ball without support.

Ball Top - A cross-wound self-supporting sliver package produced on the worsted system.

Ball Warp - Warp, which after being wound on a warping mill, is bunched together in twistless rope form and then made into a ball or similar form

Ball-Warp Sizing - The application of size to warp yarn in the form of ball warp or rope.

Ballooning (Yarn) - The appearance of the curved paths of running yarns during spinning, doubling, or winding on, or while they are being withdrawn over-end from packages under appropriate yarn-winding conditions, e.g. when yarn is withdrawn through a guide (often called a ballooning eye) placed above and in line with the axis of the package at an adequate distance from it; the yarn (travelling at sufficient yarn-winding speed) assumes the appearance of a balloon shape as it revolves during withdrawal from the package. The package may be stationary or rotated in the opposite direction from that of the original winding of the packages.

Note - The shape of the balloon is determined by several factors, among which are:

- (a) air-resistance of the passage of yarn around a package,
- (b) centrifugal force exerted on the revolving yarn,
- (c) the count and type of yarn,
- (d) yarn-winding speed, and
- (e) the length of the balloon.

Bandage Cloth - See 'Gauze'

Bands - Straps tightly bound round a bale or case to keep it secure.

BANIAN - An Indian term denoting all types of vests (see 'Vest').

Banner Cloth - A plain weave fabric of cotton, wool or silk used for the fabrication of flags, banners and buntings.

Bannockburn - A firmly woven cheviot tweed in 2/2 twill weave (straight twill or herringbone) having single and two-ply yarns one-and-one in both warp and weft. Originally the two-ply yarns were made by plying a single yarn identical to the one used in the fabric with a white yarn for use in the warp and with a dark yarn for use in the weft, but modern Bannockburn tweeds favour the count of the coloured single yarns approximating to the resultant count of the ply yarns, which are white-colour and/or light-dark woollen grandrelle or marl yarns, warp and weft.

Bar (Knitting) - A fault in a knitted fabric appearing as a light or dark stripe and arising from differences in (a) Lustre, (b) Dyeing affinity (or unlevel dyeing), (c) Yarn spacing or loop length, or (d) Yarn count; or from defective plating.

Bar Tacking - Reinforcement by means of stitching at points of stress, e.g. buttonholes, pocket corners, seam ends and belt loops.

Bar - A bar running across the full width of a piece which differs in appearance from the adjacent normal cloth. It may be shady or solid in appearance and may or may not run parallel to the picks. This is a general term covering a number of specific defects as under :

(1) Finishing Bar - A bar due to uneven appearance of fabric.

Principal Causes - Machine stoppage during the middle of processing, defective processing in case of woollen and worsted fabrics, etc.

(2) Pick Bar - A bar in which the pick spacing is different from that in the normal cloth. Types of pick bar are the following:

a) Starting Place (Setting on Place) - An isolated narrow bar running parallel with the picks, starting abruptly and gradually shading away to normal cloth. This is due to an abrupt change in the pick spacing followed by a gradual reversion to normal pick spacing.

Principal Causes - Restarting loom after pick finding, unweaving of pulling-back, prolonged loom stoppage.

Note - These bars may also be referred to as standing places or pulling-back places if the precise cause is known.

b) Weaving Bar - A bar which usually shades away to normal cloth at both its edges. It owes its appearance to a change in pick spacing, and may repeat at regular intervals throughout appreciable length or even the whole length of a piece.

Principal Causes - Mechanical fault on the loom; e.g. faulty gearing in take-up motion, bent beam gudgeons, uneven or ecentric beam ruffles, uneven bearing surface at some point in the let-off motion, etc.

Note - Bars of this type associated with the take-up or let-off motion are also referred to as mention marks.

(3) Shade Bar (Dye Bar) - A bar that has developed a different shade from the adjacent cloth during, or subsequent to, dyeing and finishing owing to damage or contamination of otherwise normal cloth or weft yarn prior to weaving.

(4) Tension Bar - A bar composed of weft yarn that has been stretched more, or less, than the normal weft prior to, or during, weaving. Such a bar may appear as cockled bar in those cases where stretch has been sufficient to cause cockle on subsequent contraction of this weft (see 'Cockle').

Principal Cause - Faulty manipulation or some mechanical fault in the winding machine, incorrect tensioning in the shuttle during weaving, faulty yarn excessively moistened at some stage contraction of this weft (see 'Cockle').

(5) Weft Bar - A bar i.e. solid in appearance, is clearly defined, runs parallel with the picks, and contains weft that is different in material, count, filaments, twist, lustre, colour or shade from the adjacent normal weft.

Principle Cause - This defect is often caused by variation in weft yarn characteristics.



FIG. 7 WEFT BAR

Barathea - A heavy worsted fabric of pebbled appearance in rib or twilled hopsack weave. It may be made from merino wool or its blends with man-made fibres and given a clear finish for use as dress material.

Barras Hessen - A coarse linen fabric similar to sack cloth; originally produced in Holland.

Basic Dye - A cationic dye characterized by its relatively high substantivity for the acidic types of acrylic fibres and for tannin mordanted cotton.

Basified Viscose - Viscose rayon which has been modified by treatment with synthetic resins in such a way that it can be dyed with dyes normally used for wool.

Basket Cloth - A fabric in which each group of two or more warp ends passes alternately over and under groups of two or more picks.

Bassinas - The waste silk obtained from the residue cocoon after reeling.

Bast Fibre - Fibre obtained from the cell layers surrounding the stems of various plants.

Bast Liquor - A bath liquor prepared by acidifying soap solution that has been used for degumming of silk. It is used in silk dyeing as it greatly facilitates the production of a level shade. (An artificial bast liquor is prepared from a solution of gelatin in soap).

Basting - Temporary stitching either by hand or machine to hold garment parts in the correct position for a subsequent permanent sewing operation.

Batch (Jute) - A quantity of raw jute which has been selected from various assortments and is intended to be mixed together to produce yarn of desired type or quality.

Batch Process - A process in which a treatment is given to a textile material and stored for a specific period prior to further processing.

Batching (Jute) - The process of selection into batches and treating jute fibres with oil-in-water emulsion and piling it, if needed, prior to carding.

Batchwise Processing - Processing of materials as lots or batches in which the whole of each batch is subjected to one stage of the process at a time.

Bates Valve - A one-way valve fixed to a bag to facilitate nozzle filling and which eliminates sewing after filling.

Bath Coating - A light-weight, soft napped material of wool or cotton. The fabric is used for coverings, infants blankets, bath robes etc.

Bathing Costume - A tight-fitting tailored knitwear used in bathing or swimming. Also known as 'Swimming Costume'.

Bathing Trunk - See 'Trunk'

Batik - A plain woven fabric printed by Batik system.

Note - The method of dyeing in which wax is applied to the cloth and then removed at places where the dyeing is to be done.

Batiste - A soft, fine, plain-woven fabric, originally of flax. It may now be made in a variety of other fibres.

Batt; Batting - An American term used to denote superimposed carded webs of the fibre in sheet form, e.g. wadding.

Battens - Wooden slats put on the bales and held in place by means of bands to keep the shape of the bale intact.

Baulk Finish - A finish in which the material is milled in the grease to the desired dimensions, scoured, dyed, lightly stentered to width and lightly pressed.

Note - The object of this finish, which is applied only to woollen materials, is to preserve the original character of the cloth. The material is finished without being raised.

Bave (Silk) - The bifilar thread spun by the silkworm. It consists of two filaments (brins) that are cemented together by gum or sericin.

Beach Yarn - See (e) under 'Coir Yarn'.

Beam - Cable-laid rope made out of superior quality hemp of 4 mm diameter.

Beam Dyeing - The dyeing of yarn or fabric wound on a perforated beam.

Beaming - Winding of warp yarns on the warp beam or winding of cloth on a tube or a beam.

Bearded Motes - See 'Motes'.

Bearers - Of trousers. Sections fastened to the side seams to take the weight of the trousers when the fronts are opened. Bearers for whole fall trousers contain the pockets.

Beaver Cloth - A heavy, firm textured cloth made from woollen yarns, which is milled, raised and cut close on the face so as to simulate natural beaver skin.

Beaver Fur - The undercoat of fine but medullated fibres from North American aquatic rodent of genus: Castor canadensis.

Beaverteen - A heavily wefted fabric of the moleskin type, used chiefly for heavy trouserings. Example : A popular cotton variety consisting of 32 ends/in. (80 ends/dm) 2-18s (295 to 32 tex) warp with 280-400 picks/in. (700 to 1000 picks/dm) of 20s-16s

weft (30-37 tex) piece dyed, and having a short, soft 'nap' on the back when finished. It is a heavier fabric than imperial sateen.

Bed Ticking - A strong, closely woven, twilled cotton material which may be yarn dyed or printed, usually in stripes. It is used for beds, mattresses and pillows.

Bedding Line - Hawser-laid line of 19 mm size made from hemp or jute yarn. One end of line is whipped and other is made into a loop. The overall length of line is about 4.5 m and is used for tying the beddings.

Bedford Cord - A cloth showing rounded cords in the warp direction with pronounced sunken lines between, produced by the nature of the weave. The weave on the face of the cords is usually plain but other weaves may be used. There are weft floats on the width of the cords on the back. Wadding ends may be used to accentuate the prominence of the cords.

Beetling - A finishing process used on linen and cotton fabrics to close up the spaces between the threads and improve the appearance and handle by subjecting the previously dampened cloth to a hammering by a series of wooden mallets or "Fallers" which flattens the threads, improves the lustre and eliminates any 'Thready' open appearance.

Beige - Soft dress fabric made in worsted warp and weft in 2 and 2 twill weave.

BELANI - See 'CHARKHA (Gin)'.

Bell Rope - A fibre rope fitted with a dolley, for the tolling of bells.

Bellies - A trade term used in Australia to denote wool which has been removed from the belly region and which is free from pizzle stain and skin pieces.

Belt Loop - A loop of material or thread which is sewn into the waist of a garment to receive a belt.

Belting (Industrial and Mechanical) - A generic term covering all forms of belts, and rolls of material from which belts are made up, that are designed for the transmission of power or for the purpose of conveying or elevating.

Bengaline - A cloth with a more or less striking warp rib appearance running across the fabric, produced from cotton or worsted yarns, silk or other continuous filament yarns, or in part from any of the materials named, a typical example being silk warp and worsted weft. The warp rib or corded effect may be produced by employing any of the following methods :

- (1) suitable thickness and setting of warp and weft threads

(2) suitable warp rib weaves, and

(3) a combination of (1) and (2).

Beret (Knitted) - A round, soft-felted, knitted headwear with flat loose top and tight-fitting at the forehead.



FIG. 8 BERET

Berlin Wool Yarn - A brightly coloured knitting yarn used chiefly for embroidery and fancy knitting by hand.

Bertna - A kind of cape or collar, sometimes of lace. It is often used for dress trimmings and attached to the edge of a low-backed waist.

Besom - A pocket featuring a stitched fold on upper and lower edges.

Beypore Yarn - See (f) under 'Coir Yarn'.

Bias (Bow, Skewness) - A fabric condition in which warp and weft yarns are straight but may vary from the perpendicular to one another by a degree which is unacceptable in that fabric.

Principal Causes - This defect is often caused by inadequate control of the fabric during open width washing.

Bias (Garment) - Direction at an angle to warp and weft. True bias is at an angle of 45° to both warp and weft. Other usage includes bias cutting and cutting on the bias which is also known as 'Cutting on the Cross'.

Bias Bag - Bag fabricated by cutting across the bias tubing according to required size and folding and stitching along with one of the open ends.

Bias Binding - A strip of material cut from a woven fabric at an acute angle to the warp (usually 45°) and sometimes folded along one or both edges.

Bias Construction - Arrangement of the gores such that the direction of the threads of the fabric makes an angle usually of 45°, with the centre line of the gore.

Bias Cut - Fabric cut at an angle to the warp and weft threads.

Bias Tubing - Continuous length of cloth (usually hessian) in a cut or roll suitably stitched lengthwise selvedge to selvedge in a biased way to form a bias tubing. Here, the weft yarns do not remain at right angles but are kept at an angle of about 30 to 45° to the length of the tubing.

Bight - The distance between the stitching line and the adjacent edge of the material [see also 'Seam Allowance (Seam Margin)'].

Bikini Suit - A two piece, bathing or swimming suit for ladies.

Billiard Cloth - A plain woven, heavily milled woollen cloth with closely cropped fibrous finish made from fine merino wool and usually dyed in green colour.

BIMLI - Fibre obtained from the bast of Hibiscus Sabdariffa (roselle). The fibre reeds are associated with underground roots since the plants, exclusively grown in Andhra Pradesh, are generally uprooted during harvesting. Chemically, it is different from jute in its low lignin content and is in general inferior and coarser than jute. It is a substitute for jute.

Binder Twine - Twine made from natural or synthetic fibre intended for agricultural use with reaper binders and combined harvesters.

Binding - A narrow fabric designed to protect, support, and give a finish to carpets, garments, blankets, books, shoes, and other articles.

Note - Certain kinds of tapes, webbings, ribbons and braids are also used as bindings.

Binding (Floor Covering) - Edge-finishing a textile floor covering with the use of a separate binding tape, fixed on the face then turned on to the back, to prevent edge fray.

Binding-Off - A term applied to locking or seaming of the last row of loops of a knitted fabric to prevent ravelling.

Bird's Eye Back - The back side of a rib-knitted jacquard fabric obtained by knitting even number of needles of one set at one feeder and odd number of needles of the same set at the other. The bird's eye back is produced to eliminate the elongation of face stitches. When three colours are used, the back side of the fabric will have very small and uniform spots which look like bird's eye.

Birdseye - A fabric having a pattern of very small and uniform spots, the result of the combination of weave and colour.

Bit Mats - See (a) under 'Mats (Coir)'.

Bitumen Felt - A hessian cloth saturated in molten bitumen and treated by passage through bituminous coating material and finally given a superficial application of mineral powder, like talc, slate, and mica. It is used for roofing purposes.

Bituminous Surfacing - A sacking or hessian cloth impregnated with low melting point bitumen and coated on both sides with a high melting point bitumen. It is used as waterproof membrane for canal lining, and surfacing air strips and roads.

Black - A trade term used in Australia to denote wool which is pigmented. However, this term is recommended to be used only to denote black pigmented wool. In case of pigmented wools of other colours, either the term 'Coloured' should be used or the specific colour may be mentioned, e.g. 'Off White Wool', 'Grey Tinged', 'Dark Brown Wool'.

Blanket - A heavy compact fabric of plain or twill weave made from wool, cotton, rayon, man-made fibres or their blends and given a soft nappy finish. Blankets made from wool are usually felted by heavy milling. Their size varies considerably but usually it is 1.5 to 2 m in width and 2 to 2.5 m in length. The weight of the blanket may vary from 1 to 3 kg.

Blanket Cloth - A heavy-weight overcoating fabric with a soft, raised finish.

Blanket Mark - A crimped, wavy, or pebbled mark embossed on a fabric by the blanket that covers the heated cylinder used in certain finishing processes.

Blaze - See 'Floss Silk'.

Blazer - A wool flannel somewhat heavily milled and raised and finished with a short nap.

Bleached Fabric - A fabric which has undergone bleaching treatment

Bleaching - A series of operations of improving (other than by scouring only) the whiteness by decolorizing the natural colouring matter of the textile materials from their grey state with or without removing the added colouring matter.

Bleeding (Colour Bleeding)

- (a) Loss of dye from coloured material when immersed in water or solvent leading to an obvious colouration of the liquor or of adjacent material.
- (b) Spreading of dye from one portion of a colour design to contiguous areas.

Bleeding Madras - A cotton fabric, usually handwoven, from coloured yarns, in check designs. The coloured yarns bleed mildly during finishing and the subsequent washes and tint the rest of the fabric and create a mutation effect. The count of warp and weft used is generally 60s (10 tex) and 40s (15 tex) respectively.

Bleeding, Colour - See 'Colour Bleeding'.

Blended Fabric - A fabric made from yarns spun with mixed fibres or filament yarn provided the fibre component is 10 percent or more (see also 'Union Fabric').

Blended Wool - A textile material containing not less than 50 percent of wool fibres. However, a manufacturing tolerance up to

3 percent on wool contents shall be permitted. (See Note 1 and Note 2 under 'All Wool').

Blending

- (a) General - A process of mixing fibres of different lots, types and varieties to produce yarns having desired characteristics; and
- (b) Wool for Market - A process of mixing small lines of similar type and yield of wool fibres having desired characteristics.

Blending Machine - See 'Willey'.

Blind - See 'Sash Cord'.

Blind Stitch - A stitch (either by hand or machine) which does not go right through the material.

Blinding - A marked and undesirable loss of lustre of fibres caused by wet processing.

Note - This may be caused by the formation, within or on the fibre, of dyes or other particles that scatter light, or by an alteration in the physical structure of the dye.

Blister Cloth - A double cloth with merino wool face and mohair back wherein differential shrinkage of the face and the back during finishing leads to blister effect. (See 'Relief Fabric').

Blobby - A trade term adopted by the Australian Wool Board to indicate short dense, square tipped wool, usually possessing good felting properties.

Block Construction - Arrangement of the gores such that the direction of the threads of the fabric is parallel to the centre line of the gore.

Block Printing - The printing of fabrics by hand with carved/ designed wooden blocks.

Blocking Out - The action of cutting many layers of material into manageable blocks which may incorporate one or more parts of a garment.

Blocky - A trade term adopted by the Australian Wool Board to indicate a staple of dense construction and square tip.

Blood - The extent of exotic strain like merino in cross-bred sheep.

Bloom (Cotton) - Brightness and lustre in raw cotton.

Bloom (Wool) - A trade term adopted by the Australian Wool Board to indicate wool of excellent condition, a trade term adopted by

the Australian Wool Board to indicate wool of excellent condition, colour and brightness.

Blotch - Any relatively large area of uniform colour in a printed design.

Blouse - A waist length, tight-fitting outer garment worn by ladies. Also known as 'JUMPER'.

Blow-Room Droppings - Waste mainly consisting of seeds, motes, leaves, stalks, seed coats, burrs besides short and entangled fibres resulting from the blow-room treatment of cotton (see also 'Gutter Fly').

Blowing (Steam) - A process in which steam is blown through cloth usually wound on a perforated roller.

Blown Finish - A finish applied to wool materials, obtained by blowing dry steam through the fabric, which is wrapped on a perforated cylinder with an interlacing cotton fabric.

Blown Periphery - A portion of the peripheral hem blown between two rigging lines on another section of the canopy during inflation, and inflating inside out thus forming a lobe. This is sometimes erroneously termed 'Thrown Line'.

Blueing - A process to enhance the appearance of bleached textiles by the use of a blue colouring matter with or without fluorescent brightening agent.

Bluff Edges (Buffed Edges) - Edges finished without outside stitching (see also 'Bluffing').

Bluffing - The process of fastening down the front edge of facings on the forepart canvas to preserve the shape of edges finished without outside stitching (see also 'Bluff Edges').

Blurred Patches - See 'Coloured Blotches'.

Boarding - A process of putting the knitted garments on boards of suitable size and shape and then pressing and heating under moist or dry conditions to set the garments to the desired shape and size.

Boat Fall - Manila rope or man-made fibre rope of 3- or 4-strand or 8-strand with medium to hard lay; sometimes unkinkable, used in conjunction with a pair of devits or for lowering boat from ships' upper deck (flexible steel wire ropes are also used).

Boat Lacing - A 3-strand high grade dressed hemp line used for securing boat covers and awnings.

Bodice - The section of a woman's garment covering the body from neck to waist.

Body - Describes the compact, solid or firm feel of a textile

stock or fabric.

Body Carpet - Plain or unbordered patterned carpet in piece form, traditionally 680 mm or 900 mm wide, mainly used for making up into larger areas by seaming or otherwise joining edge to edge.

Note - Greater widths (traditionally less than 1800 mm) are occasionally designated body carpet.

Boiled-Off Liquor - See 'Bast Liquor'.

Boiling-Off - The process of removing sericin from silk or other gummy material from fibres like Ramie.

Boll - The fruit of cotton plant; generally it has 3 to 5 loculi, each of which contains about 6 to 10 seeds, the seeds being covered with cotton fibres.

Bolt - A lapped and folded cloth with a continuous length.

Bolt Rope - A 3-strand soft laid rope made from hemp, manila sisal or man-made fibre used for edging sails, awnings, stage lashing, etc.

Bolting Cloth - A light-weight open fabric characterized by its fine and uniform mesh, used for sifting flour or screen printing. Both warp and weft threads are accurately spaced and are woven in gauze or other non-slip construction in order to maintain the mesh size.

Bombay-Hemp - A soft fibre obtained from the bast of the plant Hibiscus Cannabinus and other Hibiscus species. The plant reaches a height of 3 to 4.5 m and gives long and lustrous fibres fairly similar to jute.

Bonded Fibre Fabric - A non-woven fabric consisting of one or more webs or masses of fibres, held together with a bonding material.

Bonded-Pile Textile Floor Covering; Bonded Pile Carpet - Pile carpet in which the pile consists, e.g. of a pleated sheet of textile yarns or fibres secured to a support by a coating or adhesive, or directly to an adhesive which forms the support. (See IS:11205-1984).

Bonding Agent - A material applied to fibre or yarn assemblies, with the intention of maintaining the assembly in the required conformation.

Book (Silk) - A compressed package of raw silk weighing about 2 kg and containing a suitable number of skeins.

Book Binding Cloth - Fabrics normally made from cotton used in book binding. It is usually coloured and heavily sized.

Book Muslin - A light-weight stiff finished open cotton fabric

used in book binding and also as lining for cheap cloth.

Bonnet (Knitted) - A knitted headwear covering the entire head and ears and with strings for tying under the chin. Generally worn by children and ladies.

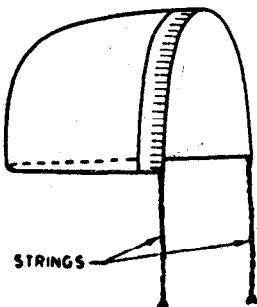
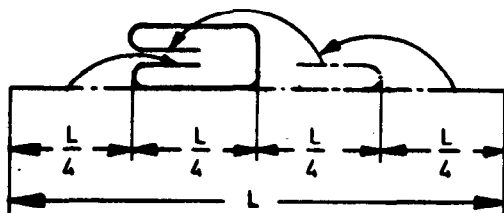


FIG. 9 BONNET

Book-Fold Bolt - A single cut which is lapped and folded into a book-fold illustrated by the heavy line in the figure. (See also IS:2873-1969).



L = Length of lap.

FIG. 10 BOOK-FOLD BOLT

Book-Silk - See 'Tsatlee Silk'

Boom Lift - Manila or man-made fibre rope which passes through tackle blocks attached to the mast and boom. It is used to adjust the angle at which the boom is inclined from the mast and shall support the load applied to the full lines.

BOOTA or BUTTA - An Indian term for cotton fabric ornamented with spots formed usually by extra warp or weft threads in weaving.

Bootee - A knitted footwear with or without seam usually with fancy rib or purl stitches for infants too young to walk. Also known as 'Infantee' and 'Infant Socks'.

Border (Sweater) - Bottom portion of knitted outer garment usually made in 1 x 1, 2 x 2 rib or of the same fabric as used for the body of the garment.

Bore Spring - Coir rope up to 610 mm in circumference used for mooring in rivers subject to bore tides.

Boski - A closely woven dress material usually from spun silk warp and weft.

Botany - The term originates from Botany bay (New South Wales, Australia), from where merino wools were exported to different countries for several decades.

Botany Twill - A variety of worsted twill fabrics made from merino Wool.

Botany Wool - All tops, yarns and fabrics made from merino wool of 60s and above fineness grades.

Botany Worsted Yarn - Worsted yarn from fine merino wool.

Bottom - Indicates a quality of raw jute (see 'Grading of Jute').

Bottoming - A thorough scouring usually in preparation for bleaching, dyeing or printing.

Boucle - A fabric with uneven looped surface made from plied worsted or woollen yarns from wool or mohair.

Boulivia - A wool, alpaca or mohair pile fabric with a pebbled, cord or ridge effect.

Bound Seam - A seam having its material edges bound with a strip of additional material.

Bourette (French) (Silk) - See (b) under 'Noils'.

Bourre (French) (Silk) - See 'Gum Waste'.

Bourrelet Fabric - See 'Relief Fabric'.

Bow - The greatest distance parallel to the selvages between a weft yarn and a straight line drawn between the points at which this yarn meets the selvages. The straight line connecting the selvages is perpendicular to both.

Bowing - A defect in knitted fabric caused due to curvature of the courses imposed during knitting or calendering or other operations.

Bowl - A roller forming part of a nip through which fibre, yarn or fabric is passed in textile processing.

Box Cloth - An all-wool, woollen-spun fabric with a fibrous surface and firm handle. The surface is completely covered with fibres so that no threads are visible. It is woven in a variety of weaves, depending on the weight required. It is used for such purposes as leggings, coachman cloths and billiard cloth.

Box Mark - A widthwise fine line showing stained or injured weft due to the rubbing by shuttle when it rebounds from the box.

Principal Causes - Improper adjustment of shuttle box front plate, dirty shuttle boxes, etc.

Box Pleats - A form of pleats achieved by double folding material alternately in opposite directions.

Box Twine - A 3-ply twine used mainly for general tying purposes. The twine is made from hemp yarn.

Brace Web - An elastic or rigid woven narrow fabric, primarily intended for the manufacture of braces.

Bradford Lustre Fabrics - Chiefly used as dress material or for lining, these fabrics are generally made from cotton warp and worsted weft from lustre wools, mohair or alpaca. Typical fabrics include:

- | | | |
|----------------------|--------------------|--------------------|
| (a) Brilliantines | (b) Glaces | (c) Grenada |
| (d) Lorraine lustres | (e) Lustre linking | (f) Melange lustre |
| (g) Puritan | (h) Parkin stripes | (j) Sicilians |

Bradford Spun - Worsted yarn spun on the Bradford system.

Bradford System - One of the systems of worsted drawing and spinning which originated in Britain. This is based on the use of oil combed tops and twisted rovings.

Braid - A narrow tubular or flat fabric produced by intertwining sets of yarn. It is generally used for binding or trimming in widths up to 10 cm.

Braided (or Plaited) Cord - A flax, cotton, hemp or man-made fibre cord of braided construction. It may be with or without a central core.

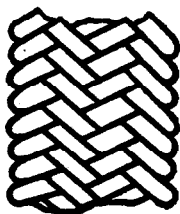


FIG. 11 BRAIDED CORD

Braided Textile Floor Covering Without Pile - Textile floor covering without pile, made of machine-braided cords sewn together.

Braiding (Plaiting) - The process of interlacing three or more threads in such a way that they cross one another and are laid together in diagonal formation. Flat, tubular, round or solid constructions may be formed in this way.

Note 1 - There are diametrically opposed opinions between sections of the industry regarding the exact meaning of 'braiding' and 'plaiting'. It is suggested, therefore, that as generic terms 'braiding' and 'plaiting' should be considered synonymous.

Note 2 - Fabrics made by this process may be constructed with or without core, gut, filler, or stuffing threads, which are not interlaced in the fabrics. For some applications, the core may

be of insulated or uninsulated wire, or of rubber or other material. The tubular fabrics may be used as sheaths or surrounds.

Note 3 - In the cordage trade, the term braided denotes a particular form of cordage manufacture. In solid-braided cordage, carriers usually travel in one direction, but the movement provides for interlocking between the strands. In a sense, this cord is more of an interlocked twisted cord than a plaited cord.

Bran Bag - See 'Australian Bran Bag'.

Branding - Marking on fabrics, sacks or bags with inks, dyes, or pigment colours to indicate trade-mark, content, weight, etc.

Brattice Cloth - Hessian fabric which after rot and fire-proofing, is used in mines as wind screens, and for ventilation purposes.

Break - The point where the lapel starts to roll over on a coat, usually at the top buttonhole.

Break Factor - See 'Count Strength Product'.

Breaker Card - Feed section of woollen card.

Breaking Cord - A flax, cotton or man-made fibre cord of hawser-laid or braided construction used as a weak link to facilitate opening of parachutes at the time of release.

Breaking Elongation (or Extension) - The elongation at the breaking load.

Breaking Extension, Percent - The extension at breaking load expressed as a percentage of the original length.

Breaking Factor - The coefficient C_r characterizing the quality level of the rope in so far as breaking load is concerned. It is given by the formula: $C_r = R / m$

where

R is the breaking load in decanewtons or kgf; and
 m is the linear density, in kilotex for net mass (g/m).

Breaking Length - The length of a specimen whose mass is equal to the breaking load. Breaking length expressed in kilometres is numerically equal to the breaking tenacity expressed in g/tex.

Note - Breaking tenacity is expressed in Newtons/tex. The Newton is the SI unit of force. It is that force which when applied to a body having a mass of one kilogram, gives it an acceleration of one metre per second square (1 N=9.81 kgf).

Breaking Load - The load that develops the breaking tension. It is correctly expressed in Newtons.

Note - The breaking load, if expressed in gram weight or

kilogram weight will vary from place to place depending on the value of the acceleration due to gravity.

Breaking Stress - The maximum stress developed in a specimen stretched to rupture. The force is usually related to the area of the unstrained specimen. If the actual stress, defined in terms of the area of strained specimen, is used, then its maximum value is called the actual breaking stress.

Breaking Tenacity - See 'Tenacity'

Breaking Tension - The maximum tension developed in a specimen stretched to rupture. It is correctly expressed in Newtons.

Note - Breaking tension, as defined, is independent of the acceleration due to gravity.

Bribe - Synonym for a woollen fent.

Bricklayer Line - A 3-strand flax, cotton or hemp line used by brick-layers, carpenters and masons for alignment purposes. (See also 'Chalk Line').

Bridle (Garment) - A narrow strip of material which is attached to the interlining along the roll of the lapel to hold and control it.

Bridle (Parachute) - A multi-lagged strop.

Briefs - A tight-fitting underwear without leg portions. Also known as 'CHADDI' and 'JANGHIA'.



FIG. 12 BRIEFS

Bright (Wool) - A trade term adopted by the Australian Wool Board to indicate wool having an attractive white colour.

Bright Hessian - A special hessian with high brightness index and cleanliness and of good texture.

Bright Silk - Thrown silk completely boiled-off or dyed, or both.

Bright Yarn - A general term for lustrous yarn as contrasted to dull, semi-dull, extra-dull or matt yarn.

Bright Yarn (Defect) - A warp or weft yarn of higher lustre than the adjacent yarns.

Brightening - Partial improvement in colour by suitable chemical treatment of the raw jute or jute product.

Brilliance - That attribute of a colour which measures its luminosity or the degree of its lightness or darkness.

Brilliantine - See 'Bradford Lustre Fabrics'.

Brin - The ultimate filament of silk as emanating from each gland of the silkworm. Two brins (one from each gland on either side of the body of silkworm) are cemented together by gum or sericin at the spinneret of the silkworm to emerge as bave or silk strand.

Bristle Fibre

(a) General- A generic term for a short, stiff and coarse fibre, and

(b) Specific - A restricted term for the hair of the hog.

Broad (Wool) - Wool that has no natural crimp or elasticity, particularly straight fibres.

Broad Cloth (Wool)- Merino wool fabric in plain or twill weave, heavily milled and given a dress face finish.

Broad Cloth, Cotton - A light-weight fabric of poplin type, used for shirtings.

Broad Goods - All woven fabrics 60 cm or more in width, as distinguished from ribbon.

Broad Rib - A fabric with multiple adjoining ribs which give longitudinal effects in face and back of the fabric.

Example: 6 X 3 rib.

Broadloom (Carpets) - Descriptive of seamless carpeting traditionally made 2 m or more in width.

Broadtail - The grade of Karacul lambskin lower than astrakhan. It has hair in swirls rather than curls and a very attractive wavy pattern.

Brocade - A jacquard weave fabric of rich appearance. Unlike the design in a 'Damask' which appears to be flat with the surface of the fabric, the design in a brocade looks as if it were raised or embroidered.

Broche - An assemblage of yarn inserted in the same dent of the sley of the loom, the group consisting usually of two ends of the chain warp, the yarns of the stuffer warp and those of the pile.

Broken Filament - A fibrous appearance of a fabric made from continuous filament yarn which may be localized or general and which is caused by damage to individual filaments. (See also 'Fuzzy')

Broken Pick (Dropped Pick) - A weft yarn which is present for only a part of the fabric width.

Principal Causes - This defect is caused by a weft yarn breaking, running out, or being prematurely released during insertion.

Broken End (Missing End) - A narrow warpwise void in a fabric caused by breakage of warp yarn(s) during weaving.

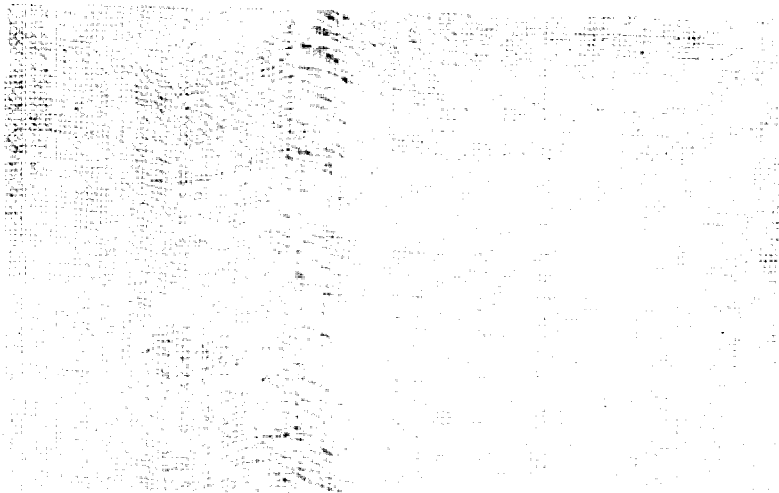


FIG. 13 BROKEN END (MISSING END)

Broken Pattern - Self descriptive; applies to woven as well as printed design fabrics (see also 'Mispick' and 'Missing End').

Principal Causes - Wrong tying of threads, inserting a pick in a wrong shed, incorrect lifting of warp threads, defective working of printing machine, etc.

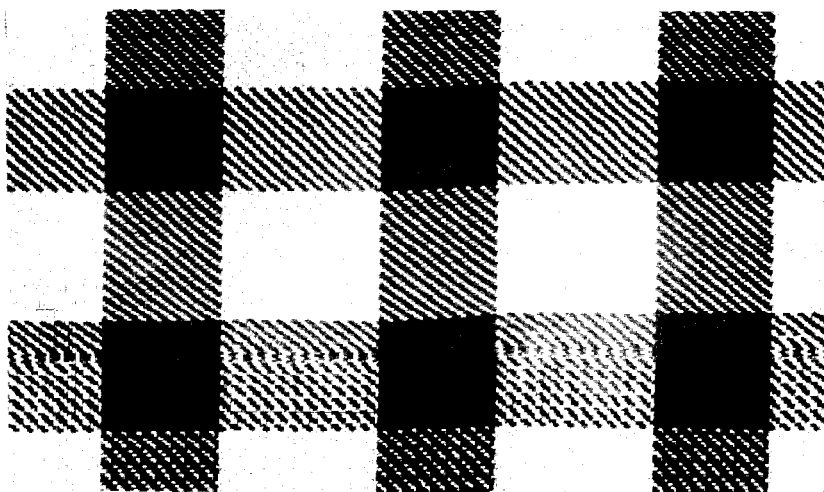


FIG. 14 BROKEN PATTERN

Broken Twill - Any twill weave in which the move number is not constant, with the result that the continuity of the twill line is broken.

Bronzing (Defect) - A bronze-like appearance on dyed textile

materials caused by precipitation/agglomeration of the dye during the dyeing process.

Bruise - An area of localized compression within a fabric.

Principal Cause - This defect is often caused by the squeezing or crushing of the fabric.

Brush Mats - See (b) under 'Mats'.

Brushed Fabric - A fabric in which fibres on one or both surfaces have been raised by means of brushing.

Brushed Rayon - Woven or knitted rayon fabric which has been given considerable brushing or napping by the teasel treatment or by rollers covered with card clothing used for napping purpose.

Brushing - A finishing process in which circular brushes raise a nap and remove unwanted surface fibres from knitted or woven fabrics.

Brushing (Silk) - Act of transferring newly hatched silkworms from the egg sheets or muslin cells on to the rearing trays, or act of removal of floss from the cooked or boiled cocoons for collection of ends for reeling.

Brusselette Carpet - A ribbed carpet woven from a loosely tensioned, coarse warp and from a fine chain.

Brusselettee - A jute floor covering made in different weights from jute yarns in plain weave. It is made in different designs, such as prints, stripes, checks and their combinations in different colours. Two beams are generally used, one for the looping yarn and the other for ground yarn.

Brussels Carpet - A loop-pile carpet woven over an unbladed vertical flat (elliptical) wire inserted on edge.

Note - Weaving is carried out in a similar manner to that for Wilton carpet on a Wilton loom and the carpet is therefore often referred to in the industry as a Brussels Wilton. Many trade names, by force of long usage, have acquired definite significant meanings of some kind in the minds of the public. Whereas the names Axminster, Wilton and Brussels, as applied to carpets, may originally have referred to the place of origin, this geographical significance has gradually changed into one implying a quality or method of manufacture.

Brussels Wilton - See 'Brussels Carpet'.

Buckram - A stiff fabric made by impregnating a light-weight open cloth with adhesives and fillers.

Buckskin Fabric - A fabric similar in handle and appearance to, but heavier than, a doeskin fabric, made from fine merino wool, closely set, heavily milled, dressed and closely cut.

Buggy - A lining from the neck down across the back of an otherwise unlined coat.

Builder Fabric - A square-woven heavy cotton duck made from very heavy ply yarns; it was formerly used in the carcass of rubber tread tyres, but has now been largely replaced by tyre cord warp sheet.

Bulk Classing - A trade term adopted by the Australian Wool Board to indicate pooling of small quantities of wool from a number of owners into standard lines.

Bulked Yarn - A yarn that has been prepared in such a way as to have greater covering capacity, or apparent volume than that of conventional yarn of equal linear density and of the same basic material with normal twist.

Bulky Yarns

- (a) Yarns in which the apparent density of the filaments is much lower than the real density, e.g. 'hollow filament yarns', the cross-sectional appearance of which is so grossly irregular that close packing is impossible.
- (b) Spun yarns made from staple fibres having a high degree of resilience, such as protein fibres, acrylic fibres.

Bull and Calf Rope - A 3-strand manila rope used for oil-well drilling and marine selvage work. (See also 'Bull Rope').

Bull Rope

- (a) A 3-strand manila or sisal hard-laid rope used for marine purposes; or
- (b) Rope led from ring of a buoy to the nose of the bow-spirit of sailing vessel or to the stem of a clipper bowed ship to prevent buoy from bumping the bows at slack water.

Bullion Cord - A cord having a core yarn, usually cotton, covered by twisting other yarns, usually 'rayon', around it.

BUMBLES - An Indian term for tassels (see 'Tassels').

Bump Top or Bumped Top - A package made by press-packing layers of horizontally coiled top, built up in cylindrical form round a vertical spindle centrally situated in the removable false base of the sliver can.

Bump Yarn - Very coarse condenser yarn. The count normally ranges from 260 to 1250 tex.

Bundle - A number of similar garment parts temporarily kept together for convenience of handling (see also 'Conventional Bundle System, and Progressive Bundle System').

Bundle (Yarn) - Skeins or hanks of yarn of definite length made up into a package of definite mass.

Bundle Yarn - Yarn, in hank form, transported in bundles. Carpet and hosiery yarns are usually transported as bundle yarns.

Bunting - See 'Banner Cloth'

Bunting Cloth - See 'Banner Cloth'

Buried-End Carpet, Buried-Pile Carpet - Tufted pile carpet with a design constituted by tufts or loops of different colours. The yarns not used for the pattern form short loops not visible on the surface of the pile.

Burl - A small knot or lump in thread or cloth.

Burl Dyeing - The colouration of cellulosic impurities in wool piece goods.

Burl Mark - A distortion resulting from some superfluous material such as a thick slub, waste or wild yarn being removed with a burling tool.

Burlap - See 'Hessian'

Burling - Removing knots and similar defects in yarn from the fabric during mending prior to finishing a woollen or worsted fabric.

Burnt Ends - A trade term adopted by the Australian Wool Board to indicate urine stains (on fleece) having a dark colour.

Burried Pile Design (Tufted Carpets) - A design formed by high-low-pile tufting with alternate needles threaded with different colours so that the high pile forms an area of one colour overlapping the low (burried) pile of a different colour.

Burrs - Dry seeds of certain weeds which get entangled in the fibrous coat of the sheep before it is shorn.

Burry - Raw wool containing burrs.

Burson Knit (Stocking) - Knitted stocking shaped to the leg contour and tubular in construction without seam.

Burst Selvedge - See (c) under 'Defective Selvedge'

Bursting Strength - The force required to rupture a fabric by distending it with pressure applied at right angles to the plane of the fabric. It is expressed in terms of force per unit area.

Bush Mulberry (Silk) - Mulberry cultivated as a bush to give more yield per unit area and to facilitate easy picking of leaves as compared to tree system of cultivation (see also 'Mulberry').

Butt Seam - A seam which is sewn with the two material edges

abutting.

Button - A knob or disc which is attached to garments as a means of fastening or ornamentation. (For button sizes see 'Ligne').

Button Down Collar - The shirt collar in which the points are fastened to the front of the shirt with a button closure.

Button Stand (Button-Hole Stand) - Part of the garment on which buttons are tucked.

Button-Hole Twist - A multiple ply sewing thread of man-made fibre made with a hard twist and used in stitching around the edges of button-holes to give strength.

Buttonhole - The hole through which a button is passed to hold the garment in the correct position.

Buttons; Skin Back - Balls of fibre that encircle the warp yarns and are woven into the fabric.

Principal Cause - This defect is often caused by the chafing of the warp yarns by the reed, heald eyes, or drop wires and is usually found in unsized or low-twisted yarns.

Cable - A balanced rope structure formed by twisting three or more ropes together. It is usually over 250 mm in circumference.

Cable Stitch - A knitting stitch, which imparts raised effect to the fabric, formed by two or more groups of adjacent wales passing under and over one another and appearing like a twisted ribbon.

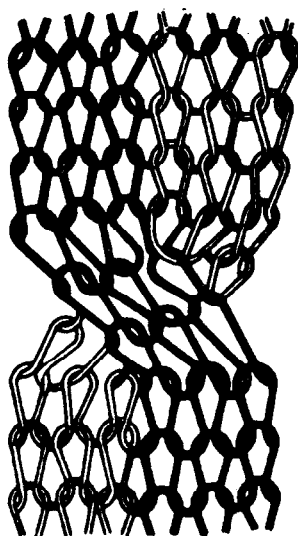


FIG. 15 CABLE STITCH

Cable Twist - A cabled yarn, cord or rope construction in which each successive twist is in the opposite direction to the preceding twist, as S/Z/S or Z/S/Z construction.

Cabled Yarn - A composite yarn produced by twisting together two

or more plied yarns. The individual plied yarns have the same nominal length and tension. (See also 'Cable Twist and Hawser Twist').

CADDIS - Short jute fibre droppings accumulated under different machines during processing.

Cable-Laid Rope - A 9-strand rope in which three primary (hawser-laid) ropes are twisted together without a central core.

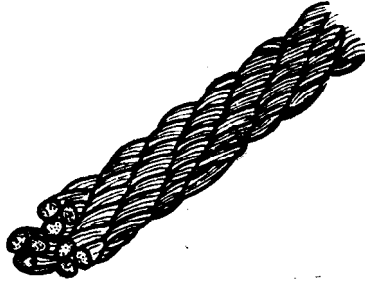


FIG. 16 CABLE-LAID (9-STRAND) ROPE

Cake - An annular-shaped package of man-made fibre yarn.

Cake Sizing - Application of size to yarns in cake form.

Calendered Fabric - A fabric which has passed through a calender normally to smoothen and flatten it, to close the intersections between the yarns or to confer surface glaze. Special calenders with an engraved heated bowl imprint a pattern in relief or modify the fabric surface to high lustre (see also 'Felt Calendered Fabric').

Calendering - A process in which a fabric is passed through a calender, normally to smooth and flatten it, to close the intersections between the yarns, or to confer surface glaze.

Calf - Fashioned or shaped part of the leg of socks or stocking covering calf portion of the leg. (See Fig. 49).

Calico - A generic term for plain weave fabric heavier than muslin and approximately having a mass per square metre of upto 120 g.

Cambric - A light-weight closely woven plain weave fabric usually with a stiff finish.

Camel Hair - The hair of the camel. The outercoat is coarse and long (up to 35 cm) and the undercoat is soft, light tan in colour and short (5 to 10 cm).

Camel Hair Fabric - Fabric made partly or wholly from camel hair.

Camel Hair Yarn - Soft worsted yarn from the undercoat of camel hair with or without blending with wool.

Camlet Fabric - A very sturdy plain weave fabric made from hard-twisted worsted yarns containing either camel hair or lustre wools.

Camlet Yarn - Hard-twisted worsted yarn made from lustre wool.

Camouflage - Net used for camouflage purposes made from hard and soft twisted coir yarns with mesh size of 5 cm² or larger.

Camouflage Garnishing Strips - A variety of narrow hessian strips of varying widths used for military purposes, generally manufactured from standard widths hessian with patent selvages incorporated at intervals depending upon the corresponding widths of strips required (see also 'Scrim Garnishing').

Camouflage Scrim Hessian - A very open weave light hessian cloth, grey or dyed (see also 'Scrim Garnishing').

Canary Colouration - A canary yellow coloured staining of fleece on the sheep particularly during the hot and humid climate. It is unscourable but light fugitive.

Candy - One of the units of mass (355.6 kg) in cotton trade in India.

Cannage - See 'Tear Drop'

Canopy - The fabric body of a parachute, which provides high air-drag when inflated.

Cantala - Cantala is the leaf fibre obtained from plant Agava cantala.

Canton - Plain merino wool worsted fabric occasionally also made from cotton warp and merino wool weft. This should not be confused with 'Canton Flannel' or 'Cantoon' both of which are cotton fabrics.

Canton Crepe - A sturdy silk dress material with a pebbly crepe surface with six S threads and six Z threads in arrangement and two S picks and two Z picks. Usually woven on box looms.

Canvas - A cloth usually made from cotton, flax, hemp, or jute in weights traditionally ranging from 6 oz/yd² (180 g/m²) and above. The weave is plain or double end plain. In cotton canvas, the yarns may be singles but are frequently plied; in other canvases, the yarns are generally singles. The warp predominates, and a feature of the heavier canvases is the very close packing of the warp, which is highly crimped over a straight weft. The term canvas covers cloths with a great variety of uses, but the salient features of all are strength and firmness (see also 'Duck').

Canvas (Garment) - A made-up interlining for a garment.

Canvas (Jute) - A plain weave cloth made wholly of jute with double warp and single weft interwoven, weighing not less than 407 g/m². The number of warp threads (ends/dm) shall be more than 118 and the number of weft threads (picks/dm) shall not be less than 55.

Canvas Making - The sewing together of all the pieces which form

the interlining of a jacket or coat either by hand or machine.

Cap - A headwear tailored or knitted to shape.

Cap Comforter - A knitted tubular garment without tassels; used for protecting head against cold. (See also 'Comforter').

Capella - A 2/1 twill weave mulberry silk fabric generally used as a dress material.

Carbonized Rag Fibre - The animal fibre recovered by carbonizing process, whether wet or dry carbonizing.

Note - Wool or hair recovered by the wet process is sometimes known as extract.

Carbonizing - A process involving the use of acids, acid producing chemicals or acidic gases to eliminate cellulosic matter from mixtures with animal or synthetic fibres.

Carded Sliver - The long continuous twistless strand of fibres produced by the carding machine.

Carded Yarn - Yarn, made from cotton or other fibres, which has been carded but not combed.

Cardigan - A knitted outer garment with long sleeves and front-opening with a closing device generally buttons and with border.

Carding - The separation and partial cleaning by processing of a tangled or matted mass of fibres to a filmy web by working the fibres between two closely-spaced, relatively moving surfaces, clothed with pointed wire, pins spikes or sawteeth.

Cargo Net - A wide meshed heavily constructed net, made from natural or man-made fibre ropes, used for loading and unloading ship's cargo.

Carpenter Line - Same as Bricklayer Line.

Carpet - A floor-covering generally having cut pile surface, traditionally woven, but currently also produced by other methods, e.g. tufting, bonding, or stitching the pile to a backing or supporting base (see also IS:11205-1984).

Carpet Backing (Primary) - Pre-formed material which acts as a carrier for the use-surface and which is often additionally used as an anchor for other parts of the substrate.

Carpet Backing (Secondary) - Fabric bounded on the back side of the carpet forming an underlay.

Carpet Square - A term applied to a carpet in rectangular form (with or without a border), traditionally at least 2 m at the shortest dimension and normally loosely laid.

Carpet Thread - A high quality hemp, jute, flax or cotton sewing thread used in binding the edges of carpets.

Carpet Twine - A hemp, jute, flax or cotton twine used for joining together two or more pieces of carpet.

Carpet Wools - Coarse wools which are generally, but not necessarily, mixed fleeces used for the production of carpets and druggets.

Carpet Yarns - Bulky soft twisted yarn for use in carpets.

Carpetting - A collective term for carpets and other manufactured fibrous floor coverings. The back may be covered by a supplementary coating of a bonding or cushioning material.

Carrier (Dyeing) - A product added to dye bath to promote the dyeing of hydrophobic synthetic fibres and characterized by affinity for, and ability to swell the fibre.

Carrier (Fibre or Yarn) - A fibre or yarn introduced at some stage of processing to support the main component, generally as an aid to further manufacture.

Carrier (Spinning) - A positive driven smooth metal roller set between the major drafting rollers on some worsted drawing boxes and spinning frames to control the fibres during drafting.

Note 1 - This is used in conjunction with a tumbler.

Note 2 - One, two or three lines of carriers may be employed, depending on the fibre length of the material being processed.

Carrotting - The modification of the tips of fur fibre by chemical treatment to improve their felting capacity.

CARUVA Yarn - See (d) under 'Coir Yarn'.

Carved Pile - See (a) under 'Pile'.

Case Cord - A cord consisting of two or more yarns twisted together, each yarn consisting of a cotton yarn covered in a long spiral by several rayon yarns. The resultant cord is soft and pliable.

Casein Fibre - A synthetic fibre made from protein, namely, casein which is obtained from milk by precipitation.

Casement Cloth - A light to medium weight weft faced fabric of cotton or man-made fibre yarns generally used for curtains and upholstery.

Casement Repp - A fabric heavier than repp used for curtains, hangings, etc, it usually has three to four times more ends than picks.

Cashemire de Soie - A high grade taffeta, usually made of fine silk yarn, which is given a finish to resemble Cashmere fabrics.

Cashmere Fabrics - A variety of fine merino weft face dress fabrics woven in 1-and-2 twill with a larger number of picks than ends/cm. Such fabrics are shrunk in width during finishing to render the weft more conspicuous. These fabrics do not contain any Cashmere (Pashmina) hair and hence should not be confused with Cashmere, Henriettas and Paramattas which are similar in structure to cashmere fabrics.

Cashmere Goat(genus: Capra hircus laniger) - Found in Ladakh and Tibet. It produces a mixed fleece of coarse outercoat and soft superfine undercoat. In India, Cashmere goat is known as Pashmina goat.

Cashmere Wool - The fine soft wool fibre which forms the downy undercoat of Cashmere goat, popularly known as Pashmina or pashmina wool in the Indian sub-continent.

Cashmere Yarn - Yarn made from the undercoat of Cashmere wool.

Note 1 - Yarns, fabrics and garments produced from the fine undercoat of other Asiatic goats.

Note 2 - The terms 'Cashmere', 'Cashmere Fabric' and 'Cassimere' have nothing to do with Cashmere i.e. Pashmina. This is deprecated.

Cassimere - Twill weave fabrics made from fine wools either in worsted warp and weft or in worsted warp and woollen weft.

Cat Lines - Manila lines of 4 strands and not less than 32 mm diameter used around a drilling rig for hoisting tools, pipes, etc. (Also known as Cat Head lines).

Catch - An underlap of material providing a backing to an opening to take buttons or a zip tape for fastening, e.g. fly-catch, button-catch.

Cationic Dye - A dye that dissociates in aqueous solution to give a coloured ion i.e. positively charged (see 'Basic Dye').

Cattle Rope - A 3-strand soft laid rope used by farmers for securing cattle.

Caustic Soda Crepe - A puckered or crepe effect made by shrinking action of caustic soda on selected portions of cotton fabrics.

Cavalry Twill - A firm warp-faced cloth in which the weave gives steep double twill lines separated by pronounced grooves formed by the weft. The name was originally applied to firm heavy-weight cloths for making riding breeches for cavalry, but was later extended to cover cloths used for rain coats and other clothing purposes.

Cellular - A term describing a fabric constructed so as to have a close and orderly distribution of hollows or holes. In woven fabric, this can be achieved by (a) honeycomb, (b) leno, or (c) mock-leno weaves.

Note - In certain sections of the trade, the term is restrictively used to describe leno cellular fabrics.

Cellulose Imago Print - A cellulosic fabric printed with a dispersion of pigment in a cellulose solution to produce a white on white or an opaque effect on white or pastel background.

Cement Bag - Bags made from jute fabric, usually measuring 71 x 48 cm and weighing 530 g. It has a valve at the side. It is made from double warp plain weave sacking fabric having 68 ends/dm and 39 picks/dm and weighing approximately 685 g/m² (see IS: 2580-1982)

Centre Root (BOOK CHAL) - See under 'Jute Fibre Characteristics'

Centre Selvedge - See 'Patent Selvedge'

Cerite - Nett silk from which natural gum has been completely removed.

Ceylons - Plain weave fabrics from cotton warp and woollen weft used for underwear and shirts.

CHADDAR - An Indian term for cotton fabric in plain, twill, diamond or honeycomb weave, used as a bed sheet or body cover.

CHADDI - An Indian term for briefs (see 'Briefs').

Chafe Mark - A streak or mark caused by friction in the dyeing or finishing of piece goods.

Chafes - Rough places in a cloth where rubbing has occurred.

CHAHAR GUL - A high quality woollen dress fabric made in Kashmir.

CHAHARBAGH Shawl - A woollen fabric of fine mesh produced in the Kashmir valley for use as veil by women. It is generally square in shape and has an area of about 4 m².

Chain (Coir) - Warp yarn in a coir matting.

Chain

- (a) Carpet - Warp threads, usually woven in pairs, between the warp way lines of pile and alternating over and under the weft.
- (b) Axminster: Spool-loom Overhead - A portion of the overhead mechanism of a spool-axminster or gripper-spools loom. The number of links corresponds to the number of rows of pile in one complete repeat of the design, or multiples thereof. The correct row is presented by means of the gripper, or transfer arms to the weaving point as required.

Chain Stitch

- a) Single Chain Stitch - A sewing stitch made from single

thread as shown below :

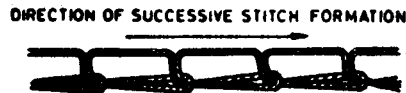


FIG. 17 SINGLE CHAIN STITCH

- b) Double Chain Stitch - A sewing stitch made from two threads as shown below :

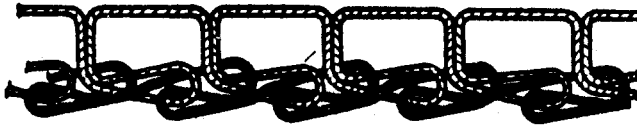


FIG. 18 DOUBLE CHAIN STITCH

Chain Warp - Warp threads, usually woven in pairs, alternating over and under the lower shot (weft yarn) and one or more top shots which are then bound and which enclose the stuffer yarns and the tufts or loops forming the pile.

Chalk Line - A 3-strand cotton or hemp line used by builders for lining up brickwork and by platers for setting out. The line is used by covering it with chalk powder which is transferred to the brickwork or steel plating by plucking.

Challis

- (a) A light, soft and pliable fabric of plain or twill weave usually printed in small floral designs but sometimes dyed in plain colours.
- (b) A light-weight soft fabric in silk warp and worsted weft originally made in Norwich (Britain).

Chambery - A dress material from silk or man-made fibre warp and worsted weft in twill weave.

CHAND - A square woollen shawl made in Kashmir for use of veil by women.

Channel - A narrow passage formed between plies of material in garment or by attachment of an additional ply of material, usually to house a draw cord.

Channel Patch - A channel shaped fabric fitting secured to the envelope to enable a rigid member to be laced thereto.

Chapands (French) - Waste silk from native reeling skin to CHARKHA silk waste.

Chaple Silk Yarn - Silk yarn spun from inferior cocoons and silk spinners waste.

Chaporaot - A very fine woollen dress fabric made in plain or twill weave from undercoat of Cashmere goat.

Char Length - The distance from the edge of the specimen exposed to the flame under specified test conditions, to the upper edge of the charred section of the specimen, expressed in metric units.

Character - A trade term adopted by the Australian Wool Board to indicate well-defined even crimp in the staple.

CHARKHA - A simple hand-operated contrivance for spinning yarn from natural fibres, also for reeling raw silk.

CHARKHA (Gin) - A simple hand-operated contrivance used for ginning of cotton.

CHARKHA Cotton - Cotton ginned with the aid of CHARKHA gin (also called BELNI), which is worked invariably by hand. [See also 'CHARKHA (Gin)'].

CHARKHA Silk - Raw silk produced on CHARKHAS.

CHARKHA Yarn - Yarn produced from natural fibres on CHARKHAS.

Charmelines - A merino wool dress fabric with a warp rib effect, produced by a three-shaft twill weave in two fold yarns.

Charmuse - Silk, cotton or rayon dress fabric with a satin weave that has a dull back and semi lustrous surface and drapes well. Used for paymer dresses, especially draped gowns.

CHARSUTI - An Indian term for fabric with four parallel yarns working as one.

Chasing - A cloth finishing operation usually for cotton and linens done on a calender having five or more rolls. Two layers (in some cases, more) of the cloth are run through the machine at the same time and face to face which gives a characteristic threadiness with a subdued lusture and the threads are not flattened.

CHASSUM (Silk) - A term popular in West Bengal, to denote the silk waste obtained during reeling of cocoons, from polyvoltine races e.g., Bengal Chassum.

CHAT - An Indian name for all types of cloth made of jute.

CHAVARA Yarn - See (g) under 'Coir Yarn'.

Checks - A variety of fabrics having rectangular patterns formed by two or more colours of warp and weft. Checks may also be brought about by the use of fancy yarns, cross dyeing, printing, etc.

Cheese - A cylindrical package of yarn usually cross-wound on a flangeless tube of wood, paper or other material.

Cheese Cloth - An open light-weight fabric in plain weave made

from carded cotton yarns originally used for wrapping cheese, meat, etc.

Chemical Cotton - Chemically purified cellulose from cotton or cotton linters intended for use in the cellulose industries.

Chemicking - Bleaching non-protein fibre materials by means of a dilute hypochlorite solution.

Chest Piece - An additional lay or layers of interlining in the front shoulder area.

Chesting - A finishing process in which the cloth after passing between all the bowls, usually, five, of a calender from bottom to top is wound upon itself on either of the two upper bowls and later stripped therefrom. This process reduces the size of the interstices between threads. When the process has been done once, the cloth is described as chested or single-chested and if done twice, the cloth is described as double-chested.

Cheviot

- (a) A British mountain breed of sheep producing coarse wool.
- (b) A medium wool of 56's quality or coarser.
- (c) rough woollen tweeds produced from Cheviot or similar breeds of sheep.

Cheviot Woollen Yarn - Woollen spun yarn made from cross-bred and medium wools and used for Cheviot type tweed cloths which require little felting.

Chiffon - A very light, sheer, open-mesh fabric, made from hard-twisted filament yarns in plain weave.

Chiffon Twist - Hard-twisted, single, raw silk thread having about 2000 to 4000 tpm; used for making chiffons, 'Mousseline de Seie' (French), etc.

Chiffon Velvet - A light-weight, soft velvet with a short thick pile.

CHIKKAN (or CHICKAN) - An Indian term for any fabric ornamented with eyelet embroidery obtained by a mixture of punch work with button-hole stitch using stem and flat stitches, also for producing conventional foliage and other effects.

Children's Socks - Seamless socks for children.

Chinchilla - Soft grey fur of a Peruvian and Bolivian rodent.

CHINDIES - Cut pieces of cloth arising during the normal course of manufacture and packing, which are 23 cm or less in length.

Chintz - A plain woven, brightly coloured, printed fabric with a

glazed finish. The glazed finish may be a temporary friction-calendered type or permanent cellulose type. Chintz is generally used for draperies and dresses.

Chlorinated Fabrics - All wool fabrics which are chlorinated in order to render them nonfelting or to improve their dyeability or printability. The term is also applied to fabrics made from chlorinated wool sliver or yarn.

Chlorinated Yarn - Yarn composed of wool fibres treated with chlorine by virtue of which they are rendered nonfelting simultaneously with increased dye absorption.

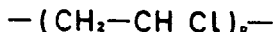
Chlorination - When used with reference to textile processing, a term indicating the reaction of a fibre with chlorine. Wool and wool materials are chlorinated for imparting nonfelting property.

Note - The chlorine may be in the form of the gas, or its solution in water, or it may be obtained from a suitable compound. Wet chlorination implies that the goods are treated in aqueous solutions containing a chlorine-yielding reagent. Dry chlorination implies treatment under non-aqueous conditions, e.g., by chlorine gas.

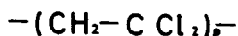
Chlorofibre

Constitution: Linear macromolecules having in the chain more than 50 percent (by mass) of vinyl or chlorinated vinyl monomeric units.

Examples: Polyvinyl chloride:



and polyvinylidene chloride:



Chop - A trade-mark or ticket on a book of raw silk indicating its grade and name of the producer or shipper.

Chopped Weft - Weft that has been partially severed.

Chromate Process - A method of dyeing in which the fibre is treated in a dyebath containing a suitable chrome dye together with ammonium chromate, where by a chromium complex is formed within the fibre.

Chromatic Colours - Those colours which possess hue, such as red, yellow, blue etc. As distinguished from the achromatic colours such as white, grey, slate, black.

Chrome Dye - A mordant dye i.e. capable of forming a chelate complex with a chromium atom.

Chrome Mordant Process - A method of dyeing in which the fibre is

pre-treated in solution of a chromium compound and subsequently dyed with a chrome dye to yield a dye-chromium complex within the fibre.

Chromosol Process - A method of dyeing similar to metachrome process except that here mordant used is a double oxalate of chromium and sodium or potassium known as chromosol mordant.

CHUNRI (CHUNGRI or CHUNGIDI) - An Indian term originally for cotton and silk sarees dyed by the knot tying method.

Circular-Knit Fabric - A fabric made in a tubular form on a circular knitting machine.

Classing - A trade term adopted by the Australian Wool Board to indicate grouping of fleeces into evenly defined lines according to fineness, length, colour, etc, (see also 'Wool Classing').

Clean Wool Content - The amount of wool base adjusted to standard contents of residuals and regain.

Cleanability - The ability of a textile floor covering to release normal soil on application of the appropriate cleaning processes.

Cleanness (Raw Silk) - The degree of cleanness of raw silk panels, determined on the basis of incidence of cleanness defects classified as super major, major and minor defects by using official standard photographs for cleanness. Cleanness is expressed as a percentage.

Cleanness Defects - Defects found in raw silk, such as waste, slugs, bad casts, knots, corkscrews, loops and loose ends.

Clear Finish - Finish usually given to fine worsted suitings or dress material to render the face side napless and to show the surface structure clearly.

Clear Woollen Finish - Clear face finish given to warp-face woollen fabrics such as buckskin, venetian and whipcord by manipulations in manufacturing and finishing processes.

Clearer Cloth - An all wool or wool blended machinery fabric, with a short dense nap, used for covering cleaning devices.

Clearing - A treatment applied to printed fabrics with the object of removing traces of unwanted dyestuff from, and improving the whiteness of the uncoloured area. The term is also used to denote an anti-chlor treatment given to wool goods that have been chlorinated. The term is also applied for removal of unfixed dyestuff from dyed goods.

Clearing (Yarn) - The process of removing imperfections, such as slubs, thick places, thin places, neps, projecting impurities, etc. from the body of the yarn.

Clem - A very small dart which is sewn and not cut.

Climbing Rope (Mountaineering) - A mountaineering rope used for roping to each other two or more climbers for the purpose of safety.

Clip Marks - A rectangular area of fabric, adjacent to the selvedge, which is characterized by bruising, lustre, surface disturbance, or a difference in colour from the adjacent normal fabric.

Principal Cause - This defect is caused by maladjusted stenter clip.

Clipped Carded Wool - Clipped wool with an admixture of carded wool up to 25 percent. Wool containing admixture of over 25 percent of carded wool is known as carded wool.

Clipped Wool - Same as shorn wool.

Clock Length - Length of material fed into the breaker card for one complete revolution of the clock pointer.

Cloque Fabric - See 'Relief Fabric'.

Closing - A sewing operation to seal a bagged out garment section.

Cloth - See 'Fabric'

Cloth (Garment) - The principal or outside fabric of a garment.

Note -This is the normal usage in the tailoring trade although any fabric may be described as a cloth.

Cloth, All Wool Melton Finish - Melton cloth woven from woollen-spun yarns using superfine wools.

Cloth, Blanket for Followers Coats - Heavy twill fabric made from homogenised natural brown grey wool.

Cloth, Collar, White - An undyed all wool heavy weight fabric woven in 2-and-2 twill weave from woollen-spun yarns.

Cloth, Drab Mixture, Woollen, Water Resistant - A heavy, all wool or wool-synthetic fibre blended twill fabric, made from woollen spun yarns, heavily milled and treated for water repellency. It is a khaki mixture shade obtained by blending dyed and undyed fibres. This fabric is used for making overcoats for army personnel.

Cloth, Woollen Kersey - All wool piece dyed 2-and-2 twill fabric.

Cloth, Woollen Superfine - Fabric made from fine merino wool and used mainly for making berets.

Cloth, Woollen, Twill Dyed - An all wool or wool-nylon blended 2-and-2 twill weave fabric made from woollen spun yarns, piece dyed and given a milled finish.

Clothes Stop Line - A 3-strand hemp or cotton line originally used

as a clothes line in naval vessels, now used for miscellaneous purposes.

Clothing Wool - Virgin wool of short staple length generally used for processing in the woollen system.

Cloudiness

- (a) In a weft knitted fabric, a defect consisting of ill defined areas of varying density attributable to the use of yarns of irregular thickness.
- (b) In a dyed fabric, a defect consisting of random, faintly defined uneven dyeing.
- (c) In a bleached fabric, a defect consisting of opaque patches, usually visible only in transmitted light, due to inorganic residue remaining after bleaching (see also 'Cloudy Cloth').

Cloudy Cloth - A term applied to cloudiness in dyed fabrics caused by uneven dyeing or faulty treatment during finishing. Cloudiness may also be due to defects in the yarns. (See also 'Colour Blurred' and 'Cloudiness').

Cloudy Web - Generally refers to card web giving a patchy appearance due to uneven distribution of fibres.

Cluster - An assemblage of two or more parachutes attached to a single load and generally designed to open simultaneously.

Coarse - A trade term adopted by the Australian Wool Board to indicate wool of large fibre diameter.

Coat - A sleeved outer garment capable of opening completely down the front and often, as in workwear, described further by length, e.g. 3/4 or full length.

Coated Backing - Backing to which has been applied a layer of rubber or plastics material.

Coated Fabric - A textile fabric on which there has been formed in situ on one or both surfaces, a layer, or layers, of firmly adherent coating material.

Coated Rope - A rope covered along its whole length with a product intended to improve its performance or to provide it with resistance to abrasion.

COATEE - A short length tight-fitting coat generally worn by ladies. Also known as 'KOTI'.

Coating - Any fabric used for making coats.

Cobbler - A piece returned for redyeing due to off-shade.

Cobourg - Coarser, heavier and stiffer variety of Cashmere fabric.

Cockle - The wrinkled appearance of a fabric in which non-uniform relaxation of shrinkage has occurred. (See also 'Cockling').

Principal Causes - Tension variations of ends or picks during weaving, from variations in the degree of stretch imposed on the yarn during earlier processes, from differences in the contraction of two or more yarns used accidentally or unintentionally in the cloth.

Note - Defect may be distributed over a large area of cloth or may be confined to isolated stripes, bars, or streaks.

Cockled Yarn - Defective yarn featured by small slubs usually caused by irregular drafting due to the presence of fibres which are too long for the roll settings.

Cockled Yarn (Linen) - Yarn with isolated loops of fibres protruding from the yarn surface owing to the relaxation of adjacent fibres that have previously been stretched during process.

Cockling

- (a) The curliness or crimpiness in fabrics. (See also 'Cockle').
- (b) An irregular surface effect in knitted fabrics caused by loop distortion due to variation in stitch and yarn twist.

Principal Causes - Irregular shrinkage in milling or scouring when yarns of different counts or quality, or with varying tensions are woven together; defective processing; etc.

Cockling: Corrugation; Sanforize Roughness - A crimped, rippled, wavy or pebbled place in a fabric showing distortion of the texture.

Principal Causes - This defect is caused during compressive shrinking by over feeding in which the shrinkage imposed on the fabric is greater than that compatible with the construction, or by poor moisture content control.

Cockspur Willey - See 'Willey, Tenterhook'

Cocoasack - Double-warp 2/1 twill weave sacking bags measuring usually 122 x 73.5 cm (normally with 102 ends/dm and 81 picks/dm), weighing approximately 1360 g, and with 5 cm wide green or blue stripes. It is used for packing cocoabeans.

Cocoon (Silk) - The silken shell spun by the silkworm larvae for their protection in the pupal stage.

Cocoonage (Silk) - Appliance used for mounting mature silkworms to enable them to spin cocoons; also known as CHANDRIKE.

Cod Line - A 3-strand heavy hemp or cotton lightly tarred line used for inland fishing.

Coffee Twill Bag - A double-warp hemmed twill sacking bag measuring usually 101.5 X 71 cm (with varying ends/dm and picks/dm ranging from 89 to 102 and 31 to 35 respectively), weighing approximately between 1135 and 1600 g, used for packing coffee.

Coffin - It is a cotton cord up to 3 mm diameter used by undertakers.

Coil - A continuous length of rope or line arranged in the form of a spiral.

Coir - A retted fibre obtained from husks of the coconut (cocos nucifera).

Coir Fenders - A spherical or cylindrical bundle of coir ropes or twisted yarns used as a shock absorber at the side of ship or boat for protecting it against the piers.

Coir Rope - A rope made from coir fibre mainly used by the shipping industry for mooring or general purposes.

Coir Rugs - Matting pieces with or without bristles cut to the required sizes and finished at the edges.

Coir Yarn - Yarn spun from coir fibres by hand or machine usually 2-ply. Different varieties of coir yarn are as follows:

- (a) **ALAPAT Yarn** - Superior quality yarn spun by hand or machine and having soft twist.
- (b) **ANJENGO Yarn** - Yarn made of clean, natural coloured hard-twisted coir with reasonable smooth appearance and good wearing properties.
- (c) **ARATORY Yarn** - Yarn made of clean, natural coloured hard-twisted coir with reasonable smooth appearance and being slightly hairy.
- (d) **ASHTAMUDY or CARUVA Yarn** - Yarn made from soaked fibre with medium twist and reasonable thickness, its runnage varies from 100 to 200 ft-lb.
- (e) **Beach Yarn** - Yarn spun from fibres of unsoaked or partly-soaked, coconut husk. It is of light to dark brown colour with varying quantities of pith adhering to the fibres.
- (f) **BEYPORE Yarn** - Hand-spun yarn having substantial amount of pith adhered to the fibres.
- (g) **CHAVARA Yarn** - Yarn produced from partly-soaked husk, hand spun, having medium twist and is pithy.

- (h) MANGADAN Yarn - Hard-twisted machine-spun yarn. It is used for the manufacture of floor covering, ropes and for agricultural purposes.
- (j) Roping Yarn - Thick hand-spun yarn used in the manufacture of ropes; also known as 'VANNUM Yarn'.
- (k) T-VYCOME Yarn - Yarn similar to vycome yarn spun from shaving bits of yarn collected during spooling or rehanding process for baling.
- (m) VYCOME Yarn - Yarn which is comparatively clean, light in colour, even in twist, and is soft.

Collar

- (a) Neck band, upright or turned over on a coat, dress, shirt, etc.
- (b) Band of lining, lace or other material, which completes the upper part of a garment around the neck.

Collar Stand - That part of a collar which joins the neck edge of the garment and terminates at the crease of the collar where the fall commences.

Colour

- (a) That characteristic of the visual sensation which enables the eye to distinguish difference in its quality, such as may be caused by difference in the spectral distribution of the light rather than by differences in spatial distribution or fluctuations with time.
- (b) Same as (a), but applied directly to the stimulus or the source (primary or secondary) giving rise to the sensation. For brevity, the stimulus is often referred to as the colour.
- (c) That property of an object or stimulus, or quality of a visual sensation, distinguished by its appearance of redness, greenness, etc, in contradistinction to whiteness, greyness, or blackness (i.e. chromatic colour in contradistinction to achromatic colour).

Colour (Coloured) - Refers to those wools containing non-scourable colour, e.g. canary yellow, heavy charcoal stain, non-scourable brands, and fleece rot.

Colour Blurred (Patchy Dyeing) - Dyed fabric having a patchy appearance.

Principal Cause - Presence of improperly dispersed dyestuff.

Colour Discharge Printing - The production of coloured design on dyed textile fabrics by printing with a composition containing

the discharging agent and other dye resistant to discharging action of the discharging agent.

Colour Flecks - A small length of coloured yarn appearing in the cloth due to unwanted contamination of yarn.

Principal Causes - Coloured threads, fabric pieces, etc., present in fibre bales; colour marking used for identifications at various stages of production; coloured fluff floating in ring frame department; etc.

Colour Out - Colours missing from an area of design in a printed fabric.

Principal Cause - This defect is often caused by a blocked screen or a faulty colour supply.

Colour Quality - A specification of colour in terms of both hue and saturation, but not luminance.

Colour Smear - Colour smudged out of the intended design area.

Colour Stain - See (a) under 'Stains'.

Colour Value - The ratio between the strengths of the dyes yielding dyeings of equal, visual strengths. In printing, this term is synonymous with tinctorial value.

Colour-Contaminated Warp Yarns - A wrong colour appearing in several (though not necessarily adjacent) warp yarns for discrete distances.

Principal Cause - This defect may be caused by the contamination of warp yarns of, e.g. one beam during warp preparation or warp dyeing.

Coloured Blotches (Blurred or Dark Patches) - An unwanted blotch in a printed pattern.

Coloured Fibres - A trade term adopted by the Australian Wool Board to indicate natural brown, grey or black fibres or tufts grown by an otherwise white sheep and also fibres discoloured and stained by urine or unscourable marking fluid.

Coloured Lake - An insoluble compound produced with suitable dye-stuffs and metallic salts or bases by means of a precipitating agent.

Coloured Resist Printing - The production of multi-coloured design on textile fabric by dyeing, printing with a resisting agent and another dye resistant to effect of resisting agent and then developing so as to obtain coloured effect on a coloured background.

Comb Sliver - Continuous assembly of parallel fibres, delivered by the comb, for use in the worsted spinning industry.

Comber's Waste - Waste from the combing operation. It is a soft waste.

Combination Suit - An underwear worn by ladies in which vest and drawers/briefs are knitted in one piece. Also known as 'Union Suit'.

Combined Fabric; Laminated Fabric - A material composed of two layers at least one of which is a textile fabric, adhering closely together by means of an added adhesive or by the adhesive properties of one or more of the component layers.

Combined Rope - A rope made from natural or synthetic fibres whose strands are formed from a combination of fibre yarns and steel wires.

Combined Underlay, Combined Backing - Pre-formed underlay which is attached to the back of the textile floor covering by one of several processes.

Combing - Straightening and parallelizing fibres and removing short fibres and impurities by using a comb or combs assisted by brushes and rollers, pins and sometimes by knives.

Combing (Worsted) - A process for preparing comb sliver by removal of noils and impurities such as vegetale matter, kemps and neps from the worsted carded sliver.

Combing Wool - Virgin wools long enough, generally above 45 mm, to be capable of processing on the worsted system.

Comeback Wool - The wool produced by crossing two breeds of sheep to produce a cross-bred, then crossing the cross-bred with one of the original breeds; thus a comeback to the original.

Note - This term is usually used in the trade for wools which have bred back towards the merino.

Comforter - A knitted tubular garment without tassels; used for protecting neck and chest/head against cold (see also 'Cap Comforter').

Note - It is longer than cap comforter.

Commercial Allowance (Conventional Allowance) - An arbitrary value equivalent to the commercial moisture regain plus an approved allowance for finish formally adopted for use with the oven-dry mass when calculating: (a) the linear density, or (b) the commercial or legal mass of a shipment or delivery of any specific textile material.

Commercial Mass (Weight) - The oven-dry mass of textile materials after removal of normal finish plus the mass corresponding to their commercial moisture regain.

Note - In case of dipped tyre cord yarns, the commercial

mass is the sum of the oven-dry mass and the mass corresponding to the commercial moisture regain (or commercial allowance) plus an increase for dipping.

Commercial Moisture Regain - The agreed value to be added to the mass of a defined material (after drying it using prescribed methods) in order to obtain its commercial mass, linear density or mass per unit area. It is expressed as a percentage of the mass of the extracted and dried material.

Note - The 'commercial moisture regain' and the 'commercial allowance' are sometimes referred to as the 'conventional allowance'.

Compatible Dyes - Dyes which, when mixed together, behave in dyeing as a homogeneous dye having similar hue and fastness properties.

Compound Fabric, Woven - A generic term for layered fabrics in which the separate layers or plies, each with its own warp and weft, are produced simultaneously and stitched together in one weave process. Cloths comprising two plies are known as double (or two ply) cloths and others by the number of plies they contain, e.g. three ply cloth.

Compressibility - Ease of squeezing.

Compressional Resilience - The ability of a fibre or yarn to recover from compressional deformation.

Conculding Line - Low-twisted heavy manila yarn used as steps of Jacob's ladder.

Condense Dye - A dye which, during or after application, reacts covalently with itself or other compounds, other than the substrate, to form a molecule of greatly increased size.

Condenser (Ring-Doffer or Tape) - The last section of a woollen card. It divides a broad thin web of fibres into narrow strips, which are then consolidated by rubbing into slubbing of circular cross-section.

Condenser-Spun - Descriptive of yarn spun from slubbing that has been consolidated from strips of card web by rubbing.

Condition (Wool) - A trade term adopted by the Australian Wool Board to indicate the presence of grease, wax, suint, moisture, etc.

Conditioned Mass - The mass of a textile material conditioned in the standard atmosphere for testing.

Conditioning - To allow textile materials (raw materials, slivers, yarns and fabrics) to come to hygroscopic equilibrium with the surrounding atmosphere or with the standard atmosphere for testing. (See IS:6359-1971).

Cone

- (a) A conical support on which yarn is wound ; and
- (b) A conical package of yarn wound on a conical support.

Cone System - See 'Drawing'.

Continuous Filament Yarn - A yarn composed of one or more filaments that run the whole length of the yarn.

Contour Stitching - Automatic sewing along or near the edge of a garment part. The shape may be predetermined or edge following.

Contract Net Weight (Bale)

- (a) Cloth- The weight as obtained from the specified length per bale, nominal width and weight per square metre of cloth. It is calculated as follows:

Contract net weight of a bale (kg) =

$$\frac{\text{Nominal width (cm)} \times \text{Specified length(m)} \times \text{Weight (g/m}^2\text{)}}{10^5}$$

- (b) Bags- The weight as obtained by multiplying the nominal weight of a bag and specified number of bags per bale.

Contract Regain - The percentage moisture regain on the basis of which the corrected net mass is calculated for trading purpose.

Conventional Bundle System - A production system in which bundles pass for allocation to the next operation.

Convolution - Natural twist in cotton fibre.

Cooking (Silk) - The process by which the silk cocoons are treated in boiling water for a shorttime with a view to softening the filament for easy unwinding during the subsequent reeling process.

Cop - A package of yarn, tapered at one or both ends, produced on spinning frames or weft winders. The cop from spinning frame is either re-wound or directly used as weft in shuttles.

Copper Number - The mass in mg of copper reduced from the cupric to cuprous state by 100 g of cotton under specified conditions. This is used as a measure to assess the reducing power of cotton.

Cord - A product generally less than 4 mm dia composed of several strands of any construction, twisted or braided and structurally balanced to maintain compactness.

Cord Carpet - A loop-pile carpet woven over an unbladed round wire.

Note - Weaving is carried out in a similar manner to that

for Wilton carpet on a Wilton loom, and the carpet is therefore often referred to in the industry as cord Wilton.

Cordage - All kinds of ropes, lines, cords and twines manufactured from natural or man-made fibres.

Cordon Yarn - A two-ply union yarn made from a single cotton yarn and a single, worsted or woollen yarn.

Cordonnet Silk - Thick soft silk yarn consisting of two or more strands twisted together in one direction. Each strand being made of a number of singles loosely twisted in the opposite direction.

Corduroy - A cut weft-pile fabric in which the cut fibres form the surface. The binding points of the pile wefts are arranged so that, after the pile has been cut, cords or ribs are formed in the direction of warp.

Note - Velveteen fabrics are sometimes cut to give a corduroy appearance.

Corduroy (Knitted) - See 'Rib Fabric (Knitted) (2 x 2)'.

Core (or Heart) - An assemblage of yarns with or without twist, used to fill the empty space formed along the axis of the rope and braided cord to prevent distortion in their shape.

Core Circumference - The size of a jute, manila, hemp or sisal or synthetic core used in the manufacture of fibre core for steel wire ropes.

Core Sample - A trade term adopted by the Australian Wool Board to indicate wool sample drawn by coring methods from a lot, bulk or consignment.

Core Spun Thread - A thread made from yarns which are a combination of continuous filaments, providing the core and staple fibres, providing the sheath.

Corkscrew Fabrics - A fine worsted fabric in which a warp rib twill effect is formed running at a flat angle.

Corkscrew Yarn

- (a) A term which, when applied to conventional folded yarns, indicates that the yarn is faulty due to spiralling of one or more of the component ends. This may be caused by one or more of component ends differing in count, twist direction, twist level, or tension from the remainder.
- (b) A two ply yarn in which a soft-twisted thick thread is wound spirally round a hard-twisted one.

Corkscrews, Heavy - Imperfections in cocoon filament that are more than twice the diameter of the yarn, they cause damage if not removed.

Cornsack Bag - Bags made from Australian cornsack cloth normally measuring 104 x 58.5 cm (see IS: 2875-1964).

Cornsack Cloth - A double warp, 2/1 twill weave sacking jute cloth having 102 ends/dm and 35 picks/dm and weighing 78 g/m² (see IS:3750-1966).

Correct Invoice Mass (Weight) - The mass of a consignment of a textile material which is declared on the invoice. It is usually numerically equal to the commercial mass.

Corrected Net Weight (Bale) - The weight obtained by adjusting the actual net weight on the basis of actual regain to the contract regain. It is calculated as follows:

Corrected Net Weight of a Bale (kg) =

$$\frac{\text{Net Weight (kg)} \times (100 + \text{Contract Regain Percent})}{(100 + \text{Average Moisture Regain, percent})}$$

Corridor Mats - See (c) under 'Mats'.

Corset - A stiff tight-fitting undergarment worn by ladies to support body or mould the figure. It extends either from the bust or waist to just below the hips.

Cortex - The body of wool or hair fibres. It consists of several elongated cortical cells. In merino type wool, these cortical cells are of two types, namely, reactive component called ortho-cortex and less reactive component called para-cortex.

Cotted Wool - Wool fibres which have felted together during its growth on the body of the sheep to form a cotted fleece. Also known as 'Matted Wool'.

Cottering - The entanglement of the fibres or filament of a yarn, or of one yarn with another, occurring during their passage through the guiding elements of winding, warping or knitting machines.

Cotton - Unicellular seed hairs of the Genus Gossypium.

Cotton Bagging - Bagging cloth used for wrapping cotton bales (see also IS:4436-1967).

Cotton Count - The linear density of cotton yarn expressed as number of 840-yd hanks/lb.

Cotton Flannel - See 'Flannelette'.

Cotton Lap (Warp Knitting) - A traversing motion in the form of open laps in which warp threads progress by one needle space at each course.

Cottonsack - A hemmed hessian bag measuring about 216 x 114 cm (normally with 38 ends/dm and 39 picks/dm), weighing approximately 1360g. The bag is usually without stripes and tar sewn.

Count (Jute) - See 'Grist'.

Count of Reed - See 'Reed Number'.

Coupling - To combine a suitable organic component, usually a phenol, with a diazonium salt in such a way as to form an azo compound.

Count of Yarn, Yarn Count, Yarn Number, Yarn Linear Density - A number indicating the mass per unit length or the length per unit mass of a yarn.

Note - Various counting systems, using different units of mass and length, have been in use, so the system used must be stated. The recommended system is tex.

Conversions

- a) Direct Systems - To find the count in tex, given that in another system, multiply the given count by the conversion factor. To find the count in any system, given that in tex, divide the count in text by the conversion factor.
- b) Indirect Systems - To find the count in tex, given that in another systems divide the conversion factor by the given count. To find the count in any other system, given that in tex, divide the conversion factor by the tex value.
- c) General Conversions - To convert the count in one system to that in another, convert to tex and then convert to the second system by means of the above rules.

YARN COUNT SYSTEMS

a) Direct Systems

<u>System</u>	<u>Unit of mass</u>	<u>Unit of Length</u>	<u>Conversion Factor to Tex</u>
Tex	gram	kilogram	1
Denier	gram	9 000 metres	0.111 11
Linen (dry spun), hemp, jute	Pound	14 400 yards (spyndle)	34.45
Silk	dram	1 000 yards	1.938
Woollen (Aberdeen)	Pound	14 400 yards	34.45
Woollen (American grain)	grain	20 yards	3.543

b) Indirect System

<u>System</u>	<u>Unit of Length</u>	<u>Unit of Mass</u>	<u>Conversion Factor to Tex</u>
Asbestos (American)	100 yards (cut)	pound	4 960
Asbestos (British)	50 yards	pound	9 921
Cotton bump yarn	yard	ounce	31 000
<u>Cotton (British)</u>	840 yards (hank)	pound	590.5
Cotton (Continental)	kilometre	1/2 kilogram	500
Glass (USA and Great Britain)	100 yards	pound	4 960
Linen (wet spun)	300 yards (lea)	pound	1 654
Metric	kilometre	kilogram	1 000
Spun silk	840 yards (hank)	pound	590.5
Woollen (Alloa)	11 520 yards (spyndle)	24 pounds	1 033
Woollen (American cut)	300 yards (cut)	pound	1 654
Woollen (American run)	100 yards	ounce	310.0
Woollen (Dewsbury)	yard	ounce	31 000
Woollen (Galashiels)	300 yards (cut)	24 ounce	2 480
Woollen (Hawick)	300 yards (cut)	26 ounce	2 687
Woollen (Yorkshire)	256 yards (skein)	pound	1 938
Woollen (Yorkshire)	yard	dram	1 938
Worsted	560 yards (hank)	pound	885.8

Count Strength Product - A number obtained by multiplying the breaking load of skein of yarn by the count of yarn expressed in an indirect system (e.g. Cotton count x pounds). This is also known as 'Break Factor'.

Note - A statement of the break factor of the skein must indicate the circumference and number of wraps in the skein if this is not otherwise apparent; without information on the number of wraps and circumference, a statement of the break factor is not correct.

Course - A transverse row of loops in a knitted fabric or garment.

Courses per 5 cm - The number of courses in 5 cm measured along a wale of a knitted fabric or garment.

Cover

- (a) The degree of evenness and closeness of thread spacing. Good cover gives the effect of a uniform plane surface and cannot be obtained with hard twisted yarns.
- (b) The degree to which, in fabric processing, the underlying structure is concealed by the finishing materials or treatments.

Cover Factor - A number that indicates the extent to which the area of a cloth is covered by one set of threads. By introducing suitable numerical constants, its evaluation can be made in accordance with any system of counting. For any cloth there are two cover factors; warp cover factor and weft cover factor. The traditional cover factor in the cotton system (sometimes known as 'Peirce's cover factor') is the ratio of the threads per inch (25 mm) to the square root of the cotton yarn count.

Coverall - A one piece type of legged workwear often capable of being fastened at wrists and ankles.

Covering Stitch - A type of chain stitch produced on twin-or multi-needle machines, used for covering seams.

Covert Coating - A light warp-face shower-proofed overcoating in twill weave characterized by its mottled appearance due to the use of grandrelle yarns or marl yarns in the warp. Usually, it is made with union twist warp (i.e. cotton and wool yarns twisted together) and worsted woollen weft.

Cow Rope - See 'Cattle Rope'.

Crab Line - Manila, sisal or man-made fibre line, 3-strand, 4 mm dia used in fishing.

Crabbing - A process used in the worsted trade to set the fabric in a smooth flat state so that it will not cockle, pucker or wrinkle during subsequent wet processing. The fabric is treated in open width and under warp-way tension in a hot or boiling aqueous medium, the tension being maintained while the fabric is cooling.

Cracked Selvedge - A selvedge in which two or more adjacent warp yarns, not including the catch thread, are ruptured.

Principal Causes - This defect is often caused by mechanical damage or unbalanced warp tensions.

Crack - A narrow streak running parallel to the warp or weft yarns due to pronounced opening between two adjacent yarns. (See

also 'Reed Mark', 'Warp Crack' and 'Weft Crack').

Principal Causes - Mechanical defects in the loom such as loose crank-arm of crank-shaft bearing, clutch not grabbing promptly, loom banging off, too much warpwise play in reed, improper let-off, damaged or defective reed, etc.



FIG. 19 CRACK

Crackers - Manila or man-made fibre rope usually 56 mm dia and above, used in well drilling in conjunction with drilling cable rendering spring or elasticity to the wire line.

Crammed Pick - See 'Pick, Dead'.

Crape Cord - A cord consisting of from one to four strands, each strand comprising a core covered by severeral fine threads in a long spiral, over wrapped in a shorter spiral in a reversed direction by a strong thread, giving a soft crepe or spiral effect. When two or more strands are used each strand is over twisted and these are laid together and reverse twisted.

Crash - A fabric, originally made of linen, which has an irregular appearance, due to the use of thick, uneven yarn, particularly in the weft. Woven in plain or fancy crepe weaves, cloths of linen, cotton, spun rayon and unions of these are now made. Typical linen crash fabrics for towels are plain woven from 16 to 25 lea (66 to 103 tex) flax tow yarns.

Cratch (Narrow Fabrics) - A type of frame or creel for carrying the warps and their tensioning devices. It is situated behind the loom in an upright position and occupies the full width of the loom frame. It is usually divided into vertical section by wood or metal struts so as to give the same number of sections as there are reed spaces in the loom. The warps are placed in the cratch and rotate on spindles.

Crease (Defect) - An unitentional fold in a fabric that may be introduced at some stage in processing (see 'Crease Mark', 'Rope

Marks').

Crease (Printing) - A break in design caused due to crease or wrinkles in the body or the selvedge of the cloth during printing.

Crease Mark - A mark left in a fabric after a crease has been removed.

Principal Causes - Mechanical damage to the fibres at the fold, by variation in treatment due to the construction along the fold, or by disturbance of the fabric structure.

Crease Recovery - The measure of crease-resistance, specified quantitatively in terms of crease-recovery angle.

Crease Resistance - A term used to indicate the capacity of a textile material to resist and/or recover from, creases incidental to its usage.

Crease Streak - A dyed-in mark of a crease, usually along the warp direction, of a lighter colour within the crease area and often with edges darker than the adjacent normal fabric.

Principal Cause - This defect is often caused by the fabric being pad-dyed whilst creased.

Crease-Resist Finish (or Easy-Care Finish) - A finishing process, mainly for cellulosic fabrics, that confers the characteristic of increased recovery from creasing, a property not inherent.

Creel Mats - See (d) under 'Mats'.

Creep - Deformation which is time dependent and exhibited by a textile material subjected to continuing load. Creep is recoverable or non-recoverable following removal of the applied load.

Creep, Primary - The recoverable component of creep after some time.

Creep, Secondary - The non-recoverable component of creep.

Crepe - A fabric, characterized by a crinkled, puckered or pebbly surface, with highly twisted yarns in the warp or weft or both. Similar effect is also obtained by using normal twisted yarn and crepe weave.

Crepe De Chine - A finely crinkled plain weave fabric with a smooth and lustrous surface exceptionally soft, light-weight and well-draping. Crepe effect is obtained by alternating two weft yarns twisted in one direction with the next two yarns twisted in the opposite direction.

Crepe Embossing - The embossing of a fabric with a pattern resembling a true crepe. The effect may be either permanent or not, according to:

- (a) the nature of the fibre;
- (b) the conditions of embossing; or
- (c) the post finishing treatment.

Crepe Fabric (Knitted)

- (a) Any warp or weft-knitted fabric made wholly or partly from crepe yarn.
- (b) A double-faced warp-knitted fabric with more rows of cleared stitches per unit of length on one side than on the other.
- (c) A weft-knitted fabric of irregular surface structure made by random tucking on one set of needles.

Note - A crepe yarn may or may not be used to produce fabrics referred to in (b) and (c) above.

Crepe Flannel - An all wool fabric of plain or twill weave with a soft handle and crepe effect.

Crepe Georgette - A light-wight, semi-shear, plain-woven crepe, dull in appearance, woven with highly twisted yarns, alternating in 'S' and 'Z' twists in both warp and weft.

Crepe Marocain - Heavy dress-weight 'canton crepe'. The weft is coarser than the warp and gives a cross-ribbed effect.

Crepe Yarn - A twisted single yarn which, when woven into a cloth of suitable construction and given the appropriate finishing treatment, is capable of producing a pebbled surface effect.

Note 1 - Originally, highly twisted natural silk yarn.

Example : 3/13/15 denier, twist either S or Z, 2200 tpm.

Note 2 - Crepe yarns are produced in a similar construction from other natural and man/made fibres.

Crepe-Back Satin - A fabric characterized by a satin weave on the face and a crepe on the back. The weft is generally of crepe twist. The fabric appears dull on one side and lustrous on the other. It is also called 'Satin-Back Crepe'.

Crepe-de-Chine (French) Yarn - Hard twisted yarn, usually with 1600 to 2800 tpm generally made from 3 to 5 raw silk threads. It is used as weft in Crepe-de-Chine.

Crepe-Georgette Yarn - Twisted yarn usually with 2000 to 3600 tpm, generally made of two threads of raw silk.

Crepillage - Undesirable pebbly appearance in a fabric.

Principal Cause - Insufficient or uneven weft tension.

Creping

- (a) A suitable wet treatment that allows the relaxation of the strain of highly twisted crepe yarns and so produces the characteristic crepe effect in the fabric.
- (b) A chemical treatment designed to produce an effect similar to (a).

Crepline - A worsted dress fabric from lustre wools, woven in various modification of 2-and-2 warp rib weave which give a greater proportion of warp on the surface and produce an irregular effect of a crepe character.

Crepon - A fabric similar to crepe but heavier, characterized by blister or pucker effect in stripes or figures formed by thick, alternately twisted warp yarns.

Crew Neck - A term applied to neck-opening designed, cut or finished in slightly curved form.



FIG. 20 CREW NECK

Crimp (Fibre) - The waviness of fibre.

Note - The fibre characteristic may be expressed numerically by reference to the number of waves or crimps per unit length or, by the difference in distance between points on the fibre as it lies in an unstretched condition and the same two points when the fibre is straightened under suitable tension, expressed as a percentage of the unstretched length.

Crimp (Yarn) - The waviness or distortion of a yarn due to interlacing in the fabric.

NOTE 1 - In woven fabrics, the crimp is measured by the relation between cloth length and the corresponding length of yarn when it has been removed from the cloth and straightened under suitable tension.

Note 2 - Crimp may be expressed numerically as (a) percentage crimp, which is $100 \times$ difference between yarn and cloth length divided by cloth length; or (b) crimp ratio, which the ratio of yarn length to cloth length.

Note 3 - This definition could logically be applied to knitted fabrics or fabrics of pile construction, but it is preferable to employ special terms, such as, 'stitch length', 'take-up' and 'terry ratio'.

Crimping/Texturizing - Processes usually applied to continuous filament yarns made from or containing thermoplastic fibres to impart high stretch character.

Crinkled Yarn - A stretch yarn in which the deformation is wave like. The crimp is obtained by knitting a yarn into a fabric, heat setting the fabric and then back winding the yarn from the fabric.

Crisped - A term used in describing an aspect of make-up of jute fabric; it describes a jute fabric folded lengthwise at the middle from selvedge to selvedge.

Crocheting - An operation of producing fabric with the help of crochet hooks.

Crocking - The rubbing off of the dye from wet or dry fabric.

Crofting - The oldest process of bleaching linen by soaking in an alkaline solution and drying in presence of sun on grass until it becomes white.

Croisure - A technique of twisting raw silk over itself in the process of reeling with the object of consolidating the different filaments constituting raw silk, rounding off the angularities of the thread and squeezing off the extra moisture and gum.

Cross Dyeing - A dyeing of one component of a mixture of fibres after at least one of the others has been dyed already.

Crop-End (Fibre) - See under 'Jute Fibre Characteristics'.

Cropping - A process of shearing the protruding fibres from the surface of the cloth in order to give the cloth an improved appearance.

Cross Plating - In rib-plated fabrics, a reversal of the yarn positions within all the stitches contained in certain courses.

Note - A plated rib fabric shows one colour on the plain wales and the other colour on the rib wales and reversal of the yarn positions for a number of courses, as in 'Cross Plating' produces a check effect in two colours.

Cross Pocket - A pocket which lies horizontally. In the case of trousers the pocket mouth can run from the waistband on the front to a point approximately 10 cm down the side seam from the waistband.

Cross Seam - The seam joining two adjacent panels in a gore.

Cross Stitch - A hand stitch formed by passing the needle alternatively on and off the edge slightly through the material and in advance of the last stitch. Used as a substitute for felling or for ornamentation of raw edges.

Cross-Bred - The term used to denote sheep and the wool.

- (a) Sheep - Progeny of two different breeds of sheep in the broad sense of the term, though this term is often applied to indicate a cross between merino and other sheep, such as Lincoln.
- (b) Wools - Wool produced generally, though not necessarily, by the cross-bred sheep. This is of three types, namely,
- i) Fine cross bred wool - of 56 to 58s fineness grade (26-29 microns).
 - ii) Medium cross-bred wool - of 48 to 54s fineness grade (30-35 microns).
 - iii) Coarse cross-bred wool - below 48s fineness grade (above 36 microns).

Cross-Bred Yarn - Yarn made from cross-bred wool.

Cross-Joining - An operation in which two lengths of carpet are joined by seaming in locations other than the selvages.

Crotch (Crutch, Fork) - The region of the garment corresponding to the fork of the human body; commonly the place at which inside leg seams join.

Crowfoot Narrowings - A term used to denote two-needle narrowings.

Crown - The upper portion of the canopy.

Crows' Feet - A puckering effect, usually in the heel or toe of circular-knitted hosiery and generally associated with the suture line.

Crows' Feet (Defect) - Cloth breaks or wrinkles of varying degrees of intensity and size, resembling bird's foot prints in shape, and occurring during the wet processing of fabrics.

Crutch Piece - A piece of fabric used at the bottom of the seat of drawers to join the two-leg portions.

Crutchings - Wool removed from the back portion of the thigh of the sheep a month or two before final shearing.

Cuban Sugar Bag (Cubans)- Bags made from 2/1 twill weave sacking cloth measuring about 122 x 73.5 cm weighing approximately 1135 g; the cloth normally having 102 ends/dm and 31 picks/dm.

Cuff - The lower part of the sleeve or leg of a garment which usually has a plain turned in edge. A turned up sleeve may be described as a gauntlet cuff.

Cummer Bund- Waist band, either folded or pleated, worn over the top of trousers.

Cup Seaming - Joining two pieces of knitted fabric on a selvedge-

to-selvedge basis by means of a chain stitch production on a sewing machine in which the fabrics are moved forward between revolving feed cups (compare linking).

Cupro

Constitution: Cellulose II.

Example: Regenerated cellulose obtained by cuprammonium process.

Curing - The heat-treatment of textiles (fibres, yarns, and fabrics but mainly fabrics) designed to complete the polymerization of condensation reaction of added substances.

Curled Pile - See (b) under 'Pile'.

Curled Selvedge - See (b) under 'Defective Selvedge'.

Curled Yarn - Worsted yarn in which the curls are introduced by over-twisting a large number of yarns, setting them and then untwisting into individual yarns.

Curtains - Of trousers. Pieces of material (usually lining) put across the top of the undersides under the waistband from side seam to seat seam.

Cushion Sole - The reinforced sole with terry loop surface in knitted footwear.

Cut (Yarn)

(a) A length of warp required to weave a piece of cloth; or

(b) In the jute and flax trade, a skein measuring 274 m.

Cut Cloth - A continuous length of cloth.

	<u>Hessian</u>	<u>Sacking</u>
Cut (or full cut)	82 m or more	73 m or more
Medium cut	37 m or more but less than 82 m	37 m or more but less than 73 m
Short piece	18 m or more but less than 37 m	14 m or more but less than 37 m

Cut Glove - See 'Cut Hosiery'.

Cut Hose - See 'Cut Hosiery'.

Cut Hosiery - Hosiery made to shape by cutting out and seaming flat or tubular knitted fabric.

Cut Marks (or Keel) - Marks made at intervals of definite length on warp during sizing.

Cut Pile - See (c) under 'Pile'.

Cut Selvedge - See (c) under 'Defective Selvedge'.

Cut Stocking - See 'Cut Hosiery'.

Cut Underwear - See 'Cut Hosiery'.

Cut Weft - A defect caused by the use of weak weft with a strong warp, showing as pin holes in the finished fabric.

Cut, Make and Trim - A section of the industry in which a contractor is supplied with materials and designs in order to produce garments for a principal.

Cut/Loop Pile - Pile of a carpet formed, during manufacture, by loops and tufts of different lengths or of the same length.

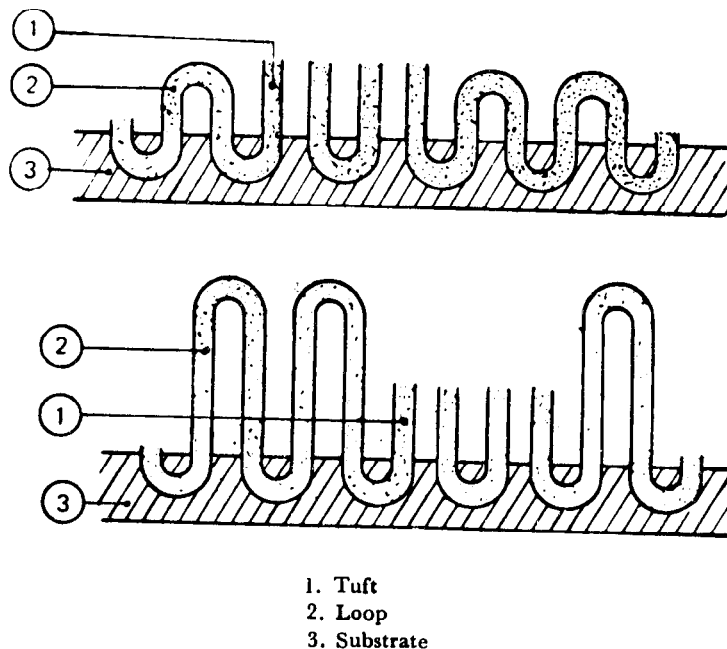


FIG. 21 CUT/LOOP PILE (LONGITUDINAL SECTION)

Cuticle - See 'Epidermis'.

Cuttings - Hard and barky portions of jute strand cut off from the root end or crop end of the raw jute strands.

Cuttle

- (a) To place cloth in loose transverse folds, usually in open width.
- (b) To fold finished cloth down the middle and place it in transverse folds of predetermined length.

Note - Folding finished cloth down the middle is termed 'rigging' in the wool trade.

Dags (Daggings) - Staples or locks of wool from the breech area heavily coated with dung. Such wools should not be classified as crutchings.

DAISEE Jute - See 'Jute'.

DALA or Tray - Local term to denote the receptacles to hold the silkworms during the period of rearing.

Damask - A firm, lustrous reversible fabric with a satin or twill ground and somewhat similar in appearance to brocade but more flat.

Damping - Applying moisture to fabric, prior to pressing, by forcing the mist through the fabric.

Dark Patches - See 'Coloured Blotches'.

Darning - Correction of defects, imperfections and damages in fabrics and garments by thread and needle. Also known as 'Mending'.

Dart - A wedge or diamond shape removed from the surface of a garment part by stitching or by cutting and stitching to contribute to the shape of the garment.

(a) Fish Dart - A dart cut at the waist to give a closer fit.

(b) V-Dart - A dart provided to give a better fit at the seat.

DASTANA - An Indian term for glove (see 'Glove').

Deacetylated Acetate

Constitution: Cellulose II.

Example: Regenerated cellulose obtained by approximately complete deacetylation of a cellulose acetate.

Dead fibre

(a) Textile Floor Covering - That part of fibre in a needled pile textile floor covering, which forms or is incorporated in the substrate and which does not form part of the effective pile.

(b) Cotton - Immature cotton fibres.

(c) Wool - A term commonly applied to denote kemps in wool or wool materials.

Dead Frame Yarn (Carpet) - Pile type yarn embedded totally in the substrate. It may be of various types and colours and may replace pile-forming yarn in one or more frames, thus avoiding variations of the thickness of the substrate. Alternately, it may also be included as complete frames to give extra filling and cushioning to the substrate. In this case it may be substituted for stuffer warp yarns.

Dead Weight Volume (Bale) - The volume calculated from the contract weight of a bale on the basis of 1.3935 m³ to a tonne or 50 ft³ to a ton.

Dead Wool - Wool taken from sheep that have died from natural causes. It should not be confused with dead fibre.

Dead Yarn (Carpet) - The pile yarn in a multiframe Wilton carpet which lies completely flat in the substrate and is not being raised by the jacquard mechanism. It excludes all yarn forming the effective pile and the pile root. (See Fig.67).

Decatizing - A finishing process, chiefly to improve the handle and appearance of fabric, in which the fabric, wound in open width tightly on a perforated roller, is either immersed in hot or boiling water, which may be circulated through the fabric (wet decatizing), or has steam with or without pressure blown through it (dry decatizing). Dry decatizing with steam under pressure is called kier decatizing (K.D.).

Note - The process is used mainly for finishing worsted fabrics containing wool.

Decitex - One tenth of a tex unit (see 'Tex').

Decortication - A process of separating fibres from other vegetable material especially in the case of leaf fibres and coconut husk.

DEDSUTI - An Indian term for matt fabric with two threads working as one in warp direction and single weft thread (see also 'Oxford').

Deformation, Immediate Elastic - Recoverable deformation which is essentially independent of time, i.e., deformation occurring in a time approaching zero time and recoverable in a time approaching zero time after removal of the applied load.

Defective Selvedge - A general term covering a number of specific defects as under:

(a) Bad Dyeing or Printing of the Selvedge - Self descriptive.

Principal Cause - Crease on the selvedge during dyeing or printing.

(b) Curled selvedge (Rolled Selvedge) - Turned over selvedge.

Principal Causes - Incorrect balance of cloth structure between body and selvedge, tension difference between body and selvedge yarns, differential shrinkage between selvedge and body of the cloth, excessive weft tension, etc.

(c) Cut Selvedge (Burst and Torn Selvedge) - Selvedge with cuts and tears.

Principal Causes - Selvedge sticking to the take-up

roller at the time of doffing, damage caused during shearing, cropping or other processes; etc.

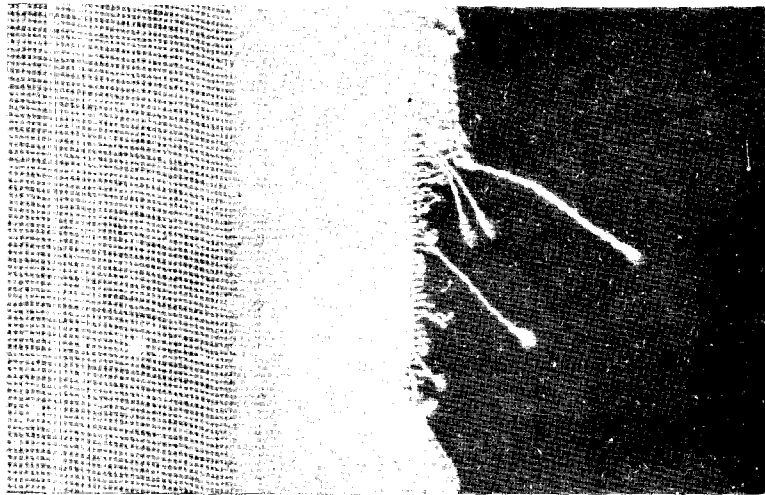


FIG. 22 TORN SELVEDGE

- (d) Distorted Selvedge - A selvedge which does not vary in width but which is not straight.

Principal Cause - Uneven stretching during processing.

- (e) Loopy Selvedge - Selvedge with irregular weft loops extending beyond it.

Principal Causes - Inadequate tension of weft yarn, wrong loom timing, catching of weft on race board and shuttle box etc.

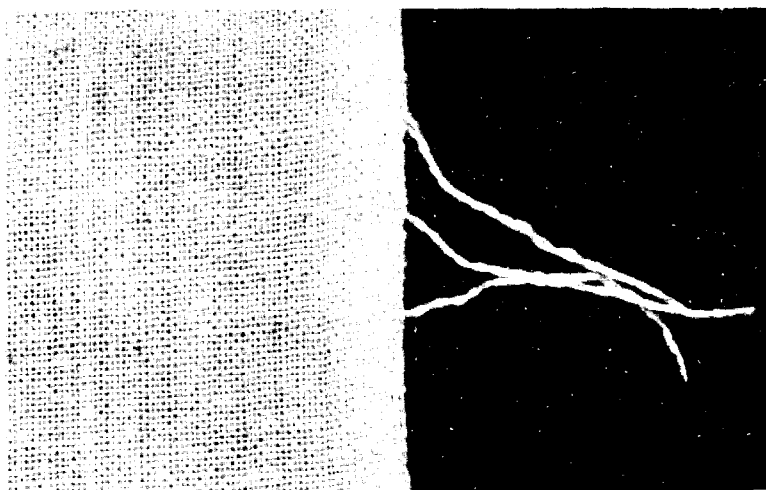


FIG. 23 LOOPY SELVEDGE

- (f) Pulled-in-Selvedge - Selvedge with edges pulled-in.

Principal cause - Isolated tight picks.

- (g) Rugged or Ragged Selvedge - A wavy selvedge showing indentations or corrugation at the edges.

Principal Cause - Variation in the tension of selvedge ends.

- (h) Scalloped Selvedge - An abrupt narrow place in the selvedge of the finished cloth.

Principal Cause - Clip of stentering machine failing to grip the selvedge.

- (j) Slack Selvedge - A selvedge i.e. slacker than the body of the fabric. This may cause cut, torn or burst selvedges during subsequent processing.

Principal Causes - Incorrect balance of cloth structure between the body and the selvedge, selvedge yarns woven at low tension, etc

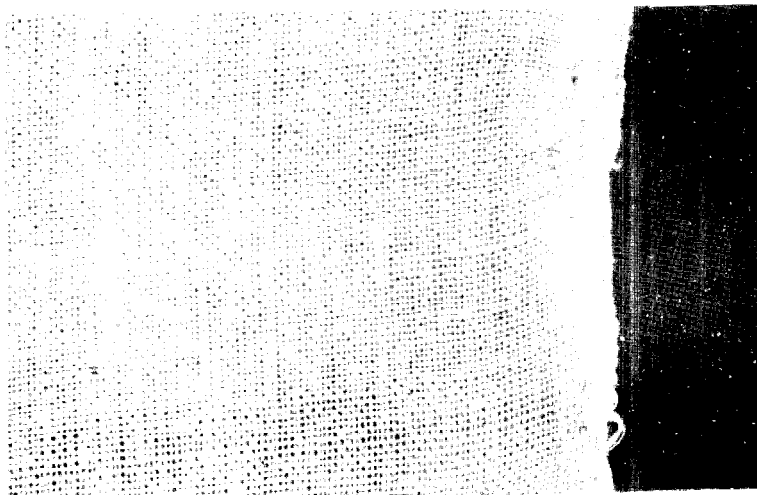


FIG. 24 SLACK SELVEDGE

- (k) Tight Selvedge - A selvedge i.e. tighter than the body of the fabric. This may cause cut, torn or burst selvedges during subsequent processing.

Principal Causes - Incorrect balance of cloth structure between the body and the selvedge, selvedge yarns woven at high tension, etc.

- (m) Uneven Selvedge - Selvedge which varies in width.

Principal Causes - Variation in weft tension, lack of control on the number of selvedge ends or the tension thereof, etc.

Deep Dyeing - Descriptive of fibres modified so as to have greater up-take of selected dyes than normal fibres, when the two are dyed together.

Deep Pinning - Conspicuous pin stenter marks appearing in the body of the fabric and so reducing the usable width of the fabric.

Principal Cause - This defect is often caused by incorrect feed on to a pin stenter.

Deep Sea Lead Line - Plain or cable-laid untarred good quality hemp line of about 12 mm diameter.

Deformation - A change in the shape of a specimen, e.g. an increase in length produced as a result of the application of a load. Deformation may be immediate or delayed, and the latter may be recoverable or non-recoverable.

Deep-Dye - Descriptive of a process for dyeing or printing carpets characterized by complete penetration of the dye into the pile.

Deformation, Delayed - See 'Creep'.

Degreasing

- (a) The removal of grease, suint, and extraneous matter from wool by an aqueous or solvent process; and
- (b) The removal of natural fats, waxes, grease, oil and dirt from the textile materials by extraction with an organic solvent.

Degumming - See 'Boiling-Off'.

Delaine - A plain woven, elaborately printed, fine worsted dress material.

Delustering - A process to subdue the lusture of textile fibres, yarns or fabrics by chemical or physical methods.

Denaturation - The conversion of the protein of silk gland into insoluble silk filament.

Denier - The unit for expressing the linear density of man-made fibres and silk filaments, yarns and cords which is equal to the mass in grams per 9000 m of material.

Denim - A warp-faced twill cloth made from yarn-dyed warp (usually blue or brown) and grey weft yarn. Typical cotton construction is 3/1 twill weave and used for making apparel.

Dense - A trade term adopted by the Australian Wool Board to indicate a compact fleece due to a high follicle density.

Density (Fibre) - See under 'Jute Fibre Characteristics'.

Dent - The unit of a reed comprising a reed wire and the space between the adjacent wires.

Depilatory Process - A process for removing wool from the pelt using sodium sulphide. The pulled wool so obtained is also called 'Tannery Wool' in India.

Depth - That colour quality an increase in which is associated with an increase in the quantity of colourant present, all other conditions (viewing, etc) remaining the same.

Derby Rib - A term applied to 6 x 3 rib.

Dermatitis - Wool affected by mycotic dermatitis.

Desized Fabric - A fabric from which minimum 80 percent of the initial size has been removed.

Desizing - A process for removing size from grey goods in preparation for bleaching, dyeing, etc, by means of an acid or enzyme or by any other means.

Developing - A stage in dyeing or printing during which a leuco compound or dye in an intermediate stage is converted by chemical reaction into a stable dye within the fibre.

Devil - See 'Willey, Wool'.

DHOTI - An Indian term for a piece of cotton cloth, white, 3.5 metres and above long with narrow coloured border and heading. Yarns used cover a wide range of counts but the construction is more or less square, generally used by men.

Diamond Hose - Hose with solid diamond designs.

Diaphragm - A fabric partition within a lighter-than-air aircraft, which may be gastight to provide separate compartments (e.g. ballonet diaphragm) or non-gastight to maintain shape (e.g. stabilizer diaphragm).

Diazotisation - A chemical reaction to convert an aromatic amine into a diazonium compound.

Die Cutting (Die-Pressing) - Cutting one or more layers of material using cutting tools (dies) or a composite cutting tool in conjunction with a machine press (Clicker press).

Differential Dyeing - Usually descriptive of fibres of the same generic class, but having potentially different dyeing properties from the standard fibre.

Diffusion - A movement of molecules or ions through a solution or fibre due to the existence of a concentration gradient.

Dimensional Change - The decrease or increase in dimensions (i.e. in length or width or both) after subjecting the fabric or garment to the prescribed test, expressed as a percentage of the corresponding dimensions before such test.

Dimensional Restorability - The ability of a fabric to return to its original dimensions expressed as a percentage of the original dimensions.

Dingy - A trade term adopted by the Australian Wool Board to indicate wool having a dull inferior colour.

Dip - An immersion for relatively short duration, of a textile in a liquid.

Dip Pick Up - The amount of dipping material present in the specimen. It is expressed as the percentage of the mass of oven-dry dip-free specimen.

Dipped Rope - A rope of which all the components (yarns, groups of yarns, strands) have been treated with a so-called impregnating product intended to confer special characteristics on the rope.

Dipping

(a) (Verb) - The process of impregnating tyre yarns, cords or tyre cord fabrics with a compound to improve its adhesion to rubber.

(b) (Noun) - The material itself.

Direct Cotton Dye, Direct Dye - An anionic dye having relatively high substantivity for cellulosic fibres when applied from an aqueous dyebath containing an electrolyte.

Direction in Netting - The directions in netting are designated in relation to the general course of the netting yarn as follows:

(a) N-direction - The direction at right angles (normal) to the general course of the netting yarn.

(b) T-direction - The direction parallel to the general course of the netting yarn, twine wise.

(c) AB-direction - The direction parallel to the bars, when the netting is stretched so as to form square meshes.

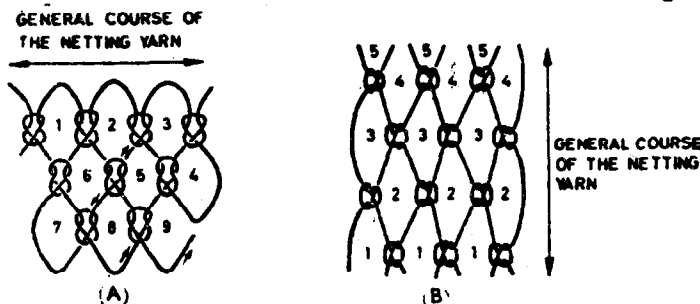
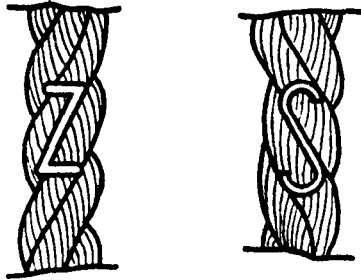


FIG. 25 DIRECTION IN NETTING

Direction of Lay (Direction of Twist) - The direction in which the strands are laid to form a rope. Strands are laid either in the right-hand direction or in the left-hand direction. When the

strands are laid in the right-hand direction, the lay of rope is called Z-lay. When the strands are laid in the left-hand direction, the lay of rope is called S-lay.



Z-Lay or Right-Hand-Lay

S-Lay or Left-Hand-Lay

FIG. 26 DIRECTION OF LAY

Direct Style - A style of printing in one or several colours where the dyes are applied to the fabric and then fixed by ageing or other appropriate means. The fabric is usually white but may sometimes be previously dyed.

Discharge Style - Style of printing in which dyed fabric is printed with a chemical composition which destroys the dye locally to give a white pattern or in which a second dye, applied simultaneously with the discharge, produces a pattern of contrasting colours.

Discharging - The destruction by chemical means of a dye or mordant already present on a material to leave a white or differently colour pattern.

Discolouration - A trade term adopted by the Australian Wool Board to indicate any departure from the natural colour of wool except scourable discolouration.

Disease-Free Seed (Silk) - Silkworm seed which has been certified as disease-free after microscopic examination of the mother-moths.

Disperse Dye - A class of water-insoluble dyes suitable for dyeing cellulose acetate and hydrophobic fibres usually applied from the aqueous suspensions.

Distorted Selvedge - See (d) under 'Defective Selvedge'.

Disturbed Place - An area where the weave has been disarranged, but where the yarns are undamaged.

Dobby Cord - Cord manufactured from flax, sunn hemp or cotton yarn, used in doobby looms by the textile mills.

Doctor Stain (Streak) - See (b) under 'Stains'.

Doeskin- A twill-woven fabric finished with a nap on one side. Some of these fabrics are made from 5-end satin weave.

Doffing - An operation of removing filled packages from a machine

and usually followed by the operation of replacing them with empties.

Doggy - Wool showing a distinct loss of crimp and is usually found in old sheep.

Dole - A group of 'Rayon' skeins twisted into a roll.

Dollop - A specified weight of jute fibres to be spread on the feed cloth of a breaker card or a hackling machine, as the case may be, in a given time usually indicated by the revolution of a clock hand of the machine.

Donegal - A plain-weave fabric woven from woollen-spun yarns characterized by a random distribution of brightly coloured flecks or slubs. It was originally produced as a coarse woollen fabric (tweed) in Irish county Donegal.

Dolly (Washer)

(a) A term used for a woollen or worsted piece-scouring machine having two bowls rotating above the surface of the liquor to squeeze the fabric and usually a suds-box beneath the bowls to carry away the liquor squeezed out from the fabric; and

(b) A term applied to a hosiery-scouring machine of the tom-tom type, i.e., free-falling beaters dropping on to goods immersed in the scouring liquor in rectangular troughs, which are moved forwards and backwards.

Note - This term, has, by association, tended to be used loosely for any type of rope-scouring machine by processors of woollens or worsted. It is never used for a milling machine of the usual rotary type, or for the fulling stocks.

Donegal Tweed - A rough woollen fabric made from thick yarn in plain or 2 and 2 twill and finished with little or no milling-named after an Irish county.

Dope - A solution of a fibre forming polymer as prepared for extrusion through a spinning jet.

Dope-Dyed Fibre or Filament - Yarn or tow produced by dope-dyeing.

Dope-Dyeing - Production of coloured yarn or tow by incorporation of coloured pigments in the spinning solution.

DORI - An Indian term for cords used for making tents and other general purposes.

DORIA (DORIAH) - Plain weave cotton cloth grey, bleached or dyed, finished hard or soft with corded effects produced by cramming the warp ends.

DOSUTI - An Indian term for a matt fabric where two warp threads

are working in pairs and two weft threads are placed in the same shed.

Double Atlas - See (b) under 'Atlas'.

Double Bow, Weft - Weft yarns in a fabric which exhibit an approximately sinusoidal waveform for more than three quarters of the wavelength.

Principal Cause - This defect is caused by a lack of control in fabric manufacture or processing.

Double Bow, Warp - Warp yarns in a fabric which exhibit an approximately sinusoidal waveform for more than three quarters of wavelength.

Principal Cause - This defect is often caused by lack of control during warping.

Double Breasted (D.B.) - A coat or any other upper garment with wrap over fronts having buttons and buttonholes on each forepart.

Double Chain Stitch - See (b) under 'Chain Stitch'

Double Cloth - A compound fabric in which a face cloth and a back cloth each with its own warp and weft are combined during weaving. It is used for coatings, blankets, upholstery cloths, beltings, etc.

Double Cocoon - A cocoon jointly built by two silkworms; it serves as protective shell for both the worms during their pupal stage of existence. Such cocoons are readily distinguished by their size and toughness.

Double Ends - Two ends found where only one is called for by the design of the fabric.

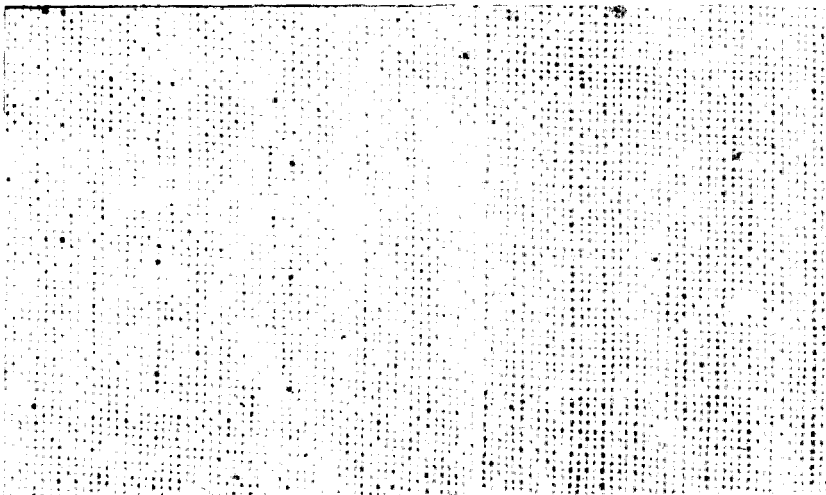


FIG. 27 DOUBLE ENDS

Double Hessian Bag - A bag having two layers of cloth on each face.

Double Jersey - A fabric with fine rib structures made on a machine having two beds of needles, each part knitting independently of the other. The resultant fabric has two interconnected layers which are back to back; having the appearance at front and back of the face of jersey fabric; i.e., the two sides of the cloth are interlocked or inter-knitted to create the impression of a doubly-knitted plain-jersey material.

Double Jersey Jacquard Fabric - A thick fabric made on a rib knitting machine with jacquard design intended for outerwear.

Double Layer Bag - See 'Double Hessian Bag'.

Double Marl Yarn - A two-fold yarn made from two identical single marls.

Double Pick - Two picks in a single shed where only one is called for by the design of the fabric. This fault may appear as a line across the width of the cloth.

Principal cause - Restarting of loom without finding correct shed when weft breaks.

Double Pique Fabric - See (b) under 'Pique (Weft knitting)'.

Double Satin Ribbon - A double warp ribbon with a satin or similar weave on each face, the two faces being equally lustrous.

Double Sole - The sole of a knitted footwear reinforced with an extra yarn.

Double Top Stocking - A stocking with a welt (at the top) formed by turning over the upper portion of the stocking and knitting or sewing it down.

Double Tricot Fabric - See 'Double-Faced Fabric'.

Double Vandyke - See (b) under 'Atlas'.

Double, On The - Any material which has been folded along the middle of its length, normally with the face side inwards, so that the selvedges are together. Cutting on the double is performed by cutting through two thicknesses so as to obtain two pieces, e.g. a right and left hand section.

Double-Faced Fabric - Also known as 'Double Tricot Fabric'.

(a) Simplex fabric - A double-faced usually made on two needle-bars of a bearded-needle warp knitting machine, the two sets of warp threads are meshed together successively on each needle bar to produce a fabric that normally has the same appearance on both sides.

(b) Duplex fabric - A double-faced fabric composed of two fab-

rics pasted together, face sides outward, each having been produced on one needle bar of a warp knitting machine. These fabrics are often identical, in which case the duplex fabric resembles simplex fabric in appearance.

Double-Knit Fabric - See 'Double Jersey'.

Double-Warp (DW) Cloth - A jute cloth in which warp yarns are woven in pairs.

Doubling

- (a) A number of slivers, slubbings, rovings or laps fed simultaneously into a machine for drafting into a single end.
- (b) A process of combing several ends of sliver during drawing with a view to reducing irregularity along and across the sliver; and
- (c) Twisting two or more yarns together.

Down Wools - Wools of medium qualities produced by selectively bred dual purpose sheep (i.e., meat and wool) in Britain. Some of these sheep are South down, Dorset down, Oxford down, etc.

Draft - Ratio of speed between delivery roller and feed roller.

Draft (Garment)

- (a) A constructed plan of a garment.
- (b) The application of body or garment measurements of a flat plane.

Draft Plan - The order of drawing warp threads through the eyes of healds or cambs.

Drafting

- (a) The **process** of attenuating laps, slubbings and rovings to decrease the mass per unit length (see 'Drawing'); and
- (b) The order in which threads are drawn through the heald eyes before weaving (see 'Drawing-In').

Drape - The manner in which a fabric falls when worn on the body or placed on a form frame or manikin.

Draw Back; Tie Back; Warp Holding Place - A warp-faced area of a fabric where the weft yarns are predominant.

Principal Cause - This defect is caused by entanglement behind the shaft or harness putting tension on several adjacent warp threads.

Draw Cord - A cord which passes through a channel and allows the

garment to be gathered.

Draw Thread - A thread introduced in the form of one row of loops during knitting which, on removal, permits the separation of articles that are knitted in a succession of units connected together.

Drawers - Knitted underwear with leg portions made to cover from the waist to the knees or ankles as under:

- (a) Short Drawers - With short legs reaching well above the knees,
- (b) Half Drawers - With legs reaching up to the knees, and
- (c) Full Drawers, Long Drawers or Under Pants - With legs reaching up to the ankles.

Drawing

- (a) Operations by which slivers are blended (or doubled), levelled, and by drafting reduced to the stage of roving. In the cotton textile industry the term is applied exclusively to processing by the draw frame.
- (b) A process of hot or cold stretching of man-made fibres to increase molecular orientation. (See also IS:11206-1984).

Drawing In - Forming a running stitch drawn to achieve gathering or gauging of the material, holding folds in various forms on garments, as in the gowns of barristers.

Drawing-In - An operation of drawing warp threads through the eyes of the healds or cambs and the dents or slits of the reed, in the order as indicated by the draft plan.

Note - In automatic weaving, this operation includes the drawing of warp threads through the eyes of the closed-end drop wires whenever used.

Drawn Pile Finish - A finish given to textile fabric to produce a surface nap or pile i.e. laid in one direction. The effect is usually produced by raising the wet or damp cloth on a teasle gig.

Dress - Clothing, particularly outerwear.

Dress Face Finished Fabrics - Heavily felted and raised woollen fabrics wherein the nap of short fibres is laid along the length of the fabrics so as to conceal the weave, such fabrics include doeskins, beavers, box cloths, billiard cloths, pilots, etc.

Dress Materials/Goods - A comprehensive term applied to a great variety of fabrics of all kinds intended for use as dresses.

Dress-Face Finish (On Wool Fabric) - A finish characterized by a close cropped surface and high lustre.

Dressing

- (a) Sizing applied to yarn or cloth to add weight, smoothness, strength or firmness.
- (b) The operation of assembling on a beam, yarns from ball-warp beam of chain, immediately before weaving.

Dressing (Garment) - A type of adjustment made to one side of trousers to improve fit.

Dressing (Silk) - In the spun silk industry, the process of sorting out fibres into groups of different lengths. Neps and noils are also removed during the process

Drill - A warp-faced twill fabric commonly 3/1 or 2/1 twill weave (see IS:177-1977).

Drilling - Marking key positions such as pockets and darts through all thicknesses of a lay by use of a drilling machine, or similar machine with a hollow needle.

Drip Dry - A term applied to fabrics and garments which, on line drying after washing, shed the wrinkles and creases developed during use.

Drip Flap - A strip of fabric secured by one edge to the envelope or outer cover to deflect rain from the surface below it.

Drop Loop - A method of lowering the belt loop below the top of the trouser waist band (usually 1 cm to 2 cm). This method prevents the belt from riding above the waist.

Drop Stitch, Dropped Stitch - A defect in a knitted fabric which may result from a defective needle, improper feeder setting, or other causes. It occurs when a needle (or needles) misses to receive the yarn but casts off its old loop at the same course. Also known as 'Missed Stitch'.

Droppings - Caddies, short fibres and dust particles which come out of jute fibres during the process of manufacture.

Drugget - A coarse heavy-weight material used as floor covering woven with cotton, spun silk, sunhemp, or jute yarn in warp and woollen, sunhemp, spun silk or jute yarn in weft.

Dry-Clean - To remove grease, oil and dirt from garments or fabrics by treating them in an organic solvent, as distinct from aqueous liquors. Examples of suitable solvents are white spirit, trichloroethylene, perchloroethylene.

Dry-Combed Top - A top made principally for the continental system of worsted spinning without the addition of oil.

Note - A top combed in oil and backwashed to reduce oil and fatty matter not more than one percent may also be described

as a dry-combed top.

Dry Decatizing - See 'Decatizing'.

Dry Sewn - Sewing done with plain yarn or twine.

Dry Spinning - A method of spinning used for flax tow, hemp, jute, etc. The essential feature is that the 'reach' must be quite long to prevent breaking of fibres. Usually the dry spinning frames are of flyer type.

Dry-Spun

- (a) Descriptive of a worsted yarn produced from dry-combed top; and
- (b) Descriptive of man-made filaments, the coagulation of which is effected by evaporation of the solvent from the spinning solution.

Dry-Spun Top - See 'Dry-Combed Top'.

Drying Cylinder, Drying Can - A heated hollow cylinder over which textile material is passed as a means of drying.

Duchesse - A silk-fabric made with a dense warp, very lustrous, smooth in hand and popular for women's wear.

Duck - A closely woven, plain-weave cloth, usually made from cotton or linen yarns, similar to canvas. The terms canvas and duck have become almost generic and are usually qualified by terms that indicate the use of the cloth, e.g. royal navy canvas, artists canvas, duck suiting, belting duck.

Dull Yarn - Yarn which has a very subdued lustre usually produced by incorporating finely divided particles of titanium dioxide in the spinning solution.

Dull, Matt - Term applied to textile materials, the normal lustre of which has been reduced by physical or chemical means.

Dullness - The colour quality, an increase in which may be compared with the effect of the addition of a small quantity of neutral grey dye to the dyestuff, whereby a match cannot be made by adjusting the strength.

Dumped Wool - A trade term adopted by the Australian Wool Board to indicate conventional wool bales compressed tightly for shipment and held by bands or wire.

Dumping Mats - See (e) under 'Mats'.

Dungaree - A 3/1 or 2/1 twill fabric used for overalls; some cloths are piece-dyed; better qualities are made from dyed warp and weft yarns (see 'Denim').

DUPATTA - An Indian term for a kind of open fine scarf made from cotton, silk or man-made fibre, worn by ladies.

Dupion Silk - Silk thread reeled from double cocoons which are spun by two silk worms. The yarn is uneven and resembling irregular slub yarn. Also known as 'Duppione (Italian)'.

Duplex Fabric - See (b) under 'Double-Faced Fabric'.

Duplex Printing - A method for printing the same design on the face and back of cloth, done in two distinct operations.

Durability - The ability of a textile floor covering to maintain its characteristics in use.

- (a) Appearance Retention - The maintenance of the appearance in the structure, pattern and colour of a textile floor covering.
- (b) Crushing or Flattening - Loss of thickness in a textile floor covering under the action of a static or dynamic load.
- (c) Filamentation - Unbroken filaments pulling out from the main body of the continuous filament yarn, not readily removed by brushing suction.
- (d) Fluffing or Shedding - The appearance of fibres of short length (flock), not fixed during the manufacture of the textile floor covering, which come from the use-surface during early use of the textile floor covering, and which can be removed by brushing or suction.
- (e) Hairiness - The appearance of fibres which were poorly fixed during the manufacture of the textile floor covering, which come from the use-surface and form a fuzzy surface.
- (f) Pilling - The formation of small aggregates of fibres generally drawn from the use-surface of a textile floor covering which are not readily removed by brushing or suction.
- (g) Resistance to Soiling - The ability of a textile floor covering to resist change of appearance due to soiling during use.
- (h) Shading - Irreversible localized change of appearance of the pile of a carpet due to irregular changes in direction (lie) of the tufts, loops or fibres in the pile.
- (j) Wear by Abrasion - Progressive loss of surface material from the use-surface, caused by mechanical action.

Durable Finish - Any type of finish reasonably resistant to

normal usage (washing, and/or dry-cleaning).

Durable Press - A textile finishing treatment designed to impart to a textile material or garment the retention of specific contours including creases and pleats resistant to normal usage, washing and/or dry-cleaning.

Duration of After Glow (After Glow Time) - The time for which a material continues to glow, under specified test conditions, after cessation of flaming, or after removal of the ignition source.

Duration of Flame (After Flame Time) - The length of time for which a material continues to flame, under specified test conditions, after the ignition source has been removed.

DURRIE (or DURRY) - An Indian term for a coarse plain weave weft faced fabric generally used as a floor covering. While most of the durries are made from cotton, some are made from coarse wools and are often referred to as druggets.

DUSSA - A woollen fabric having fine texture and coloured selvages having a length of 5.5 metres and weighing 1 to 1.5 kg and manufactured out of merino or pashmina wool. It is used as shawls in colder climates by men.

Duster - See 'JHARAN'.

Dutch Twine - A 2-ply twine made from European hemp and mainly used for book-binding (cotton and flax twines are also used).

Duvetyn - A twill-woven fabric with a very soft, velvet-like appearance produced by raising, cropping and brushing the face of the fabric.

DW(Double-Warp) Flour Bag - See 'Flour Bag'.

DW(Double-Warp) Heavy Cee Bag - See 'Heavy Cee Bag'.

DW(Double-Warp) Raisin Bag - See 'Raisin Bag'.

DW(Double-Warp) Salt Bag - See 'Salt Bag'.

Dye - A colorant that has substantivity for a substrate, either inherent or induced by reactants.

Dye Bar - See (3) under 'Bar'

Dye-Fixing Agent - A product i.e. capable of reacting with a dye on a fibre to give improved fastness to water or washing.

Note - Dye-fixing agents are normally applied as after-treatments to dyes that already have some affinity for the textile substrate and are so distinguished from mordants.

Dyed Fabric - Fabric on which a dye or pigment has been uniformly applied and fixed.

Dyeing - The process of colouring textiles or other materials in such a way that the colour appears to be a property of the dyed material and does not give superficial effect such as that produced by painting.

Dyestuff Stain - See (a) under 'Stains'.

E-Bag - A double-warp hemmed plain weave sacking bag measuring about 101.5 X 71 cm (normally with 42.5 ends/dm and 31 picks/dm), weighing approximately 759 g. The bag is usually without any stripe.

E-Nitrate - See 'Nitrate DW Bag'.

Ears - See 'Lugs'.

Ease of Recovery of Thickness After Compression - Self-explanatory term.

Easing-In - The manipulation of an additional amount of one of the materials into a seam in order to create fullness, shape or contour.

Easy Care Finish - See 'Crease-Resist Finish'.

Ecreu Silk - Thrown silk that has been washed in tepid soap solution to remove dirt, the original gum content being retained.

Edging - A narrow strip of knitted fabric or lace attached to another fabric or made-up article by one edge, usually for decorative purposes.

Easy Care Finish - See 'Crease-Resist Finish'.

Ecreu Silk - Thrown silk that has been washed in tepid soap solution to remove dirt, the original gum content being retained.

Edging - A narrow strip of knitted fabric or lace attached to another fabric of made-up article by one edge, usually for decorative purposes.

Effective Pile (Carpet) - See 'Pile, Effective (Carpet)'.

Effective Pile Thickness - The difference in the thickness of the carpet before and after the pile above the substrate has been shorn away, measured under the standard pressure.

Effective Reed Length (Fibre) - See under 'Jute Fibre Characteristics'.

Egyptian Grainsack - A double-warp hemmed twill sacking bag measuring about 152.5 x 76 cm (normally with 76 ends/dm and 31 picks/dm), weighing approximately 2270 g or 1475 g with 5 cm wide magenta stripes, and tar sewn.

Egyptian Sugar Bag - A double-warp hemmed twill sacking bag

measuring about 152.5 X 76 cm (normally with 76 ends/dm and 31 picks/dm), weighing approximately 2270 g or 1475 g with 5 cm wide magenta stripes, and tar sewn.

Egyptian Sugar Bag - A double-warp hemmed twill sacking bag measuring about 122 x 71 cm (normally with 76 ends/dm and 31 picks/dm), weighing approximately 1135 g with 5 cm wide blue or magenta stripes, and tar sewn.

Eight Lock - A double faced 2 x 2 or broad-rib fabric with crossed sinker wales.

Eight Strands Plaited Rope - See 'Square Rope'.

El. Lenne - See 'Aeolian'.

Elastane

Constitution : Elastomer composed of at least 85 percent (by mass) of a segmented polyurethane.

Characteristic : Fibre which, when stretched to three times its original length and released, recovers rapidly and substantially to its initial length.

Elastic - A trade term adopted by the Australian Wool Board to indicate the condition of wool fibres able to return to their original form after being deformed by either stretching or compression.

Elastic Fabric - A textile fabric made from an elastomer either alone or in combination with other textile materials.

Elastic Fabric, Wide - A knitted or woven fabric constructed with elastomeric yarns either alone or in combination with other textile fibres, that is 152 mm in width or wider.

Elastic Narrow Fabric - A narrow fabric incorporating natural or synthetic rubber threads with the object of permitting stretch warp-way and/or weft-way with virtually complete recovery on removal of the stretching force.

Note - The definition excludes crepe.

Elastic Top - Top (of socks or stockings) in which elastic or rubber threads have been laid-in during knitting.

Elasticity - The property of a material by virtue of which it tends to deform on application of stress and to recover its original size and shape immediately after removal of the stress causing deformation.

Elastodiene

Constitution : Elastomer composed of natural or synthetic polyisoprene, or composed of one or more dienes polymerized

with or without one or more vinyl monomers.

Characteristic : Fibre which, when stretched to three times its original length and released, recovers rapidly and substantially to its initial length.

Elastomeric Thread - The component conferring the elastic properties in the fabric. Generally it is either natural or synthetic rubber or polyurethane.

Elbow Cap - A tubular band knitted on round machines with elastic threads laid-in; used by sportsmen for support and protection to the elbow.

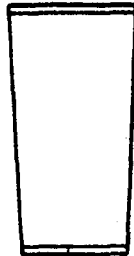


FIG. 28 ELBOW CAP

Electrostatic Propensity - The extent to which a textile floor covering develops and accumulates an electrostatic charge on a person or object moving across its surface.

Elongation - The difference between the length of a stretched specimen and its initial length (under pre-tension) in a tensile test usually expressed as a percentage of the latter.

Elongation at Break - In a tensile test, the difference between the length of a stretched specimen at breaking load and its initial length, usually expressed as a percentage of the latter.

Elongation Under a Given Load - The increase in length of a yarn or cord which results from subjecting it to a certain desired load and generally expressed as a percentage of the initial length of the specimen.

Embossed Backing - Foam or other material applied to the back of a textile floor covering, the outer part of which is impressed to form a regular embossed structure.

Embossed Cloth/Crepe - A pebbly effect in imitation of a true crepe, produced by subjecting a cloth-commonly cotton print-to the action of a suitable engraved roll in an embossing calender. The effect will not stand laundering in case of cotton fabrics.

Embossing - A process to produce a pattern in relief on fabrics by pressure with the use of engraved rollers.

Embroidered Hosiery - Hosiery with ornamental motifs or patterns produced by hand or machine with the help of threads after the

article has been knitted. This is distinguished from the hosiery where patterns are produced during the process of knitting itself.

Emery Cloth - A plain or twill weave strong fabric coated on one side with powdered emery.

Empress Gauze - A fine flower figured fabric originally woven with raw-silk and linen. The raw silk is employed for the ground weave while the linen is used for the designs in satin weave.

Emulsion - A finely divided suspension of an oil in water or water in oil.

Enameled Cloth - A heavy cotton cloth, such as drill or warp sateen, treated with oil, pyroxylin etc. and given a glazed finish to resemble patent leather.

ENDI (Silk) - Silk of white or brick red colour obtained from a species of domesticated lepidopteran insect (Attacus Ricini) belonging to the family Saturniidae. It feeds on castor leaves and is mostly a habitant of Assam, Bihar, Orissa and Andhra Pradesh.

Ending - Uneven dyeing consisting in a continuous change in colour from one end of a length of fabric to the other, or a difference in colour between, the bulk and the end of a length of fabric. It is also known as 'Tailing'

Ends

- (a) Spinning - An individual strand;
- (b) Weaving - An individual warp thread [see 'Warp' (Warp Yarn)];
- (c) Fabric - A length of finished fabric less than a customary unit;
- (d) Piece - Length (in certain districts a half-piece); and
- (e) Finishing - (1) Each passage of a length of fabric through a machine, e.g. in Jig-dyeing; and
(2) A joint between pieces of cloth due, e.g. to damage or short lengths in weaving or damage in bleaching, dyeing and finishing.

English Bran - A hemmed hessian bag measuring 124.5 X 68.5 cm, weighing approximately 510 g, without stripes.

English Welt - See 'Roll Welt'.

Envelope (Aerospace)

- (a) The gas-containing unit of a balloon or non-rigid or semi-rigid airship.

- (b) The outer cover of an airship in which the gas containing units are surrounded by a layer of air or inert gas.

Epaulet (Epaulette) - Strap on shoulder of coat, sport shirt, or jacket, military in origin.

Epidermis - The outer layer of wool and hair fibres. The cuticular structure is made up of a series of overlapping scales whose free margins point towards the tip of the fibre. By virtue of their alignment these scales impart to wool fibres a directional or differential frictional effect (D.F.E.) with friction always higher in the direction of tip to root in comparison with that in the direction of root to tip.

Epingline - A warp rib dress material made of silk warp and worsted weft. The cloth has pebbled effect and feel similar to crepe.

Sponge - A French term for 'sponge cloth' or 'ratine' woven from a hard twist warp and soft spun weft, usually with a fancy yarn to give a soft and loose-woven fabric.

KRI (Silk) - See 'ENDI (Silk)'.

Estamene - A milled cross-bred worsted cloth, piece-dyed, and finished with a rough fibrous surface, usually woven in 2-and-2 or 3-and-3 twill.

Eta Patch - A fan-shaped patch of fabric and webbing secured to the envelope.

Etching - A process for producing the design on metallic roller used in a printing machine by chemical dissolution of the metallic surface.

Etching Silk - A hard-twisted silk sewing thread used for outlining embroidery.

Etoile

- (a) A lustrous satin cloth used as dress material.
- (b) A star design made by weft in the meshes of the net foundation.

Europe Twine - Twine made of 4-ply flax yarn used for sealing milk cans in the dairy farms and also for hand stitching for palliasses. This term is popular in the military dairy farms.

Evenness

- (a) The uniformity of any textile material in terms of thickness or diameter or mass per unit length, and
- (b) (See also 'Unevenness').

Examined Silkworm Seed - See 'Disease-Free Seed (Silk)'.

Exhaustion - The ratio at any stated stage between the amount of dye or other substance taken up by the substrate and the amount originally available.

Expression (Percent) - The mass of the liquid retained by textile material after mangling. This term is also known as retention and is calculated as percentage usually of the air-dry mass of the goods. (If the dry mass is used, this should be indicated).

Extensibility - The ability of a textile material to undergo extension or elongation following the application of sufficient force.

Extension, Percent - In a tensile test, the elongation expressed as a percentage of initial length.

Extent of After Glow - The area of specimen in which the after glow spreads beyond the area damaged by flaming.

Extract - Wet carbonized rag fibre.

Eye of Buttonhole - The rounded end of a buttonhole into which the shank or neck of the button will pull when the button is fastened.

Eyelet - An openwork effect produced by transferring sinker loops to two adjacent needles. Usually two consecutive sinker loops are collected and transferred.

Fabric - A manufactured assembly of fibres and/or yarns which has substantial surface area in relation to its thickness and sufficient mechanical strength to give assembly inherent cohesion.

Note - Fabrics are most commonly woven or knitted, but the term includes assemblies produced by lace making, tufting, felting, knot making and the so-called non-woven processes.

Fabric Dip - A chemical composition which is applied to a textile cord or fabric to improve its adhesion to rubber or other elastomer.

Fabric Glove - Same as 'Cut Glove'.

Fabric Hose - Same as 'Cut Hose'.

Fabric Laid - A fabric made without weft yarns. The warp yarns are held together by a binding material.

Fabric, Airplane - A plain-weave fabric, well woven practically without imperfection, of mercerized two-ply yarns, width 90 to 140 cm, maximum mass 142.5 g/m² and yarns per dm warp and filling 315 to 330.

Fabric, Bonded - A layered fabric structure wherein a face or shell fabric is joined to a backing fabric, such as tricot,

with an adhesive that does not significantly add to the thickness of the combined fabrics (see also 'Fabric, Laminated').

Fabric, Braided - A structure produced by interlacing several ends of yarns in a manner such that the paths of the yarns are not parallel to the fabric axis.

Fabric, Combustible - A fabric which after ignition will continue to burn at a moderate to fast rate.

Fabric, Impregnated - A fabric in which the interstices between the yarns are completely filled with the impregnating compound throughout the thickness of the material, as distinguished from sized or coated materials, where these interstices are not completely filled.

Fabric, Laminated - A layered fabric structure wherein a face or outer fabric is joined to a continuous sheet material, such as polyurethane foam, in such a way that the identity of the continuous sheet material is retained, either by the flame method or by an adhesive, and this is in turn normally, but not always, is joined on the back with a backing fabric such as tricot (see also 'Fabric, Bonded').

Fabric, Noncombustible - A fabric that will neither ignite nor give off vapours that will ignite when subjected to external sources of ignition.

Fabric, Stable - A textile fabric, the dimensions of which do not change significantly with multiple passes through measuring devices.

Note - A stable fabric as defined above may not be dimensionally stable if subjected to a series of laundering or drycleaning operations.

Fabric, Treated - A fabric to which a finish has been applied in order to change the original level of a specific property or properties, e.g. property for water repellency, crease resistance, soil resistance.

Face-Finished (Fabric) - Descriptive of a finish given, e.g. to wool fabrics, in which the face side is treated selectively, as in raising.

Face Side - The side of a material intended to be shown whilst in wear.

Faced Cloths - Cloths which have a different surface texture, pile or nap on front and back.

Facing - A separate piece of material used as a covering on specific areas of a garment, e.g. a lapel.

Face-to-Face Carpet - Carpet made on a loom which produces simultaneously, face to face, two substrates joined by the pile

yarn. Two cut-pile carpets are made by cutting the pile yarns between the two substrates. An example is given in Fig.29

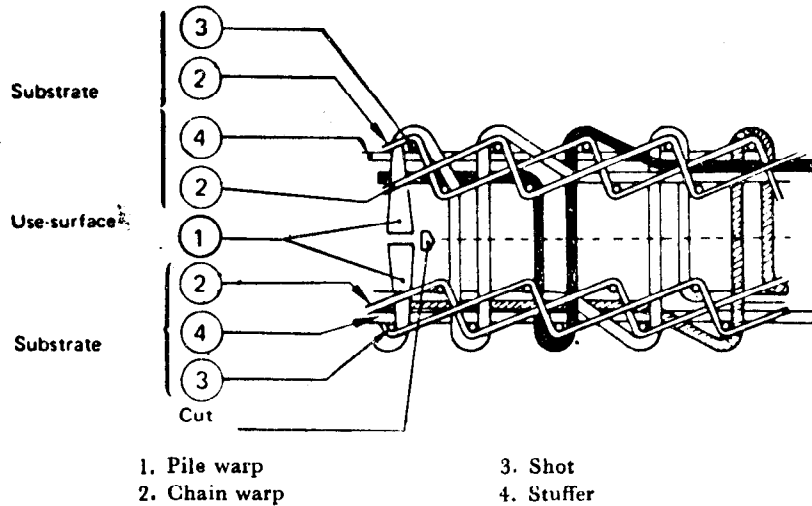


FIG. 29 FACE-TO-FACE CARPET (WARPWAY SECTION)

Face-to-Face Bonded-Pile Carpet - Pile carpet manufactured on a machine which produces face-to-face textile floor coverings, with the pile-forming material passing alternately from one substrate to another, where it is fixed by adhesive. Two cut-pile carpets are made by cutting the pile-forming material between the two substrates.

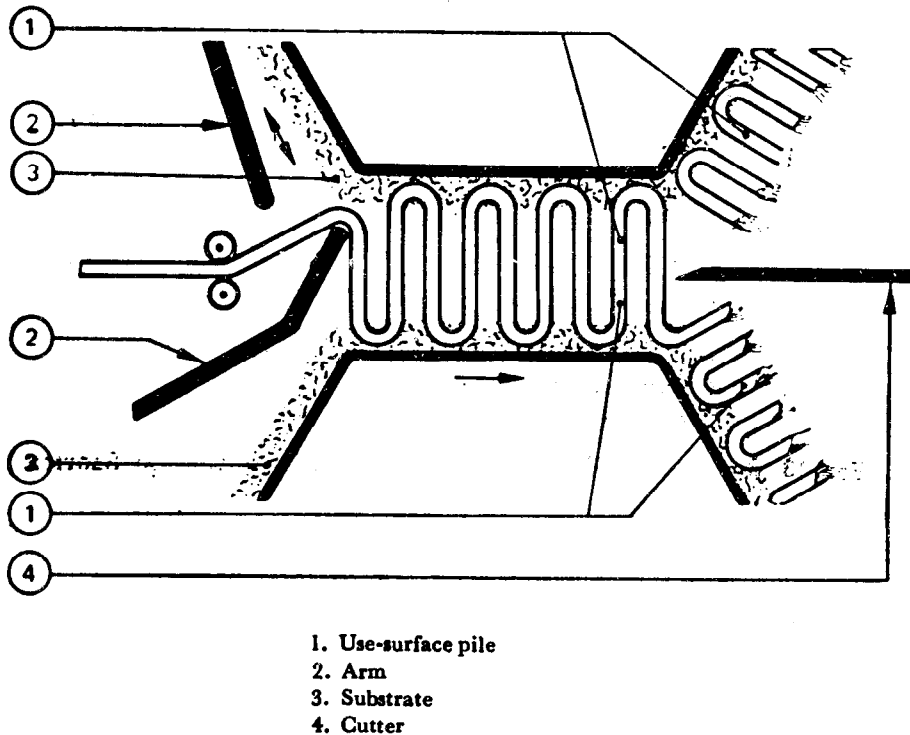


FIG. 30 FACE-TO-FACE BONDED-PILE CARPET (LONGITUDINAL SECTION)

Facing Yarn - Yarn used on the face of fabric for plated hosiery.

Factor of Safety - The value by which the breaking load of new rope is divided to determine its safe working load.

Fadge - A trade term adopted by the Australian Wool Board to indicate wool pack partly filled or several bags sewn together.

Fadging - A trade term adopted by the Australian Wool Board to indicate the replacement of shorn wool in its original bales.

Fag-End - Untwisted end of a cordage.

Fagot Stitch - A form of lock stitch, using a modified zig-zag machine, for joining materials, allowing a narrow gap between the two edges.

Faliletine Ribbon - A ribbon with faille characteristic but of more open texture.

Faille - A soft, flat-ribbed plain-woven fabric with body and drape in which the ends per decimetre are more than the picks per decimetre. The ribs are wider and flatter than those in 'grosgrain'.

Faille Ribbon - A fabric of silk or of rayon or other man-made fibre continuous filament yarn; it is usually of plain weave with a definite rib effect to give brightness, and with a selvedge woven in a manner to add a lustrous effect.

Faille Taffeta - A 'taffeta' with pronounced ribs running crosswise.

Fall - Of collar. The section of the collar between the crease and leaf edge.

Fall Plate Fabric - A fabric of a tuck-like structure which is made on one needle bar on a Raschel warp knitting machine, involving the use of a solid metal plate (fall plate or chopper bar) to push down the newly formed laps below the spoons of the open latches to be cast off with the ground laps of the previous course.

Note - Often a yarn is used which could not otherwise be incorporated in the particular fabric.

Fallers

- (a) Straight, pinned metal bars employed in the control of fibres between drafting rollers;
- (b) Curved, pinned metal bars employed in the feed mechanism of Lister and square-motion (Holden) combs; and
- (c) Curved arms fixed to two shafts on a mule carriage and carrying the faller wires.

False Twist - Turns inserted in opposite directions and in equal numbers in adjacent elements of yarn, sliver, or similar aggrega-

tions of fibres or filaments, characterized by their temporary nature.

Note 1 - The extreme ends of the yarn or sliver are prevented from rotating, and the false-twisting element, through which the yarn or sliver passes, is situated between these ends.

Note 2 - At the start of the operation, turns of twist are inserted by the revolution of the twisting element (one turn in each direction on either side of the twisting element) but, as the yarn or sliver passes through the twisting element, each turn of twist carried through from one side cancels a turn present on the other side.

Note 3 - The amount of twist actually inserted depends not only on the relative speeds of the twisting element (rev/min) and yarn or sliver (m/s), but also on the effectiveness of the means adopted in the twisting element to resist rotation, and on the restoring torque exerted by the twisted yarn or sliver.

Note 4 - False twist may be used:

- (a) To produce effects, e.g. (1) the entanglement of fibres while false-twisted, (2) a measure of permanence to the twisted form, by heat-setting the false-twisted yarns;
- (b) To assist processing e.g. (1) the passage of sliver from Noble comb to can, (2) the attenuation of rovings on a condenser ringframe.

False Twisting - A process by which equal amounts of a twist are inserted and removed from successive sections of a textile strand (see also 'Bulked Yarn').

Fancy Line - Braided cord used for decorative purposes.

Fancy Yarn - A yarn that differs significantly from the normal appearance of single or plied yarn due to the presence of irregularities deliberately produced during its formation. In single yarns, the irregularities may be due to the inclusion of knots, loops, curls, slubs and the like. In plied yarns, the irregularities may be due to a variable delivery of one or more of its components or to twisting together dissimilar single yarns.

Fascinator - Decorative headwear worn by ladies.

Fashion Marks - Stitch marks, arising during narrowing and widening through transference of loops to adjacent needles during the course of shaping in fully-fashioned hosiery.

Fashioned Hosiery - See 'Fully-fashioned Hosiery'.

Fashioning - Decreasing or increasing the width of a knitted fabric during the knitting operation so that it conforms to a definite shape when the fabric is made into a garment.

Fast Base - An aromatic amine which on diazotization will combine with naphthol to form an azoic pigment.

Fast Colour Salt - A stabilized diazo compound, active or passive, stabilized as sulphate or chloride or aromatic sulphonate or as complex salt of diazo compound used as a component of the rapid fast or rapidazol or rapidogen dye and applied by dissolving in cold water and subsequently coupled with the azoic coupling component (naphthol).

Fastness (Colour) - Resistance of the colour of textile materials to different processes and agencies to which they may be subjected during manufacture and subsequent use.

Note - On the standard scale, five grades are usually recognized from No. 5 signifying unaffected to No. 1 grossly changed. For light-fastness, eight grades are used, No. 8 representing the highest degree of fastness.

Fathom - A unit of linear measurement equal to 6 ft and abbreviated as 'fm'.

Fault - A trade term adopted by the Australian Wool Board to indicate vegetable matter in wool.

Faulty Texturing - Portions of a bulked yarn that differ from the normal yarn in respect of degree of crimp and similar distortions of the filaments.

Principal Cause - This defect is caused by a lack of control during texturing processes.

Fearnought - A stout, thick woollen cloth with a heavy appearance, used chiefly as a covering for port-holes and the doors of powder magazines and also for scarves and coats.

Fearnought Blending Willey - See 'Willey, Tenterhook'.

Feather Stitch - A decorative stitch, similar to the fagot stitch but in which the joining of two edges is not involved.

Feel - See 'Handle'.

Felling - The flattening of an overseam by stitching it down, usually with a single chain stitch.

Felling Marks - Marks in the form of a few pieces of yarn usually coloured, woven into fabrics at certain intervals to indicate where one piece finishes and another starts.

Fellmongering - A trade term adopted by the Australian Wool Board to indicate the process of removing wool from pelts by bacterial action or by treatment with chemicals. (See also 'Skin Wool, Slipe' and 'Pulled Wool').

Felt - A textile material characterised by the densely matted condition of most or all the fibres of which it is composed.

Note 1 - Three broad classes of felt can be distinguished as:

- (a) Materials having a woven or knitted fabric structure;
- (b) Materials relying for their construction upon the ability of the constituent fibres, such as wool and fur, to mat together to form a composite body with neither warp nor weft; and
- (c) Needle-felts.

Note 2 - The felts that clothe the press sections of paper-making machines conform to the above definition. In the case of the so-called dryer felts, which clothe the drying sections, the term 'felt' is a misnomer because the great majority of dryer felts have a woven structure and are not subjected to any wet-finishing.

Felt (Floor Covering) - A non-woven felt highly matted by heavy milling generally embroidered and primarily used as a floor covering (see also 'NAMDA').

Felt Calendered Fabric - A fabric which is processed through a felt calender (see also 'Calendered Fabric')

Felting - The matting together of fibres during processing or wear (see 'Milling').

Felting Shrinkage - The decrease in dimensions of a fabric or garment after milling, expressed as a percentage of the corresponding original relaxed dimension.

Felts, Woollen - All wool fabric produced by milling of carded web of soft, medium, hard and extra hard varieties depending on the degree of felting induced.

Fender Lanyard - A 3-strand manila or sisal rope, usually of 76 to 90 mm circumference used for lashing fenders (a protection for a ship's side against piers, etc. consisting of a bundle of rope, etc.) to the rail.

Fents - Cut pieces of cloth, arising during the normal course of manufacture and packing, having lengths ranging from 45-90 cm for widths 1 m or more and 65-135 cm for widths less than 1 m. This excludes cut pieces of towels.

Note - The term remnants has been used as a synonym for fents. These are usually short lengths of fabric that accumulate

in the marketing of textile material.

Fibre - A unit of matter characterized by flexibility, fineness, and high ratio of length to thickness.

Fibre Boards - See 'Jute Fibre Board'

Fibre Fineness - See 'Fineness'

Fibre Length

- (a) Crimped Length - The extent [see (b)] of a crimped fibre substantially freed from external restraint, measured with respect to its general axis of orientation; and
- (b) Fibre Extent - The distance in a given direction between two planes (each perpendicular to the given direction) that just enclose the fibre without intersecting it.

Note 1 - If the fibre is in a sliver (or yarn, roving, etc) and the direction of the extent is not specified, the 'given direction' is to be taken as the axis of the sliver.

Note 2 - It should be noted that the extent of a fibre is a variable quantity which differs from the straightened length of the fibre according to circumstances; thus, in a card web e.g. where the fibres are in a state of considerable same disarray, the extent of a fibre is markedly different from the extent of same fibre after it has been passed through one or more drawing processes. If, for any reason, a fibre is subject to a stretching force, its extent in the direction of the force may be greater than its straightened length.

- (c) Staple Length - A quantity by which a sample of fibrous raw material is characterized as regards its technically most important fibre length.

Note - The staple length of wool is usually taken as the length of the longer fibres in a hand-prepared tuft or 'staple' in its naturally crimped and wavy condition [see 'Crimp (Fibre)']. With cotton, on the other hand, the staple length corresponds very closely to the modal or most frequent length of the fibres when measured in a straightened condition.

- (d) Straightened Length - The length of a fibre when tensioned sufficiently to remove crimp or other axial deformation.

Note - Ideally, this dimension should be the length of the curving axis of the fibre when free from all restraint, but in practice it can be measured conveniently only after a small load has been applied. The application of a load sufficient to remove all crimp may in some cases result in an elongation of the fibre axis. Hence

the most appropriate load to use will vary according to the form and properties of the fibre under examination.

Fibre Mats - See (f) under 'Mats'

Fibre Strand - The bast fibre in the jute plant, situated between the outer bark and the central woody core, and running the whole length of the stem as a lace-work sheath usually several layers thick.

Fibre Strength - Average breaking load of a single fibre (see 'Strength').

Fibre Tenacity - See 'Tenacity'

Fibril (Cotton) - Thread-like aggregate of cellulose molecules constituting a morphological unit in cotton fibre. The fibril has a thickness of about 1 micron and is visible under a light microscope when the fibre is swollen in certain chemical reagents.

Fibril (Silk) - Fibrils are globules of fibroin formed in silk gland, but which subsequently did not fuse into the fibroin core during spinning of the filament by the worm and as such appear as tiny specks on the surface of the filaments.

Fibrillation (Cotton) - The process of separation of fibres into fibrils by chemical cum mechanical treatment.

Fibrillation (Silk) - The formation of fibrils on the silk filament. It is responsible for the defect known as 'Lousiness' in dyed silk yarn.

Fibroin (Silk) - The fibre material of raw silk thread which is a protein not soluble in boiling water.

Fiji Bag - A hemmed hessian bag measuring about 91.5 X 56 cm (normally with 47 ends/dm and 59 picks/dm), weighing approximately 455 g, without stripes, and dry sewn.

Filament - A fibre of indefinite length.

Filament or Yarn Number - The linear density of a filament or yarn expressed in suitable units as tex, denier, millitex, etc.

Filature - An establishment for the production of raw silk from cocoons, employing modern techniques, such as, steam for heating and power for driving the reels.

Filling

(a) Non-substantive and generally insoluble material, such as china-clay and gypsum, added to fabrics together with starches or gums during finishing to add weight or to modify the appearance and handle of fabric.

(b) A synonym for weft yarn.

Filter Cloth - A plain, leno or twill weave fabric varying much in yarn count, texture and weight. It is used for filtering purposes in the sugar, chemical, food, paint, petroleum and similar industries. There are various types of fabrics known by this name and made from natural or man-made fibres.

Fine - A trade term adopted by the Australian Wool Board to indicate wool of small fibre diameter.

Fine Darning - The hand operation of repairing faults in fabrics by sewing or closing up the places where threads or yarns are missing. It is a form of invisible mending.

Fine End - A silk warp thread that is thin in places because all of the filaments supposed to make up the full ply are not present; mainly caused by laxity on the part of the reeler.

Fine Hessian - A term used to describe hessian generally made from fine counts of jute yarn.

Fine Yarn; Thin End; Thin Pick - A yarn whose thickness is unacceptably less than that of the adjacent yarns.

Principal Cause - This defect is caused by variation in the linear density of the yarn.

Fineness - A general term used for textile fibres, yarns and fabrics with special reference to their transverse dimensions and measured in a variety of units, such as mass per unit length, or length per unit mass, cross-sectional area and diameter.

Fineness Grades - Classification of wool fibres, before or after combing, according to average fibre fineness. This is only one of the attributes of wool quality.

Finger Mark - An irregular spot showing variation in picks per unit length for a limited width.

Principal Causes - Spreading of warp ends while loom is in motion, pressure upon cloth between reed and take-up roller, etc.

Fingering Yarn - Piled yarn specially produced for hand-knitting.

Finish

(a) A term used to impart the desired characteristics to textile materials.

(b) The substance used for finishing.

Finisher Gilling - Subjecting combed slivers to a series of gilling operations with a view to aligning the fibres parallel, bringing about uniformity in sliver weight and packing the slivers in the form of balls if necessary to facilitate transportation.

Finishing - All operations physical or chemical, to impart

desired characteristics to textile materials.

Note - The yarn sizing for weaving should not be considered as finishing.

Finishing (Hosiery) - The term 'Finishing' usually includes in addition to bleaching and dyeing processes, the cutting out, sewing together, shaping of the garment and pressing etc.

Finishing Bar - See (1) under 'Bar'.

First Printed Resist - A process where the resisting agent is printed on the fabric, which is then dried and padded with the dye solution followed by drying and developing.

Fisherman's Cord - Manila or man-made fibre cord, 9-strand cable-laid or 8-strand plaited, tarred or untarred used mainly in large diameter as anchor lines, especially in fishing of the grand banks.

Fisheye - See 'Pin Holes'.

Fishing Line - Tightly laid hemp, cotton or man-made fibre 3-strand line used for commercial fishing.

Fishnet - A float plated structure wherein the missed yarn is usually thicker than the ground yarn. The missed thread will occur in odd wales for 1 to 4 courses and then in even wales for the same number of courses.

Note - The term 'fishnet' is now loosely applied to many other open-knitted structures.

Fixing Agent - Any chemical used in dyeing, printing or finishing which combines with a soluble compound to form an insoluble compound upon the fibre.

Flagging - The rising and falling of material caused by the needle movement on the sewing machine.

Flaggings - See 'Strings'.

Flame - As related to textile flammability, a hot, luminous zone of gas or matter in gaseous suspension, or both, that is undergoing combustion, which is relatively constant in size and shape and which produces a relatively low heat flux.

Flame Resistance - The property of a material whereby flaming combustion is prevented, terminated or inhibited following application of a flaming or non-flaming source of ignition, with or without subsequent removal of the ignition source. The degree of flame resistance exhibited by a specific material during testing may vary with different test conditions.

Flame-Proof Fabric - A fabric which does not propagate flame, i.e. any flame goes out quickly when the igniting flame is withdrawn.

Flame-Resistant - The material having flame resistance.

Note - "Flame Resistant" is a mandatory description for a product that meets established conformance standard when the product is tested by a specific method. Where no conformance standard exists, "Flame Resistant" is a relative term and is used to compare one material with another.

Flame-Retardant - A chemical used to impart flame resistance.

Flame-Retardant Finish - A process for incorporating or adding flame retardant(s) to a material or product.

Flammability - The characteristics of a material which pertain to its relative ease of ignition and relative ability to sustain combustion.

Flannel - A fabric, originally all wool and now usually containing some wool, of plain or twill weave with a soft handle and of 200 g/m² or more. It may be slightly milled and raised.

Flannel, Hospital, Grey - Plain weave hospital clothing made from woollen-spun strong merino wool or wool-nylon blend.

Flannelette - A fabric originally made from cotton warp and soft-spun cotton weft, the fabric being subsequently raised on both sides to give an imitation of wool flannel. The weave may be plain or twill with two warp threads woven as one.

Flap - A shaped piece of material which provides a covering for a pocket mouth, or is for ornamentation.

Flat Crepe - A smooth, soft fabric in plain weave, less crinkled in texture than other crepes. It is often called 'French Crepe'.

Flat Filament - A relatively narrow continuous strip, obtained by cutting or splitting of a material suitable for textile use, the thickness of which is slight in relation to the width. In rope making, the filament can be used flat or twisted.

Flat Knit - A term used to describe fabrics knitted on a flat machine in contrast to those knitted on a circular machine.

Flat Packed - Describes bales or trusses packed in a flat condition.

Flatlock Seam - A butt seam formed using a flatlock stitch. The edges of the material are trimmed during sewing.

Flatlock Stitch - A stitch formed by the 'Flatlock' machine with four needles, four loopers and a covering thread which makes the sewn portion to lie flat and not rise above the surface of the fabric.

Flax Fibre Bundles - The aggregates of ultimate fibre that run from the base of the stem up to the top of the branches of the

flax straw. They are each composed of large numbers of ultimate fibres overlapping each other.

Flax Fibre Strands - Flax fibres after removal from the plant, consisting in the cross-section more than one ultimate fibres.

Flax Green: Natural Flax - Scutched flax produced from deseeded straw without any intermediate treatment such as retting.

Flecked - Yarn or cloth with a flaw caused by spots or off-colour dots.

Fleece - Carded jute fibre mat before being condensed into sliver form.

Fleece Finish - Very bulky woollen fabrics with a relatively long, tangled, raised pile. The pile fibres lie loosely and are of fairly uneven length. The fabrics are soft and full (fleece). The reason for having such a long, tangled pile is to trap as much air as possible, thus increasing the insulating properties of these fabrics. The intensive raising process loosens the fabric considerably. A high level of insulation is thus achieved in cold but not draughty conditions.

Fleece Wool - The entire fibrous crop shorn from a living sheep at onetime in one piece.

Fleecy - Resembling a wool fleece in appearance and handle, or descriptive of fabrics having a fine, soft, open and raised structure.

Fleecy Fabric - In a generic sense, it denotes all types of knitted fabrics which are brushed or raised on the surface to give smoothness and possible warmth.

Flexibility

(a) The ease of bending of a fabric ranging from pliable (high) to stiff (low).

(b) In the case of a fibre it is the ability to be deformed without rupture or fracture.

Flexural Fatigue - A physical property expressed in terms of the number of times a material can be bent on itself through a prescribed angle, before it ruptures or losses the ability to recover.

Float Plating - An effect in a plain-knitted plated fabric which is produced when the face yarn is missed by certain needles to allow the other yarn to appear on the face.

Float Stitch - A stitch in a plain-knitted fabric where a length of yarn is not received by the needle (or needles) and the yarn connects two loops of the same course that are not in adjacent wales. This portion of yarn floats at the back of the fabric.

Also known as 'Missed Stitch' or 'Press-Off Stitch'.

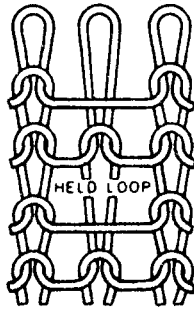


FIG.31 FLOAT STITCH (BACK SIDE OF FABRIC)

Float - A place in the fabric where warp and weft yarns escape the required interlacement.

Note - Floats are not flaws if introduced purposefully as a feature of design.

Principal Causes - Matting up broken ends, large knot or waste in warp threads, defective warp tension, defective shuttle flight etc.

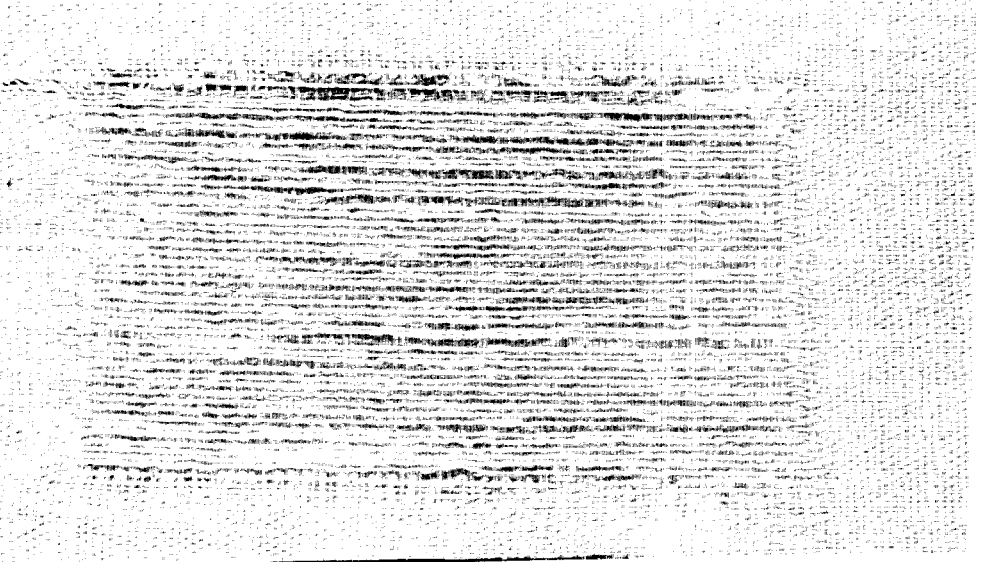


FIG.32 FLOAT

Flock - A material obtained by reducing textile fibres to fragments as by cutting, tearing, grinding, milling, raising, etc.

Flocking, Flock Printing - A method of cloth ornamentation in which adhesive is printed on the fabric and finely chopped fibres are applied all over by means of dusting-on, an air-blast, or electrostatic attraction. The fibres adhere only to the printed areas and are removed from the unprinted areas by mechanical action.

Floor Rug - See 'Rug, Floor'.

Flocked Pile Textile Floor Covering; Flocked Carpet - Carpet obtained by projecting the fibres on to a support coated with

adhesive. An example is given in Fig. 33

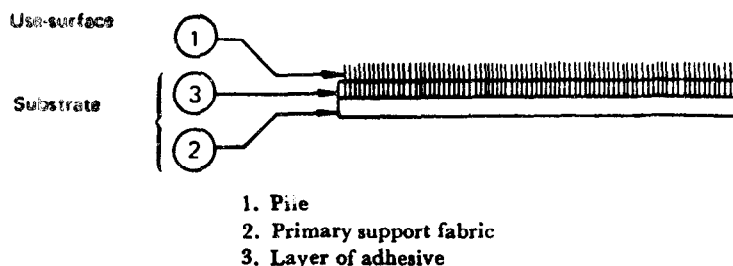


FIG. 33 FLOCKED PILE CARPET

Florentine - A type of Bradford lustre fabric wherein cotton warp and lustre wool weft is used.

Floss Silk - Silk from the outer part of the cocoon; it is of low grade and is available only in small amounts. It is also known as 'Blaze (French)'. The term is also applied to soft silk yarn or singles without twist, used in embroidery and electrical insulation of wires.

Flour Bag - Bags made from DW flour jute cloth. The standard dimension being 142 x 71 cm, and weighing approximately 1135 g, (see also IS:3984-1967).

Flour Bag Cloth - A double warp plain weave sacking jute cloth having 68 ends/dm and 31 picks/dm and weighing 539 g/m² (see also IS:3966-1967).

Fluff (or Fly) - Loose fibres which fly out into the atmosphere during processes such as carding, drawing, spinning and weaving.

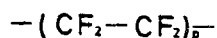
Fluidity - The reciprocal of the viscosity expressed in poises (where 1cP = 1mPa s).

Fluorescent Brightener - A substance i.e. applied to an uncoloured or a coloured textile material to increase the apparent reflectance in the visible region by conversion of ultra-violet radiation into visible light and so to increase the apparent whiteness or brightness of the textile material.

Fluorofibre

Constitution : Linear macromolecules made from fluorocarbon aliphatic monomers.

Examples: Polytetrafluoroethylene:



Polyhexafluoropropylene, and

Polychlorotrifluoroethylene.

Flushing - A heavy woollen coating cloth originally made in Holland.

Fly (Garment) - A material covered opening to conceal a fastening, e.g. buttons, zip etc. A blind fly is fastened instead of left open along the finished edge.

Fly Front - A flap of material attached by one edge to underwear for extra coverage.

Flyline - The line of the fly fastening from the centre of the fork to the top of the waistband on a pair of trousers.

Foam Backing - Mechanically or chemically foamed polymer compound, applied to the back of a textile floor covering. The outer part of the layer of foam is usually produced so as to be compact and uniform.

Foggy Yarn - Yarn soiled during processing by dirt suspended in the atmosphere.

Fogmarking - Localized soiling of the fabric usually confined to edges and folds, though sometime apparent as bars.

Principal Cause - This defect is often caused by deposition of atmospheric dirt during waiting periods in processing or when stored in plated form and is often aggravated by static charge attraction.

Fold - That part of a textile floor covering which is turned under to avoid, in certain cases, fraying when fixed to the edge of the room by pinning (see (d) under 'Method of Laying of Textile Floor Covering').

Folded Yarn - Yarn composed of two or more single yarns twisted together in one operation.

Follicle - Skin structure which is differentiated from the epidermis or 'outer skin' and in which the animal fibres develop and grow

Footless Stocking - A turn-over top seamless stocking without foot portion; generally worn by sportsmen.

Footwear (Knitted) - Knitwear used as covering for the leg or foot or both, e.g. socks, stockings, hose tops, anklets, etc.

Fore Hand Line - A 3-strand hemp or man-made fibre rope used in whale catching for connecting the fore line to the whale line.

Fore Line - A short length of 3-strand hemp or man-made fibre rope used in whale catching. It connects the harpoons to the fore hand line.

Foregoer - See 'Fore Line'.

Foreign Body - An inclusion of non-textile matter.

Principal Cause - This defect is often caused by insufficient attention to the cleanliness of looms and of the weaving shed.

Foreign Fibres - Fibres of a different type and/or colour from the other fibres in the fabric.

Principal Cause - This defect is caused by the contamination of the fabric by extraneous fibre which is either included in the yarn or woven into the fabric.

Forelooper - See 'Fore Line'.

Foreparts - The front parts of upper garments.

Forerunner - See 'Fore Line'.

Fork Quantity - The allowance of material in bifurcated garments provided for the thickness through the trunk from front to back at the crotch.

Foulard - A light-weight fabric, in twill weave; soft and well draping.

Frame (Wilton or Gripper-Axminster Carpets) - The yarns comprising all or a portion of the pile-warp yarns in a woven carpet. The number of frames corresponds to the number of pile-warp ends per dent and from which the tuft or loop is selected by the jacquard mechanism. The bobbins or cheeses for any frame may be all of one colour or of a variety of colours.

Frameage (Number of Frames) - In carpets woven over wires and in face-to-face carpets, the number of separate sheets of yarn of the same or different colours from which the jacquard mechanism selects the pattern. Single-colour carpets can be produced from a single frame.

Free Balloon Net - A net over the envelope of a free balloon, from which the basket is suspended.

Free Laying Method, Loose Laying - A method of laying in which the textile floor covering is laid on the floor without any kind of fixing.

French (or Dry-Spun)-Worsted Yarn - Yarn made from wool fibres combed on rectilinear combs and containing less than one percent oil.

French Combing - See 'Rectilinear Combing'.

French Crepe - See 'Flat Crepe'.

French Cuff - Cuff on shirts, either folds back or has double thickness usually closed with cuff links.

French Foot - The foot of a fully-fashioned stocking with a continuation of the seam down the centre of the sole and with fashion marks near heel and toe.

French Merino

- (a) A breed of sheep known as Rambouillet, and
- (b) A fabric similar to merino warp cashmere, but in 2-and-2 twill. The twill runs at a very flat angle with weft predominating on the surface.

French Seam - A seam in which two pieces of material are superimposed, stitched together and then folded over and stitched again to conceal the edges thus producing a flat folded seam with only one row of stitching visible.

French Welt - See 'Tubular Welt'.

Fresco - Generic name for worsted or woollen fabrics made from tightly twisted ply yarns in plain weave (original fresco: 3-fold twist in 2 movements).

Fribby Wool - Short tufts of wool obtained as a result of second cuts during one shearing.

Fribs - A trade term adopted by the Australian Wool Board to indicate shorter wools adhering to the fleece, often sweaty

Friction Calendering - The process of passing fabric through a calender in which a highly polished heated steel bowl rotates at a higher surface speed than the softer (e.g. cotton or paper filled or rubber coated) bowl against which it works, thus producing a glaze on the face of the fabric that is in contact with the steel bowl. The friction ratio is the ratio of the peripheral speed of the faster steel bowl to that of the slower bowl and is normally in the range 1.5:1 or 2:1.

Frieze - A heavy, coarse twill-woven, napped fabric. It usually has coarser warp than weft and is made to produce a mixed colour effect by double cloth weave.

Frill Yarn - Yarn with spiral or corkscrew effect usually made as a novelty yarn.

Frise - A pile fabric of uncut loops.

Frison (French) - The silk waste brushed from the outer layers of cocoons prior to reeling. Such waste is also described as Strusa (Italian), Knubs (English) and JOOTH (Hindi).

Frog - Design made of braid, loops and stitched around button holes. Usually on pyjamas or robes.

Front Rise - The distance from the crotch to the centre front of the waistline.

Fud - Droppings from the woollen card consisting of very sort fibres that are heavily charged with oil.

Full Cardigan Stitch - A stitch produced by tucking on 1 x 1 rib basis as under:

First Course - Tuck all rib needles, and knit all plain needles; and

Second Course - knit all rib needles, and tuck all plain needles.

Also known as 'Polka Rib'.

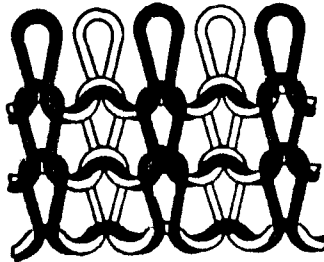


FIG. 34 FULL CARDIGAN STITCH

Full Drawers - See (c) under 'Drawers'.

Full-Fashioned Hosiery - See 'Fully-Fashioned Hosiery'.

Fulling - See 'Milling'.

Fullness - The additional amount of one of the materials joined at a seam which is allowed in order to create the desired shape in a part of a finished garment. e.g. a sleeve head (see also 'Easing-In').

Fully-Fashioned Hosiery - Hosiery which is shaped wholly or in part by widening or narrowing or by both by loop transference to increase or decrease the number of wales knitted on a flat bed weft-knitting machine without alteration of the character of the stitch. Also known as 'Fashioned Hosiery', 'Full-Fashioned Hosiery' and 'Selvedged Hosiery'.

Fulpat - A term used for weak, gummy and immature jute fibres.

Fur - Hair from domesticated animals other than goat or sheep. The important fur bearing animals include badger, mink, otter, angora rabbit, beaver, musk-rats, etc.

Fur Fabric - A wide range of pile fabrics made to imitate various furs. In most cases the pile is comparatively long and the fabric is subject to special finishing processes to imitate a particular fur.

Fusible Interlinings - An interlining which has been treated so that it adheres to other materials by the application of heat and pressure.

Fusing - The action of bonding a fusible interlining to a garment piece by the action of heat and pressure.

Fuzzy (Hairy, Broken Filament) - Fibrous appearance of a cloth. This might aggravate the cloudiness of the cloth.

Principal Cause- Presence of abraded yarns..

Fuzzy Motes - See 'Motes'.

Gaberdine - A firmly woven, clear finished, warp faced cloth in which the ends per centimetre considerably exceed the picks per centimetre thus producing the twill line at a steep angle. Usually woven in 2/1 and 2/2 twills. It is largely used for raincoats, suitings and sportswear.

GADA - A term commonly used in South India to denote cotton fabrics produced from yarns in the count range 18s-30s and square in construction. Gada is mostly sold in the grey state and used as apparel and household textile.

GADLAPET - An Indian term given to cloth used for making bedding.

Galettame - Waste silk from the inner part of cocoons (see also 'Bassinat').

Galloon Ribbon - A ribbon with transverse ribs, each composed of two or more picks, to give a uniform or pronounced effect. The ribbon has a special selvedge, which is normally of tubular weave.

GANJI - An Indian term denoting all types of vests (see 'Vest').

Gantline - A 3-strand manila or sisal rope used for general purposes.

Garden Reel Line - A cord treated with preservative and supplied in reel form for use in horticulture.

Garden Twine - Twine treated with preservative mainly for use in horticulture.

Garment - An individual piece of clothing.

Garnetting - A process of recovering the fibres from hard-twisted thread wastes, rags, clippings, etc, especially of wool. The object is to thoroughly break up the material and return it to a fluffy fibrous condition so that it may be reused in blends, or in some cases, alone.

Garnishing Scrim - Net like structure with square mesh of various sizes and in the form of strips usually dyed or pigmented and used for camouflage purposes.

Garment Band - See 'After-Welt'.

Gas Fading - See 'Atmospheric Fading'.

Gas Main - A fabric hose running through the length of a rigid airship having branches to the gas bags for inflation.

Gas Mantle - A dome-shaped knitted article made of ramie, rayon or cotton and treated with suitable chemicals; used for heating to incandescence in pressure lanterns to give the rated luminosity.

Gas-Bag-Net - A net of cordage or wire to retain a gas bag in position.

Gasketting - Several yarns of hemp, jute or hard fibre twisted together either tarred or untarred used for legging of steam pipes. [See also (a) under 'Yarn'].

Gassed Yarn - A yarn that has been passed through a gas flame to remove protruding fibres and improve the yarn by making it smoother and brighter in appearance. Also known as 'Signed Yarn'.

Gassing - A process of burning off protruding fibres from the surface of yarn or cloth to obtain a smooth surface. Also known as 'Singeing'.

Gathering (Gauging) - The shortening of the material length by drawing together and holding a succession of small folds of materials by stitching. Machine gathering or gauging is achieved by the use of a special pressor foot or attachment.

Gauge Knitting

- (a) A term specifying the spacing of the loop-forming elements in knitting and ancillary machines and expressed as the number of elements per unit of length; and
- (b) A term specifying the physical dimensions, usually thickness, of loop-forming elements.

Gauge Length, Nominal

- (a) The length of a specimen under specified pre-tension measured from nip to nip of the jaws of the holding clamps at the beginning of the test; and
- (b) The distance between points at which the specimen is attached to tabs, measured while the specimen is under specified tension.

Gauze - A light, open mesh, loosely woven fabric in plain, leno or mock leno weave. It finds use in bandages, sanitary goods, surgical dressings, etc.

Gaw - A gap in the jute cloth caused by missing weft.

Geelong Convertor - Apparatus consisting of three intersector gill boxes arranged in tandem with intermediate feed and transfer mechanism. This is used as a substitute for carding.

Genappe Yarn - A smooth worsted thread in which all the loose fibres have been removed from the surface by gassing (e.g. Singeing).

Genoa Velvet - A heavy type of velvet with three picks to a wire and a special ground weave, the repeat of which is on four ends and six picks. It is commonly a figured velvet with a smooth ground and a pile figure developed in various colours.

Georgette, Georgette Crepe - A fine lightweight, open texture fabric, usually in a plain weave, made from crepe yarns, usually two Z-twisted and two S-twisted yarns in both warp and weft.

GHICHA - The yarn drawn by hand out of tasar cocoons without any twisting.

GICHA-GICHA - Fabric made out of gicha yarn both in warp and weft.

GICHA-Noil - A fabric produced by using gicha and noil yarn mostly on handloom.

Gill Box - A drafting machine, used in worsted processing, in which the motion of the fibres is in part controlled by pins fixed on moving bars (pinned fallers).

Gill Drafting - A method of attenuation of fibres in which the motion of the fibres is in part controlled by pins fixed on moving bars (pinned fallers).

Gilling - An operation, preparatory to spinning, of passing wool or jute or flax or spun-silk fibres through one or more gill boxes in order to improve fibre parallelization.

Gimp - A special thread used to support and raise the buttonhole stitching.

Gingham - A light-to medium-weight cotton fabric in plain weave made from dyed yarns and normally in checks. It is used as dress and curtain material.

Ginned Wool - Short wool fibres retrieved from burrs by passing them through a ginning machine.

Ginning - A process of separating lint from seed-cotton.

Ginning (Roller) - A ginning process in which the fibres on seed cotton are made to adhere to the roughened surface of a rotating leather coated roller and are pulled out from the seed by the action of one or more knives.

Ginning (Saw) - A ginning process in which the fibres on seed cotton are gripped by saw teeth bordering a number of parallel discs on a rotating shaft. A suitably placed grid prevents the seeds from advancing with the fibres and thus the latter get wrenched from the seeds.

Ginning Percentage - The ratio of the mass of lint to the mass of seed cotton (KAPAS) expressed as a percentage.

Glance - A type of lustre dress fabric (see 'Bradford Lustre

Fabrics').

Glass

Constitution : Mixed silicates

Examples : Aluminium, calcium and magnesium borosilicates.

Glass (Textile) - Glass in a form suitable for spinning or weaving.

Glaze - The smooth, glossy and plain appearance of the surface of a fabric produced by the applications of heat, heavy pressure or friction.

Glove - A covering for the hand and wrist with a sheath each for the four fingers and the thumb. Also known as 'DASTANA'.

Goat Hair - Hair from a domesticated ruminant of genus Capra. However, the most important ones are Angora goat (Capra hircus aegagrus) and Cashmere goat (Capra hircus lanigar).

Gog Rope - A 3-strand manila, sisal or man-made fibre rope used as a secondary rope for towing in harbours and narrow waters. It braces the tow rope to the centre line of the tug at the after-end when being pulled stern first by the vessel it is assisting.

Golf Hose - Heavy wool stockings for sportsmen, made in fancy designs and turn-over tops.

Gore - A wedge-shaped piece of material inserted into a garment part to obtain width at a specific place.

Gore (Aerostat) - A shaped section of an envelope or gas bag made of fabric.

Gore (Parachute) - A shaped section of the canopy normally bounded by two adjacent rigging lines.

Gore Line (Heel) - The line on either side of the heel of socks or stockings made on circular machine, formed while shaping the heel (see Fig.100).

Gore Line (Toe) - The line on either side of the toe of socks or stockings made on circular machine, formed while shaping the toe (see Fig.100).

Gorge - The edge of the forepart to which the collar stand or neck band is joined.

Grab Line - A line becketted round the outside of life boats just below the gunwale, forming loops, to which men in the water can cling on.

Grade (Cotton) - Classification of cotton according to colour, foreign matter and ginning percentage.

Grade (Silk) - Classification of raw silk on the basis of tests carried out according to standard methods in silk conditioning houses. The qualities taken into consideration are winding, size, tenacity, elongation, evenness, cleanness and neatness (see IS:2938-1964).

Grade (Wool) - Classification of wool according to their fineness, length and yield.

Gout - Foreign matter, usually lint or waste, accidentally woven into a fabric.



FIG. 35 GOUT

Grading - The process of producing a range of patterns of different sizes from a master pattern.

Grading of Jute - Sorting of jute fibres into various grades according to the fibre characteristics such as W₁, W₂, etc, for white raw jute and TD₁, TD₂, etc, for TOSSA daisee raw jute (see IS:271-1975).

Grain - The direction of the warp of a fabric. Hence cutting straight grain means cutting with the grain, that is warp.

Grainage - An institution where silkworm seed is produced and sold to rearers.

Graineur - The person engaged in the production of silkworm seed.

Grandrelle Yarn - A 2-ply yarn composed of single yarns which differ from one another in colour or lustre.

Greasy Blowing - Dry decatizing of greasy wool fabric i.e. unscoured woollen or worsted fabric, in open width.

Greasy Cloth (Greasy Fabric, Greasy Piece) - Same as grey cloth but the term is generally reserved for all-wool or wool blended woollen or worsted fabrics.

Greasy Milling (Wool) - The process of milling the cloth before it is scoured.

Greasy Wool - Wool which has not been washed or scoured (see also 'Raw Wool').

Greasy Yarn (Wool) - Yarn which has not been washed or scoured.

Great Coat Cloth: Woollen Dyed - A heavy weight dyed overcoating used by armed force personnel as winter uniform, made from cross-bred wool, woollen-spun yarns in 2-and-2 twill weave.

Green Cotton - Cotton lint obtained from balls picked in immature condition.

Grege (French) - Raw silk produced by filatures.

Grenada - A type of Bradford lustre fabric.

Grenadine Twist - Hard-twisted plied silk yarn with 800 to 2400 tpm, composed of singles, which have been first twisted in the same direction and have then been twisted together in the reverse direction.

Note - It is used in the warp of grenadines which have to withstand severe friction.

Grey Cloth - Cloth in the loom state before it is scoured, bleached or dyed.

Grey Goods, Greige Goods - Woven or knitted fabrics as they leave the loom or knitting machine, i.e. before any bleaching, dyeing, or finishing treatment has been given to them.

Note 1 - In some countries, particularly in the North American continent, the term greige (alternative spelling, griage) is used.

Note 2 - For woven goods, the term loomstate is frequently used as an alternative. In the linen and lace trades, the term brown goods is used.

Grey Hosiery - Hosiery which is not scoured, bleached or dyed.

Grey Scale - A series of pairs of neutrally coloured chips showing increasing contrast within pairs, used visually to assess contrast between other pairs of patterns; e.g. the ISO (International Organization for Standardization) grey scales comprise two series of chips against which the magnitude of the change in colour of a specimen submitted to fastness test and of staining of adjacent uncoloured material can be visually assessed and rated on a 1-5 scale.

Gripper Axminster Carpet - See under 'Axminster Carpet'.

Gripper-Spool Axminster Carpet - See under 'Axminster Carpet'.

Grist - The linear density of bast fibre yarns spun on jute system expressed in terms of weight in pounds of one spindle (14400 yd) of yarn (see 'Count of Yarn').

Gros de Londres - A cross-ribbed fabric in plain weave or its derivative, with heavy and fine ribs alternating; or with ribs of different colours.

Grosgrain - A hard finished, closely woven, ribbed fabric, in plain or derivative of plain weave having the ribs running crosswise. The ribs are heavier than those in 'poplin' and are rounder than those in 'faille'.

Gross Mass (Weight) - The total mass of a consignment, case, bale, roll or sample; including the mass of packing materials, containers and of supports, such as cones, bobbins.

Grown-On Facing - The formation of a facing by folding back the material edge.

Guanaco (Huanaca) - Ruminant of the small ungulate family (Llama guanicoe) in South America and believed to be the common ancestor of llama and alpaca producing soft brown fur.

Guard Fibres - Relatively coarse outer-coat fibres which often project above the inner coat e.g. in the coats of fur-bearing mammals. They may have a shield-like apical portion, when they are named shield fibres.

GULUBAND - An Indian term for muffler (see 'Muffler').

Gum (Silk) - A sticky protein material that coats the filaments of raw silk. This is otherwise known as 'Sericin'.

Note - The gum serves to cement together the two filaments of silk bave and aids in the formation of the cocoon; in silk manufacture, the gum is useful as a natural-size in weaving and in the construction of fabrics such as bolting cloth.

Gum Silk - Thrown silk from which gum or sericin has not been removed.

Gum Spots - Hardened places in skeins of raw silk caused, when, at some stage of production excessive moisture softens the gum in raw silk and the gum later hardens to form an aggregated mass of filaments and gum.

Gum Waste - Bits of silk collected as waste in the re-reeling of raw silk at the filatures or during throwing and weaving. It is also called 'Strazza' (Italian) or 'Bourre' (French).

Gummy Matter - The pectin type of gummy matter present in jute fibres due to insufficient retting.

Gun Cotton - Raw cotton treated with a mixture of nitric acid and sulphuric acid and having powerful explosive properties.

Gun Flap - Style detail on a French coat, the extra layer of cloth across the shoulder.

Gunny - A general term applied to manufactured jute goods, especially sacking.

Gusset - An extra piece of material sewn to a garment for reinforcement.

Gut Thread - A thread incorporated in a woven, knitted, or braided structure, primarily for the purpose of limiting its extensibility.

Gutter Fly - Very short fibres and dust taken out of cotton through the dust extracting cages during the blow room treatment; generally this is treated as a part of invisible loss.

Guy Line - A plaited cord made from hemp or polyester fibre, used by fire brigades in conjunction with lowering line.

Guy Rope

(a) Manila, sisal or man-made fibre 3-strand rope used to hold or steady some object such as a pole or mast.

(b) A 3-strand manila rope used in the shipping industry with derricks guy tackle.

Gymnasium Hose - Hose extending beyond the knees; generally worn by gymnasts.

Gypsum - Hydrous sulphate of calcium which is used for weighting and dressing of cotton goods.

HABI JABI - Tangled and ravelled jute of any description free of hunka and sticks.

Habit Cloth - A fine woollen costume cloth generally made in 5-thread warp satin weave and finished with a dress face.

HABUTAI (or HABUTAYE) - A soft, light but closely woven Japanese silk fabrics, woven from raw silk filature yarn with very little twist. Various types of weave are used according to the weight, which varies from 2.5 to 6.0 momme.

Hair (Hair Fibres) - Fibrous growth on the body of mammals other than sheep. Sheep hair is called wool irrespective of its coarseness.

Hair Carpet - Carpet with a surface made entirely of hair and wool. The purpose of the wool when used is to facilitate spinning and dyeing.

Hair Net - A net-covering to retain the hair in order.

Haircord Carpet - A hair carpet produced by weaving over unbladed wires.

Note - The use of the term haircord is deprecated for carpets made from other than 100 percent hair. Other carpets having similar construction should be referred to simply as cord carpets.

Hairiness - The condition of a textile material with numerous loose fibre ends or loops or both, projecting from its surface.

Hairy - see 'Fuzzy'.

Hairy Fibres - Completely medullated fibres (see also 'Kemp').

Half Cardigan Stitch - A stitch produced by tucking on 1 x 1 rib basis as under:

First course - Tuck all rib needles, and knit all plain needles; and

Second course - Knit all rib needles, and knit all plain needles.

Also known as 'Royal Rib'.

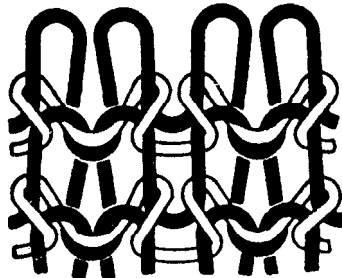


FIG. 36 HALF CARDIGAN STITCH

Half Drawers - See (b) under 'Drawers'.

Half Hose - See 'Sock, Socks'.

Half Marl - A two-fold yarn made from a solid single yarn and single marl yarn.

Halo - An area of light colour surrounding a localized thick portion of the fabric after dyeing.

Principal Causes - This defect is often caused by migration of dye during dyeing or by less dye reaching the area around the thickening (e.g. knot, slub, gout) during pad dyeing.

Halo-Length - A measure of fibre length made on a halo combed out on a cotton seed.

Halter Rope - see 'Cattle Rope'.

Halyard - A small size rope or cord used with a block to hoist or lower flags or small sails. These are usually of unkinkable

construction. Manila, sisal, hemp are 3-strand and cotton usually braided.

Hambro Line - Hemp, manila, or sisal line used for lashings and seizings.

Hammer Line - Rope made out of finest grade manila fibre, 4 strands, hard laid with a graphited core and having dia 48 to 62 mm, used for pile driver hammer.

Hand Knitting Yarn - Yarn intended for hand-knitting.

Hand Lead Line - See 'Pilot Lead Line'.

Hand-Knitting - A term applied to knitting done by hands with the help of knitting pins.

Hand-Knotted Carpet - A carpet obtained by knotting the tufts into the surface by hand.

Note - The two most common types of knot are the Persian (or Sehna) and the Turkish (or Ghiordes).

Hand Knotted Pile Carpet - A carpet obtained by knotting the pile-forming yarns by hand.

- (i) Method I - This is a typical example of single Persian or Senneh knots. According to this method, the weaver:
 - (a) Makes knots by: (1) looping a strand of pile yarn around a (the first) warp thread, (2) passing the strand under the adjacent (the second) warp thread to the left of the first warp thread, and (3) pulling up the strand and cutting it, and
 - (b) Weaves the backing between two adjacent rows of knots by laying two (or more) weft threads, interlacing each with warp threads as in a plain weave (a weave repeating on two warp threads and two weft threads).

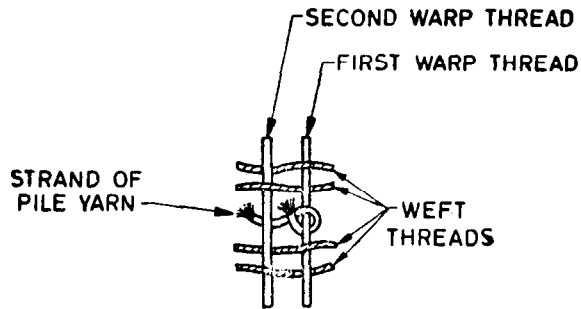


FIG. 37 EXAMPLE OF KNOTTING AND WEAVING, METHOD I

- (ii) Method II - This is a method adopted for producing carpets having very few, say 6000 knots/m². This.

method is used to increase the strength of the fabric warpwise or in place of coarse warp yarn of twice the thickness, i.e., coarseness. According to this method, the weaver;

- (a) Makes knots by: (1) looping a strand of pile yarn around a (the first) pair of warp threads, (2) passing the strand under the adjacent (the second) pair of warp threads to the left of the first pair of warp threads, and (3) pulling up the strand and cutting it; and
- (b) Weaves the backing between two adjacent rows of knots by laying two (or more) weft threads, interlacing each with pairs of warp threads as in a Basket weave (a weave repeating on two pairs of warp threads and two weft threads).

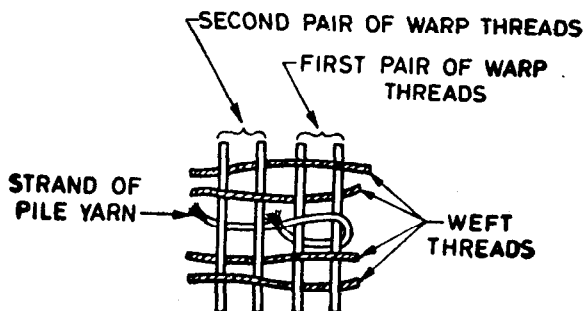


FIG. 38 EXAMPLE OF KNOTTING AND WEAVING, METHOD II

- (iii) Method III - This is a typical example of double knots. This method saves labour and allows the production of carpets with intricate designs. The designs show the same fineness as that produced with single knots. The pile density is maintained by using the pile yarn of adequate thickness. This method is used for fine carpets only. According to this method, the weaver makes knots as in method II and weaves the backing as in Method I.

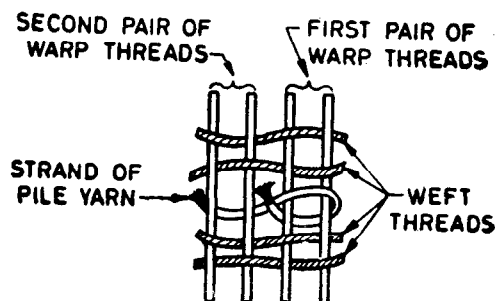


FIG. 39 EXAMPLE OF KNOTTING AND WEAVING, METHOD III

- (iv) Method IV - This method gives combination of single knots according to method I and double knots according to method III. The proportion of single knots to double knots depends upon the design but is approximately 2:1. According to this method, the weaver:

- (a) Makes some knots as in method I and the remaining as

in method II, and

(b) Weaves the backing as in method I.

Note - Method IV is used only in figured carpets.

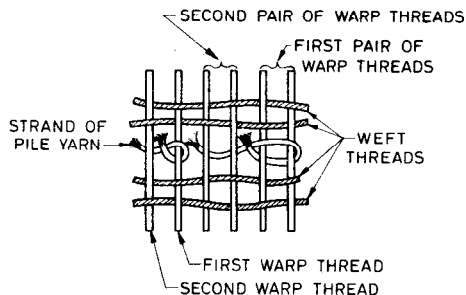


FIG. 40 EXAMPLE OF KNOTTING AND WEAVING, METHOD IV

(iv) Method V - This method is a variation of method III used in such carpets which are not very fine. According to this method, the weaver:

(a) Makes a knot by: (1) Looping a strand of pile yarn around a (the first) warp thread, (2) passing the strand above the adjacent (the second) warp thread to the left of the first warp thread, (3) passing the strand behind the adjacent (the third) warp thread, to the left of the second warp thread, and (4) pulling up the strand and cutting it;

(b) makes the second knot as in (a) above after leaving the adjacent (the fourth) warp thread to the left of the third warp thread; and

(c) weaves the backing according to method I.

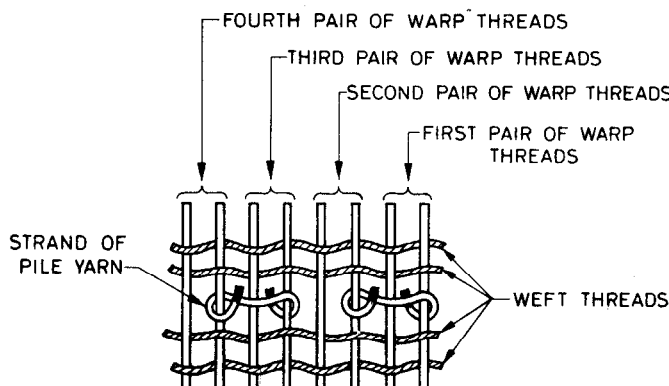


FIG. 41 EXAMPLE OF KNOTTING AND WEAVING, METHOD V

Hand-Printed Fabric - A fabric printed by hand, (a) by block, (b) by screen, (c) by stencil, or (d) by a combination of these methods.

Hand-Tufted Carpets - Carpets, wherein the pile is inserted with the aid of a hand operated tufting gun and then the tufts fixed by coating the underside of the carpet with rubber latex or

similar polymers.

Handle - The subjective assessment of a textile material obtained from the sense of touch.

Note - It is concerned with the subjective judgement of roughness, smoothness, harshness, pliability, thickness, etc.

Handloom Woollen Blanket, Scarlet - Hand woven 2-and-2 twill blanket from woollen-spun yarn made from scarlet stock-dyed cross-bred wool.

Handwear (Knitted) - Knitwear used as covering for hand or wrist or both, e.g. gloves, mittens, wristlets, etc.

Hang Pick (Pick Hang) - A pick which is out of line for a short distance, producing a triangular hole in the fabric.

Principal Cause - Incorrectly tied knots.

Hanger - A loop or loops fixed on a garment for hanging it up.

Hanging Threads (Printing) - Loose threads on the face of a printed fabric causing break of pattern (see also 'Loose Threads').

Hangman Rope - A 4-strand rope of special construction used for execution of death sentence. The rope is made from sisal, manila or hemp yarn.

Hank

(a) A synonym for skein;

(b) A yarn or twine in coiled form;

(c) A definite length of sliver, slubbing, roving, or yarn, e.g., 840 yards of cotton yarn; 560 yards for worsted yarn; 300 yards for jute yarn, etc.

(d) A synonym for count as applied to sliver, slubbing, or roving, e.g. 2-hank roving; and

(e) The skein of a reeled skein.

Hank Sizing (or Skein Sizing) - The application of size to yarn in hank form.

Hard Fibres - Fibres obtained from the leaves or leaf-stalks of various monocotyledonous plants, e.g. sisal and abaca.

Hard Finish - A finish usually for woollen and worsted fabrics without a nap of any kind.

Hard Size - Hard gummed specks visible on the surface of cloth.

Principal Cause - Use of cold or old size.

Hard Twisted Yarn Yarn having more twist than normal.

Hard Waste - Yarn waste produced during spinning, preparatory and weaving processes.

Harness - An assembly of straps or cords worn by parachutist or employed to suspend an inanimate load to which the parachute is attached.

Harness Skip (Warp Skip) - Warp yarn(s) appearing more or less continuously on the surface of the fabric due to non-interlacement with weft.

Principal Causes - Heald or harness eye broken, irregular height of harness, improper timing of healds, broken dobbie peg or defect in the jacquard, etc.

Harpoon Line - A line attached to the harpoon used for catching whales or big fish. (See also 'Whale Line').

Harris Tweed - Patented name for hand-made tweeds originally from the island of Harris off the north coast of Scotland. Harris tweed is made from fairly coarse and kempy woollen yarns and from stock dyeings.

Harsh - Wool lacking in softness to the touch.

Harvesting Twine - See 'Agricultural Twine'.

Hawser

- (a) A 3-strand rope generally over 40 mm diameter flexible construction used for marine purposes, such as towing, mooring, warping and securing; or
- (b) A rope used for tying an oil bag to the sea anchor for dampening the waves in the sea.

Hawser Twist - A cabled yarn, cord or rope construction in which the single and first ply twist are in the same direction and the second ply twist in the opposite direction, S/S/Z or Z/Z/S construction.

Hawser-Laid Rope - A rope in which three strands are twisted together without a central core. It is generally of Z-lay.

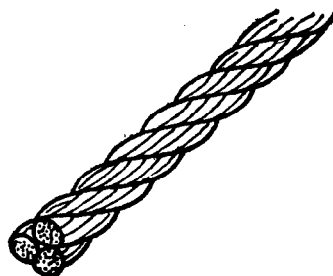


FIG. 42 HAWSER-LAID (3-STRAND) ROPE

Hay Baler Twine - See 'Agricultural Twine'

Head - Bundle of jute in a bale of raw jute usually weighing from 2.25 to 4.50 kg. Each head is given a twist and folded prior to packing in the bale.

Header - See 'Tab'.

Headgear (Knitted), Headwear (Knitted) - Kitwear used as covering for head, e.g., balaclava cap, beret, TOPA, etc.

Heald Cord - See 'Dobby Cord'

Heat Degradation - The loss in strength of tyre yarns or cords on exposure to an elevated temperature for a pre-determined time. It is expressed as the percentage of the initial strength of the specimen.

Heat Shrinkage - The maximum shrinkage in length of yarn or cord when exposed to an elevated temperature under a pre-tension; it is expressed as a percentage of the original length of the specimen.

Heat Shrinkage Force - The maximum force developed in the yarn or cord of fixed length when exposed to an elevated temperature. It is expressed as force per unit linear density (grams per tex or grams per denier)

Heat-Relaxation - The process of exposing the fabric to moist or dry heat allowing complete freedom for the yarn or fabric to shrink.

Heat-Setting, Setting - The process of stabilisation of fibres, yarns or fabrics to any shape by the action of moist or dry heat. The process consists essentially in exposing the material while under dimensional control and shape to a temperature higher than any temperature likely to be met with in its subsequent use.

Heather Mix Carpet - Carpet in which the pile yarns are composed of blends of different coloured fibres.

Heaving Line - A 3-strand manila, sisal or man-made fibre rope of small size for throwing across an open space to haul in a larger rope.

Heavy Cee - A double warp plain weave sacking jute cloth having 68 ends/dm and 35 picks/dm and weighing 673 g/m². (See IS: 3751-1966).

Heavy Cee Bag - Bags made from heavy cee cloth measuring normally 101.5 X 71 cm and weighing 1020 g. (See IS: 2874-1964)

Heavy Colour, Machine Stop - Excess colour smudged in a weftways band.

Heavy Conditioned Wool - Wool containing a large amount of yolk and foreign matter.

Heavy Goods - A term by which sacking goods are denoted (see 'Sacking').

Heel Gore Line - See 'Gore Line (Heel)'.

Held Loop - A loop which, having been pulled through the loop of the previous course, is retained by the needle during the knitting of one or more additional courses (see Fig. 32 and Fig. 115).

Held-Loop Fabric - See 'Relief Fabric'.

Hem - The folded part, without pile, of a textile floor covering, held to the substrate by stitching.

Hemmed Bag - A bag with raw edges of the cloth at the mouth folded and stitched.

Hemp - A soft fibre obtained from the inner bark of the hemp plant, Cannabis Sativa. The fibres are steel grey to creamy white in colour usually occurring in narrow flat ribbons of 1 to 2.5 m in length. It is used in the manufacture of ropes, twines and rugs.

Note - the term 'hemp' is indiscriminately applied to a great many fibres, e.g. Manila hemp, Sisal hemp, Bombay hemp and Madras hemp.

Henequen - Henequen is the leaf fibre obtained from the plant Agave Fourcroydes and is cultivated mainly in the Yucatan peninsula of Mexico.

Henrietta - Similar to cashmere fabric but warp is of pure silk.

Hessian - A single-warp plain weave jute fabric manufactured in varying weights and widths, weighing up to 500 g/m² [see also IS:2818 (Part 1)-1971].

Hessian Bag - Bag made from hessian.

Heterotype (or Heterotypical) Fibres - Fibres showing discontinuous medulla. Such fibres are very useful in imparting resiliency to the carpet pile.

High Bulk Yarn - Spun synthetic yarns which owe their bulk to the blending of pre-shrunk and unshrunk fibres in which the different degree of shrinkage in the fibres in wet finishing produces a bulking out of the yarn.

High Draft - A draft which is higher than that normally possible with the conventional three roller system at the fly frames or spinning frames.

High Neck - A term applied to neck of a knitted outerwear, designed or finished in tubular high shape to cover the neck fully or

partly. It may be single or turn-over type.



FIG. 43 HIGH NECK

High-Spliced Heel - A heel where splicing is introduced high above the shoe line.

High-Temperature Dyeing - Dyeing under super atmospheric pressure with the object of raising the temperature of the dye liquor above its normal boiling point.

Hill (Pahari) Wool (Clipped) - Clipped wool obtained from the body of sheep from the hill districts in the Himalayan region.

Hill (Pahari) Wool (Pulled) - Pulled wool obtained from the pelts of slaughtered sheep (in the same manner as in pulled wool) from the hill districts in the Himalayan region.

Hog - See 'Hog Wool'.

Hog Wool - The first clip from a sheep not shorn as a lamb (see also 'Hogget Wool').

Hogget Wool - A trade term adopted by the Australian Wool Board to indicate wool from a young sheep of either sex from about nine and ten months until it is a two-tooth.

Holes - A break down in fabric where two or more adjacent yarns are severed.

Principal Causes - Careless handling of cloth roll at doffing, rough take-up roller, defective temples, improper singeing, adverse effect of chemicals during finishing, insect damage, some warp and weft floats or slubs which get milled up in scouring and form a thick place on the cloth getting cut on shearing machine, removal of foreign matter sticking or entangled in a fabric, etc.

Holland Finish - A glazed or unglazed finish applied to certain cotton fabrics by applying an oil and filling material followed by a thorough calendering to make them more or less opaque.

Hollow Yarn or Filament - See 'Aerated Yarn'.

Homespun - Term applied to woollen cloths composed of yarns spun from local wools and woven on handlooms-generally a tweed in 2-and 2-twill. This term is applied generally to various woollen fabrics made in Scotland, Ireland and England. The appropriate Indian term for home-spun is 'KHADI'.

Honan - A silk pongee cloth made from wild silk worms raised in the Honan area in China. The fabric is noted for its uniformity

of colour.

Honeycomb - A rough textured fabric with marked ridges and hollows produced by floating warp and weft yarns. The appearance of the fabric resembles the cellular comb of the honey bee. It is also called 'Waffle Cloth'.

Honeycomb Design - A design characterized by cell-shaped cavities on the face of a weft-knitted fabric made on tuck stitch basis. A typical honeycomb design fabric is produced as follows:

<u>Courses</u>	<u>Rib Needles</u>	<u>Plain Needles</u>
1 and 2	Tuck on odd and non-knit on even	Knit all
3	Knit all	Knit all
4 and 5	Tuck on even and non-knit on odd	Knit all
6	Knit all	Knit all

Hoops - See 'Bands'.

Hop Cloth - A very coarse double-warp plain weave fabric used for making bags.

Hose - Knitted footwear where the leg length extends beyond the knee.

Hose Top - A tube-like seamless rib fabric used for covering the leg portion from ankle to knee. It is worn over the socks.

Hosiery

- (a) In the generic sense, all types of knitted fabrics and goods made up there-from.
- (b) In the restricted sense, knitted coverings for the feet and legs.

Hosiery Marl - A multiply yarn made from identical single marl yarns.

Hosiery Yarn - Soft twisted yarn for use in knitting. It can be made from natural or man-made fibres or their blends. Hosiery yarns are of many differer types (see also 'Alpaca and Camel Hair Yarns, Berlin Wool Yarn, Cashmere Yarn, Fingering Yarn, Lamb's Wool Yarn, Shetland Yarn, Wheeling Yarn, Worsted Yarn').

Hospital Blankets, Woollen, Dyed - Milled and raised stock-or piece-dyed blankets woven in 2-and-2 twill weave from woollen-spun yarn from wool or wool nylon blend.

Houseline - A soft laid 3-ply twine, s-lay, usually tarred used for seizings (binding).

Huarizo

- (a) A cross-breed of Llama (Llama glama glama) father and

Alpaca (Llama glama pacos) mother.

(b) Fur produced by this cross-breed.

Huckaback - A fabric with pebbly or irregular surface produced by short floats of warp and weft on a plain ground.

Hue - That attribute of colour whereby it is recognized as being predominantly red, green, blue, yellow, etc.

Hulls (Cotton) - The outer hard shells of cotton seeds.

HUNKA - Very hard jute strands running from the lower end up to practically the tip of the fibre. This is due to insufficient or no retting. (See also under 'Jute Fibre Characteristics').

Hydro Extraction - An operation for squeezing out excess liquid generally water from a textile material. It neither brings about any change in the basic character of the textile material, nor involves any chemical treatment.

Ice Colours - A term applied to azoic dyes because the diazotised base solution has to be kept at low temperature by adding ice to prevent its premature decomposition.

Identification Yarn - Usually coloured yarn used for identification of quality of the rope.

Imitation Rib - An effect resembling ribbed texture produced on a plain-knitted fabric either by systematically removing the needles or closing the beard of needles during knitting. Also known as 'Mock Rib'.

Immersion Suit - A suit designed to protect the body against the effects of immersion in cold water.

Imperial Cloth - A fine piece dyed merino wool worsted coating in 2-and-2 twill weave.

Impregnated Fabric - A fabric in which the interstices between the yarn are completely filled with the impregnating compound throughout the thickness of the material, as distinguished from sized or coated materials, where these interstices are not completely filled.

Impregnation - The operation of depositing a bonding and/or finishing agent by total immersion of the textile floor covering, then extracting the surplus.

Impression - Of pressing. Surface unevenness after pressing, usually around areas of extra thickness, such as pockets and seams.

In-Laid fabric - See 'Laid-In Fabric'.

India Hemp - See 'Sunn Hemp'.

Indian Carpets - A term applied to all-wool hand-knotted pile carpets made in India in a variety of Indian, Persian, European or Tibetan designs. They are produced from worsted (2 or 3 ply) or woollen yarns of 2-5 Nm resultant count and the density of knots varies from 6 to 60/cm².

Indian Wool - Wool obtained from indigenous sheep. It is essentially a mixed fleece often kempy and is suitable for carpets and blankets.

Indicator Line - A 3-strand Italian hemp or flax line used on the indicator apparatus when testing reciprocating engines.

Indigo Dye - A dye capable of giving rich permanent blue colour after oxidation in air of the yellow juice applied on textile material and obtained from Indigoferae plant leaves.

Indigosol Dye - See 'Solubilized Vat Dye'.

Indo-Persian Carpets - Indian carpets with well known Persian design (see also 'Persian Carpets').

Industrial Fabrics - A variety of fabrics used for non-apparel purposes in industry.

Infant Suit - A baby suit for infants (see 'Baby Suit').

Infantee, Infant Socks - See 'Bootee'.

Inflation Net - A net of cordage used to hold down an envelope during inflation.

Ingrain Carpet - A reversible coarse carpeting woven on a jacquard loom accommodating up to six coloured weft threads, which may be two-ply (Kidderminster Carpet) or three-ply (Scotch Carpet).

Ingrain Colours - Dyes which are developed in situ on the fibre.

Ingrain Yarn - See 'Top-Dyed Yarn'.

Inlay - An extra allowance besides the usual seam allowance inside the garment for letting out if required or for strength at a given position.

Inner Coat - See 'Undercoat'.

Inserted Seam - A seam in which a single or number of plies of material is inserted between two others which are turned in. The complete assembly is sewn in one operation.

Insolubilizing (Filaments) - The process of rendering the filaments resistant to or insoluble in, hot acid baths.

Instep - Upper part of the foot of socks or stockings.

Insulating Tape - A narrow strip of fabric impregnated with a resin having a high dielectric constant, which is further coated with an adhesive on one side used for insulation. Tapes and polymer films coated with adhesive on one side can also be used. Coloured yarns are frequently used for the purpose of identifying specific electrical circuits.

Insulation Ratio, Effective - In thermal transmittance of textile, an indication of the increase in insulation afforded by the fabric in comparison to the uncovered test plate under specified conditions of test.

Intarsia Design - A design in weft-knitted fabrics in two or more colours which are solid from front to back. Each area of colour is knitted from a separate yarn which is contained within that area. Generally a detached motif is made in colour on different coloured ground. Also known as 'Solid Design'.

Inter-Lining Cloth - A fabric, woven or non-woven, used as a layer between the outer cloth and inner lining of garments or between two layers of the same cloth, e.g. in collars, to give stiffness, shape and/or warmth; better quality interlining cloth is often chemically treated and/or impregnated with suitable polymers to obtain permanent stiffness.

Interlacing - The passing of a thread over or around another thread or loop of another thread.

Interlining - A layer of material inserted in between the inner and outer fabric for shape retention, strength, warmth or bulk.

Interlock Fabric - A double 1 x 1 rib-knitted fabric with crossed sinker wales. The wales on one side of the fabric are immediately behind the wales of the other side of the fabric. The appearance of the fabric is same on both sides.

Intralooing - The passing of a loop of thread through another loop formed by the same thread.

Intrinsic Strength - The value obtained by dividing the mean single fibre strength by the mean fibre weight per unit length. (Synonymous with tenacity).

Inturned Top Stockings - A stocking with inturned welt at the top.

Inturned Welt - A welt made by folding a plain fabric backward and then joining the starting end with the main body of the fabric during the process of knitting. Also known as 'Turned Welt'.

Invoiced Mass (Weight) - The mass indicated on the seller's invoice.

Italian Cloth - Dyed cotton warp and undyed woollen weft fabric woven in 5-thread weft sateen in which the wool portion is piece

dyed. This cloth is lustre finished and used as a lining cloth.

J-box

- (a) A J-shaped trough or vessel for the processing of textiles from one process to another. The long limb of the J-box forms an inclined plane on which the material accumulates during the dwell period, being withdrawn from the radial portion.
- (b) An upright J-shaped vessel for continuous wet processing of textiles.

Jacket - A short outer garment generally of hip length, with full sleeves and tight-fitting border.

Jackets (Machine Covering) - A textile product, woven or felted into tubular or sleeve form ready for covering and shrinking on a machine roll.

Jacquard Fabric (Knitted) - A knitted fabric with designs generally in colour made on the basis of needle selection.

JAMAWAR (or JAMAVAR) SHAWL - Fine worsted or cotton warp, and worsted weft jacquard shawl woven with intricate design border as shoulder wear for ladies.

JAMDANI - An Indian term used for superfine cloth produced on handlooms with characteristic designs.

JANGHIA - An Indian term for briefs (see 'Briefs').

Jacquard Weave Carpet - Pile carpet produced on a jacquard loom and having a design obtained by the use of creels (frames) each supporting the bobbins of pile yarn of different colours. The successive selection of the appropriate frames during weaving forms the required design.

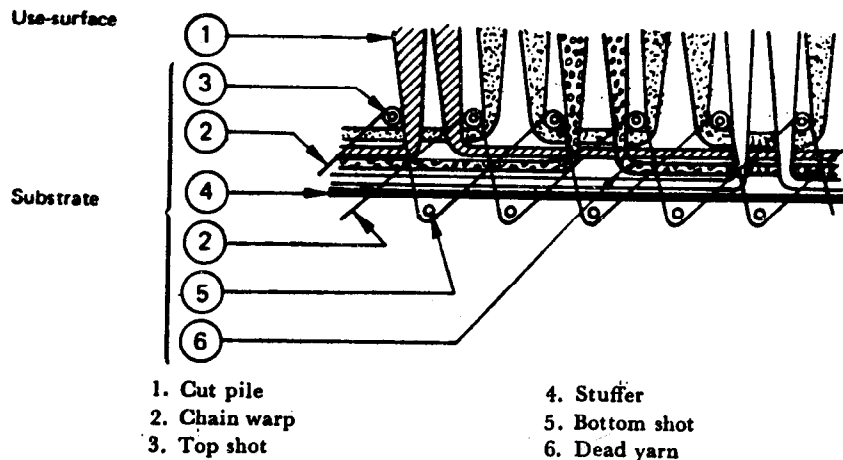


FIG. 44 JACQUARD WEAVE CARPET, TWO-SHOT (WARPWAYS SECTION)

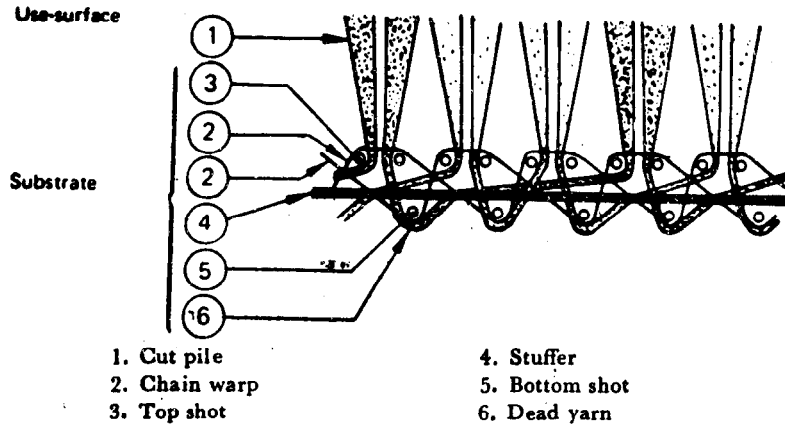


FIG. 45 JACQUARD WEAVE CARPET, THREE-SHOT THROUGH TO THE BACK (WARPPWAYS SECTION)

JANGLI - This is an inferior variety of jute coming mainly from some Bihar districts. This variety of jute is usually not properly retted or cleaned.

Jaspe Carpet - Carpet having a flamelike regular pattern, traditionally produced by using pile yarn dip-dyed in hank form into two tones of the same colour or two different colours in fixed proportion of length of the hanks in any one lot.

Jaspe Yarn - Jaspe yarn may be woollen-spun or worsted-spun yarn produced by folding two space dyed yarns. They are usually used in carpets called jaspe carpets.

Jean - A 2/1 warp faced twill fabric used chiefly for overalls. Typical cotton particulars are 18s warpx 28s weft with 90 ends/dm and 60 picks/dm.

Note - - The term jeanette is sometimes used to describe the lighter weights and these may be used for linings.

Jerk-In Weft - See 'Weft Trail'.

Jersey - Pullover with a hem at the bottom.

Jersey Fabric - A plain-knit fabric as opposed to rib-knit one. It may be circular knit, flat knit or warp knit.

Jet-Dyeing - A process for dyeing fabric in rope form in which the fabric is carried through a narrow opening by dye-liquor circulated at a high velocity.

Jetted Pocket - A pocket having a mouth on which the edges are finished by the application of jettings.

Jetting - A narrow strip of fabric, usually cut warpwise, sewn parallel to the pocket opening and turned over the pocket mouth edge.

JHARAN - An Indian term for handloom, coarse cloth made with or without borders on all sides and sometimes with check designs. It is used as duster cloth.

JHOOT Silk Coating - It is a plain weave thick coating fabric produced on handlooms in West Bengal. 2 Ply degummed jhoot warp and 2 or 3 ply jhoot weft is used. Jhoot yarn is produced from reeling silk waste.

JHURI (Silk) - Yarn spun out of tasar waste without subjecting it to opening processes.

JHURI-JHURI - A plain-woven thick fabric produced on handloom mostly in Bihar out of reeled tussar silk waste hand-spun yarn. It is used for dress material, furnishing, etc.

Jig, Jigger - A dyeing machine in which fabric in open width is transferred repeatedly from one roller to another and passes each time through a dye-bath of relatively small volume. Jigs are also frequently used for scouring, bleaching dyeing and finishing.

Jigger (Garment) - The button on the inside of a double breasted coat (usually sewn with a long shank).

Joined Bag - A bag fabricated out of two pieces of jute cloth.

JOOH - See 'Frison (French)'.

JUMPER - An Indian term for blouse (see 'Blouse').

Junk - Condemned cordage of sizes 102 mm and above.

JURAB - An Indian term for socks and stockings (see 'Sock, Socks' and 'Stockings').

Jute - A multicellular fibre obtained from the bast of various species of *Corchorus*, of which the round pod jute (*Corchorus capsularis* or White jute) and the long pod jute (*Corchorus olitorius* or Tossa or Daisee jute) are the most important. The fibre strands are long, usually varying from 1.5 to 3.5 m in length.

Jute Blanket - A type of blanket made out of woollenized jute or with jute mixed with low grade wool or cotton.

Jute Fibre Boards - Boards made by impregnating jute fibre with adhesives and other chemicals and consolidating the fibres under heat and pressure. These are used as insulation boards. Fibre board drums, packing materials, etc.

Jute Fibre Characteristics - The following are the principal jute fibre characteristics:

- (1) Centre Root (Book Chal) - The hard barky region in the middle part of the reed which requires additional softening treatment.

- (2) Colour - The property of a fibre which distinguishes its appearance, such as redness, yellowness, greyness, etc.
- (3) Crop End - The hard gummy (sometimes barky) fibre at the top end of the reed.
- (4) Croppy Fibre - Fibre with apical ends rough and hard (but not barky).
- (5) Weak Croppy Fibre - Fibre which has become unusually weak over a length of 30 cm at the top end.
- (6) Dazed Fibre - Fibre which is weak and dull in appearance.
- (7) Density - Mass per unit volume of the fibre including air-spaces. Higher density (heavy body) is a characteristic of better quality of fibre.
- (8) Effective Reed Length - The length of the reed after defective basal and apical ends have been removed.
- (9) Fibre Fineness - A measure of diameter or weight per unit length or both. The finer the fibre the better the spinning quality.
- (10) FULPAT - A term used for weak, gummy and immature jute fibre.
- (11) Gummy Fibre - Closely adhering fibre strands not easily separable.
- (12) HUNKA - The very hard barky fibre running continuously from the basal end to almost the apex of the reed.
- (13) Knots - Stiff barky spots in the body of the reed which break the continuity of the fibres when opened.
- (14) Leaf and Loose Leaf - Leaf is the dark grey leafy or paper like substance (remnant of the skin of the plant) appearing on the strand. Loose leaves are those that lie loosely on the fibre and are easily removable.
- (15) Lustre - It depends on the display of light reflected from the fibre exposed to normal light. Higher lustre in jute is generally a characteristic of better quality fibre.
- (16) Meshiness - The intertwining of fibre strands forming loops, genetically inherent in the species from which fibre is obtained.
- (17) Mossy Fibre - A type of vegetation which sometimes gets attached to the plant.
- (18) Moss - Presence of dead adventitious roots at the lower

or middle part of the reed.

- (19) Over-Retted Fibre - Fibre which has lost its strength and brightness.
- (20) Pliability - The property which determines how easily the fibre can be bent or twisted.
- (21) Reed - The fibre system from the stem of one individual jute plant (see also under 'Porter').
- (22) Reed Length - The entire length of the reed including the base and apex.
- (23) Reed Tapering - The rate of thinning of the reed from the base to the apex.
- (24) Reed Thickness - The average thickness of the reed.
- (25) Root - The hard barkly region at the basal end of a reed which requires additional softening treatment. Also known as 'Cuttings'.
- (26) Runner - The hard barkly fibres running from the lower end to the middle region, more or less continuously.
- (27) Speck - The bark with a knotty core in the body of the strand which breaks the continuity of fibre.
- (28) Sticks - presence of small pieces of wood of jute plant over the body of the reed.
- (29) Tensile strength - The longitudinal stress at which a fibre specimen of a specified length ruptures. It is usually expressed in gram force per tex.

Jute Matting - See 'Matting'.

Jute Mesh - An open weave jute cloth used for soil conservation and in lighter weights, for the manufacture of strengthened paper and underfelt (see 'Scrim').

Jute Nettings - Nets manufactured with meshes of various sizes and provided with tying lines used for camouflage purposes.

Jute Rugs - Jute fabrics of various sizes sometimes cut, printed, hemmed and fringed for use as floor coverings.

Jute Stick - Woody centre stem of a jute plant.

Jute Stick Boards - Boards made from jute stick particles. These are used for insulation partitioning, packing cases, etc.

Jute Twine - A plied yarn made by twisting together two or more strands of yarn.

Jutlac - Laminated sheet made of jute and shellac combination capable of being made into drums, boxes and similar articles.

K-Bag - A double-warp hemmed plain weave sacking bag measuring about 101.5 X 71 cm (normally with 51 ends/dm, 31 picks/dm), weighing approximately 850 g, plain (without stripes), and dry sewn.

K.D. (Kier Decatizing) - A finishing process for dimensionally stabilizing and flat setting wool fabrics (see 'Decatizing').

KAMBLEE (CUMBLEE, KAMBLI, KUMBAL) - An Indian term for fibrous coarse blanket made out of wool or a mixture of wool and other animal fibres, which are not milled.

KAMDANI - An Indian term for fine fabric with ornamentation made with gold and silver threads (see 'ADHI').

KAPAS - A term used for seed cotton.

Kapok - A unicellular fibre obtained from the seed pods of the kapok tree, Ceiba pentandra (Eriodendron anfractuosum) and Bombax malabaricum. The fibres are about 2.5 cm in length, white or twany in colour and have silky lustre. It cannot be spun into yarn. It is very light and is used mainly for stuffing purposes.

Kashmere Silk - Silk fabric made with 2/1 right-hand twill weave that gives a soft finish.

Kashmere Worsted - See 'LOHI'.

Kashmir Shawls - Shawls made in Kashmir, usually embroidered.

Katan Cloth - A plain weave mulberry silk fabric in which double and twisted yarn is employed both in warp and weft.

Katia Fabric - see 'JHURI-JHURI'.

Katia Yarn - The yarn spun out of tasar waste after opening and cleaning.

KD Finish - Treatments given to woollen fabrics to improve handle, appearance and shrinkage resistance by passing through heated perforated cylinders.

Keel - See 'Cut Marks'.

Keeper - A ring, usually of webbing metal, forming the rigging lines into a riser.

Kemp - A coarse animal fibre with a wide lattice-type medulla, which is shed from the skin at least once a year; it is often shorter than fibres of the fleece, has a long tapering tip and, when completely shed, tapers sharply towards the root end.

Note 1 - Kemp fibres are usually chalky white in appearance,

but may be coloured either very dark brown to black or reddish. Kemps are usually very strongly inherited. When dyed, because the cortex is relatively thin, they appear much lighter in colour than normal fibres.

Note 2 - The use of this term is not necessarily confined to wool fibres.

Kenaf - The fibre obtained from the bast layer of the plant Hibiscus cannabinus.

Note 1 - Kenaf is commonly known as Mesta in India.

Note 2 - Being similar to jute in many of its properties, kenaf is used either as an alternative to or in admixture with jute.

Keratin - Basic ingredient of all horny tissues and wool, hair and fur fibres. It is a sulphur containing protein.

Kerial - It is a handloom silk sari generally woven in West Bengal, with twisted degummed silk yarn. It is woven in plain weave with design or plain border and pallu, brought out by throw shuttle loom.

Kersey - A compact, lustrous woollen fabric, diagonally ribbed or twilled, which is heavily milled and finished with a short nap. It is similar to Melton.

KETE (Silk) - A term used for handspun tasar thread.

KHADI (or KHADDAR) - An Indian term for fabric woven on handlooms from handspun yarns of natural or man-made fibres or blend of two or more of such fibres.

KHANDY - see 'Candy'.

KHES - An Indian term for denoting plain, twill, striped, check or double cloth with woven all-over designs commonly used as bed sheets or bed covers in some parts of India.

Kickling - Winding an old rope around a heavy rope to protect it from chaffing.

Kidderminster Carpet - see 'Ingrain Carpet'.

Kidney Cotton - A type of Brazilian cotton in which the seeds adhere together in clusters, making ginning difficult.

Kier Boil (Kiering) - The process of prolonged boiling of cellulose and their blends with alkaline liquors in a suitable large container known as a kier, either at or above atmospheric pressure.

Kier Decatizing - See 'Decatizing' and 'K.D. (Kier Decatizing)'.

Kincob or Kinkhab - See 'Brocade'.

Kink

- (a) A definite deflection of a portion of the length of a fibre, yarn or cordage from the general direction of the remainder.
- (b) A place in a yarn where it has doubled back on itself and twisted in the manner of a plied yarn.

Kinky Weft; Looped Yarn; Weft Kinks - Exposed loops of weft yarn.

Principal Causes - This defect is often caused by over twisted poorly set weft yarns or inadequate tension control of weft yarns during winding, unwinding or insertion.

Kinky Yarn or Thread - See 'Snarl Yarn, Snarly Yarn'.

Kitties - Small particles of trash motes or leaf bits visible on the surface of cloth.

Note - These are invariably found in 'Grey Cloth'. Basically this is a yarn defect.

Knee Cap - A tubular band knitted on round machines with elastic threads laid-in; used by sportsmen for support and protection to the knee.

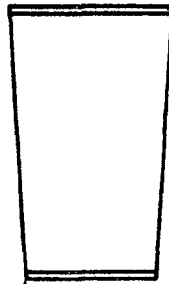


FIG. 46 KNEE CAP

Knee Kicker - A device used in the laying of textile floor coverings to achieve a suitable tension; this tension is brought about by the pressure of the knee on one end of the device, the other end being held in the backing by pins.

Knicker Boker Yarn - A fancy woollen spun yarn with coloured spots due to unopened tufts of fibre.

Knife Pleat - A pleat with the folds lying flat and facing in one direction.

Knit-Deknit Finish - A finish used for thermoplastic fibres for introducing a very high degree of curliness or crimp which gives extremely high stretch and bulk and hence adds greatly to the appeal of fabric, by first knitting the filament yarns into a tubular fabric and then setting permanently by steaming at 0.17 M Pa (25 psi) pressure.

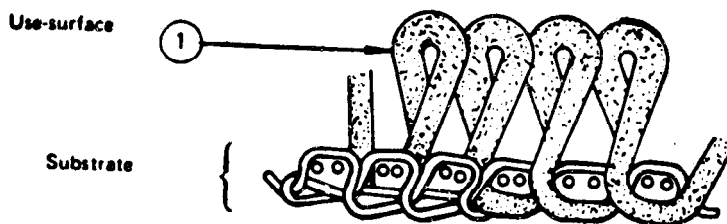
Knitted Backing - Carpet backing produced by knitting, either before manufacture, or in the course of production.

Knitted Fabric - Fabric produced by the process of knitting.

Knitted Garments - Garments made by knitting or out of knitted fabrics.

Knitted Goods - Goods made by knitting or out of knitted fabrics.

Knitted Textile Floor Covering with Pile; Knitted Pile Carpet - Knitted textile floor covering with pile, knitted carpet made on either warp knitting machines (Raschel type), or weft knitting machines (Wildman type). An example is given in Fig. 47.



1. Loop pile

FIG. 47 WARP KNITTED PILE CARPET (RASCHAL TYPE)
LONGITUDINAL SECTION

Knitted Textile Floor Covering Without Pile - Textile floor covering without pile, made on a knitting machine.

Knitting - The process of producing a fabric with the aid of needles by the interlooping of one or more yarns.

Knittles - The strands of two ropes twisted together.

Knitwear or Knitted-Wear - Knitted goods used as apparel.

Knop Design - Designs produced by consecutive tucking and knitting basis on plain fabrics and consecutive tucking, knitting and missing basis on rib fabrics. This gives an effect of raised spots.

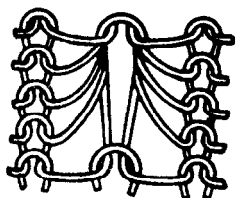


Fig. 19A

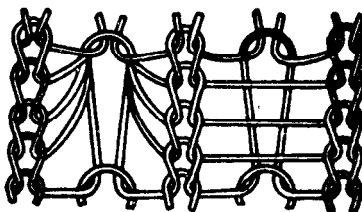


Fig. 19B

FIG. 48 KNOP DESIGN

Knop Yarn or Thread - A fancy yarn with knops or lumps of one or more components at regular or irregular intervals.

Knot

- (a) A joining by tying together;
- (b) A tuft of yarn inserted in hand-made pile carpets, or
- (c) A package made up of a number of skeins.

Knot Rope - A rope or cable generally consisting of long fibred hemp (with the exclusion of two) and having along its whole length a succession of single knots regularly spaced.

Knot Strength - The breaking load required to rupture a single strand having an overhead knot in the portion of the specimen between the clamps. It is used as an approximate measure for brittleness of yarn.

Knots - Big knot of warp or weft yarns present in the cloth.

Kolinsky - Kolinsky [Mustela (Lutreola) sibirica] is the finest species of Asiatic mink. Fur fibres are usually reddish brown, 20 mm in diameter and generally exhibit ladder type medulla.

KORA Cloth - Printed saris, scarf and printed dress materials for ladies are made from kora cloth or fabric. KORA cloth is a silk fabric mainly of mulberry silk used both in warp and weft in undegummed and untwisted condition. KORA cloth is classified in two varieties:

- (a) Single - Where the warp is of single yarn and weft is of 2 ply, and
- (b) Double - Where the warp is of 2 ply and weft is 3 ply or more.

KOSA - A light-weight fabric handwoven from tussar yarn in warp and weft, and is generally printed.

KOTI - An Indian term for COATEE (see 'COATEE').

L-Twill Bag - Bags made from L-Twill cloth normally measuring 112 x 67.5 cm and weighing approx. 1135 g (see IS: 3794-1966).

Label Cloth - A heavily sized plain weave cotton fabric, used for tags and labels.

Lace - A fine open work fabric with a ground of mesh or net on which patterns may be worked at the same time as the ground or applied later, and which is made of yarn, by looping, twisting, or knitting, either by hand with a needle or bobbin, or by machinery; also a similar fabric made by crocheting, tatting, darning, embroidering, weaving or knitting.

Lace Stitch (Knitting) - A stitch produced on one set of needles in weft-knitted fabrics by transferring either partially or wholly a loop from one needle to another.

Lacquer Finish - An extremely smooth, highly glazed finish forming a thin film on the surface of the fabric produced by means of nitrate cellulose derivatives, synthetic resins etc.

Lacquer Printing - see 'Pigment Printing'.

Ladder - A sequence of drop stitches in a single wale. It appears like a ladder.

Ladder Stop - see 'After-Welt'.

Ladder Web - A four ply woven narrow fabric consisting of two outer or body webs between which are woven two narrower webs, with staggered relationship with each other, each being woven alternatively into one and then the other outer or body web so as to form when opened up, supports for the slats of venetian blind.

Ladies' Hose, Ladies' Stocking - A fine-knitted ladies' footwear where the length of the leg portion extends well above the knee. It has generally a broad welt at the top.

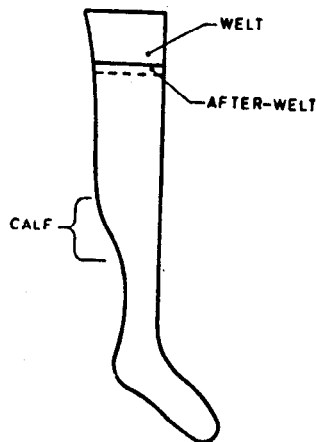


FIG. 49 LADIES' STOCKING

Laid-In Fabric - A knitted fabric containing non-knitted yarns, which are held in position by the knitted yarns. Also known as 'In-Laid Fabric'.

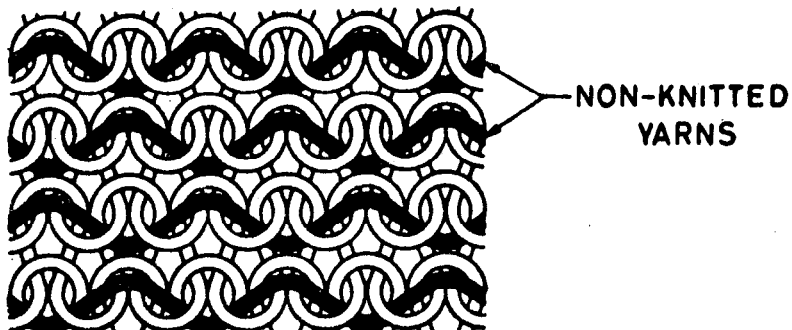


FIG. 50 LAID-IN FABRIC

Laid Cordage - Cordage constructed by twisting three or more

strands about each other to form a helix round a central axis.

Lamb's Wool - Wool from young sheep up to six months of age.

Lambs' Wool Yarn - Woollen-spun knitting yarn made from short and fine wools, which may not necessarily be lamb's wool.

Lame - Any fabric in any weave using metal threads or JARI threads in warp or weft for decoration.

Laminates - Jute fabric, usually hessian and DW tarpaulin, laminated with kraft paper, or plastic sheets.

Lamp Wick - A narrow flat or tubular cotton fabric made with coarse soft spun yarns. It is used for wick in lamps, stoves, etc.

Lanyard - Braided or cable-laid cord of sizes varying from 13 to 19 mm used for holding knife, whistle, pistol, etc. The cord is made from cotton or worsted yarn, but mainly from cotton yarn.

Lap (Cloth) - The length of cloth between the successive transverse folds when pieces are plaited down or folded.

Lap (Flax) - An arrangement of the fibre strands in scutched flax pieced out of hacking or in pieces of hackled flax to facilitate their removal as separate units from built-up bundles.

Note - In one method, a small bunch of fibres is separated from one side of the root laid across the centre of the pieces; the end is then folded round on to the under-side. In another method a half twist is inserted at the centre of the piece and compressed between thumb and first finger until the piece is placed in position in the bundle.

Lap (General) - A sheet of fibres or cloth wrapped round a core with specific applications in different sections of the industry, e.g. sheets of fibre wound on rollers or round endless aprons to facilitate transfer from one process to the next.

Note - In cotton spinning, the sheets of fibre from openers and scutchers, sliver lap machines, and ribbon lap machines are wound on the cores; in worsted preparing, the gilled fibres from the sheeter box are wrapped round a wide apron.

Lap Waste (Wool) - A sheet of fibres accidentally wound round rollers or aprons. It is substantially without twist and can be carded without further processing.

Lap-Felled Seam - A seam formed with the edges of both plies of material concealed by interlapping. Two or more rows of stitches secure the turned pieces of material.

Lapel - The upper forepart of the front edge of a jacket or coat which folds back. The length of the lapel extends from the gorge seam to the break.

Lapel Roll - The fall and curl of the lapel downwards from the break seam of the collar to the first button. The term 'Roll' applies chiefly to a soft finish lapel, not one which is pressed almost flat on the crease line.

Lapped - A term used in describing an aspect of make-up of jute fabric; it describes a jute fabric continuously folded backwards and forwards in predetermined lengths.

Lappet Cloth - It is a lightweight muslin like cotton cloth with coarse extra warp figuring threads. The figuring ends traverse horizontally and are bound by means of weft at the reversing point. Each figure is made from one thread only.

Lapping Cloth - A compact machinery fabric made of wool or its blends with natural or man-made fibres, spun into yarns on woollen or semiworsted system and woven in twill weave.

Lashed-In Weft - see 'Weft Trail'.

Lashing - A 3-strand, soft laid rope, used for securing cargo in transit or for tying up or for securing any object. The rope is made from sisal, hemp, jute, cotton or man-made fibre yarn.

Lashing (Garment) - The fastening of the inside seams of coat edgings or facings to the outer material or interlining, in order to hold them in position. Usually sewn by a blind stitch machine.

Lasting - A very closely woven fabric made from hard-twisted yarns. A 'Worsted Lasting', usually a seven-shaft weave, is used for protective clothing in munition works.

Lawn - A fine, plain-woven cloth of linen or cotton, made in various quality to produce fine, sheer fabrics. Various finishes may be applied to a fabric of this type, in which case the cloth is known by the name of the finish used, e.g., organdie.

Lawn Finish - A medium starch finish applied to lawns and other fine yarn plain cloths to give a crisp finished fabric.

Lay (Rope) - see 'Pitch (of Rope)'.

Lay - An assembly of materials placed one on top of another in preparation for cutting.

Lay Planning (Layout Planning) - The arranging of patterns of the component parts of a garment within given width of material in order to obtain the most economical use of the material.

Laying - Twisting of strands to form a rope. (See also 'Direction of Lay').

Laying (Silk) - The entire quantity of eggs laid by a single moth.

Laying Up (Spreading) - The process of spreading material to form

Laying Up (Spreading) - The process of spreading material to form a lay.

Laying with Full Adhesion - A method of laying in which the textile floor covering is stuck to the whole of the floor to be covered.

Laying with Partial Adhesion - A method of laying in which the textile floor covering is stuck to part of the floor to be covered, e.g. round the edges or in irregularly spaced areas.

Lazy Leg - A cord intended to withdraw certain items of an assembly in correct sequence after the main withdrawal or static line has been released or fractured.

Lea

- (a) The unit of count system used mainly for flax. Sometimes used for manila and sisal also (lb/300 yd),
- (b) Length of cotton yarn measuring 109.6 m (120 yd) wound in 80 rounds with a warp reel of 1.370 m (1.5 yd) circumference.

Lea Strength (Lea Breaking Strength) - Breaking load of a lea of yarn (see also 'Breaking Load').

Lead - The slightly faster surface speed of a roller or a set of sliding bars than that of another roller just behind it is called lead and is usually expressed as a percentage of the speed of the slower roller.

Lead Line - A dressed hemp line of s-lay (cable-laid) used for taking depth soundings.

Leaf Edge - The outer or fall edge of the collar.

Leasing - The operation of inserting a crossed traverse lease-cord in wraps of yarn on a reel for the purpose either of separating wraps into groups of specific numbers, e.g. 120, or to prevent entangling of wraps of yarn during processing, e.g. hank dyeing, to facilitate subsequent winding on a yarn package from hank supply after removal of the lease-cords.

Leather Cloth - A cloth having a woven or knitted ground structure coated on one side with an oil or rubber compound, cellulose derivative, or synthetic, polymer material, which is embossed to give a leather-like appearance, the other side sometimes being raised. In other cases, both sides of the fabric are coated and embossed.

Length of Effective Pile - The length of fibre of one leg of a tuft from the place where it emerges from the substrate to its farthest extremity, or half the length of a loop measured between the two points where it emerges from the substrate

Length of Lay - see 'Pitch (of Rope)'

Length of Mesh (Knotless Netting) - Distance between the centres of two opposite joints in the same mesh when fully extended as in knotted netting.

Length of Mesh (Knotted Netting) - Distance between the centres of two opposite knots in the same mesh when fully extended in N-direction. (See 'Direction in Netting').



FIG. 51 LENGTH OF MESH

Leno - A fabric in which warp threads are made to cross one another, between the picks, during leno weaving. The crossing of the warp threads may be a general feature of plain leno fabrics (as in marquisette and some gauzes and muslins) or may be used in combination with other weave (as in some cellular fabrics).

Leuco Dye - A reduced form of dye from which the original dye may be regenerated by an oxidation process.

Levelling - Migration leading to uniform distribution of dye in a dyed material.

Levelling Acid Dyes - Acid dyes having good levelling properties.

Life Line

- (a) A high quality 3-strand hawser-laid rope used for supporting breaches buoy in rescue operations; or
- (b) A manila rope fitted on the devit span for holding by the crew of the life boat during lowering and hoisting of the boat.

Lift Web - That part of the harness connected to the rigging lines.

Light Cee Bag - A double-warp hemmed plain weave sacking bag measuring about 101.5 X 71 cm (normally with 68 ends/dm and 31 picks/dm), and weighing approximately 910 g, striped or plain, and dry sewn.

Light Conditioned Wool - Wool containing a small amount of yolk and foreign matter.

Ligne - A standard measure, equal to 0.635 mm (i.e. 1/40 in.) by which buttons and ribbons are measured.

Limbric - A light to medium weight, closely woven, plain weave, cotton cloth made from good quality yarns. The weft is coarser and more closely spaced and has a lower twist factor than the warp, thus giving a soft cloth in which the weft predominates on both sides.

Limed Wool (Tannery Wool) - Wool removed from the pelts of slaughtered sheep with the aid of slaked lime paste as a depilatory.

Lincoln - Name of a British long lustre wool producing sheep. Wool produced by this sheep is called Lincoln wool. Many medium wool producing sheep have been based on Lincoln and merino cross-breeds.

Line - A cordage with a circumference of less than 25 mm. (See also 'Rope').

Linear Density - Mass per unit length (the quotient obtained by dividing the mass of yarn or cord by its length). It is usually expressed in denier or tex.

Linen

(a) Descriptive of yarns spun entirely from flax fibres.

(b) Descriptive of fabrics woven from linen yarns.

(c) Descriptive articles which, apart from adornments, are made of yarns spun from flax fibres.

Note - Despite some usage of the term in non-technical circles as a generic one, e.g., linen department, baby linen, household linen, it is incorrect to apply it to individual articles that do not comply with the definition.

Linen Count - The linear density of linen yarn (wet spun), expressed as number of 300 yd hanks/lb. (See 'Count of Yarn').

Lingerie - Ladies' underwear, slumberwear and similar garments of fine texture and aesthetic appeal.

Lingerie Ribbon - Any type of washable ribbon suitable for use on ladies' and children' underwear.

Note - It should have a soft, smooth finish and be firmly constructed with strong selvages.

Lininess - Longitudinal defect(s) caused by structural distortion in knitted fabric.

Lining Cloth - A separate entity used in making-up garments and other articles, consisting of a single layer or multiple layers of material loosely held in place along one or more edges. It does not modify the properties of the main fabric with which it is associated but can impart certain performance characteristics to the article.

Linking - The process of joining knitted garment parts on a linking machine, in which individual loops from two fabrics are run on to a series of regularly spaced points and then joined by chain stitches.

Links, Links Fabric - See 'Purl Fabric'.

Linseys - Woven with a linen warp and worsted weft in white and blue stripes, resulting in a coarse, strong and durable fabric which is used as a hard wearing apparel.

Lint

(a) The main fibres separated from the cotton seed by ginning; or

(b) A plain-weave sterilized material with a raised fleecy surface, being highly absorbent and of a type made for surgical purposes made from cotton.

Linter - Very short fibres removed by delinting process from cotton seed already ginned.

Lip - A partial extension of the periphery of the canopy to facilitate inflation.

Liquor Ratio - The ratio of the mass of liquor employed in any treatment to the mass of fibrous material treated.

Lisle Yarn (Thread) - A highly-twisted, plied (usually two-ply), good quality cotton hosiery yarn, spun generally in fine counts. All lisle threads are gassed and some may be even mercerized (mercerized lisle).

List; Listing - See 'Selvedges'.

Listing (Shading) - A gradual variation in tone or depth of shade.

Listings - See 'Spindle Tape'.

Liverpool Twill (L-Twill) Cloth - A double warp twill weave sacking cloth approximately 716 g/m². (See IS: 3668-1966).

Lizard - A rope with several ring on thimbles spliced into it.

Llama - Hair of the South American llama (see also 'Alpaca').

Llama Yarns - Same as angola yarns.

Lobster Mar Line - 2-ply manila twine usually tarred used for making lobster creels.

Lock stitch - The 'plain stitch' in which two separate threads are used. In formation, one thread is passed through the material, forming a loop, while the second is passed through the loop on the underside of the material. This loop is pulled into the

material bringing with it the locking thread.



FIG. 52 LOCK STITCH

Locknit fabric - A fabric made on a warp knitting machine with one needle bar and two full-set guide bars, where the guide bar movements are controlled as follows:

- | | |
|---------------------|--------------------------|
| (a) Front guide bar | 2-3, 1-Ø and repeat; and |
| (b) Back guide bar | 1-Ø, 1-2 and repeat. |

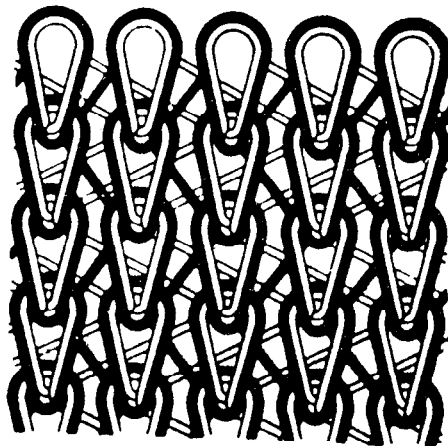


FIG. 53 LOCKNIT FABRIC

Locks (Wool)

- (a) Second cuts and small portions of wool from the lower parts of the legs and edges of the fleece containing fribs and sweaty ends.
- (b) Bunch of wool fibres of which the fleece is composed.

Lofty - Describes fibres or yarns which are open, lively, highly elastic and springy, resuming normal position after pressing in hand.

LOHI - An Indian term for a heavy, rough woollen fabric in twill weave with two picks in shed, made in Kashmir from wool of the local sheep. Its length is about 2 m and weighs from 600 to 900g. It is used as shawl in colder climates by men.

London Finish - A finishing process applied to fabrics in which the fabric is thoroughly moistened and then allowed to dry naturally in the absence of tension, steamed and pressed.

London Shrinkage - Removing strains in the fabric in the final stages of woollen and worsted finishing by wetting the fabric and then drying it tensionless in open width.

Long Cloth - A cotton fabric in plain weave of nearly balanced construction and somewhat heavier than cambric and lawn.

Long Drawers - See (c) under 'Drawers'.

Long End - A term used to refer to the extended bottom layer of cloth of a lapped cut which is turned and placed on top of the lap before folding.

Long Line - A plaited (or twisted) hemp line mainly used on ships to tow a rotary log, for recording the speed.

Looming - A terms covering the processes involved in preparing, the weaver's beam for the loom, e.g. drawing-in, dropper-pinning, sleying, knotting, tying, etc.

Loop - The continuous length of yarn or fibres between the two successive lowest points of bindings of the pile in the substrate. An example is given in Fig. 54.



FIG. 54 TWO SUCCESSIVE LOOPS OF A PILE (LONGITUDINAL SECTION)

Loop (Knitting) - The fundamental unit formed by bending of the yarn. In a knitted structure this is supported by and intermeshed with other units.

(a) Needle loop - The upper curved portion of the loop.

(b) Sinker loop - The lower curved portion of the loop.

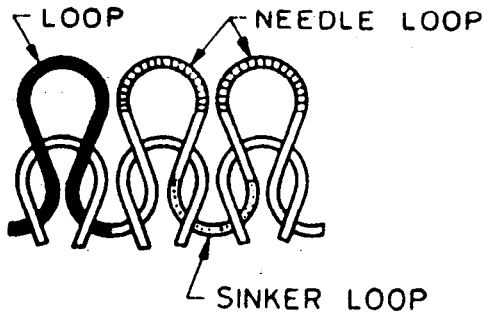


FIG. 55 LOOPS (KNITTING)

Loop Length (Pile Structures) - The continuous length of yarn or fibres between the two successive lowest points of bindings of the pile in the substrate.

Loop Pile - Pile of a carpet consisting of loops.

Loop Stitch - A type of hand stitch used for oversewing edges so as not to increase their thickness by having an edge turned in.

Loopy Pile - Loops in a terry fabric that are longer than adjacent normal loops.

Loopy Selvedge - See (e) under 'Defective Selvedge'.

Loose Course - A course where the loops are kept looser or longer than the loops of the other courses of the fabric or garment.

Loose Threads - Threads loose on the face of the fabric (see also 'Hanging Threads').

Principal Cause - Long and short ends of warp not removed after piecing up.

Lorraine Lustres - A type of Bradford lustre fabric with cotton warp.

Lot - A trade term adopted by the Australian Wool Board to indicate any parcel of wool catalogued and offered for sale as one line.

Lousiness (Silk) - A defect in silk due to fibrillation of silk filaments. The filament splits up into fine fibrils, which form small neps and which in dyed fabric, are evident as white specks [see also 'Fibrillation (Silk)'].

Lovers-Knot Mat - See (g) under 'Mats'.

Lugs (Ears) - Strips of cloth stitched or tied to the corners of bags or packages generally in a loop form to facilitate easy handling. Also may be made by stitching the bottom corners of the bags diagonally.

Lumen - A canal or central cavity in the fibre.

Lump - A length of unfinished fabric usually longer than the customary piece length.

LUNGI - An Indian term for fabrics of varying texture and quality used as loin cloth. It generally comes in dyed, printed or in checks.

Lustre - The display of different intensities of light reflected both specularly and diffusely from different parts of a surface exposed to the same incident light. Due to this reflection of light, the surface of textiles (fibre, yarn or fabric) looks glossy or shining.

Lustre Linings - A type of Bradford lustre fabric with cotton warp.

Lustre Woollen Yarn - Similar to cheviot yarn but made from lustrous medium wools and used for rugs and pile fabrics.

Lustre Wools - Long lustrous wools, usually produced by sheep such as Lincoln, Leicester, Romney Marsh, Devon, Wensleydale, etc., in Britain, New Zealand and South America.

Lustre Worsted Yarn - Worsted yarn made from long lustrous wools, mohair and alpaca.

Lustres (Lustre Fabrics) - Term applied to Bradford lustre fabrics.

Lyons Velvet - A 'velvet' having a rich, full pile and a fairly stiff twill back.

Macaroni Yarn - See 'Aerated Yarn'

Machine-Knotted Pile Carpet - Carpet obtained by automatic knotting.

Mackerel Line - A 3-strand hemp line with soft lay primarily used for mackerel fishing.

Madder Bleach - A very thorough bleach given to cotton goods by several long alkali boils and bleaching with bleaching powder to give full white and is generally used for goods to be printed.

Madras Hemp - See 'Bombay Hemp'.

Magyar Sleeve - A sleeve which is cut in one piece with the bodice.

Main Seam - The seam joining two adjacent gores in a canopy.

Make Through - The traditional method of garment manufacture, in which one operator completely assembles one garment at a time.

MAKHMAL - An Indian term for cotton or rayon or silk velvet sometimes embroidered with gold threads. It is used as dress material, in canopies, etc.

Making Up - Converting material into garments.

MALIDA - An Indian term for an all wool embroidered fabric of fine and soft construction made from pashmina wool and slightly felted, used for coating, jackets, etc.

MALMAL - An Indian term generally applied to fine cotton fabric slightly heavier than muslin.

Man Alignment Drogue - A small stabilizing parachute attached to the parachutist so that, when it opens, his feet are directed towards the airflow.

MANGADAN Yarn - See (h) under 'Coir Yarn'.

Mangle - A machine whose purpose is to express liquid from moving textiles by passage through a nip. The textile may be in rope form or in open width, and the mangle may consist of two or

more rollers (bowls) running in contact.

Mangling - The process of extracting liquid by passing the wet textile material in rope form or open width form through one or more nips of the mangle.

Mangling (Jute) - A finishing process in which the cloth that has been calendered is rolled on a steel pin and rotated backwards and forwards under pressure, a number of times between two steel bowls. Mangling closes the interstices between threads more effectively than chesting. When the process has been done once, the cloth is described as mangled and if done twice, the cloth is described as double-mangled. The machine in which the process takes place is known as 'Mangle'.

Manila Hemp - A hard fibre obtained from the leaf stems forming the trunk of the Abaca plant *Musa textiles*. The fibres are long (1 to 3 m), rather coarse, creamy white to brown in colour, quite strong and durable. It is extensively used for the manufacture of ropes and cordages.

Maquay - See 'Cantala'.

Marabout Silk - Hard-twisted, stiff silk yarn dyed in the gum state, consisting of 2 or 3 untwisted or slightly twisted singles. It is used for crepes.

Marble Silk - A light-weight silk or wool dress material which has mottled appearance caused by the use of multi-coloured weft yarns or by warp printing prior to weaving of the cloth to simulate the veining of marble.

Marbled Cloth - A dress fabric of silk and wool with a mottled face, produced by using multi-coloured weft.

Market Bleach - The bleach given to cotton fabrics that are sold in this state and not later dyed or printed.

Marking In - Marking around the component garment patterns with chalk or other means to indicate where material is to be cut. The term can also apply to marking with pencil when making paper markers.

Marl (Local, Mottle) - To run together and draft into one, two slubbings or rovings of different colour or lustre.

Marl Yarn - Yarn made by running together and drafting into one, two slubbings or rovings of different colour or lustre.

Marline - A soft laid 2-ply cord generally used for binding fibre rope ends. It is usually tarred.

Marling - See 'Marline'.

Marquissette - A light, open-textured, fine-quality gauze, in which slipping is reduced by crossing the warp threads by means

of the leno principle used as curtain and dress materials (See 'Leno').

Married Yarn; Double End - Two ends inadvertently running on to one spindle during spinning operations. This is usually caused by one end breaking and combining with an adjacent end and continuing to run in married form.

Mason's Line - See 'Bricklayer Line'.

Mass Pigmented Yarn - Yarn produced by the extrusion of the dope containing finely divided dye or pigment particles.

Matching

- (a) General - A process in which the proportions of the dyes present in a material are adjusted so that the final colour resembles that of a given sample as closely as possible; and
- (b) Wool - A process in wool sorting which consists of putting together those portions of different fleeces which correspond in quality.

Matching Carpet - A textile floor covering with a design that matches in both directions indefinitely (transverse and longitudinal).

Matching Waste - Waste created when the length required in a made-up textile floor covering does not equal a whole number of pattern repeats.

Matelasse - A double woven fabric with a raised or puckered surface that has a quilted appearance.

Matinee Coat (Knitted) - Ladies' light-weight coat with open front and without any closing device.

MATKA - Yarn spun by hand appliances out of mulberry pierced and unreelable cocoons after degumming.

MATKA-MATKA - See 'MATKA'.

Mats (Coir) - These are characterized by their method of production as follows:

- (a) Bit Mats - The pile is produced by insertion of bits of coir yarn in place of the fibre or the PUNJA yarn.
- (b) Brush Mats - The pile is obtained by cutting topping or PUNJA yarns wound on a flat iron rod with grooved rod interlacing the base fabric. Also called 'Rod Mats'.
- (c) Corridor Mats - The yarns forming the face of the mat are taken alternatively over metal rods in a series to make the required length. When the fabric is formed, the

- metal rods are removed and thick coir yarn is inserted to obtain the consolidated mat.
- (d) Creel Mats - The pile is produced by cutting the loops made from an additional set of warp yarn. The base fabric of a creel mat may be either of coir or jute or a mixture of the two depending on the quality.
 - (e) Dumping Mats - Pillow like structures with straight sides from heavy grade matting made from ANJENGO or ARATORY yarns. It is tightly filled with cut coir fibres or coir yarn to give sufficient resiliency. The sides are sewn thoroughly with high-twist coir yarn. These mats act as shock absorbers when materials are unloaded from a lorry or a truck, thus preventing the material unloaded being damaged. Two loops of coir rope are provided at the two ends for lifting the mats.
 - (f) Fibre Mats - The pile is produced by insertion of fibre around alternate warps. The fibre is held in place by weft yarn.
 - (g) Lovers-Knot Mat - Obtained in similar manner to the sinnet mat but instead of the braided yarn, ropes are used. A set of five ropes are used to form the mat in which neither the beginning nor the end of the rope can be detected.
 - (h) Matting Mat - Obtained from cut-lengths of matting and suitably finished.
 - (j) Rod Mats - See 'Brush Mats' (b) above.
 - (k) Sinnet Mat - Produced by suitable arrangement of braided coir yarn.

Matt Yarn - Dull-lustered yarn.

Matted Wool - See 'Cotted Wool'.

Matting

- (a) Coir - Coir floor covering fabric woven on handlooms in plain, dobby and jacquard designs. Matting is sold in standard length of 45 m but in different widths ranging from 30 to 275 cm. One individual piece of matting is called a unit.
- (b) Jute - Jute floor covering fabric woven in plain, striped, dobby or jacquard designs.

Mattress Fibre (Coir) - The waste fibre obtained during the extraction of bristle fibre along with pith.

Mattress Twine - An Italian hemp or flax twine used in the manufacture of mattresses.

Matty - See 'Cellular'.

Maturity - The degree to which the lumen (or canal) of cotton fibre has been obliterated by the cellulose laid down in the walls of the fibre.

Maud - A woollen cloth in check design, used as plaid or as a travelling rug, in which different tones of grey yarns are used in forming the pattern.

MAZRI - A coarse cotton fabric produced from a blend of grey and black dyed cottons. The fabric is usually woven in plain construction in a relatively open reed and pick.

Mean Fibre Length - The average measure of the fibre length.

Mean Fibre Mass per Unit Length - The quantity obtained by dividing the mean fibre mass by the mean fibre length.

Measure Cutting - The cutting of a garment to individual measurements.

Measured Surface Pile Density - The ratio of mass to volume of the pile above the backing measured under the standard pressure.

Mechanical Fabrics - A class of heavy fabrics used in various industries, such as sheeting for the laundry trade, drill for oil and chemical filters, duck for tent, etc.

Medium Cross-Bred Wool - Wools lying in the fibre diameter range of about 29 to 34 micrometres.

Medulla - The central hollow portion of wool or hair fibres due to open meshwork of cell walls. Medulla can be continuous as in hairy fibres, dis-continuous as in heterotype fibres or ladder type as in case of Angora rabbit hair fibres.

Medullated Fibres - A trade term adopted by the Australian Wool Board to indicate fibres possessing a hollow core and, consequently, a tendency to uneven dyeing.

Melange Lustre - A type of Bradford lustre fabric wherein printed tops are used.

Melange Printing (Vigoureux Printing) - A printing process in which bands of thickened dye paste, with intervening blank areas are applied across slubbings of wool or other fibres. The slubbing is subsequently steamed, washed, and then combed to produce a very even mixture of dyed and undyed lengths of fibre.

Melange Yarn - A yarn produced from coloured printed tops or slivers, being distinguished from a mixture yarn, in that the fibres have more than one colour upon them.

Melton - A heavy-weight fabric, all-wool, or with cotton warp and woollen weft, which is finished by heavy milling and cropping.

The fibres in the cloth are tightly matted together by the milling process and this gives the fabric a felted appearance. It is usually made in a 2/2 twill, especially if all-wool, but it is sometimes made in other weaves to facilitate milling and the covering of the cotton warp.

Mending - See 'Darning'.

Mercerization - The treatment of cellulosic textiles and blends in yarn or fabric form with caustic soda solution of desired strength whereby the yarns or fabrics are swollen, dye affinity and lustre of the materials are increased.

Mercerized Fabric - A fabric which has undergone mercerization treatment.

Merino

- (a) A breed of finest wool producing sheep originating in Spain but during the past two centuries, extensively developed in Australia. Australian merino sheep are of three types, namely, superfine, fine and strong merino.
- (b) Wool from merino sheep. Superfine merino wool is finer than 19 microns; fine merino wool is 19.1-22.5 microns and strong merino wool is 22.6-24 microns in average diameter. Length varies from 60 mm up to 120 mm. Meddulation is absent.

Merino Yarn - Yarn made from merino quality wool.

Mesh - A designed opening, surrounded by the netting material.

Mesh (Fabric) - A fabric having appreciable openings/spaces between the threads. (See also 'Net').

Meshiness (Fibre) - See under 'Jute Fibre Characteristics'.

Messaline - A light-weight 'Satin' fabric, woven with fine yarns.

Messenger - A 3-strand manila, cotton, sisal or man-made fibre light rope secured to a larger rope for hauling purposes. (When a heavy rope or wire which will not go round the winch barrels to be hove in, smaller rope known as 'Messenger' is connected to the large one which is heaved in slowly).

MESTA - This fibre which is a substitute of jute is obtained from the bast of Hibiscus cannabinus (kenaf). Chemically, it is different from jute in its low lignin content and is, in general, inferior and coarser than jute.

Metachrome or Chromate Process - A method of dyeing in which the dye and the mordant (in the form of chromate, which does not form the lake with the dye and which is gradually converted into dichromate) are applied to the fibre from the same bath when present simultaneously.

Metal Complex Dye - A water soluble pre-metallised dye in which one metal atom (either chromium or cobalt) is complexed with dyestuff molecule(s) which is applied from neutral or acidic dyebath and has very good all round properties.

Metameric - Descriptive of objects that exhibit metamerism.

Metameric Match - A match i.e. judged to be satisfactory under a particular illuminant but not under other illuminants of different spectral composition.

Metamerism - A marked change in the colour of an object with a change in the spectral composition of the light by which it is viewed.

Note - Metamerism can be judged only with reference to the changes occurring in other objects in the fields of view as the illumination is changed.

Method of Laying of Textile Floor Covering - A method of laying a textile floor covering under tension with attachment to the floor along its periphery by various means. The following are common methods.

- (a) Pin-and-socket - A method of laying in which attachment is achieved by pins passing through the textile floor covering. These pins are secured in sockets placed in the floor.
- (b) Ring-and-Pin - A method of laying in which attachment is achieved by rings stitched to the textile floor covering, these rings are held by pins fixed in the floor or at the base of the walls.
- (c) Tackless Installation - A method of laying in which the textile floor covering is secured to slats of wood or metal, bearing rows of pointed pins, and which are attached to the floor at the base of the walls.
- (d) Turn-and-Tack A method of laying in which a fold is made along each edge of the textile floor covering which is directly fixed to the floor along each edge by pins.

Metric Count - The linear density of yarns, expressed as number of 1000 m hanks/kg (See 'Count of Yarn').

Micron - A unit of measurement equivalent to one-millionth of a meter. Properly known as micrometre. This unit is used to indicate average fibre fineness (diameter) of wool.

Middle - Indicates a quality of raw jute (See 'Grading of Jute').

Mildew A superficial growth produced by certain species of fungi.

Note - On textile materials, this may lead to discolouration, tendering, and variation in dyeing properties.

Milanese Fabric (Circular Warp-Knitting) - A tubular warp-knitted fabric made with two full sets of warp threads traversing continuously in opposite directions .

Note - The manner of traversing the thread is always cotton lap.

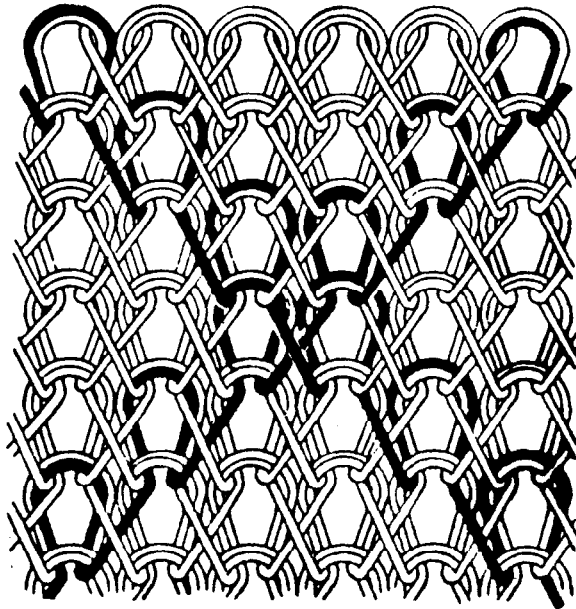


FIG. 56 MILANESE FABRIC (CIRCULAR WARP-KNITTING)

Milanese Fabric (Warp-Knitting) - A warp-knitted fabric normally made with a full set of warp threads (i.e. containing twice as many threads as there are wales in the fabric). The threads are continuously divided into two equal warp sheets, one set of which traverses to the right continuously and the other set to the left, such that any particular thread traverses the full width of the fabric, and on reaching the selvedge is transferred to the other set .

Note - The manner of traversing the threads may be either silk lap or cotton lap.

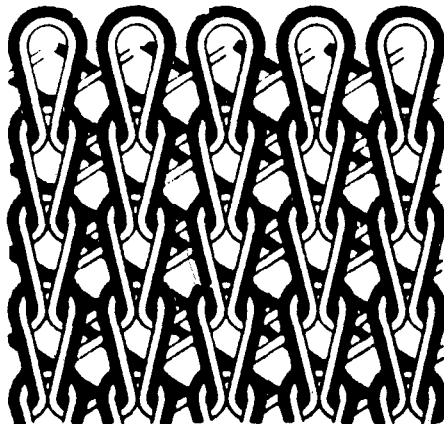


FIG. 57 MILANESE FABRIC (WARP-KNITTING) WITH SILK LAP

Mildew Proofing - Imparting, usually by chemical treatments, resistance to textiles from attack by mildew.

Mildew Resistant Fabric - Fabric treated to resist the growth of mildew or mould.

Milani Rib - A three course weft-knitted rib structure, knitted as follows:

Course 1 - 1 x 1 rib knitting;

Course 2 - Plain needles knitting, rib needles non-knitting;

Course 3 - Rib needles knitting, plain needles non-knitting.

Mill Ends - Remnants or short lengths of finished fabric.

Mill Rigs - Creases produced in milling.

Mill Run - Yarns, fabrics or other textile products which are not inspected or which do not come up to the standard quality.

Milling - A process of consolidating or compacting fabric, which usually, though not exclusively, contains wool to obtain the required cover and firmness of texture.

Milling Dyes, Acid Milling Dyes - Acid dyes having high fastness to wet processes on wool (particularly to milling) and normally applied to protein fibres from weak acid or neutral dyebaths.

Mineral Dyes - A class of dyes consisting of mineral pigments precipitated more or less mechanically in the fibre.

Mineral Khaki - A mixture of hydrated ferric hydroxide and chromium hydroxide giving khaki colour by padding the cotton fabric in solution containing ferrous sulphate and chrome alum and then treating with alkali to form metal hydroxides.

Mingled Pile - Terry loops of contrasting colour appearing on the wrong side of the fabric.

Principal Causes - This defect is commonly caused by interference with the formation of individual pile loops, as the result of incorrect shedding, drawing-in, etc.

Mispick - A pick placed in the wrong shed of the warp (see also 'Broken Pattern')

Misregister; Out of Register - In a printed fabric, colours not correctly positioned with respect to each other.

Principal Causes - This defect is often caused by printing rollers or screens not being synchronized.

Missed Stitch - See 'Drop Stitch' and 'Float Stitch'

Missing End - See 'Broken End'.

Missing Pick - A bar across the fabric where no weft has been inserted.

Principal Causes - This defect is often caused by an interruption of the weft supply, a faulty weft stop motion, or drawing through.

Misti

(a) A cross-breed of alpaca (Llama glama pacos), father and llama (Llama glama glama) mother.

(b) Fur produced by this cross-breed.

Mitten - A covering for the hand and wrist. The difference between a glove and a mitten is that the former has a sheath for each of the four fingers and the thumb, while the mitten has either one sheath for the entire four fingers and one for the thumb or it has no sheath for the fingers and thumb at all.

Mixed - Describes a fabric or yarn in which two or more types of fibres have been combined.

Mixed End - See 'Wrong End'.

Mixed Fleece - Fleece which contains mixture of two coats namely undercoat of short fine true wool fibre and outercoat of long coarse medullated fibres. Mixed fleece is a sign of lack of domestication of the sheep.

Mixed Weft - An unintentional mixing of two or more lots or types or both of weft yarns.

Note - This may lead to the formation of weft bars.

Mixture - See 'Blending'.

Mixture Fabric - Cloth made of mixture yarns or of yarns made of different types of fibres, e.g., wool and cotton, or wool and man-made fibres.

Mixture Shades - Yarns or fabrics in which the individual fibres have been dyed differently either in loose form or by melange printing, and then mixed together and spun. Both worsted and woollen yarns can be produced in this fashion. These effects can also be produced by mixing different fibres (e.g. natural with man-made) and then dyeing in piece form.

Mixture Yarn - Yarn made by mixing together of fibres of different characteristics, such as, colour, lustre, etc.

Mob - A group of sheep of the same breeding run together as a unit of flock during a season, whose wool may be significantly different from that of other mobs in the flock. Mobs may differ

from one to another in respect of age (e.g. hoggets), sex, breed or strain, husbandry practice and pasture.

Mock Grandelle Yarn - Yarn produced to imitate grandelle yarn by drafting and twisting two rovings of different colours together.

Mock Marl - Hosiery yarns composed of different coloured solid or mixture of single yarns giving an imitation marl effect.

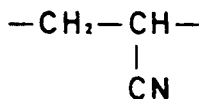
Mock Rib - See 'Imitation Rib'.

Mock Romaine Crepe - A fabric similar to 'romaine crepe' in texture and appearance but made with combination twist yarns only in the warp.

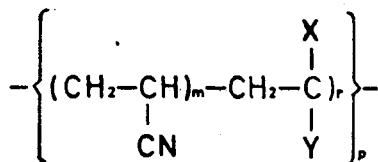
Mock Safety Stitch - A type of overedge stitch which has an appearance similar to that of a safety stitch on the top surface of the material but has a common looper thread joining the two rows of stitching which can be seen underneath the fabric.

Modacrylic

Constitution: Linear macromolecules having in the chain more than 50 percent and less than 85 percent (by mass) of the recurring unit:



Example: Acrylic copolymer:



Modal

Constitution: Cellulose II

Characteristics: Regenerated cellulose obtained by processes giving a high wet modulus. These fibres or filaments should be able to resist in the wet state a load per unit linear density of 22.0 cN/tex. Under this load the elongation in the wet state should not be greater than 15 percent.

Modal Length - The central length of the group which in a fibre length frequency distribution contains the largest number of fibres.

Model

- (a) The original sample garment.

(b) The original garment made up from a design.

Modified Rayon - Rayon composed principally of regenerated cellulose and containing amounts of non-regenerated cellulose fibre-forming material; e.g., a fibre spun from viscose containing casein or other proteinous fibre.

Modulus of Elasticity - The ratio of the stress expressed in force per unit linear density (denier) to the strain (percent elongation).

Mohair

(a) The hair of the angora goat.

(b) Descriptive of yarns spun from mohair.

Mohair Braid - Any type of braid made from mohair yarns.

Mohair Floor Rug - A floor rug or mat that has a surface pile, cut or uncut, entirely of mohair.

Moire - A ribbed or corded fabric that has been subjected to heat and heavy pressure by rollers after weaving so as to present a rippled appearance. The effect arises from differences in reflection of the flattened and the unaffected parts. This type of fabric is also correctly described as 'watered'.

Moire Effect - A defect in dyeing arising from non-uniform dyeing and differences in reflection of different parts of the fabric which gives it a rippled appearance.

Moire Finish - A finish to produce wavy effect by passing two superimposed layers of cloth through a calender under heat and heavy pressure.

Moisture Content - The mass of moisture in a textile material, expressed as a percentage of the total mass.

Example: If 100 parts by mass of material contains 20 parts by mass of moisture, the moisture content is $100 \times 20/100 = 20$ percent.

Moisture Equilibrium - The condition reached by a sample or specimen in a controlled atmosphere when the net difference between the amount of moisture absorbed and the amount desorbed, as shown by a change in mass, shows no trend and becomes insignificant. For test purpose, moisture equilibrium shall be reached by absorption, starting from a relatively low moisture content.

Moisture Regain - The mass of moisture present in a textile material expressed as a percentage of the oven-dry mass.

Example: If 100 parts by mass of material contains 20 parts by mass of moisture, the regain is $100 \times 20/80 = 25$ percent.

Moit - A trade term adopted by the Australian Wool Board to indicate vegetable material other than burr and seed namely, fern, twigs, bark and straw.

Moleskin Fabric - A thick and heavy cotton fabric, heavily wefted and with a smooth face, used chiefly for workmen's clothing. Only one warp is used, but the picks are arranged two face and one back. It is slightly raised on the back and piece-dyed.

Molleton - A heavy reversible cloth with a nap on both sides. It was originally made of wool. Now it is made of cotton and used as a blowing wrapper for delicate fabric.

Molleton Flannel - A high quality 2-and-2 twill woollen flannel, heavily milled, raised and finished with a dense fibrous nap, dyed in delicate colours and used for making dressing gowns and jackets.

Monkey Cap - A knitted cone shaped cap that covers the head; usually, has a pompon at the apex. Also known as 'TOPA'.



FIG. 58 MONKEY CAP

Monofilament - A single filament of sufficient size to function as a yarn in normal textile operations.

Monofilament Thread - A thread comprising one continuous filament.

Mooring Rope - A synthetic or hard fibre rope used for tying the vessels to the moorings.

Mop Twine - A 5-ply hemp twine used in the manufacture of mop heads.

Moquettes - Wool loop-pile fabrics with a ground warp of cotton worked two end together. Loop-pile is produced in the same manner as for Brussels and other carpets, but the pile may be left looped, cut or partly looped and partly cut.

MORAH - See 'Head'.

Mordant - A substance i.e. applied to a fibre for the purpose of forming a complex with a mordant dye within or on the fibre.

Mordant Dyes - Dyes capable of forming a complex with a mordant on a fibre; the dyes may or may not have an intrinsic affinity for the fibre.

Mosquito Netting - A mesh fabric, woven or knitted and used for

protection from mosquitoes.

Moss (Jute) - The vegetable matter other than jute adhering to the jute fibre strands (see also under 'Jute Fibre Characteristics').

Moss Finished Cloth - A soft woollen fabric mostly in fancy colours, which is heavily milled and finished with a fibrous face which obscures the weave and structure.

Mossy Crepe - A fabric with a fancy crepe weave characterized by a pebbly, rough surface. It is also called 'sand crepe' because it presents a sandy effect on its face.

Motes - Small pieces of broken or crushed seeds or small immature seeds found in ginned cotton. For example:

- (a) Bearded Motes - A piece of seed coat with fairly long lint fibres attached.
- (b) Fuzzy Motes - The largest of this type of mote consists of whole aborted or immature seeds covered with fuzz fibres and possibly also with very short lint fibres, the development of which ceased at a very early stage. Small fuzzy motes originate as either undeveloped or fully grown seeds, which are broken in ginning and disintegrate still further in the opening, cleaning, and carding processes.

Moth-Proofing - Imparting resistance to wool, hair or fur fibres from attack by insect such as moth and beetles.

Mottle - See 'Marl'.

Mottle Yarn - Folded yarn produced by twisting together two yarns of different colours.

Mottled Appearance - Colour variation, localized or general, which is not specifically oriented in the warp or weft directions.

Principal Cause - This defect is often caused by uneven application or penetration of dye.

Mottled Carpet (Twisted or Flecked) - Carpet having the type of patterned effect produced by using pile yarn composed of two or more single yarns of different colours twisted together.

Note - A type of mottled effect on fibre-bonded textile floor coverings may be obtained using a blend of fibres of two or more colours.

Motty - A 3-ply low quality hemp cord, tarred, used for attaching tokens to trucks in coal mines.

Moulding - The application of heat and/or pressure to material on a mould, to shape the garment or garment parts.

Mouline - Moulines are folded yarns of two or more yarns of different colours or twist levels. Fabrics made from such yarns have a lively appearance and a smooth springy handle when the constituent yarns have different twist factors.

Moulting - Shedding of skin by silkworm during its larvae stage. The silkworm normally sheds its skin four times during its development.

Mountain Wools - Coarse wools produced by sheep in the hilly regions of Britain. Typical breeds include Scottish Blackface, Welsh mountain, Cheviot, etc.

Mountaineering Rope - A hawser-laid rope made from the highest grade of natural fibres or man-made fibre or a braided rope made from man-made fibre (such ropes are used by mountaineers). (See also 'Climbing Rope' and 'Rappelling Rope').

Mourzouks - A floor covering produced on special looms, the surface and pattern of which is formed by the weft yarn and not by warp yarn as in coir matting; the warp threads are drawn back into the fabric after weaving (see also 'Carpets').

Mousseline de Soie - A crisp, plain weave, sheer fabric, more closely woven than 'chiffon' and not as soft as voile.

MUFFLER - A long narrow knitted or woven piece of fabric, normally made of wool, and worn as a protection for the neck or head against cold. Usually it is less than 1 m long and 30 cm wide.



FIG. 59 MUFFLER

Muga Cloth - A fabric woven by using Muga silk in warp and weft. The Muga is a semi-domesticated silkworm of Antherea Assamensis species.

Muga Silk - Silk from the cocoons built by partly domesticated moth Antherea Assamensis.

Mulberry - An urticaceous, hardy and perennial tree of the genus morus; silkworms (Bombayx Mori) feed on its leaves.

Mulberry Silk - Silk mainly of yellow, white or greenish yellow colour obtained from domesticated silkworm Bombayx Mori belonging to the family Bombycidae which feed on mulberry leaves.

Mule Spinning - A system of spinning on a mule frame in which the drafting of the roving, twisting of the yarn and winding it on the bobbin, takes place intermittently and not continuously (see also 'Ring Spinning').

Mullet Twine - A 2 or 3-ply flax, hemp, cotton or synthetic twine

used for making mullet nets.

Mulls - A soft, sheer, lustrous fabric in plain weave of relatively open texture made from fine yarn and used for dress and other purposes. The cloth is soft finished and usually bleached.

Multifilament Yarn (Thread) - Yarn with many continuous filaments or strands.

Multiply Fabric - Fabric formed of more than one ply.

Multivoltine Cocoons - Cocoons built by a silkworm race with more than two generations (life cycles) in a year.

Mungo - The fibrous material made in the woollen trade by pulling down new or old hard woven or milled cloth or felt in rag form (see also 'Shoddy').

Mushy Wool - Wool without any regularity of staple, obtained usually from old sheep in bad seasons. It is usually not combed as its yield of top is poor and the quantity of noil is large.

Muslin - A generic term for a light-weight open cloth of plain or plain gauze weave. Normally muslins do not exceed 68 g/m². Some of these cloths are used in the grey (butter muslin and cheese cloth), whereas other (dress muslin) are bleached and dyed.

Mutton Cloth - See 'Stockinette'.

Nainsook - A fine, light, plain-woven, cotton cloth with a soft finish.

NAMBALI - An Indian term for handloom cotton and silk fabrics printed with religious names worn as outer covering on ceremonial occasions by Hindus.

NAMAVALI - See 'NAMBALI'.

NAMDAS - An Indian term for handmade, felted rug made of all wool or blends of wool with cotton and man-made fibres, with embroidery work done with woollen yarn and used mainly as floor covering.

Nap - A fibrous surface produced on a fabric or felt in which part of the fibre is raised from the basic structure. Such surfaces often show directional effects.

Nap Finish - A process wherein the fibres are raised and made to stand vertically from the foundation of a woollen fabric and then rubbed to form curls or nubs.

Napkins - A piece of fabric, generally of cotton (plain or patterned) and used for wiping hands, etc.

Napping - A finishing process used for obtaining nap on the surface of cloth. (See also 'Brushing').

Naps (Cotton) - Small aggregates of loosely entangled cotton fibres. They are comparatively easy to remove from cotton and generally their individual fibres can be easily separated. They are larger than neps.

Narrow Fabric

(a) Any woven fabric not exceeding 45 cm (18 in.) in width.

(b) Any braid and trimming.

Note - The upper limit of width recognized by the Brussels nomenclature is 30 cm (12 in.).

Narrowing - The act of reducing the width of the fabric or garments by decreasing the number of wales by stitch transferring during knitting to get the desired shape.

Neatening - Finishing a cut edge to prevent fraying. Various methods include: Turning in the edge, pinking, overedging and taping.

Neck Band - A band which goes around the neck part of a garment.

Necks - Wool removed from the neck region of the fleece. Should only be removed if distinctly different from the rest of fleece because it contains heavy burr, dust or seed.

Neckwear (Knitted) - Knitwear used as covering for neck, e.g. mufflers, scarves, ties, etc.

Needle Damage - Damage caused to material by the needle during sewing.

Needle Lines - Longitudinal lines in fabric or garment produced due to defective functioning of the needle(s).

Needle Loop - See (a) under 'Loop (Knitting)'. .

Needled Felt - A felt produced on a hessian or scrim base by pricking into it with needles on a lap or sheet or intertwined fibrous material usually obtained from jute caddis or shredded fibre waste. The felt may be needled on one or both sides of the fabric base, i.e., can be either single-sided or double-sided. Sometimes needled felt is produced without a hessian or scrim base. It is used as padding material for automobile seats.

Nep - A small knot-like aggregate of tightly entangled fibres, usually not larger than a common pin head (about 2 mm in diameter).

Nep Count - The number of neps per unit weight of material, usually expressed in terms of number of neps per gram.

Neppy Fabric - A fabric having neps on the surface due to neppy warp or weft yarns or both.

Needling; Needle-Bonding - The consolidation of a batt of fibres through entanglement by multiple penetration of barbed needles. An example is given in Fig. 60.

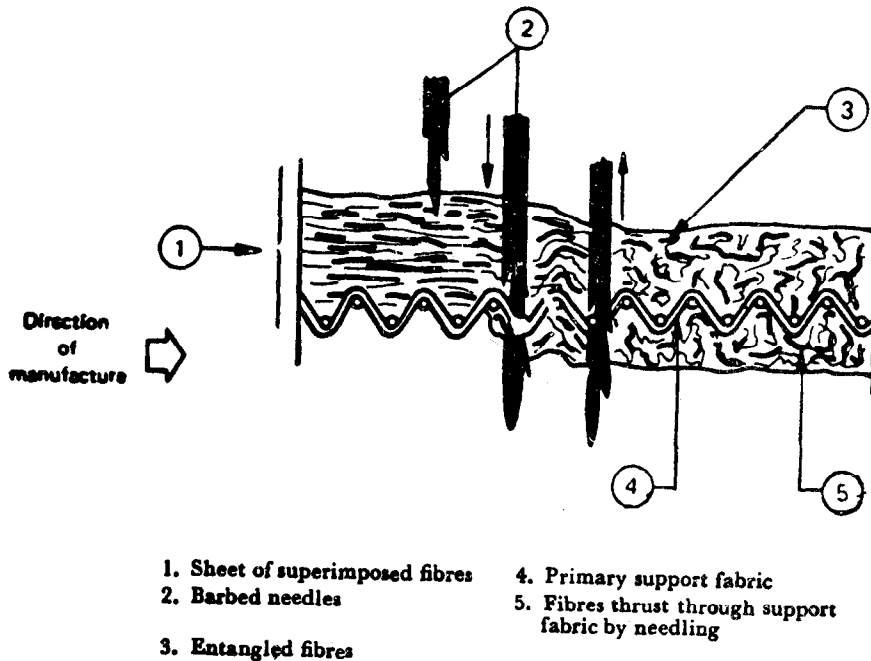


FIG. 60 MANUFACTURING PRINCIPLE OF NEEDED TEXTILE FLOOR COVERING WITH PRIMARY SUPPORT FABRIC

Neppy Yarn - A faulty yarn in which the incidence of nep occurs at a relatively high level to constitute a fault.

Note - Neppy yarns are sometimes used purposely as decoration, e.g. knickerbocker yarn.

Net - An open mesh fabric in which a firm structure is ensured by some form of twist, interlocking, or knitting of the yarn. It may be produced by gauze weaving, knitting, or knotting, or on a lace machine.

Net Mass (Weight) - The difference between the gross mass and the tare mass determined at the same time.

Nett Silk - Raw silk filaments or strands which have been processed into yarns by twisting or folding or both.

Netting - A meshed structure of indefinite shape and size which comprises a product either:

- (a) Composed of one yarn or of one or more systems of yarns, interlaced or joined; or
- (b) Obtained by other means, e.g. by stamping or cutting from sheet material or by extrusion.

Netting Twine - A flax, hemp, cotton, manila or man-made fibre twine used for making fishing nets, sports nets, and garden nets.

Netting Yarn - A yarn (a general term which embraces single yarn including monofilament, multiple folded yarn and cabled yarn) which is suitable for the manufacture of netting.

Note - The principal types of netting yarns are monofilaments and twines. The latter are defined below:

- (a) Braided Twine - The product of applying the braiding or plaiting operation to netting yarns or twines or both.
- (b) Cabled Netting Twine - The product of further twisting operations using two or more netting twines.
- (c) Netting Twine - The product of one twisting operation using two or more single netting yarns or monofilaments.

Nettlestuff - A hemp twine used in the Navy for making hammock clews.

Neutral-Dyeing Acid Dye - An acid dye that has relatively high substantivity for wool from a neutral dyebath.

New Jute Woolpack - A double warp hemmed twill sacking pack (without stripes) with attached top, measuring about 137 x 69 x 69 cm (normally with 102 ends/dm and 35 picks/dm), weighing approximately 5100 g.

New Zealand Cornsack - A hemmed twill sacking bag measuring about 117 x 58.5 cm (without stripes) (normally with 102 ends/dm and 35 picks/dm), weighing approximately 1145 g and dry sewn (see also IS:2875-1964).

New Zealand Flax - See 'Phormium'.

New Zealand Hemp - See 'Phormium'

New Zealand Woolpack - A double-warp hemmed twill sacking pack with 1.5 cm wide red or blue stripes measuring 137 x 69 x 69 cm (normally with 102 ends/dm and 31 picks/dm), weighing approximately 5445 g, and dry sewn. (See also 'New Jute Woolpack').

NEWAR - A heavy jute or cotton strip manufactured in a tape loom in narrow widths and used for cots, chairs, etc.

Niantic Foot - A fully-fashioned hose foot, made in two parts with the seams on either side of the foot and with seamless heel and toe pouches. The complete hose with niantic foot is made on two machines known as 'Legger' and 'Footer'.

Ninon - A very thin, smooth rather crisp fabric in plain weave, heavier than 'chiffon'.

Nitrate DW Bag - A double-warp hemmed plain weave sacking bag

measuring approximately 84 x 41 cm (normally with 68 ends/dm and 31 picks/dm), weighing approximately 710 g either without stripes or with 1.3 cm coloured stripes.

Noble Combing - A circular combing machine for worsted slivers, wherein the combing and the removal of tufts is combined into a continuous process.

Noil Percentage - It is the ratio of weight of noil to the combined weight of noil and comb sliver expressed as percentage. It differs from the term 'tear' which is simply the ratio of weight of comb sliver to the weight of noil.

Noil Yarn (Silk) - Yarn spun from silk noils.

Noils

- (a) General - Shorter fibres separated from longer fibres during the process of combing; or
- (b) Silk - Short stapled residue from the dressing operations in silk spinning.

Non-Felting - A process for modifying, mainly the scaly surface structure of wool or hair fibres so as to reduce their tendency to felt.

Non-Ionic Dye - A (water-soluble) dye that does not dissociate electrolytically in aqueous solution.

Non-Textile Backing - Carpet backing composed of material other than textile material and consisting generally of plastics material or of rubber.

Non-Woven - A non-woven is manufactured sheet, web or batt or directionally or randomly orientated fibres, bonded by friction, and/or cohesion and/or adhesion, excluding paper and products which are woven, knitted, tufted, stitch-bonded incorporating binding yarns or filaments or felted by wet-milling whether additionally needled or not. The fibres may be of natural or man-made origin. They may be staple or continuous filaments or be formed in situ.

Non-Woven Backing - Backing for textile floor coverings produced by a technique other than weaving or knitting.

Northrow Silk - Two or more untwisted singles, which are doubled together with no more twist than is necessary to bind together the filaments of silk.

Note - The treatment given makes a very soft yarn and eliminates formation of loops.

Nosing - The front edge of the tread of a stair.

Note - This term is also used to describe reinforcement of

textiles, synthetic elastomers, plastics or metallic materials, placed on the nosing of a tread to protect it from excessive wear.

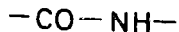
Notched Lapel - Lapel on which top line slants down in line with collar seam.

Notches - Small cuts made in the edges of garment parts which are used as guides during garment assembly (see also 'Balance Marks').

Novelty Yarn - Yarns produced for special effects; usually uneven in size or colour. Flakes, nubs and slubs are typical of novelty yarn.

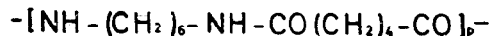
Nylon or Polyamide

Constitution: A generic term for man-made fibres in which the fibre forming substance is any long chain synthetic polyamide having recurring amide group:



as an integral part of the polymer chain.

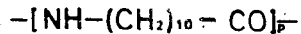
Examples: polyhexamethylene adipamide (polyamide 6.6):



Polycaproamide (polyamide 6):



and polyundecanamide (polyamide 11):



Off Pressing (Pressing Off) - The final pressing operations on a garment after assembly.

Off-Square - A fabric where ends or picks per decimetre differ appreciably.

Off-Side Printing Stain - See (c) under 'Stains'.

Oil Cloth - Fabric coated with a resin-forming material and pigments.

Oil or Grease Stain - See (d) under 'Stains'.

Oil-Combed Tops - Wool or hair tops that contain added oil.

Oiled Fabric - Thin fabric soaked in boiled linseed oil and dried to make it waterproof.

Oiled Wool - Unscoured or undyed knitting wool or wool dyed before spinning and containing added oil not subsequently removed.

Oily Warp - See (e) under 'Stains'.

Oily Weft - See (f) under 'Stains'.

Olefin - A man-made fibre in which the fibre forming substance is any long chain synthetic polymer composed of at least 85 percent by weight of ethylene, propylene or other olefin units.

Oligomer - A simple polymer having small number of monomeric units combined, the number of monomeric units of which it is composed, may be known.

Omatt Fibre (Coir) - The shorter fibres obtained while combing the bristle fibre.

One-Piece Beret - Beret knitted in one-piece [see 'Beret (Knitted)'].

One-Piece Garment - A knitted garment made from one piece of material without any joining at the shoulders and of the sleeves to the body.

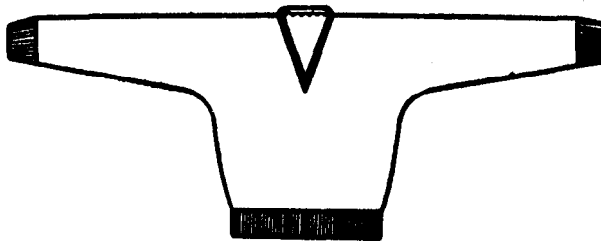


FIG. 61 ONE-PIECE PULLOVER

Onion Pocket - A hemmed hessian bag measuring about 101.5 X 57 cm (normally with 38 ends/dm and 39 picks/dm), weighing approximately 340 g, with 3 blue stripes, and tar sewn.

Onium Dye - A cationic dye i.e. solubilized by a liable ammonium, sulphonium, phosphonium, or oxonium substituent, which splits off during fixation to leave an insoluble colourant in the fibre.

Open Boil - Scouring of cellulosic or their blended textiles with alkaline liquors in open vessels at or near to boiling point (see 'Scouring').

Note - Scours at temperatures lower than the boil are usually referred to as 'Steeps'.

Open-End Spinning - The production of spun yarns by a process in which the sliver or roving is opened or separated to its individual fibres or tufts and is subsequently reassembled in the spinning element into a yarn.

Opening

(a) A general term covering several processes in the prelim-

inary treatment of raw cotton. The primary objects of which are to separate the compressed and mated masses of cotton into loose tufts and to remove the heavier and bulkier impurities.

- (b) A general term for opening of cloth from rope form to open width form through scutcher or opener machine.

Openness - The provision for leg stance in the angle of the leg seams.

Opera Hose - A hose extending up to the hip, generally used by opera artists.

Optical Bleach - A process for imparting improved whiteness to an uncoloured textile material in the form of fibres, filaments, yarns or fabrics by application of colourless compounds which fluoresce under ultra violet light. The apparent whiteness of the textile material is increased due to increase in the apparent reflectance in the visible region by conversion of ultra violet radiation into visible light.

Optical Bleaching, Brightening, or Whitening Agent - Preferably referred to as fluorescent brightener.

Ore Pocket - A double warp twill sacking selvaged bag measuring about 76 x 51 cm (normally with 102 ends/dm and 31 picks/dm), weighing approximately 680 g, without stripes, and dry tar sewn.

Organdie - A plain-weave translucent fabric of light weight with a permanently stiff finish.

Organdie Finishing - A finishing treatment given to cotton fabrics comprising a short contact of fabric with sulphuric acid of high concentration, to produce a stiff and transparent effect.

Organzine - Silk yarn used as warp for weaving, or for knitting, comprising single threads that are first twisted and then folded together two, three or four fold, and then twisted in the direction opposite to that of the single twist.

Orleans - A plain Bradford lustre fabric mostly used as lining.

Oslo Twill - A twill sacking cloth for bag making of about 108 cm width weighing about 534 g/m² (normally with 115 ends/dm and 39 picks/dm).

Otter - Fur fibre (from genus: Lutra Lutra).

Ottoman - Ottoman is made out of silk, acetate, rayon and cotton. It has a larger and heavier diagonal rib. The original weave was a 12 harness 75° left hand twill (see also 'Relief Fabric').

Ottoman Rib Fabric - See 'Relief Fabric'.

Outercoat (Guard Fibres) - Long, hairy and coarse fibres projecting

above the undercoat of fur bearing animals and undomesticated sheep and goat.

Outerwear (Knitted) - Knitwear worn as outergarment; e.g. cardigan, pullover, shirt, slipover, etc.

Oven-Dry Mass (Weight) - The mass of a sample of textile material (after removal of normal finish) dried to substantially constant mass in an oven maintained at 105 to 110°C and supplied with air at the standard atmospheric conditions (65 ± 2 percent RH and 27° ± 2°C).

Note - In case of dipped tyre cord yarns, the oven-dry weight does not include the dipping material, the mass of dipping material shall, therefore, be deducted.

Over-Raised - Excessive surface nap that may or may not be accompanied by damage to the ground structure.

Principal Cause - This defect is caused by the incorrect setting of the raising machine or irregular feed of the fabric.

Overall - Loose work garment usually designed to be worn over everyday clothes to give protection to clothes.

Overboarding - An undesirable practice of boarding the garments to oversize.

Overcoatings - A term embracing a large and greatly varying range of fabrics for overcoats.

Overedge Stitch - A type of chain stitch, in which the needle thread loop is carried from the underside of the fabric over the edge and returned to the line of stitching to be secured by the needle on its next downward stroke. Varying amounts of edge cover can be obtained by using machines employing more threads.

Overedging (Overlocking, Serging) - The use of overedge stitching either by hand or machine to bind the edge to avoid fraying. It is sometimes used as a decoration and often described as overlocking or serging if done by machine.

Overknit Fabric - See (b) under 'Pique (Weft Knitting)'

Overlock Seam - A seam in which two or more edges of material are joined together, oversewn and edge-trimmed in one operation, with overedge stitches having two or more threads.

Overlocking, Whipping - Finishing a textile floor covering with separate yarn covering the edge, thus binding the tufts and backing and preventing edge fray.

Overlock Stitch

- (a) Two-thread overlock stitch - A sewing stitch made from two threads used for hemming purposes. The edge of the

fabric is first cut by knives incorporated in the machines and then the stitch is made over the cut edge of the fabric to join it with the main fabric.

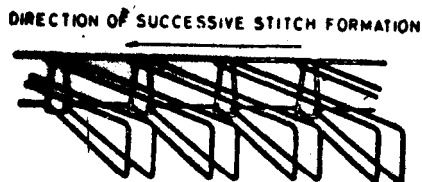


FIG. 62 TWO-THREAD OVERLOCK STITCH

- (b) Three-Thread Overlock Stitch - A sewing stitch made from three threads used for joining two or more pieces of fabric. The edges of the fabrics are first cut by knives incorporated in the machine and then the stitch is made over the cut edges of the fabrics to join them together.

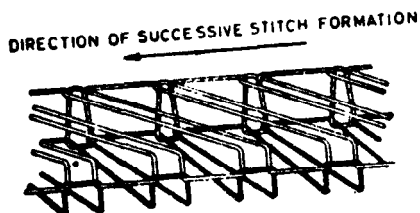


FIG. 63 THREE-THREAD OVERLOCK STITCH

Overlapping Pattern (Printing) - Self descriptive.

Overprinted Resist - The treatment in which the fabric is impregnated with the dye solution, dried and printed with the resisting agent followed by development.

Ovule - Small undeveloped seed present in cotton.

Oxford - A woven fabric which has two warp ends working as one. Fancy weave effects can be incorporated, and dyed yarns, are used to form stripes (see also 'DEDSUTI').

Oxidation Colour - Colour obtained by the oxidation of aromatic amines (used as their salts with inorganic acids like hydrochloric acid to make them soluble in water) in the fibre substance in an acidic medium e.g. aniline black, diphenyl black, solaniline black, paramine brown and fuscamine brown, etc.

Oxidized Oil Staining, Gilding - Staining of textiles caused by oxidation of oil acquired or applied during processing.

Pack (Outer) - A fabric envelope in which other components of a parachute system are stowed when the canopy is packed in a separate inner pack.

Pack (Pack Cover, Inner Pack) - A fabric bag or envelope in which a parachute is packed.

Pack (Wool) - A traditional unit weight 108.86 kg (i.e. 240 lb) of wool.

Pack Sheet - Jute fabric used as a protective covering for bales or trusses of jute fabrics or bags (see also IS:2873-1969).

Pack-Elastics - Elastic cords, with a means of fastening at either end, fixed under tension to pack flaps to ensure their quick opening.

Package - The units from which the yarn is to be unwound, and which together constitute the consignment. The packages may be of various sizes, shapes and winding appearance; e.g., bobbins, cones, copes, cakes, tubes, hanks, pirns and cheeses.

Package Dyeing - The forced circulation of dye liquor through packages of fibre, yarn, or cloth without limitation of temperature. The use of the term pressure dyeing in this connection is deprecated (see also 'High Temperature Dyeing').

Packing Allowance - The percentage allowance by which the volume of a bale may exceed the dead weight volume.

Packing Twine - A sisal, hemp, cotton or jute twine used in packaging.

Pad - Any form of wadding, felt, foam or rubber inserted into a garment for the purpose of shape or fit.

Pad Stitching (Padding) - The operation of imparting shape by successive rows of sewing, normally at the lapels and collar.

Pad-Steam Process - A process of continuous dyeing in which fabric in open width is padded with dyestuff and, if necessary, with a reducing agent, and is then steamed (see 'Padding').

Padding - The application of a liquor or paste to textiles; either by passing the material through a bath and subsequently through squeeze rollers, or by passing it between squeeze rollers, the bottom one of which carries the liquor or paste.

Padding Double-Warp (or Padding DW) - A double-warp single weft fabric in plain weave used as cheap padding.

Padding Mangle - A form of mangle for impregnation of textiles in open width in which the textile is passed through one or more nips. The textile may be saturated before passing through the nip, as in slop padding, or the impregnating liquid may be carried as a film on the surface of one of the bowls forming the nip and transferred to the textile as it passes through the nip, as in nip padding. In case of textile dip padding, the textile is passed through a trough containing impregnating liquid.

PAGREE or PAGRI - An Indian term for a head dress fabric in plain weave produced in white, dyed, checks or printed designs.

Painter - A mooring or towing rope for small boats.

Paired Weft - Regroupment of weft yarns in pairs, apparent as weftway ribs.

Note - It is a defect if it only occurs in a fabric where the design does not desire this effect.

Pairing - Putting together two complementary units of footwear or gloves of the same type, size and shape.

Paisley Shawl - Hand-woven shawl made in the nineteenth century in Paisley (UK) with a view to imitating Pashmina shawls from Kashmir.

Palm Beach Suiting - A mohair cloth used for the tropical suiting.

Palmering - A finishing process done on Palmer Calender to impart a soft mellow handle to fabrics.

Panama - A piece-dyed, light-weight, and smooth-finished worsted dress fabric in plain weave made from hard-twisted yarns used for tropical suitings.

Panama (Sheep) - A cross-bred American sheep, from Rambouillet (French merino), rams and Lincoln ewes, yielding 56-60s fineness grade wool.

Panel (Aerostat) - A sub-division of a gore.

Panne Satin - A highly lustrous rather stiff satin fabric.

Panne Velvet - A light-weight 'velvet' with the pile pressed flat in one direction

Paper Finish - Treatment given to woollen/worsted fabrics by pressing between layers of papers under pressure to improve handle, appearance and lustre of the fabrics.

Paper Pressing - A part of the worsted finishing sequence, particularly for imparting a pressed finish to all wool worsted suitings, wherein a damped fabric is sandwiched between glazed electrically heated cardboard sheets and pressed for several hours at high pressure with the aid of a hydraulic press in a discontinuous operation.

Paper-Lined Bag - Bag made of jute cloth lined with crepe or plain paper by means of bitumen or other adhesive.

Paper-Lined Hessian - Hessian laminated or reinforced with paper for any particular end use.

Par Weighting - A degree of weighting that results in degummed silk returning to its original weight. Thus it is considered that 100 lb of raw silk yields 75 lb of degummed silk and from this will be produced 100 lb of par-weighted silk. Par weighted silk is also known as 16 oz, weighted silk. Thus weighted silk of which 150 lb

is produced from 100 lb of raw silk is silk of 24 oz weighting.

Parachute - An umbrella-shaped, aerodynamic device to produce drag, commonly used to reduce the velocity of a moving body.

Parachute (Antispin) - A parachute attached to an aircraft to assist in its recovery from a spin.

Parachute (Approached) - A parachute deployed from an aircraft to steepen the approach.

Parachute (Automatic) - A parachute which is caused to deploy at a predetermined height by a barometric or other time delay device.

Parachute (Auxiliary) - A subsidiary parachute attached to the pack or to the main parachute to assist in the deployment sequence.

Parachute (Black Gore) - A parachute in which the whole or part of one or more gores is cut out. The peripheral and vent hems are retained.

Parachute (Conical) - A parachute constructed from triangular gores which form a multi-sided pyramid or approximate cone.

Parachute (Drogue) - A relatively small parachute or parasheet commonly used to provide stabilization or for the initial stage of a compound parachute system.

Parachute (Emergency) - A parachute used by an occupant of an aircraft for an emergency descent.

Parachute (Extractor) - A parachute designed to withdraw a load from an aircraft in flight.

Parachute (Flat) - A parachute, the canopy of which consists of triangular gores forming a regular polygon when laid out flat.

Parachute (Guide Surface) - A parachute in which the canopy is shaped in such a manner as to produce, close to the periphery, a re-entrant surface which acts as a guide or stabilizing member.

Parachute (Hem Rigged) - A parachute, the rigging lines of which are attached at the peripheral hem and do not pass over the canopy.

Parachute (Landing Brake) - A parachute deployed from an aircraft to reduce its landing run.

Parachute (Research) - A second parachute sometimes carried by a parachutist for use in emergencies when the parachute normally used fails to function.

Parachute (Retarder) - An extractor parachute used to deploy the main load-carrying parachute.

Parachute (Ribbon) - A parachute, the gores of which are constructed of ribbons instead of continuous fabric.

Parachute (Ring Slot) - A parachute, the canopy of which is made up of concentric rings of fabric separated from each other by fixed distances and joined at regular intervals by radial tapes.

Parachute (Shaped) - A parachute, the canopy of which is constructed of gores that are not straight-sided.

Parachute (Square) - A parachute, the canopy of which when laid out flat, is approximately square.

Parachute (Stabilizing) - A parachute used to stabilize an otherwise unstable load.

Parachute (Triangular) - A parachute which is approximately triangular when laid out flat.

Parachute Cord - A braided cord with or without central core made from nylon or cotton used as rigging lines in parachutes.

Parachute Fabric - Fabric used for making parachutes which are used in man or supply dropping purposes.

Parallel Fabric - A multiply fabric with the warp threads of all the plies parallel.

Paramattas - Type of cashmere fabrics woven in 2-and-1 weft twill weave.

Parasheet - A parachute constructed from a piece (or pieces with parallel warp) of fabric in the form of a regular polygon, with the rigging lines attached to apices of the polygon.

Parasheet (Gathered) - A parasheet, the periphery of which is constrained by a hem cord.

Parasheet (Ungathered) - A parasheet, the periphery of which is not constrained by a hem cord.

Parcelling - The practice of binding a wire rope with strips of tarred canvas or hessian, each turn of the strip overlapping that preceding it by half the width of the strip. (See Fig. 90).

Part Wool - The textile material should be marked 'part wool' if it contains not less than 20 percent wool fibres. However, a manufacturing tolerance upto 3 percent on wool contents shall be permitted. (See Notes 1 and 2 under 'All Wool').

Pashmina

(a) **Pashmina Goat** - A goat of genus Capra hircus laniger found in Ladakh region of Kashmir and in Tibet. Also known as Cashmere goat.

(b) **Pashmina Wool** - Superfine fleece of pashmina goat-particularly the undercoat separated from the fleece by manual separation of hairy outercoat.

- (c) Pashmina Yarn - Yarn made from pashmina wool or their blend with wool.
- (d) Pashmina Shawl - Shawls made from pashmina wool or their blend with wool.

Note 1 - Pashmina is an Indian term for cashmere.

Note 2 - See also 'Cashmere and Cashmeres'.

PAT - The local Bengali names for raw jute.

Patch Pocket - A pocket formed by the application of a piece of material to the surface of a garment.

Patent Selvedge - A type of selvedge formed within the width of cloth between the real selvedges of the cloth. This enables the cloth to be subsequently cut into narrower widths and prevents the cut edges so formed from fraying; it is also called 'split selvedge'. When the selvedge is at the centre of the width of the fabric it is called 'centre selvedge'.

PATKA - See 'PAGREE or PAGRI'.

Pattern

- (a) A shape or an assembly of shapes in card or other sheet material cut to the outline of garment parts that are to be joined together to make the garment.
- (b) Template(s) used for marking out the parts of the garment on material prior to cutting.

Patterned Carpet - Carpet in which the pile consists of yarn or fibres of two or more colours, or a single colour but used either in areas of different height, or areas of tufts with areas of loops.

Peaked Lapel - Lapel on which the top line slants up from the horizontal.

Pearl Fabric - See 'Purl Fabric'.

Pebble - The irregular or rough surface texture of a fabric.

Perching - A process of examining cloth for defects in open width, drawn over roller or perch against good light.

Perchmentizing - A finishing treatment predominantly given to cellulosic fabrics comprising a short contact with, e.g., sulphuric acid of high concentration, to produce a variety of effects depending on the type of fabric and the conditions used, varying from a linen-like handle to a translucent organdie effect (applied mainly to cotton fabrics). Reagents other than sulphuric acid can also produce the effect.

Pelerine - A cellular effect produced on knitted fabric by transferring formed sinker loops.

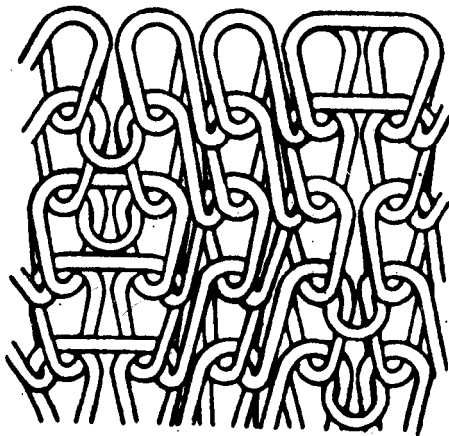


FIG. 64 PELERINE

Perkin Stripes - See 'Bradford Lustre Fabrics'.

Permanent Set - Permanent dimension stabilization of fabric, yarn or fibre either chemically or with the aid of steam (or hot air).

Permeability - The rate of flow of fluid, vapour or gas under a differential pressure through a material.

Pershia - A lightweight piece dyed woollen fabric, usually woven from worsted yarns. It is generally used for making ladies dresses.

Persian Carpets - Name of world famous all-wool hand-knotted carpets made in Persia (Iran) in a variety of designs originating in different parts of Persia. Famous Persian designs now used in carpets all over the world include Afschar, Ahar, Ardebil, Bakhtiar, Bokhara, Gharadji, Ghiordes, Ghoum Heriz, Hereke, Hamadan, Kaimuri, Kashan, Kerman, Kardy, Lichi, Meshad, Mahal, Sarab, Sarabend, Tabriz, etc.

Persian Print - A low grade, plain woven cotton fabric printed in large patterns and brilliant colours.

Petersham Ribbon (Millinery) - A ribbon usually with silk or rayon warp and having single picks of relatively coarse weft, usually cotton to form a rib with the return of the weft making a gimp like edge and traditionally with 10 ribs/cm (25.4 ribs/in.).

Petersham Ribbon (skirt) - A narrow fabric having a pronounced rib weftway, composed of one or more picks per rib and having lateral stiffness produced either by closeness of the weave or by a finishing process. It is woven with or without pockets in which to insert supports. The selvages are formed by the return of the weft so as to produce gimp-like edges or they are woven in a contrasting manner.

Petticoat - A sleeve so pleated as to leave a clear passage when collapsed.

pH Value - The logarithm to the base 10 of the reciprocal of the concentration of hydrogen ions in an aqueous solution. It is a convenient method of expressing small differences in the acidity or alkalinity of nearly neutral solutions. For solutions on acid side the pH value is less than 7 and on the alkaline side it is more than 7.

Phormium - A fibre obtained from the leaves of the phormium plant (Phormium tenax forst).

Photo Degradation - Degradation caused by electromagnetic radiation in the ultra-violet, visible, and near infra-red wave-bands.

Note 1 - Photo degradation occurs only when electromagnetic radiation falls on the textile, but the resulting total degradation may depend on other factors.

Note 2 - The limits of the visible spectrum are ill-defined, but for most practical purposes the lower limit is 380 nm and the upper 780 nm. In daylight, the photo chemically active radiations are principally in the wavelength range 296-800 nm.

Photoengraving - A method used for preparing designs for textile printing by photographic techniques.

Pick and Pick

- (i) Descriptive of a woven fabric in which the alternate picks are of different colours or yarns.

Note - If the weft is inserted by shuttles, this fabric must be produced on a pick at will loom.

- (ii) Descriptive of a shuttle loom that picks alternately from opposite sides.

Pick Bar - See (2) under 'Bar'.

Pick Hang - See 'Hang Pick'.

Pick, Dead; Crammed Pick - A pick on which the take-up motion is put out of action.

Picking

- (a) The operation of passing the weft through the warp shed (see shed) during weaving.
- (b) The rectification of the face and back of a carpet after manufacture including inserting missing tufts, replacing incorrect ones, and repairing broken yarns in the backing (local mending).
- (c) A process carried out before the final stage of cloth finishing to remove by hand any contamination (such as kemp, wrong fibre, coloured hair, etc.) which has not

been removed by previous processing. This process is carried out particularly during the finishing of suitings face-finished cloths, and cream or off-white cloths.

- (d) Removal by picking locks and bellies from the fleece during skirting.

Picking-Out Mark - A weft-wise band or bar characterized by fuzzy appearance due to the pulling out of the faulty picks and inserting fresh picks.

Picks - The weft or filling yarn which lies across the length of a fabric.

Piece - A length of fabric of customarily accepted unit length. In the woollen and worsted fabric trade, it is usually above 40 m but generally less than 75 m in length.

Piece Dyed - Term applied to cloth woven with the yarn in grey condition (i.e. undyed), scoured and then dyed; this being the most convenient and economical method of applying colour to a fabric.

Piece Dyeing - The dyeing of fabrics in the piece form.

Piece-Goods - Cloth sold by or from the piece.

Pieces (Wool) - Skirting from the edge of the fleece containing shorter wool, fribs, clumpy burr or seed. Should not contain bellies, stains, or locks or second cuts or skin pieces.

Pierced Cocoon - Cocoon from which the moth has emerged after softening the end of the cocoon and forcing its way out.

Note - Pierced cocoons are not reliable and are used in spun silk manufacture.

Pigment - A substance in particulate form, which is substantially insoluble in a medium, but which can be mechanically dispersed in this medium to modify its colour and light-scattering properties.

Pigment Padding - The application of dyes or pigments to fabric by padding through an aqueous dispersion.

Pigment Printing - Printing of textile fabric with an emulsion of pigment along with a binder and curing the binder to fix the pigment.

Pigment Taffeta - A dull 'taffeta', made of dull or pigmented yarns.

Pigmented Yarn - A dull or coloured yarn spun from a solution to which a pigment has been added.

Pile - That part of a fabric or carpet consisting of textile yarns or fibres, cut or looped, projecting from the substrate

and acting as a use-surface. [See also 'Effective Pile (Carpet)', 'Measured Surface Pile Density', and 'Total Pile Fibre Content'].

- (a) Carved Pile - The pile of a carpet i.e. subjected, after manufacture, to a shearing operation with the object of creating different levels of pile, often on the periphery of certain elements of design formed by the pile.
- (b) Curled Pile - The pile of a carpet in which the curl has been induced in the pile yarn by over-twist or by other means.
- (c) Cut Pile - A pile surface that consists entirely of severed ends of fibres or yarns.
- (d) Loop Pile, Uncut Pile - A pile, the fibres or yarns of which are caused to form loops during manufacture of the fabric.
- (e) Sculptured Pile - A pile in which a pattern is created by having areas of different height or by omitting pile in certain areas.
- (f) Textured Pile - A pile in which the surface character is varied, e.g., by having areas of different characteristics, by combinations of loop and cut pile, etc.

Pile Fabric - A fabric with a pile surface, which may be cut or uncut (loop).

- (a) Warp pile fabric - A pile fabric with loop or cut pile formed by the warp yarn such as terry towels, warp plushes, velvets, etc. (See also 'Velvet').
- (b) Weft pile fabric - A fabric whose surface consists of warpway (weft rib) or weftway (warp rib) raised lines or ridges (see 'Rib Fabric') (see also 'Velveteen').

Pile Carpet Woven Over Wires - Pile carpet produced in a single operation on a loom in which steel rods are used to form the pile and to determine its length. Examples are given below.

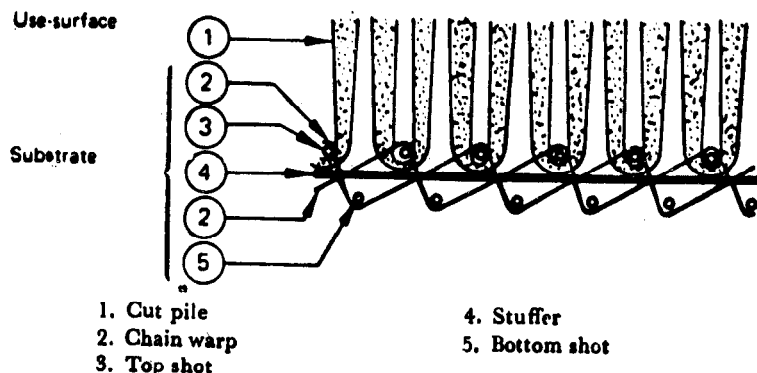


FIG. 65 CUT-PILE, PLAIN-WOVEN CARPET, TWO-SHOT
(WARPWAYS SECTION)

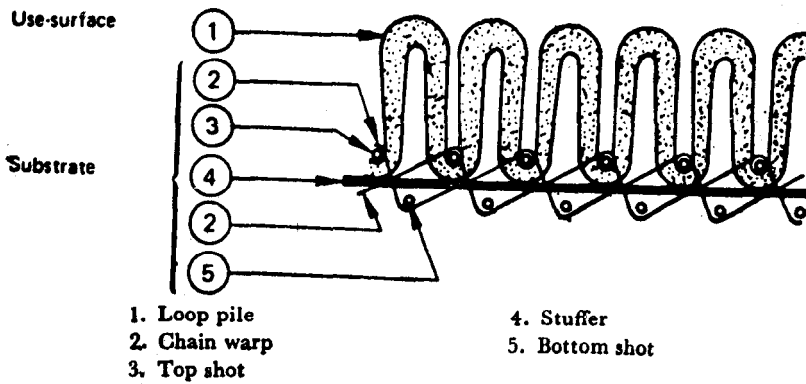


FIG. 66 LOOP-PILE, PLAIN-WOVEN CARPET, TWO-SHOT (WARPWAYS SECTION)

Pile Bursting - The appearance of cut pile of a carpet achieved by different processes producing a volume apparently greater than that which was occupied before the application of this process.

Pile Root (Carpet) - That part of tufts and/or loops, excluding dead yarns, which is in the substrate.

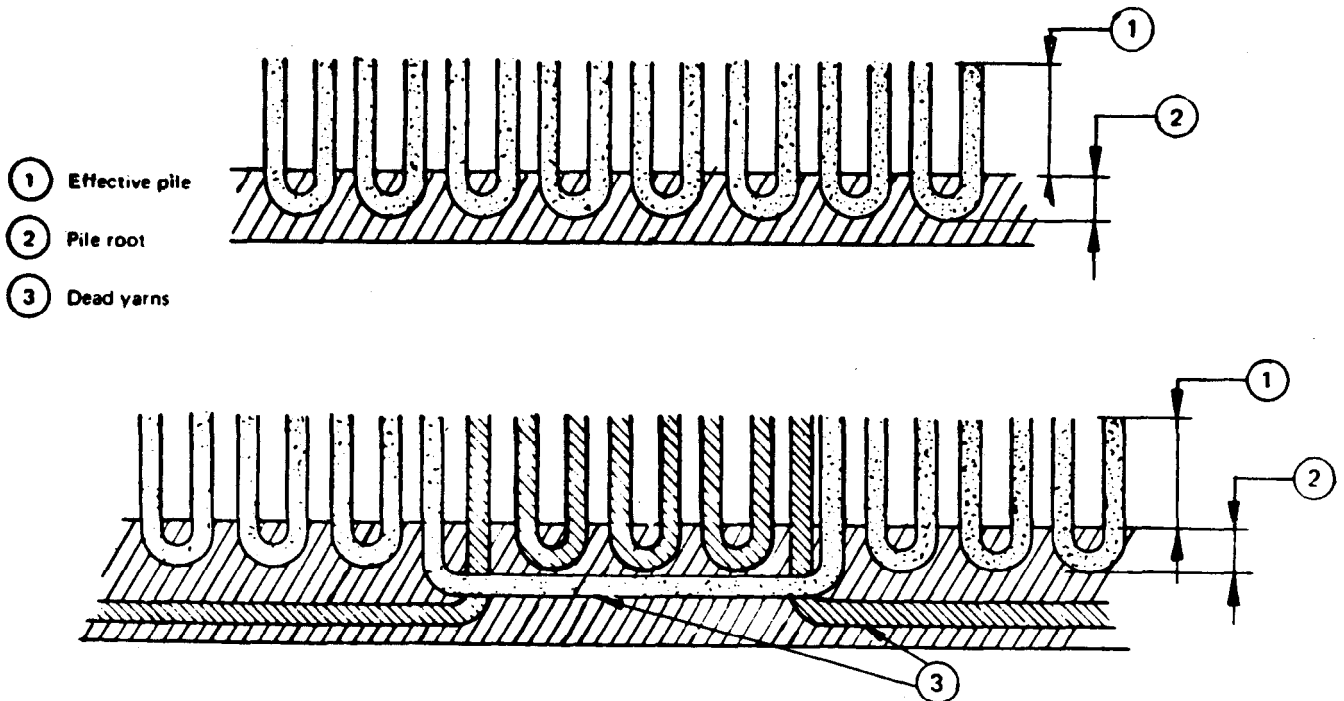


FIG. 67 PILE ROOT (LONGITUDINAL SECTION)

Pile Height, Effective (Carpet) - The difference in the thickness of a carpet before and after shearing away the pile above the backing.

Pile Yarn - The yarn forming the loops or tufts (cut loops) of a pile fabric.

Pile, Effective (Carpet) - That part of the pile which is above the substrate and which can be separated from it by shearing [see 'Pile Height', 'Effective Pile (Carpet)']. (See Fig. 67).

Pilling - Small accumulations of fibres on the surface of a fabric and held to the surface by an entanglement with the surface fibres and composed of the same fibres as those from which the fabric is made.

Pilot Cloth - A heavily milled 2-and-2 twill woollen cloth dyed blue with nappy finish and used for overcoats and jackets.

Pilot Lead line - A line used by the river survey department for taking depth soundings. The line is made from jute or flax yarn (see also 'Lead Line').

Pin Drafter - A high-speed gill box without back rollers, used in American system of worsted drawing.

Pin Drafting - Any system of drafting (e.g., gill drafting) in which the oriented position of fibres relative to one another in a sliver is controlled by pins.

Pin Holes - Very small holes caused by loop distortion. Also known as 'Fisheye'.

Pin Marks - A series of small apertures or severed yarns running parallel to and near the fabric edges.

Principal Causes - This defect is caused by hooked, blunted or poorly adjusted stenter pins.

Pin Tack - A small sewn pleat.

Pinking - Serrating of a material either to prevent fraying or to decorate a raw edge.

Pinstripe - Used in worsted suitings. The pattern is formed by using alternate pale and dark yarns in the warp giving a very fine stripe design. Woven in twill or panama.

Piping

- (a) A strip of material with or without a filling, applied folded, normally to the edge of a garment.
- (b) A narrow fabric having a cord on one edge.
- (c) The operation of applying piping.

Pique - A cloth showing rounded cords in the weft direction, with pronounced sunken lines between them, which are produced by the nature of the weave. The weave on the face of the cords is plain. There are warp floats on the width of the cords on the back. Wadding picks are used to accentuate the prominence of the cords.

Note - For many years, the term pique has been applied on a much less expensive white cloth made in a light weight Bedford cord weave.

Pique (Warp-Knitting) - A fabric, normally made with two guide bars, showing pronounced cord effect in the wales direction. The portions between the cords are made by omitting one or more threads from the guide bar i.e. making the smaller underlap.

Pitch (Carpet) - The average number of tufts or knots in carpet per unit area. Traditionally number of knots/in.².

Pitch (Garment) - The balance insertion of the sleeve into the garment, controlled by balance marks in the scyeline.

Pique (Weft-Knitting)

- (a) Single Pique Fabric - A six-course interlock fabric which differs from ordinary interlock at the third and sixth courses by tucking on one bed.

For circular knitting machines, the sequence is as follows:

<u>Feeder No.</u>	<u>Dial</u>	<u>Cylinder</u>
1	Knit odd needles	Knit even needles
2	Knit even needles	Knit odd needles
3	Tuck odd needles	Knit even needles
4	Knit even needles	Knit odd needles
5	Knit odd needles	Knit even needles
6	Tuck even needles	Knit odd needles

- (b) Double Pique Fabric - A special type of knitted fabric made of circular rib machines by knitting successively with odd number dial needles at Feeder No.1 and 2 and even number of dial needles at Feeder No. 3 and 4 and on cylinder needles knitting and missing on alternate feeder.

For circular knitting machines, the repeat sequence is as follows:

<u>Feeder No.</u>	<u>Dial</u>	<u>Cylinder</u>
1	Knit odd needles	Knit all
2	Knit odd needles	None knit
3	Knit even needles	Knit all
4	Knit even needles	None knit

Also known as 'Overknit Fabric'.

- (c) Texipique Fabric - A six-course interlock fabric which differs from ordinary interlock at the third and sixth courses by tucking on both beds.

For circular knitting machines, the repeat sequence is as follows:

<u>Feeder No.</u>	<u>Dial</u>	<u>Cylinder</u>
1	Knit even needles	Knit odd needles
2	Knit odd needles	Knit even needles
3	Tuck even needles	Tuck odd needles
4	Knit odd needles	Knit even needles
5	Knit even needles	Knit odd needles
6	Tuck odd needles	Tuck even needles

Pitch (Of Rope) - Distance between two successive spirals of the same strand of a rope measured parallel to the axis of the rope.

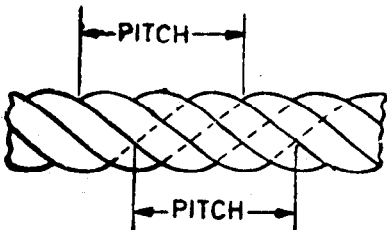


FIG. 68A PITCH OF ROPE

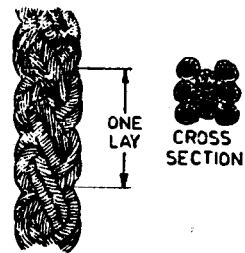


FIG. 68B LENGTH OF LAY FOR 8-STRAND ROPE (PLAITED)

Placket - An opening provided in a garment or an extra piece of material applied to that opening for reinforcement or as a style feature, which may incorporate fastenings.

Placket Shirt - A full sleeved shirt with two or three buttons underneath the collar. Very often, the colour of the placket and collar contrast with the colour of the body of the shirt.

Plaid

- (a) A pattern consisting of coloured stripes or bars crossing each other at right angles. Plaid usually infers a multi-coloured pattern of comparatively large repeat, while the word check usually is applied to similar patterns on a smaller scale and of fewer colours.
- (b) The rectangular garment or piece of cloth, usually worn by both sexes in Scotland in place of an original cloak.
- (c) The woollen fabric from which plaids are made; now, any fabric with a cross-barred woven or printed design.

Plaid Flannels - Plain or twill woven flannels of cotton or wool made with colourful, yarn-dyed, plaid patterns. Finished with a soft nap and used for shirting; also, for rubberizing, linings, etc.

Plaid-Pack - An overcoating made on the double cloth principle.

The face warp and weft are of dark, conservative colours; the back warp and weft are of lighter colours arranged to form a plaid pattern which will be on the inside of the garment and often takes the place of the lining.

Plaiding Cloth - A heavy machinery fabric in twill weave from woollen spun yarns made of wool fibres or their blends with man-made fibres. The cloth is made with or without a soft finish on one side of the fabric to impart a smooth feel.

Plain DW Flour Bag - See 'Flour Bag'.

Plain DWE - See 'E-Bag'.

Plain Fabric (Knitted) - The simplest weft-knitted fabric made on one set of needles in which all the loops are intermeshed in one direction. Also known as 'Jersey Fabric'.

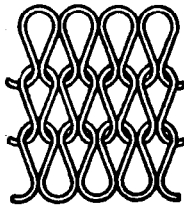


FIG. 69 PLAIN FABRIC (KNITTED)

Plain Knit - Describes simplest knit structure as in hose.

Plain Seam - A seam formed by a row or rows of stitches joining two pieces of material together face to face.

Plain Stitch (Knitting) - A primary weft-knitting stitch made on one set of needles. (See Fig. 104).

Plain Weave Carpet - Woven pile carpet with uniform pile length, containing generally a single colour.

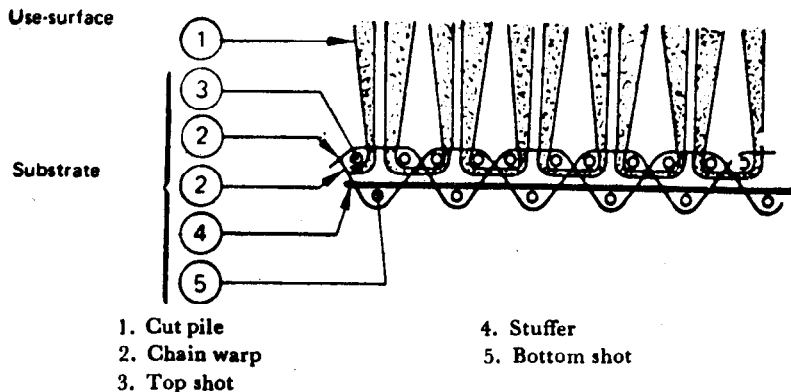


FIG. 70 PLAIN WOVEN CARPET, THREE-SHOT (WARPWAYS SECTION)

Plain Surface Fabric - A fabric which does not have an intentionally raised fibre or yarn surface, such as pile, napped, or tufted surface.

Note - Plain surface fabrics also include fabrics having fancy woven or knitted patterns.

Plain Weave - The type of weave in a cloth in which each warp thread or a pair of warp threads passes alternately over and under each weft thread.

Plaited Cord - See 'Braided Cord'.

Plaiting - See 'Braiding'.

Plaiting Cloth - The felting of wool and fur fibres for hat bodies, by means of heat, steam, moisture and pressure. Shellac is sometimes used when stiff finishes are required.

Plated Fabric - A fabric i.e. produced from two yarns of different qualities of colours, characters or qualities of one of which appear on the face and of the other on the back. A yarn may be plated by being covered by another yarn. Plated fabric is extensively used in making heavy sweater and other bulky materials.

Plating (Knitting) - The controlled knitting of two different yarns in the same stitch such that each yarn takes up a definite position within the stitch. Plating usually involves the knitting of two yarns of different colour, lustre or composition, so that only one of these yarns is visible on the face of the stitch.

Pleats - Material folds introduced to allow for expansion or to provide style features. Examples include: accordion pleats, box pleats, knife pleats and sunray pleats.

Pliability (Fibre) - See under 'Jute Fibre Characteristics'.

Plied Yarn - See 'Folded Yarn'.

Plisse - A French term meaning pleated i.e. applied to fabrics with a puckered or crinkled effect (see 'Seersucker').

Plucked Wool - See 'Pulled Wool'.

Plugging - Fastening buttons by inserting a plug through the eyes of the shanks on the inside of a garment.

Plumb Line - See 'Bricklayer Line'.

Plush - A cut pile fabric in derivative of plain weave with pile of greater depth than that in 'velvet'.

Plush Fabric (Knitted) - A fabric made with uncut elongated loops of yarn projecting on the reverse side of some or all stitches. Also known as 'Terry Fabric (Knitted)'.

Ply

- (a) Of fabric - A single thickness of material in a lay or seam. The number of plies in an assembly is the number of

material thickness.

- (b) Of thread - An individual yarn in a thread. The number of plies in a thread is the number of yarns which are twisted together to form the thread.

Plying - The operation of twisting together two or more single yarns of the same length maintained under the same tension.

Pocket - A bag for practical or decorative use formed by the inserting or attachment of material to a garment. Pockets may have flaps, jettings or welts.

Pocketing Cloth - A stout cotton cloth used for making the pockets in men's wear. A softer material is used for the same purpose in women's and children's wear. Pocketing materials include drill, satin etc.

Point Line - A small size 3-strand manila or sisal line used for seizings, lashings, etc.

Point Seaming - See 'Linking'.

Point Splicing - High splicing above heel diverging from a point. Also known as 'Taper Splicing'.

Point-to-Point Seaming - See 'Linking'.

Polka Rib - See 'Full Cardigan Stitch'.

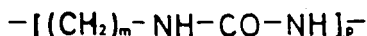
Polo Shirt - A type of sports shirt with crew neck and short sleeves, usually of solid colour with rib trimmings of contrasting colour around the neckline and at the sleeve ends; generally worn by polo players.

Polycarbamide

Constitution: Linear macromolecules having in the chain, the recurring functional group:



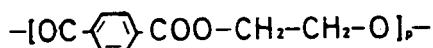
Example: Polymethylene urea:



Polyester

Constitution : Linear macromolecules comprising at least 85 percent (by mass) in the chain of an ester of a diol and terephthalic acid.

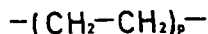
Example: Polyethylene terephthalate:



Polyethylene

Constitution: Unsubstituted aliphatic saturated hydrocarbon linear macromolecule. It forms part of the class of polyolefins.

Example: Polyethylene:



Polyethylene Extrusion Coated Fabric - Jute fabric extrusion coated with polyethylene to a thickness of 250 to 300 gauge used for packing industrial raw materials, hygroscopic fertilizers, etc.

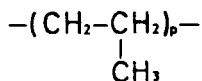
Polyethylene-Lined Hessian - Hessian laminated or reinforced with polyethylene for any particular end use.

Polypropylene

Constitution: Aliphatic saturated hydrocarbon linear macromolecule, where one carbon atom in two carries a methyl side chain, generally in an isotactic disposition and without further substitution.

Note - It forms part of the class of polyolefins.

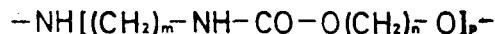
Example: Polypropylene:

**Polyurethane**

Constitution: Linear macromolecules composed of chains with the recurring functional group:



Example: Polymethylene dicarbamate:



Pongee - Originally a Chinese silk cloth, tan or ecru in colour and very light in weight. Tussah silk is used and the fabric is woven on hand-looms. The term 'Pongee' is stated to have been derived from the Chinese word 'Punki' which means woven at home on one's own handloom.

Poplin - A plain weave fabric with high warp sett, with characteristic series of fine ribs running across the cloth from selvedge to selvedge; generally used as shirting and dress goods.

Porosity - The ratio of the volume of air or void contained within the boundaries of a material to the total volume (solid material plus air or void) expressed as a percentage.

Porosity, Geometric - The percentage of aperture to total canopy area in a ribbon, ring slot or similar design of parachute.

Porter

(a) **Fabric** - The value obtained by counting in a jute fabric or jute product as marketed, the number of warp threads per full gauge length of 47 mm (or 37/20 in.) and dividing it by the number of threads per split. (2 For hessian, 4 for double warp plain fabric and 6 for double warp twill cloth).

(b) **Reed** - Number of groups of 20 splits over 94 cm (37 in.).

Post-Boarding - Boarding after dyeing to confer durable set.

Potato Bag - A double-warp hemmed plain weave sacking bag measuring about 91.5 X 81 cm (normally with 25.5 ends/dm and 31 picks/dm) and weighing approximately 454 g.

Potting - A finishing process applied mainly to woollen fabrics. The dyed fabric (which may have been crabbed) is batched on a roller which is then immersed in water. The temperature of the liquor and the duration of treatment depend on the effect desired. The fabric is cooled on the roller and rebatched end for end, and the process is repeated. The fabric is wound off the roller and dried.

Power Stretcher - A device used in the laying of textile floor coverings to achieve a suitable tension; this tension is brought about by a lever placed between the two ends of the device, one taking the stress from a fixed point, the other being held in the backing by pins.

Power Transmission Rope - A 3 or 4-strand rope, usually made of cotton and sometimes of manila or sisal yarn, used on pulleys attached to shafts for transmission of power.

Pre-Shrunk - See 'Antishrink Fabric'.

Pre-Beaming - The primary operation of warp making in which ends withdrawn from warp creel, evenly spread in sheet form are wound on a warper's beam.

Pre-Boarding, Pre-Setting - The operation of boarding carried out on garments or stockings usually before they are scoured and dyed.

Note - Woven or warp-knitted articles are usually made from fabric that has been pre-set by either moist steam or dry heat according to established methods for stabilizing the fabric, and finished goods made from set fabric do not need to be pre-boarded. On the other hand, hosiery made from knitted fabric which has not been stabilized or fashioned depends to great extent on the pre-boarding operation for conferring on them their final shape and ability to resist permanent creasing in such treatments as dyeing.

Pre-boarding is confined mainly to fabrics or articles made from synthetic-polymer yarns (e.g., nylon) and is done by submitting them to the action of steam under pressure or dry heat so that they acquire the desired shape.

In addition to removing the stretch imposed on the yarns during manufacture, the treatment stabilizes the dimensions of the articles so that they undergo no further change of shape during subsequent scouring and dyeing, provided that these processes are carried out under conditions less severe than those used during the pre-boarding. In general practice, stockings are drawn over stainless steel formers and subjected to wet steam at 1.75 kg/cm² (or 25 lb/in.²) pressure for a pre-determined time. The lengthwise shrinkage of the stocking thereby produced is usually about 50 mm (or 2 in.).

Pre-Tension - The relatively low tension used to remove kinks and crimp when mounting a specimen preparatory to making a test and used to establish the nominal gauge length.

Preconditioning - To bring a sample or specimen to a relatively low moisture content [equilibrium in an atmosphere between 10 and 25 percent RH and not exceeding 50°C (see Note)] prior to conditioning in a controlled atmosphere for testing. (While preconditioning is frequently translated as predrying, specimens should not, in fact, be brought to the oven-dry state.)

Note - These conditions may be obtained by heating air at 65 percent RH and 27°C (the standard atmosphere) to a temperature up to 50°C.

Precreping

(a) The embossing of a fabric containing crepe yarns with a design to influence the uniformity and fineness of the resultant crepe effect produced in subsequent treatment.

(b) See 'Crepe Embossing'.

Preparing - The operations, prior to spinning, from carding to the final drawing or roving stage.

Preservative - A compound used to inhibit the growth of mould, mildew, bacteria etc.

Presidents - A cotton warp and wool weft fabric in 5-thread satin weave on the double cloth principle. Lower qualities with shoddy or mungo in their composition are also made and nap finished.

Press-Off (Knitting) - The casting-off of the fabric from the needles by virtue of the fact that the supply of yarn has failed.

Press-Off Stitch - See 'Float Stitch'.

Pressing - The removing or creating of creases or shape in materials by heat and/or steam and/or vacuum, or a combination of these

with pressure.

Pressure Boil - Scouring of cellulose or their blended textiles with alkaline liquors in closed vessels under pressure.

Pressure Mark - An impression or an area of greater lustre in fabric caused by irregularities of pressure during finishing process.

Pressure Suit - A suit which is capable of exerting pressure on the body in order to counteract an increase of pressure in the lungs.

Pressure Suit, Partial - A pressure suit which does not exert pressure on the whole of the body and is limited, therefore in, the altitude/time protection it affords.

Pressure Suit, Full - A pressure suit which exerts pressure on the whole of the body.

Prick Stitch - A stitch made by passing the needle straight through the material at right angles to the surface, alternately from one side to the other.

Primary Rope - Any one of the 3 hawser-laid (3-strand) rope, all the three of which, when twisted together, form a cable laid rope.

Primary Strand - A strand of the primary rope.

Prince of Wales - Characteristic black check pattern, obtained by using a specific colour sequence in warp and weft. Woven in twill, Panama and plain. Worsted yarns are mainly used but woollen yarn may also be used for special articles.

Printed Fabric - Fabric on which a colour pattern has been produced with or without a definite repeat.

Printing - The process of localized dyeing, producing designs of one or more colours on a fabric by means of roller, block, screen etc., using any of the printing styles such as direct, discharge, resist, transfer and spray.

Profile Stitching - Sewing along a pre-determined profile (see also 'Contour Stitching').

Progressive Bundle System - A production system in which bundles pass from one operator to the next with some work in hand at each operation. The operations are laid out in sequence with the required number of machines for approximate balance allocated to each.

Progressive Line System - A production system in which single garments or parts are assembled. During assembly the parts are passed from one operator to the next resulting in some work in hand.

Proof - Resistant to a specified agency, either by reason of physical structure or inherent chemical non-reactivity or arising from

a treatment designed to impart the desired characteristics.

Proofed - Descriptive of material that has been treated to render it resistant to a specified agency.

Proofed Fabric

- (a) Fire - A fabric resistant to rapid combustion.
- (b) Flame - A fabric resistant to the propagation of a flame beyond the edges of the charred area produced by the application of a test flame.
- (c) Shower/Water Repellant - A fabric resistant to the absorption and penetration of water at the same time retaining a degree of permeability to air.
- (d) Smoulder - A fabric resistant to flameless combustion (glowing or smouldering) after withdrawal or extinction of a test flame.
- (e) Water - A fabric highly resistant to absorption and penetration of water possessing a low degree of permeability to air.
- (f) Moth - A fabric resistant to the degradative action of moth larvae.
- (g) Rot - A fabric resistant to the degradative action of bacteria in soil or water.
- (h) Mildew - A fabric resistant to the action of fungal microorganisms.

Proofing - A chemical treatment of fabric to make it resistant to water, fire, insects, rot, moth, etc.

Protein

Constitution: A polymer, consisting of amino acids linked together by the peptide group:

Examples: Silk, wool and other animal hair fibres, casien, arachin and zein etc.

Puff - A small wedge of the same material sewn on to 'V' cut at various positions in canvas or lining-making to accommodate a prominence, such as the shoulder bones.

Pull (Sampling) - The act of manually abstracting a sample of fibres from a bulk lot of raw material or sliver with a view to assessing the length and/or distribution of length of fibre within the sample.

Pull Through Cord - A 6-strand flax, jute or man-made fibre cord used for cleaning the bores of rifles.

Pulled Wool - Wool plucked from the pelts of slaughtered sheep with the aid of bacterial action (sweated wool) or by treatment with lime (lime wool) or with sodium sulphide (tannery wool). Also called plucked wool or fellmongered wool. All pulled wools show skin portions and root ends under microscope. (See also 'Skin Wool', and 'Skin Pieces').

Pulled-Down Yarn - A yarn specially prepared in the spinning process so that the tufts it produces in a carpet contract in finishing to produce a relief pattern.

Pulled-In Selvedge - See (f) under 'Defective Selvedge'.

Pulled-In Weft - See 'Weft-Trail'.

Pulling (Rag) - The operation of reducing rags and thread waste to a fibrous state.

Pulling (Wool) - The removal of wool from skins.

Pulling-Back Places - See (2) under 'Bar'.

Pullover - A knitted outer garment with full sleeves, tight-fitting border at the bottom and without complete front-opening (see Fig. 61).

Punching (Wool Industry) - A winding operation to prepare four-end balls of sliver for the noble comb.

Puppa (Silk) - The resting stage in the life cycle of a lepidopteran insect (it is also called Chrysalis Stage). During this stage, replacement of larval organs by that of the adult is realized.

Pure Dye Silk - Silk dyed but neither weighted nor adulterated.

Purl Fabric - A weft-knitted fabric in which some loops contained within the same wale are intermeshed in one direction and the other loops in the opposite direction. Also known as 'Pearl Fabric' or 'Links-Links Fabric'

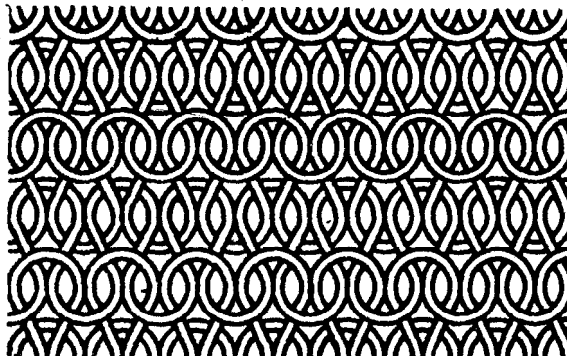


FIG. 71 PURL FABRIC (1 X 1)

PUTTEE - An Indian term for a narrow woollen or cotton webbing with tapes attached to one or both ends and used as a kind of gaiter wrapped around the calf.

Quality - Various attributes of wools which include primarily fineness and also uniformity, length, colour and soundness.

Quality Number - A trade term adopted by the Australian Wool Board to indicate a series of numbers related to spinning ability of greasy wool and determined principally by fibre fineness.

Queen's Cord (Knitting) - A two-bar warp-knitted construction made with full-set threading in both guide bars. The lapping movement of the back guide bar involves underlapping of 2, 3 and 4 needle spaces while the front guide bar chains continuously on the same needle.

Quilting - The production of a raised or padded effect by stitching or other means in two layers of material lined or interlined with wadding or similar material. The stitching, etc. May be in parallel rows or to a pattern.

Quilting Twine - A 2-or 3-ply flax, cotton or hemp twine used for upholstery and bedding purposes.

Rabbit Hair - Fur removed from common rabbit, angora rabbit (Lepus caniculus), and the hair (Lepus europaeus and Lepus timidus). The fine fur fibres (undercoat) exhibit a typical ladder type medulla (see also 'Angora').

Rack (Racking) - See 'Shog (Shogging)'.

Radium - A firm, smooth, soft, closely woven fabric in plain weave. Usually it is tightly woven under high tension and is finished to produce a high lustre.

Rag Pulling - Breaking up a garment into individual fibres to yield shoddy or mungo.

Ragged Selvedge - See (g) under 'Defective Selvedge'.

Raglan Sleeve - A sleeve with the armhole line extending from the front and back scye to the neck point so that the shoulder section is joined to the sleeve crown, eliminating the conventional shoulder and sleeve head seams.

Rags - Cut pieces of cloth, arising during the normal course of manufacture and packing, having length:

- (a) 23 cm but less than 45 cm where the width of the fabric is one meter or more, and
- (b) More than 23 cm but less than 65 cm where the width of the fabric is less than one metre.

Rags (New) - The waste cloth, whether woven or knitted, i.e.

left after a garment has been cut out. The term also covers piece ends and discarded pattern bunches.

Rags (Old) - Worn garments that have been discarded.

Raised Fabric - A fabric with raised, brushed or napped surface or with cut or uncut pile.

Raised-Design Fabric - See 'Relief Fabric'.

Raisin Bag - A double-warp hemmed sacking bag measuring about 86 x 56 cm (normally with 25.5 ends/dm and 31 picks/dm), and weighing approximately 454 g.

Raising - The production of a layer of protruding fibres on the surface of woven, knitted or felt fabrics, by brushing, teasing or rubbing. (See 'Napping' and 'Brushing').

Rambouillet - French merino sheep and its wool.

Ramie - A soft fibre obtained from the bark of the ramie plant, Boehmeria nivea and B. Tenacissima, belonging to the nettle family. The fibres are from 10 to 100 cm in length, white in colour, very strong and durable and have silky lustre. It is still being used in the manufacture of fabrics for dress goods, sports clothes, table cloths, etc.

Rams - Wool from rams. Often contains a strong odour.

Random Dyeing - A form of space dyeing.

Note - It is so called because it can be used to produce random colouration in the final fabric.

Rapid Fast Dye - A suitable mixture of selected stabilised antediazotate and selected azoic coupling component (naphthol).

Rapidazole Dye - A suitable mixture of inactive stabilised diazo compound such as diazosulphonate or diazosulphonic acid or diazo-sulphite, and a suitable azoic coupling component (naphthol) applied by dissolving in an aqueous solution.

Rapidogen Dye - A suitable mixture of stabilised diazoamino or diazoimino compound (fast salt) and a selected azoic coupling component (naphthol) applied by dissolving in an aqueous solution.

Rappelling Rope (Mountaineering) - A mountaineering rope used by climbers to come down from steep and vertical pitches.

Ratch

- (a) The distance between the nips of the front and back rollers in a roller drafting system. (Synonym of Reach).
- (b) A slight additional drafting of the yarn, which takes place towards the end of the mule draw.

Rate of Dyeing - The rate at which a standard mass of dye is absorbed by a standard mass of substrate under specified conditions. It may be expressed quantitatively in several ways, such as the mass of dye absorbed in unit time, the percentage of dye absorbed in unit time, or the time taken for the substrate to absorb a given fraction of the amount of dye that it will absorb at equilibrium.

Ratine - Originally a thick woollen cloth with a curled nap. This term or 'ratine' the past participle of the French verb ratiner (meaning to cover with a curled nap), is also applied to a cloth, made from a variety of fibres, with a rough surface produced either by using a fancy yarn in a cloth to which a special finishing technique may or may not be applied or by using ordinary yarns in a cloth to which the special finish is applied. (See also 'Eponge').

Ratline - A 3-strand tarred hemp line used in ship rigging.

Raw silk - The silk reeled by drawing together the required number of filaments from cocoons; it contains its original gum or sericin.

Raw Wool - Wool as shorn from the sheep or wool which is pulled, limed or ginned and carded, contains varying amount of impurities like sand, grease, suint, vegetable matter, tags and dung. It is, therefore, purchased on the basis of either laboratory scoured yield or clean wool fibre content.

Rawkiness - Unevenness in the piece caused by uneven yarn, which gives the effect of streakiness.

Rayon - A generic term for man-made fibres, monofilaments and continuous filaments composed of regenerated cellulose with less amounts of non-fibre forming material or without it.

Rayon Spun Yarn - Yarn spun from rayon staple or cut rayon waste.

Rayon Staple - Rayon fibres of spinnable length manufactured directly or by cutting rayon tow. This does not include rayon waste.

Rayon Tow - A multifilament strand suitable for cutting into rayon staple or spinning directly into spun rayon yarn.

Rayon, Modified - See 'Modified Rayon'.

Rayon, Solution-Dyed or Spun-Dyed - See 'Pigmented Yarn'.

Reach

(a) See (a) under 'Ratch', and

(b) The distance from the back heald to the back rest or back roller of a loom (locally Ratch or Perry).

Reactive Dye - A dye that, under suitable conditions, is capable of reacting chemically with a substrate to form a covalent dye-substrate linkage.

Real Selvedge - See 'Patent Selvedge' and 'Selvedges'.

Realization Factor - A factor used for the calculation of breaking strength of ropes from the breaking strength of its component yarns. The realization factor varies with the construction and size of the rope. Usually it is used when suitable testing machine is not available.

Rearing House - The house wherein silkworms are reared from hatching of eggs to formation of cocoons.

Reclaimed Wool - Wool recovered from rags, known as 'shoddy' or 'mungo'.

Recomber's Noil - The shorter fibres separated in combing tops (i.e., in recombining).

Recommended Allowance - The percentage that, in the calculation of commercial weight and of yarn linear density is added to the oven-dry weight with or without previous washing to remove natural or added oils and dressings. For such materials, the recommended allowance is arbitrarily chosen according to commercial practice and includes the moisture regain. It may also include the normal finish i.e. added to impart satisfactory textile qualities to the material.

Recovered Wool - A vague term the usage of which is not recommended. It is used synonymously with reclaimed wool.

Rectilinear Combing - Combing of worsted sliver by the use of straight combs wherein the tufts are presented to the combs intermittently by movements of the slivers into nipper jaws, which grip them firmly and release them after combing onto a pair of rollers. These rollers draw the tufts which are subsequently recombined automatically by overlapping them, the resultant combed sliver being continuous but uneven.

Reduced Heel - A defective heel made by reducing the number of active needles forming the heel.

Reduced Vat Process or Leuco Vat Process - A method of dyeing in which the vat dye is first converted into soluble and substantive leuco form by reduction and then applied to textile material.

Reduction Clearing - See 'Clearing'.

Reed

(a) A device consisting of a number of wires closely set between two slats or baulks which may serve any or all the following purposes:

(i) Separating the warp threads,

(ii) Determining the spacing of the warp threads,

(iii) Guiding the shuttle, and

(iv) Beating up the weft.

(b) Jute - The fibre coming from one jute plant, held together as a unit by the meshy structure of the fibre system; and

(c) To draw ends through a reed.

Reed (Fibre) - See under 'Jute Fibre Characteristics'.

Reed Length - The average length of jute fibre strands. (See also under 'Jute Fibre Characteristics').

Reed Mark - A pronounced warp-way crack in a woven fabric caused by a damage or defective reed (see also 'Crack').

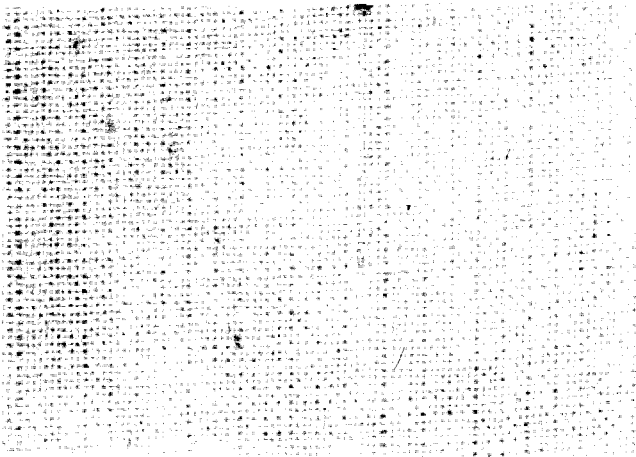


FIG. 72 REED MARK

Reed Number - The number of dents per unit width of reed. There have been many units in common use. The recommended SI unit is dents/cm.

Reed Tapering (Fibre) - See under 'Jute Fibre Characteristics'.

Reed Thickness (Fibre) - See under 'Jute Fibre Characteristics'.

Reeling - The process of winding silk filament from the cocoon.

Regain - See 'Moisture Regain'.

Regenerated Wool - A vague term indicating reused wool. The use of this term is not recommended.

Reinforcement - Strengthening of any portion of the knitted garment which is subjected to harsher wear either by splicing or by sewing or affixing other material.

Reediness - Fine cracks between groups of warp ends appearing

uniformly across the cloth.

Principal Causes - Faulty timing and setting of the loom, faulty denting in the reed, unevenly manufactured reed, etc.

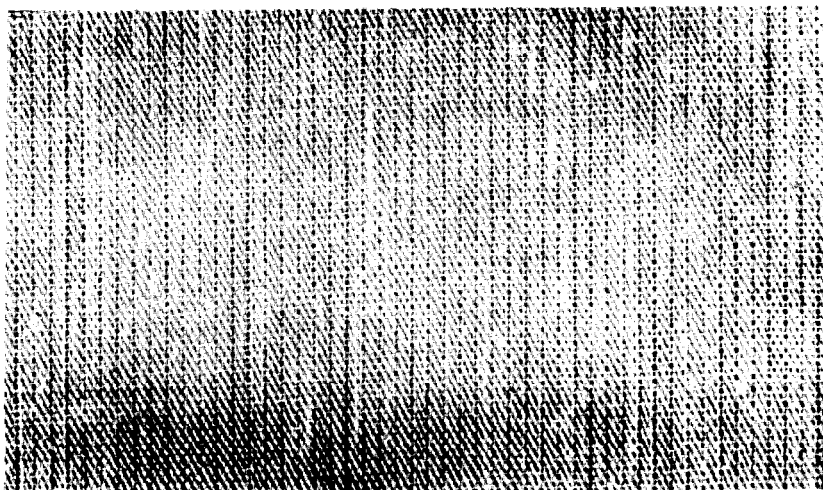


FIG. 73 REEDINESS

Relative Humidity - The ratio of the actual pressure of the water vapour in the atmosphere to the saturation vapour pressure at the same temperature. The ratio is usually expressed as a percentage (see also 'Absolute Humidity')

Relaxation - The releasing of strains and stresses in textile materials.

Relief Fabric - A compound or double fabric with a figured blister raised effect; usually produced on a rib jacquard machine. The ground yarn is knitted on all or alternate needles in one set and on selected needles in the other set. This takes place not more frequently than every third course. The patterning yarn (or yarns) is knitted on selected needles of the second set to give a preponderance of loops of the patterning yarn on the face side of the fabric. Also known as 'Blister Fabric', 'Bourrelet Fabric', 'Cloque Fabric', 'Held-Loop Fabric', 'Ottoman Rib Fabric', 'Raised-Design Fabric', 'Ripple Fabric' and 'Roll-Welt Fabric'.

Remanufactured Wool - Reused wool. However, the use of this term is not recommended as it is vague and is often confused with reprocessed wool.

Remnants - Fents

Renditta - The number of kgs of cocoons required to yield 1 kg of raw silk. The cocoons yield is expressed in terms of renditta.

Example: If 18 kg of cocoons give 1 kg of raw silk, the yield is said to be 18 renditta.

Rep or Repp - A plain-weave fabric with a prominently weftway-rib effect, made from two warps and two wefts. Both the warp and the weft threads are arranged alternately coarse and fine. Coarse ends are raised above coarse picks and fine ends above fine picks, the rib effect being accentuated by different tensions in the warps.

Note - Less expensive fabrics are now often made with one warp and one weft but with the general ribbed effect.

Reppo - See 'Self-Twisted Yarn Production'.

Repping - A bar in a fabric in which a prominent weftways rib is evident.

Reprocessed Wool - Wool recovered from processed but unused materials e.g., remnants, tailors' clipping waste, soft waste and hard waste.

Note 1 - This term should not be confused with 'reused wool' or 'remanufactured wool'.

Note 2 - Pulled wool is also referred to as reprocessed wool. This usage is not recommended.

Rereeling - The process of winding yarn reeled on small reels on to standard reel (150 cm) to make hanks for marketing.

Rescue Line - A 3-strand hawser-laid hemp or man-made fibre rope used for rescue work.

RESHAM - Indian name for natural silk (see also 'Raw Silk').

Residual Shrinkage - The potential shrinkage remaining in a fibre, yarn or fabric after treatment designed to reduce or eliminate that shrinkage.

Residuals - Small amounts of dirt and fatty matter remaining in washed samples, and measured as part of the standard method for determining yield or wool base.

Resiliënce - The property of a material by virtue of which it is able to return to the original state from its deformed state.

Resist Dyeing or Printing - A substance applied to a substrate to prevent the uptake or fixation of dye during a subsequent operation.

Resist Style - Style of printing in which undyed material is printed with suitable compounds to give on subsequent dyeing a white pattern on a coloured ground, or a pattern of contrasting colours to the ground by incorporating suitable dyes of colour-producing substances in the resist print paste.

Resist Yarn - Yarn, that has been treated to resist the action of dyestuffs.

Restraining Agent - A product which, when added to a dyebath, reduces the rate of equilibrium exhaustion.

Retarding Agent - A product which, when added to a dyebath, reduces the rate of dyeing but does not affect the final exhaustion.

Retting - The treatment on the crop to make the bast fibre strands more easily separable from the woody part(stick) of the stem by immersing the plants in water which sets up certain chemical and biological changes to help the process.

Reused Wool - Wool reclaimed from used garments, e.g., shoddy and mungo extract. This term excludes soft waste and hard wastes.

Reverse Plating - In plain-plated fabrics, reversal of the yarn positions within certain stitches so that the opposite yarn appears on the face of the fabric.

Reversed Weave Fabric - A type of fabric where double weft and single warp is used, the warp is usually heavier than the weft.

Rib Fabric - A fabric whose surface consists of warpway (weft rib) or weftway (warp rib) raised lines or ridges.

- (a) Warp rib - A fabric with ribs running in the direction of weft due to the weft being coarser than the warp or due to two or more picks being put in the same shed. In warp rib, there are usually three to four times as many ends as picks per unit length so that the weft is completely covered.
- (b) Weft rib - An effect produced by the use of a weft cover approximately twice the warp cover, the weft being made to bend around the warp, which remains substantially straight. This leads to the formation of rounded weft-faced cords running down the cloth. The prominence of the cords can be accentuated (i) by using a coarser warp than weft; and (ii) by weaving two or more ends at once.

Rib Fabric (Knitted) (1 x 1) - A weft-knitted fabric made on two sets of needles in which all the loops of alternate wales are intermeshed in one direction and all the loops of the other wales knitted at the same courses are intermeshed in the other direction.

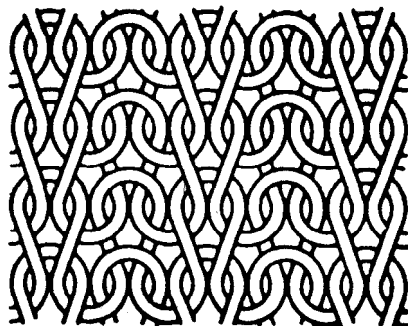


FIG. 74 RIB FABRIC (KNITTED) (1 X 1)

Rib Fabric (Knitted) (2 x 2) - A weft-knitted fabric made on two sets of needles in which all the loops of alternate pairs of wales are intermeshed in one direction and all the loops of the other pairs of wales knitted at the same courses are intermeshed in the other direction. Also known as 'Corduroy (Knitted)' and 'Swiss Rib'.

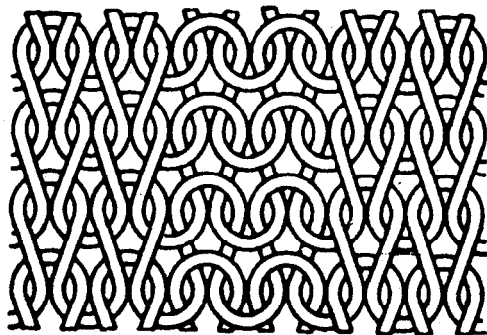


FIG. 75 RIB FABRIC (KNITTED) (2 X 2)

Reversibles - Fabrics on which the pattern appears on both sides of the cloth, so that either side can be used. Examples include reversible shawls, blankets or hosiery.

Rib Stitch - A primary weft-knitting stitch made on two sets of needles (see also 'Rib Fabric (Knitted) (1 x 1)' and 'Rib Fabric (Knitted) (2 x 2)').

Rib Top (Ribbed Top) - Top (of socks or stockings) made in 1 x 1 rib.

Ribbed Satin - A ribbed fabric, such as 'bengaline' or 'faille' woven with a satin face, the ribs giving a broken, lustrous surface to the face of the fabric. This fabric may be given a moire finish.

Ribbon (Cut or Slit) - A fabric 30 cm or less in width made by cutting wider fabrics to a desired width.

Ribbon, Textile - A fine-textured, narrow fabric which weighs less than 5.25 kg/100 metres per dm of width approximately 510 g/m² and which is used primarily for trimming or decorative purposes.

Note - Usually ribbons are woven fabric less than 100 mm wide.

Ribbon Width (Cotton) - The width of the broadest part of a fibre between two successive convolutions.

Rigging - See 'Cuttle'.

Rigging Line - Any cord attached to the canopy which transmits the drag of the parachute to the load.

Rigolette - A light-weight knitted scarf worn by ladies as head-covering.

Ring (Knitting) - A fault in a circular-knitted fabric appearing as a light or dark stripe and arising from differences in (a) lustre, (b) dyeing affinity (or unlevel dyeing), (c) yarn spacing or loop length, or (d) yarn count; or from defective plating.

Ring Spinning - A system of spinning on a ring frame in which drafting of the roving, twisting of the yarn and winding it on the bobbins takes place simultaneously and continuously (see also 'Mule Spinning').

Rings (Raw Silk) - Places where a length of raw silk thread has, in reeling, been inadvertently wound in the form of ring instead of in its usual cross form, due to thread having escaped from the traversing guide of the reeling machine. Rings increase waste in winding.

Ric-Rac Braid, Vandyke Braid - A braid having zig zig appearance with the almost serrated effect on both edges. This effect is produced by applying different tension to the individual threads in the process of manufacture.

Rip Cord (Aerostat) - A cord for tearing open the rip panel.

Rip Cord (Parachute) - A cord or flexible cable on a parachute which, when pulled, opens the pack and allows the parachute to deploy.

Ripple Fabric - A fabric made from coarse woollen yarns. The face is raised and finished so as to give the fabric a rippled or wavy appearance usually used for dressing gowns. (See also 'Relief Fabric').

Riser - An extension of the rigging lines of a parachute formed into strop.

RN Vest - Vest with round neck and without sleeves. Also known as 'Sandow'

Note - These vests are made either with narrow shoulder straps (cross-cut) or with broad shoulder straps (shape-cut).



FIG. 76 RN VEST

Rod Mats - See (j) under 'Mats'.

RNS Vest - Vest with round neck and with short sleeves.

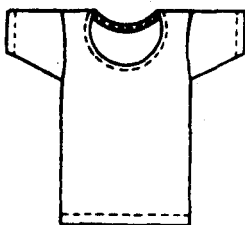


FIG. 77 RNS VEST

Robust - A trade term adopted by the Australian Wool Board to indicate thick well-grown sound staples of wool.

Rocket Line - A buoyant hemp or man-made fibre rope used for attachment to a rocket for sea rescue work.

Roll Welt - A welt produced on rib machine by knitting on one set of needles for a few courses (generally not exceeding 4) and non-knitting on the other set of the needles while they retain their old loops. This is followed by knitting on both sets of needles together on rib basis. This gives a roll effect on one side of the fabric. Also known as 'English Welt'.

Roll Welt Fabric - See 'Relief Fabric'.

Rolled - A term used for describing an aspect of make-up of the jute fabric; it describes a jute fabric made into a roll.

Rolled Seam - A seam where the two edges of the material to be joined are rolled together and secured by a single row of stitching.

Rolled Selvedge - See (b) under 'Defective Selvedge'.

Rolled Threads - Over-riding of contiguous threads in case of fabrics where double drawn ends or double picks are used; e.g., in 'DOSUTI'.

Roller Printing - This is a fast and continuous method of registration of variety of colours using engraved copper rollers.

Rolls (Sliver) - Sliver wound into form of a roll at the delivery of a carding or a drawing machine by roll formers.

Romaine Crepe - A light-weight, plain-woven, heavy sheer fabric having slightly dull lustre.

Roofing Felt (Jute-Based) - See 'Bitumen Felt'.

Roots (Jute) - The hard, barky portions at the lower end of jute strand. (See under 'Jute Fibre Characteristics').

Rope - A flexible, continuous yarn twisted from fibres and formed into strands and thereafter these strands are laid into rope usually greater than 4 mm diameter, structurally balanced to maintain compacted form.

Rope Gauge - An instrument used for measuring the circumference and diameter of the rope

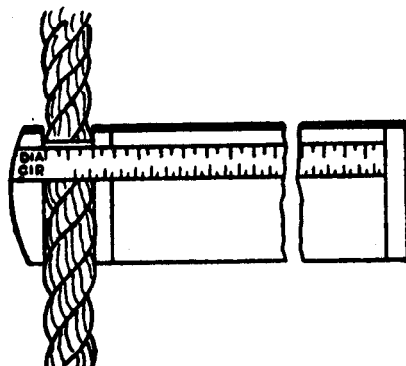


FIG. 78 ROPE GAUGE

Rope Marks (Running Marks) - Long crease marks in dyed or finished goods running approximately in the warp direction. They are caused during wet processing in the rope form and may be the result of (a) the formation of creases along which abrasion or felting may occur, or (b) imperfect penetration or circulation of the processing liquors.

Roping Twine - A 3-ply hemp, jute or flax twine used for whipping the fibre rope ends and for sewing rope to canvas.

Roping Yarn - See (j) under 'Coir Yarn'.

Rotary Pressing - Continuously pressing medium of heavy woollen or worsted fabrics between a steam heated rotating metal roller and concave static metal bed at a high pressure and temperature.

Rotary Screen Printing - A continuous method of printing using rotary metal screens generally made from nickel.

Rotproofed Hessian - See 'Sand Bag'.

Round Neck - A term applied to neck-opening designed, cut or finished in round shape.

Rounding - Condemned cordage of size less than 102 mm.

Rove (or Roving)

(a) General - A continuous, slightly twisted strand of fibres produced on a roving frame and from which yarn is spun;
or

(b) Wool - A continuous strand of fibres with no twist, made from the web produced on condenser card by splitting the

web into a number of parts and then condensing each part by rubbing.

Roving Courses - Additional courses used either as protective courses or to facilitate handling in subsequent operations in the manufacture of knitted articles. These courses are afterwards removed.

Royal Rib - See 'Half Cardigan Stitch'.

Rubberized Fabric/Cloth - Cotton, silk or man-made fibre fabric which has been given a waterproof treatment to be used for some definite purpose, such as table covering or sheeting. Generally one side of the cloth is coated. Much of the cloth is used in raincoat fabric.

Ruffling - A form of gathering.

Rug - A piece of thick, heavy fabric used for floor coverings and blankets.

Rug Blankets - Either all wool, woollen spun warp and weft, type of travelling rugs or cotton warp and woollen weft type of blankets generally in twill weaves and bold checks. The wool fibre used is cheviot and coarse cross-bred type. These rugs may also be made from shoddy.

Rug Wool - A wool yarn, generally woollen-spun, twisted six-fold, the single thread before plying being not finer than 350 tex.

Rug, Corridor - Carpetting traditionally 0.7 to 1 m wide and in any required length greater than 2 m.

Rug, Floor - A collective term for pile floor coverings of small size.

Rug, Sofa - Carpetting traditionally 1 to 2 m wide, in varying lengths.

Rugged Selvedge - See (g) under 'Defective Selvedge'.

Runnage - Unit of linear density for coir yarn expressed as number of metres per kilogram or yards per pound.

Runner (Floor Covering) - A textile floor covering used for covering, along the length and part of width, floors of corridors and stairs.

Runners (Jute) - The hard barky jute strand running from its lower end to the middle or sometimes up to the tip of the fibre. This is due to incomplete retting.

Running Mark - See 'Rope Mark'

Running Stitch - A continuous stitch formed by passing the thread through the material alternately from top to underside and vice

versa.

Running-On - The operation of placing a series of loops into points or needles preparatory to further knitting or to joining fabrics together by linking.

Rust Stain - See (g) under 'Stains'.

S-Lay - See 'Direction of Lay'.

S-Twist - See 'Twist'

S/P Ratio - The ratio of the number of secondary follicles in skin to the number of primary follicles. The latter are formed early in the embryonic life of the lamb and produce fibres 10-20 percent coarser than those produced by the secondary follicles of the sheep.

Sacking - A general term applied to double warp coarse fabrics either in plain or twill weave used chiefly for the making of bags or sacks. They are often made of jute or hemp, with coarse yarns having count from 240 tex upwards and the threads per centimetre may vary from 2 to over 12.

Sacking Bag - A sack tailored from coarse jute fabric with either one side opening or a valve device fitted at one corner for filling, storing and conveying the goods.

Safe Working Load - The maximum working load which can be applied to rope consistent with the factor of safety recommended for the conditions under which the rope is to be used.

Safety Factor - The factor by which the breaking load of the rope must be divided in order to determine its safe working load.

Safety Line - A high quality 3-strand hawser-laid rope used for safety purposes by personnel engaged in dangerous work.

Safety Net - A net made from high quality natural or man-made fibre cords used for safety purposes by personnel engaged in dangerous work.

Safety Stitch - A stitch formed by an overedge stitch reinforced by a chain stitch (or sometimes lock stitch) further in from the material edge.

Safety Thread - A breakable thread of specified strength used to make a safety tie.

Safety Tie - A breakable tie connecting any two parts of a parachute system to prevent accidental release.

Sagathies - A worsted fabric made from undyed warp and dyed weft, usually with a 2- and- 2 twill weave.

Salt Bag - A double-warp plain weave bag measuring 114.5 X 66

cm and weighing approximately 795 g, the sacking cloth has normally 51 ends/dm and 31 picks/dm.

Salt Sensitivity

- (a) In Dyeing - The extent to which the dyeing properties of dye are affected by the addition of a neutral electrolyte.
- (b) Of Dyed Fabric - The susceptibility to colour change of a dyed material when it is spotted with aqueous solutions of neutral electrolytes.

Sand Bag - A bag made from hessian fabric measuring about 84 x 36 cm and weighing approximately 170 g (unproofed) and 190 g (proofed) (see IS:9685-1981).

Sand Bag Cloth - Hessian fabric having 38 ends/dm and 39 picks/dm and weighing approximately 245 g/m² [see IS:2818 (Part 6)-1977].

Sandow - See 'RN Vest'.

Sansevieria - Leaf fibre from the perennial plant Sansevieria and is grown in Arabia, India, Ceylon and Africa.

Sappy Wool - Wool containing abundance of grease; consequently the yield of such wool is low.

Saran - A man-made fibre composed of copolymers of vinylidene and vinyl chloride.

SAREE (or SARI) - Cotton, silk, wool, man-made fibre or blends thereof, dress wear for ladies popular in India. It is woven or knitted, generally characterized by cross border (PALLU) in 4.5, 5.5, 6.5 and 8.5 m lengths. Gold and silver threads are also used for borders or for designs in the body of material. The sarees are distinguished by different names according to the place of production, design, etc.

Sarsnet Ribbon - A ribbon constructed entirely in plain weave of very fine warp and weft and with higher density, the weft density being higher than that of the warp.

Note - A true sarsnet is made wholly of silk warp.

Sase (or Sases) Yarn - Spun rayon yarn made of viscose staple of different count.

Sash Cord - A braided cotton or man-made fibre cord used on sash windows in buildings.

Sateen - A fabric with a lustrous surface, obtained by a sateen weave with lower warp sett and higher weft sett.

Sateen, Duck - A weft-face heavy fabric with sateen weave, mainly used for suitings.

Satin - A fabric with a lustrous surface, obtained by a satin weave with higher warp sett and lower weft sett.

Satin (Knitted) - A two-guide bar warp-knitted fabric in which the front-bar underlaps are arranged with a view to produce a smooth surface. Typical front-bar laps are /1-Ø/3-4/or/1-Ø/4-5/ and back-bar laps are /1-Ø/1-2/.

Satin Damask - See 'Damask'.

Satin, Double Faced - A silk fabric employing two sets of warp yarn and one set of weft so as to present a satin face on both sides. Both warps interlace with the weft.

Satin-Back Crepe - See 'Crepe-Back Satin'.

Satin-Backed Velvet - A lustrous 'velvet' with satin weave.

SATRANJI - An Indian term for a large size floor covering woven from coarse, dyed cotton yarn with or without designs [See also 'DURRIE (or DURRY)'].

Saturation/Purity/Intensity/Chroma of a Colour - That attribute of chromatic colours which determines its degree of difference from a grey of the same brilliance.

Saxony Cloth - Woollen textures, made from Saxony or merino quality of fine wool, with a smooth surface, soft handle and compact structure.

Saxony Woollen Yarn - A typical woollen spun yarn made from fine merino wool.

Scalloped Selvedge - See (h) under 'Defective Selvedge'.

Scarf - A square, rectangular or a triangular piece of woven or knitted fabric made generally from wool, silk or man-made fibres. It is generally worn by children, ladies and men on the neck or head.

Schappe - Spun silk yarn, particularly that which is made from stock which has been partly degummed by the schapping or maceration process.

Note - Such a fermentation process does not remove the gum entirely and hence schappe contains up to 10 to 12 percent of gum.

Scotch Finish - A closely shorn nep finish on heavy woollen fabrics.

Scorage of Yarn (Coir) - A number indicating the fineness or coarseness of the coir yarn which is obtained by dividing the number of strands that could be laid very close to each other without overlapping in a length of 0.914 m (or 1 yd) by 20.

Scoured Fabric - Fabric which is freed from natural waxes, proteins and added sizing materials by chemical treatments.

Scouring - Treatment of textile materials in aqueous or other solutions in order to remove natural fats, waxes, proteins and other constituents, as well as dirt, oil and other impurities.

Scrambling Net - A net made from natural or man-made fibre used on the side of a ship to assist in rescue work and boarding operations.

Screen Printing - The production of a coloured design on a substrate by the application of a colourant by forcing printing paste or ink through the unblocked areas of a thin gauge screen in contact with the substrate during printing.

Scrim - A plain weave open mesh, light-weight fabric weighing less than 240 g/m². It is used in the manufacture of bags for large size light articles. It is fixed to tarred brown paper to make waterproof packing; and used as tobacco shade cloth. The lighter varieties are also used for the manufacture of underfelt.

Scrim Garnishing - It is a 50 mm or 75 mm hessian strip stitched on both the sides with sewing thread made from plain weave medium weight hessian fabric weighing not less than 305 g/m². It is used for camouflaging purposes by defence. The hessian is also dyed either in mild-bronze shade or grass green shade or light green shade or dark brown shade (see also 'Camouflage Garnishing Strips' and 'Camouflage Scrim Hessian').

Scroop, Scrooping - A finishing process usually associated with silk but also given to cellulosic fibres, yarns or fabrics to give high coefficient of static friction relative to dynamic coefficient which results in a high-pitched sound when the material is compressed normally due to the presence of a long chain fatty component and a crystalline organic acid, (e.g. soap and tartaric acid).

Sculptured Pile - See (e) under 'Pile'.

Scutching

- (a) **Cotton** - An operation in preparing cotton for spinning that has three objects, namely, to reduce the cotton to loose open condition by beating it, removal of impurities remaining in the cotton after opening, and the formation of a continuous lap or web of cotton wound on to a rod for use on carding machine.
- (b) A cleaning operation given to bast fibres like flax and hemp, after they have been retted, to separate the fibres from the woody portion of the stalk.

Seam - A seam is a joint consisting of a sequence of sewing stitches uniting two or more pieces of material and used for assembling parts in production of sewn items.

- (a) Counterlaid Seam - A seam in jute bag formed by the raw edges of cloth turned outwards and sewn through four thicknesses of cloth. The bag is turned after sewing.

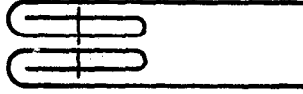


FIG. 79 COUNTERLAID SEAM

- (b) Flat Seam - See 'Seam, Splay Seam'.
 (c) Fold-over Seam - A seam in jute bag formed by the two edges of cloth folded over and then sewn through four thicknesses of cloth. The bag is used without turning after sewing.

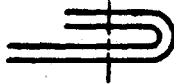


FIG. 80 FOLD-OVER SEAM

- (d) Hemming - A seam in jute bag formed by turning over the selvages of cloth once and sewn through two thicknesses of cloth while the raw edges may be turned twice and sewn (union stitch) through three or six thicknesses so formed.

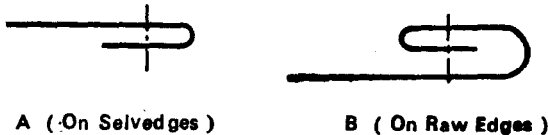


FIG. 81 HEMMING

- (e) Laid-in or 'M' Seam - A seam in jute bag formed by the cloth edges turned in and the sewing (lock stitch or union stitch) is done through four thicknesses of cloth.



FIG. 82 LAID IN OR 'M' SEAM

- (f) Over-Edge Seam on Raw Edge - A seam in jute bags formed by turning in the raw edges and sewn with overhead or Herakle machines using heavy twines through four thicknesses of cloth. The bag is used without

turning.

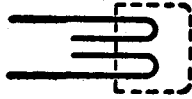


FIG. 83 OVER-EDGE SEAM ON RAW EDGES

- (g) Over-Edge Seam on Selvages - A seam in jute bag formed with overhead or Herakle machines using heavy twine and sewn through two thicknesses of cloth with selvages. The bag is used without turning after sewing.

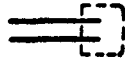


FIG. 84 OVER-EDGE SEAM ON SELVEDGES

- (h) Overlap Seam - See 'Seam (Fold-over Seam)'.
 (j) Plain Seam - A seam in jute bag formed by sewing (union stitch) through two thicknesses of cloth. The bag is turned after sewing.

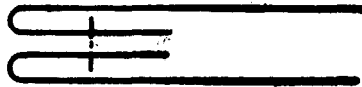


FIG. 85 PLAIN SEAM

- (k) Safety Seam - A seam with a second inner line of stitching (union or lock stitch) over and above the outer overhead or herakle sewing.

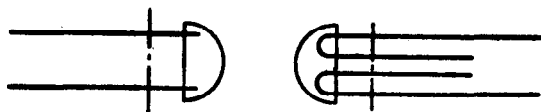


FIG. 86 SAFETY SEAM

- (l) Splay Seam

- (i) On Selvages - The two selvages are laid together, one edge projecting about 1.5 cm more than the other and then lock stitched through two folds of cloth. The protruding cloth is then turned over and stitched through two thicknesses of cloth. The bag is then

turned after sewing. This type of seam is used in the heavy bags.



FIG. 87 SPLAY SEAM ON SELVEDGES

- (ii) On Edges - Similar to splay seam on selvages but the cloth is sewn (lock stitch) at first through two or three folds and then through three folds. The bag is then turned after sewing.

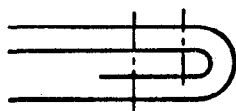


FIG. 88 SPLAY SEAM ON RAW EDGES

- (m) Turn-Over Seam - See 'Seam (Fold-Over Seam)'.

Scye - The armhole.

Sealing Twine - A 2-ply hemp, cotton or flax twine used in conjunction with lead seals for security purposes.

Seam Allowance (Seam Margin) - A pre-determined amount of material between the edge of component parts of the garment and the seam line.

Seam Binding - A woven narrow fabric of fine texture, usually of cotton or rayon, in plain weave and with cross grain selvages, and intended for use in covering or strengthening seams or edges in clothing. The widths range from 10 to 20 cm.

Seam Bursting (Seam Opening) - Pressure open seams, often carried out as an intermediate operation during garment assembly.

Seam Grin (Grinning) - Gaping of seam under stress usually due to inadequate thread tension at sewing.

Seam Mark - A particular form of pressure mark in the cloth, produced by the thickness of a seam during bleaching, dyeing, printing or finishing process.

Seam Pucker (Pucker) - Generally unwanted material waviness along the line of stitching.

Seam Slippage - The movement of warp and weft threads away from a seam line under transverse stress.

Seamcovering - A process where the seams already produced are reinforced by sewing to give them a good cover, flatten them, and provide a good appearance. There are two rows of needle stitches parallel to the seam on the outside of the garment and on the

inside there is a soft heavy looper thread which crosses the seam connecting the two lines of needle stitches .

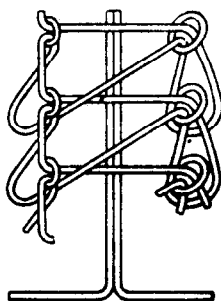


FIG. 89 SEAMCOVERING

Seamed Welt - See 'Hem'.

Seaming - Joining together the component parts of a garment.

Seaming Twine - A 2- or 3-ply hemp, flax, or jute twine chiefly used for sewing canvas and other heavy fabrics.

Seamless Fabric - Tubular knit fabric without seams.

Seamless Hosiery - Hosiery-knitted in tubular form on a circular machine.

Searing - A damage to rigging lines or fabric due to heat generated by friction.

Seat - Part of trousers or similar garments covering the buttocks.

Seat Angle - The quantity of material (5 cm to 8 cm) allowed at the seat on the underside for better fitting.

Sechoiring (Conditioning or Hot-airing) - The technique of killing and drying the pupae in the cocoons by subjecting the cocoons to hot air of specific temperature in an enclosed chamber for required time without damaging the quality of silk in the cocoons.

Seconds - Textile products which owing to some fault or imperfection do not meet an agreed standard of quality.

Section Mark - Bands or bars running lengthwise in a fabric at regular intervals in a part or full width of the fabric.

Principal Cause - Difference in tension of sections during sectional warping.

Seed Cocoons - Cocoons of pure race of selected quality chosen for propagation.

Seed Cotton - Raw cotton (including seeds) as removed from balls. It is also called 'KAPAS'.

Seed Hair - Fibres growing from the surface of seeds or from the inner surfaces of fruit cases or pods. Such fibres (seed hairs)

are formed by the marked elongation of epidermal cells.

Note - From a botanical aspect, cotton is a seed hair, since it is an outgrowth in the form of single cells from the epidermis or outer skin of cotton seeds. In this respect, cotton differs from fine vegetable fibres, which are composed of a number of plant cells, usually joined and cemented together to form a bundle and often occurring in the stems (e.g., flax) or leaves (e.g., sisal) of plants of shrubs. Nevertheless, in commerce and industry, it is customary to refer to cotton as a vegetable fibre. Calotropis (Akund) and Asclepias (Milkweed) are other examples of hairs growing on seeds, whereas Eriodendron (Java Kapok) grows on the inner surface and the placenta of seed pods.

Seedy Wool - Wool containing a variety of grass seeds difficult to remove.

Seersucker - A fabric characterised by the presence of puckered and relatively flat sections, particularly in stripes, but also in checks.

Note - The effect may be produced in a variety of ways, e.g.
(a) by weaving from two beams, with the ground ends tensioned and the ends for the puckered stripes woven at lower tension
(b) by treatment of cellulosic fabrics, particularly linen and cotton, with caustic soda solution, which causes the treated parts to contract.

Seine Net Rope - A 3-strand manila, sisal or man-made fibre rope for securing and towing seine nets.

Seine Twine - A 3-ply soft hemp, cotton, flax or man-made fibre twine used in the construction of seine fishing nets.

Self-acting Teaser - See 'Willey, Wool'.

Self-Twist Yarn Production - A method of making a yarn from rovings fed to a drafting unit. The emerging strand of fibres is subjected to a false-twisting action, which can be imparted in a number of ways. Two adjacent strands delivered from the false-twist system are brought together through a guiding means, and the twist energy in the two strands causes them to wrap around each other. This wrapping action is defined as self-twist and produces a self-twist pattern of S-zero-Z-zero, etc, in the yarn produced. The self-twist yarn is then taken up on a package in cheese form. Self-twist yarn is also referred to as ST yarn or as Repco yarn.

- (a) Average Self-Twist - The number of turns of self-twist in one twist zone of a self-twist yarn divided by the length of that zone.
- (b) Cycle Length - The length of two consecutive zones of opposite twist in a self-twist yarn.
- (c) Pairing Twist - The minimum quantity in turns per metre

of unidirectional twist required to produce a yarn configuration in which the ply twist has become either zero or unidirectional throughout.

- (d) Phasing - A method of describing the relative linear positions (with reference to the twist zones) of the strands in a self-twist yarn.
- (e) Strand Twist per Half Cycle - The number of turns of twist in the strand between two changeovers after the removal of self-twist.
- (f) Self-Twist Twisted (STT) Yarn - A self-twist yarn to which unidirectional twist has been added in a separate operation.

Selvage Doubling; Selvedge Turndown - A lengthways streak immediately adjacent to the selvage characterized by a difference in colour from that of the body of the fabric, by surface disturbance, or both.

Principal Cause - This defect is caused by the selvage having folded over thus shielding the edge of the usable fabric during processing.

Selvagee - Skein of rope with another rope wound around it.

Selvd - Short form of 'selvedged'.

Selvedges - The longitudinal edges of a textile fabric formed in such a way that the component threads are interlaced to prevent them from unravelling or fraying

Note - In jute industry, a selvage is sometimes called 'RS' or 'Real Selvage' to distinguish it from 'PS' or 'Patent Selvage'.

Selvedge Marks - More or less regular pressure marks in the body of the finished cloth along the selvage.

Principal Cause - Rolling or folding of selvedges during finishing operations.

Selvedge Seaming - See 'Cup Seaming'.

Selvedged Bag - A bag with selvage forming the mouth of the bag.

Selvedged Hosiery - See 'Fully-Fashioned Hosiery'

Semibrite Hessian - Hessian made from fairly light coloured fibres or chemically treated fibres so as to improve its colour.

Semiworsted-Spun - A term applied to yarn spun from sliver produced by carding and gilling in which the fibres are substantially parallel, the carded sliver not having been condensed or combed. Alternatively, a roving produced from such a sliver may be used.

Sennit - Braid formed by plaiting strands of the rope together.

Separating Course - A slack course of knitted loops separating one garment or garment part from another which on removal permits the separation of articles that are knitted in a succession of units connected together. Separating courses may be cut, ravelled, or dissolved, and several such courses may be made consecutively.

Serge - A medium-coarse textured twill weave fabric made from worsted or woollen-spun yarns, usually spun from merino or cross-bred wools or their blends with other fibres and given a clear finish.

Serge Battle Dress - A water-repellant, heavy cross-bred wool 2-and-2 twill fabric made from worsted warp and woollen weft in khaki drab mixture shade in clear finish.

Serge Blue for Naval Ratings - All wool fabric, woven in 2/2 twill weave with worsted spun warp and woollen spun weft.

Serge Blue Grey No. 2 - Cross-bred wool fabric woven in 2/2 twill weave with worsted spun warp and woollen spun weft. It is used mainly for the manufacture of uniforms for airmen.

Serge Blue No.1 - A 2-and-2 twill weave merino wool serge dyed in blue shade and woven from fine worsted-spun yarns.

Serge, White, Lining - Cross-bred wool or wool blended undyed fabric, woven in 2-and-2 twill weave from worsted spun yarns and given a milled and raised finish.

Serge, Worsted, Dyed (Superior) - 64s quality all wool fabric spun on the worsted system into fine counts woven in 2/2 twill weave and given a clear cut finish.

Sericin - See Gum (Silk)'. .

Sericulture - The art and science of raising silkworms for the production of cocoons.

Serving - Binding a splice or a length of rope with close turns of spun yarn. Each turn is hove taut with a special serving mallet. The rope is usually wormed and parcelled before serving.

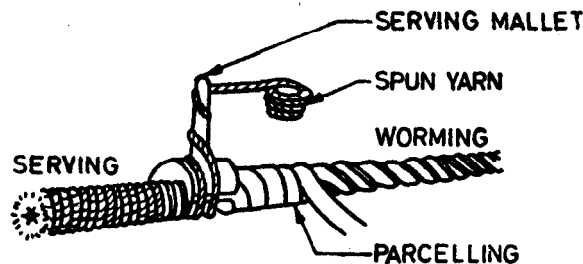


FIG. 90 SERVING, PARCELLING AND WORMING

Serving Mallet - A wooden implement used for serving a rope. It

has a score in its head to fit and a wooden handle about 38 mm long. (See Fig. 90)

Serrations - The scales of wool fibre; more in evidence on the finer wools.

Serviette - A napkin made of cotton or linen with figured effect produced on dobby or jacquard.

Set or Sett

(a) A term used to indicate the spacing of ends or picks, or both per unit length, it is usually expressed as ends or picks per decimetre or centimetre, or

(b) A synonym for 'count of reed'.

Set-In Sleeve - A sleeve which is set into the scye.

Setting on Place - See 2(a) under 'Bar'.

Sewed Toe - The toe of a knitted footwear closed by overlocking rather than by linking.

Sewing Out - Sewing parts of a garment together with the raw edges turned in.

Sewing Round - Sewing round the edges of a coat to join the outer material to the facing or the facing and lining.

Sewing Thread - A variety of yarn, normally plied, characterized by a combination of twisting and finishing with solid or semi-solid, wax-like materials to secure a smooth, compact strand which is quite flexible but presents no loose fibres.

Shade (n) - A common term loosely employed to describe broadly a particular colour of depth, e.g., pale shade, 2 percent shade, fashion shade.

Shade (v) - To bring about relatively small modifications in the colour of a substrate in dyeing by adding a further small amount of dye, especially with the object of matching more accurately with a given pattern.

Shade Bar - See (3) under 'Bar'.

Shading - See 'Listing'

Shading (Carpet) - A permanent and localized change of appearance of the pile of a carpet due to changes in the direction (lie) of the pile.

Shadow Welt - See 'After-welt'.

Shaft Hold A band of floats across the full width of cloth.

Principal Cause - Heald shafts held up or down due to defect in shedding motion.

Shafty - A trade term adopted by the Australian Wool Board to indicate wool well-grown, bold-stapled, and essentially of good length.

Shahtosh (Shahtush) - The finest animal hair of textile use having average fibre fineness of 10-12 micron (undercoat), derived from Ibex goat in Ladakh and Tibet. Used almost exclusively for production of the lightest, softest and expensive luxury shawls.

Shake Willey - See 'Willey, Dust'.

Shaker - See 'Willey, Dust'.

Shalloon - A 2/2 twill-weave cloth made from cross-bred worsted yarns, used as a lining for coats, liveries, etc.

Sham Hole - An imitation buttonhole. A double row of stitching inserted in the fabric to simulate a buttonhole.

Shantung - A plain weave fabric with a slubbed or rubbed texture originally made from yarns of tussah silk in which the natural yarn irregularities have been retained.

Shaped Hosiery - Hosiery which is shaped wholly or in part by varying the type or length of stitch on weft knitting machines without increasing or decreasing the number of wales.

Sharkskin - A firm, heavy, acetate rayon fabric in twill weave made with delustered filament yarn.

Sharkskin Fabric (Knitted) - A warp-knitted fabric, the characteristic of which is a firm construction and a rather stiffy handle. The usual warp-knitted sharkskin is a two-bar construction made with full-set threading in both guide bars. The lapping movement of the back guide bar involves underlapping of 3 or 4 needle spaces, and that of the front guide bar of one needle space in the opposite direction.

Shawl - An Indian term for a usually oblong piece of fabric, woven or knitted, worn as a loose covering for the shoulders, made in a wide range of sizes and from many different materials.

Shearing - Shearing indicates:

- (a) Cutting fleece from live sheep,
- (b) Trimming nap or pile to the required uniform height, and
- (c) Removing all protruding fibres from the surface of the fabric i.e. cropping.

Sheepskin - Pelt of sheep with wool. This should not be confused with lamb skin which is all cotton fabric with fleece finish.

Sheer - A class of thin, light-weight, diaphanous fabrics, such as 'sheer crepe', 'sheer velvet', 'georgette', 'chiffon', etc.

Sheeting - A medium-weight, closely woven, plain weave or 2/2 twill weave cloth, made from yarns of medium linear density and used primarily for bed coverings. Condenser-spun weft may be used. Examples of high quality cotton sheetings are: (a) plain weave, 17s x 18s, 64 x 58. (b) 2/2 twill weave, 28s x 16s, 60 x 72.

Shell-Stitch Fabric - A warp-knitted fabric, having a raised shell-like surface produced by holding loops on certain needles while knitting on others at each course. The arrangement of the held-loops in pattern formation gives the shell-like effect.

Shepherd's-Check Effect - Small check effect developed in black and white, or in contrasting colours, generally by groups of four, six or eight threads of the two colours and in twill weaves, commonly the 2/2 twill. The description applied to the effects probably originates from the traditional plaids worn at one time by shepherds in the hills of the Scottish borders.

Shetland - Takes its name from the wool produced in the Shetland Isles. Collective name for fabric produced from coarse woollen yarn with a pleasant handle, woven in twill, or more generally knitted, for men's and women's outerwear.

Shetland Wool - Fine and soft wool from Shetland-British Isles, north of Scotland. Mostly used in hosiery, shawls and scarves.

Shetland Yarn - Yarn made from soft natural-coloured wool alone or in mixture with white wool. This is a hosiery yarn made in imitation of Shetland wool.

Shield Fibres - A special kind of guard fibre (see 'Guard Fibres') with a flat ended shield-like apical portion.

Shirt (Gents) - An outer garment with buttoned front-opening, designed to cover the trunk of the body, having half or full sleeves and with collared neck.

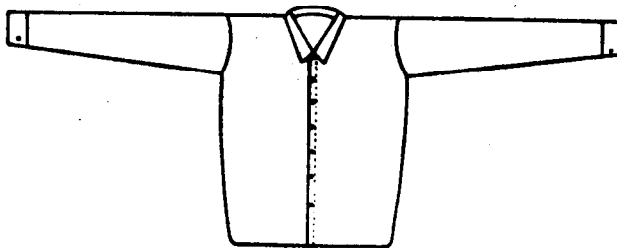


FIG. 91 SHIRT (GENTS)

Shirting - Any fabric used in the manufacture of shirts. May be plain or fancy woven, dyed or printed.

Shiner (Fabrics Made From Man-made Fibres) - A warp or weft thread, usually of a continuous filament yarn, i.e. more lustrous

(and generally tighter) than its neighbours (see also 'Tight End' and 'Tight pick').

Principal Cause - Excessive tension applied to yarn during processing.

Shirring - A type of gathering which is usually done with multi-needle chain stitch machines using elastic thread in the looper.

Shives

- (a) A vegetable matter other than burr found in fleece, and
- (b) The short pieces of woody waste beaten from the straw during scutching.

Shivy Wool - Wool that contains small particles of vegetable matter other than burrs.

Shoddy - The fibrous material made in the woollen trade by pulling down new or old knitted or loosely woven fabrics in rag form (see also 'Mungo').

Shoddy Shaker (Local Issit's Shaker) - A machine used for shaking fud reclaimed from under the carding engines.

Shoddy Yarn - The cheaper class of woollen yarn made from reused wool.

Shog (Shogging) - Lateral movement of needlebed on a flat-knitting machine or angular displacement of dial relative to cylinder on a circular-knitting machine or a lateral movement of yarn guide bars on a warp-knitting machine. Also known as 'Rack (Racking)'.

Shopping Twine - See 'Packing Twine'.

Shorn Wool - Wool obtained by shearing live sheep.

Short Drawers - See (a) under 'Drawers'.

Short Piece - See under 'Cut Cloth'.

Short Rib Fabric - Full cardigan fabric made by using one colour at the first feeder and the second colour at the second feeder (successively), so that one colour appears on the face and the other on the back of the fabric when contracted.

Shot - See 'Picks'.

Shotting - The number of weft threads per inch of the finished cloth.

Note - Shots/in. = picks/dm x 0.254.

Showerproof Fabric - Water-repellent fabric which retains porosity and allows air circulation. Such fabrics are treated with chemicals

which impart water repellency in sharp contrast to waterproofed fabrics generally produced by surface coating with rubber or wax rendering them impervious to air and water.

Shrink-Resist - See 'Shrink-Resistant' and 'Non-Felting'

Shrink-Resistant - Descriptive of textile materials that exhibit dimensional stability conforming to specified standard based on tests designed to simulate normal conditions of usage.

Shrink-Resistant Fabric - See 'Anti-Shrink Fabric'.

Shrink-Resistant Finish - A treatment applied to a textile material to make it shrink-resistant. In case of wool material, this term generally implies non-felting.

Shrink-Resisting - See 'Shrink-Resistant' and 'Non-Felting'.

Shroud-laid Rope - A 4-strand rope in which the strands are twisted together with a central core of the basic yarns of which the strands are made.

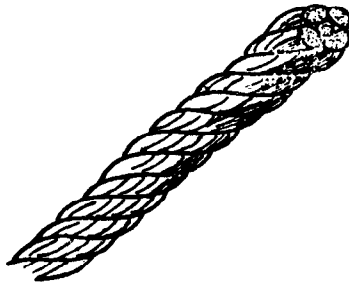


FIG. 92 SHROUD-LAID (4-STRAND) ROPE

Shuttle Fly - A portion of the weft thread not properly interlaced with the warp. (See also 'Float').

Principal Cause - Shuttle flying over some of the warp ends of the top layer of the the shed.



FIG. 93 SHUTTLE FLY

Shrinkage - The reduction in length (or width) of a fibre, yarn or fabric. It may be induced by, e.g., wetting, steaming, alkali treatment, wet processing, laundering or dry heat.

Shuttle Marks - Width-wise marks due to abrasion of warp yarns by the shuttle.

Principal Causes - Faulty shedding or picking motion.

Sicilian - A type of Bradford lustre fabric.

Sighting - Temporary colouration of textile materials either for visual identification of a particular fibre or quality or to enable the printer to see the pattern when applying colourless substances.

Note - The term tinting is also used in this context.

Signal Halyard - A 3-strand rope used for hoisting flags and sails.

Silesia - A lining cloth with a smooth face. Originally, a plain-weave cloth, but now chiefly in a 2/1 or 2/2 twill weave. The cloth may be piece-dyed, colour woven in stripes, or printed.

Silk - A protein substance which is secreted in the fluid state by silk worm (Caterpillar stage of several silk moths) and which on exposure to air hardens in the form of a thread. It is composed mainly of fibroin and partly of sericin and other substances. (See also 'Mulberry Silk, ENDI, Muga silk and Tasar silk'). The term is also used to denote a fabric or a yarn made from silk or waste silk.

- (a) All Silk - A term which may be applied to fabrics where no textile fibre other than silk is present, irrespective of the amount of weighting.
- (b) Pure Silk - A term which may be used only where there is no metallic or other weighting of any kind, except that which is an essential part of dyeing.
- (c) Raw Silk - See 'Raw Silk'.
- (d) Silk Spun - See 'Spun-Silk Yarn'.

Silk Lap (Warp Knitting) - A traversing motion in the form of open laps in which the warp threads progress by two needle spaces, making an overlap and an underlap at each course.

Simplex Fabric - See (a) under 'Double-Faced Fabric'.

Singed Yarn - See 'Gassed Yarn'.

Singeing - See 'Gassing'.

Singeing Marl - A single yarn spun from a roving produced from

two differently coloured reducers (i.e. reduced slivers).

Single Atlas - See (a) under 'Atlas'.

Single Breasted - A style of coat or any other upper garment with minimum overlap and a centre front fastening.

Single Chain Stitch - See (a) under 'Chain Stitch'.

Single Filament (Bast Fibre) - The finest fibre strand which appears single to the naked eye. It tends to be identical with a small fibre strand.

Single Mottle Yarn - A single yarn made from two half weight rovings of different colours spun together.

Single Pique Fabric - See (a) under 'Pique (Weft Knitting)'.

Single Satin Ribbon - A ribbon of silk or rayon warp and silk, rayon or cotton weft, with a warp satin weave to give a lustrous effect on one face, and with plain tubular or cross grain selvages.

Single Vandyke - See (a) under 'Atlas'.

Single Yarn - A yarn which is either twistless or can be rendered twistless in a single untwisting operation.

Singles - A term applied to thrown silk when its single threads have been twisted; used for chiffon.

Singlet - A sleeveless vest with round neck and wide shoulders; with welting around the neck-opening and armholes.

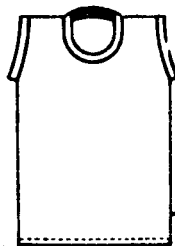


FIG. 94 SINGLET

Singling - In yarn manufacturing, a condition caused by the breaking of one or more of the ends in doubling process and thus causing unevenness in the final product.

Sinkage

- (a) Loss of weight in wool cleaning, usually expressed as a percentage.
- (b) Unaccounted or 'invisible' loss of weight in processing, usually expressed as a percentage.

Note - It is incorrect to use the word shrinkage as a synonym for sinkage.

Sinker Loop - See (b) under 'Loop (Knitting)'.

Sinnet Mat - See (k) under 'Mats'.

Siro Spun Yarn - Two ply worsted yarn produced directly on the ring frame by combining fibre strands from two different rovings after drafting them separately. The yarn resembles a twist on twist two-ply yarn.

Sisal - A hard fibre obtained from the sword like leaves of the sisal plant, *Agava sisalana* and other *Agava* species. The fibres are long (60 to 180 cm), white or creamy white in colour, and are strong and durable. It is used extensively for the manufacture of binder twine, summer rugs, brushes, etc. Also known as 'Sisal Hemp'.

Size - A colloidal solution of materials, such as starch and glue, which is generally applied when hot before weaving and which when cold forms a film. It strengthens and stiffens the warp.

Note - The main type of substances used are carbohydrates and their derivatives, gelatin, and animal glues, although other substances, such as linseed oil, polyacrylic acid, and polyvinyl alcohol are also used.

Size (Raw Silk) - Term used in respect of raw silk synonymous to count in respect of cotton, woollen and jute yarns. The size of raw silk is expressed in deniers (see also 'Denier').

Size Code - A system of symbols, numerals, alphabetical letters, signs or a combination of these used to represent size which in use indicates size suitability to an intended wearer.

Sized Backing - Backing of a carpet which has been submitted to a light coating of size in order to give a measure of rigidity.

Size of Mesh

- (a) Length of Mesh Side - The distance between two sequential knots or joints measured from centre to centre when the yarn between those points is fully extended in the AB-direction [see (c) under 'Direction in Netting'].

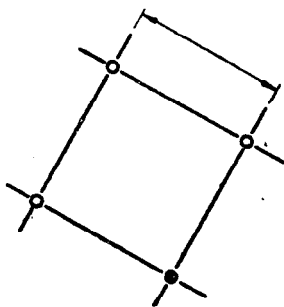


FIG. 95 LENGTH OF MESH SIDE

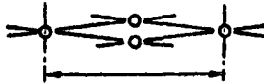
(b) Length of Mesh

FIG. 96 LENGTH OF MESH

- (i) Knotted Netting - Distance between the centres of two opposite knots in the same mesh when fully extended in N-direction [see (a) under 'Direction in Netting'].
- (ii) Knotless Netting - Distance between the centres of two opposite joints in the same mesh when fully extended as in knotted netting.

(c) Opening of Mesh

FIG. 97 OPENING OF MESH

- (i) Knotted Netting - The inside distance between two opposite knots in the same mesh when extended in the N-direction [see (a) under 'Direction in Netting'].
- (ii) Knotless Netting - The inside distance between two opposite joints in the same mesh when extended as in knotted netting.

Size of Netting - The size of netting is indicated by the number of meshes:

- (a) in T-direction, and
- (b) in N-direction.

Example:

1000-T x 200-N means netting comprising 1000 meshes in the T-direction and 200 in the N-direction. A complete description also necessitates stating the length of mesh.

Size of Netting Yarn - The size of netting yarn is indicated by its linear density expressed in the tex system. The size of the final product is expressed by the 'resultant linear density'.

Note - The resultant linear density is the reciprocal of 'runnage' which expresses the length per unit mass, for instance, metres per gram or per kilogram.

Size of Rope - Circumference of rope (mm or in.).

Sizing - A process of applying size to the warp.

Sizing Dry - The application to textile yarns of suitably compounded sizing materials in solid form which melt at elevated temperatures.

Sizing Flannels - Fabrics used for wrapping the rollers of sizing machines. They are usually all wool fabrics, made from cross-bred wools. The fabrics usually have their face side raised to provide a spongy surface for absorbing the sizing solution and are finished in natural white or bleached condition. Sizing flannels may also be made with linen or synthetic fibre warps for increased strength and life.

Sizing, Single End - Application of size to individual yarns during winding from one yarn package to another.

Skein - A definite length of yarn in the form of a coil made on a reel of a specified girth. A synonym for hank (see 'Hank').

Skein Breaking Tenacity - The maximum tensile stress developed in a test skein before rupture, expressed in force per unit linear density of the yarn constituting the skein. This is expressed in grams per tex.

Therefore, Skein Breaking Tenacity, grams per tex =

$$2 \times \frac{\text{Breaking load in grams of skein}}{\text{(number of wraps in test skein)} \times \text{(linear density of unstrained yarn in tex)}}$$

Skew - A cloth condition in which the warp and weft yarns, although straight, are not at right angles to each other. The effect is due to the cloth structure and is not a distortion imposed during processes subsequent to weaving (see also 'Bias').

Skewness - See 'Bias' and 'Skew'.

Skiers, Sweater - High-necked heavy-weight sweater with full sleeves; generally used by skiers.

Skin Pieces - A trade term used in Australia to denote wool that has skin attached.

Skin Wool - Wool obtained from the skins of dead or slaughtered sheep, also known as pulled wool.

Skipped Stitch - A stitch which appears twice as long as the other stitches in a line of stitches. It is caused by failure in the stitch formation allowing the needle thread to return to

the surface without being held by the bobbins (lower) thread.

Skirt - Garment covering the body below the waistline and extending from the waist to nearly any length depending upon the fashion. The lower end of the skirt must enclose both the legs in a single opening.

Skirt (Parachute) - The lower portion of the canopy.

Skirt, Hesitator - A weak tie around a folded canopy enclosing a bight of rigging lines to ensure their correct deployment before the canopy begins to inflate.

Skirting - Portion of the fleece obtained from head, face, legs and britch of sheep, usually removed from the fleece to make it uniform.

Skitteriness - An undesired speckled effect in a yarn or fabric arising from differences in depth of dyeing between adjacent fibres or portions of the same fibre.

Slack Course - A course of knitting made with loops longer than normal for a special purpose, e.g., linking, running-on, separating garments, etc.

Slack End - A warp thread or a part of it woven in the cloth under insufficient tension.

Slack Pick - A pick woven in the cloth under insufficient tension.

Slack Selvedge - See (j) under 'Defective Selvedge'.

Slashing - See 'Sizing'.

Slats - See 'Battens'.

Sleeve - That part of a garment which covers all or part of the arm. Examples include: Magyar sleeve, Reglan sleeve and Set-in sleeve.

Sleeve (Sock, Deployment Bag) - A long fabric container for a canopy, to control its deployment from a parachute pack or stowage.

Sleeve Crown - The top section of the sleeve head which extends on either side of the shoulder seam.

Sleeve Head - That part of the sleeve which is joined to the scye.

Sleeving - Braided, knitted or woven fabric of cylindrical form having a width less than 10 cm (circumference less than 20 cm).

Slide Fasnter (Zip Fastner) - A fastening device consisting of two flexible, interlocking stringers (with or without end stops) and a slider so arranged that by moving the slider along the

stringers in one direction, an opening is formed and by moving it in the other, the opening is closed. The end which is adjacent to the slider when the device is fully opened is designated the bottom end. The other end is designated the top end.

Sling Rope - Spliced to form an endless loop.

Slupe

(a) A trade term adopted by the Australian Wool Board to indicate fellmongered unscoured wool; and

(b) Lime Steeped skin wool.

Slupe Wool - See 'Skin Wool'.

Slipon - A ladies' knitted outer garment without front-opening with three-quarters, half, short or batwing sleeves and tight-fitting border at the bottom.

Slipover - A knitted outer garment without sleeves, with tight-fitting border at the bottom and without front-opening.

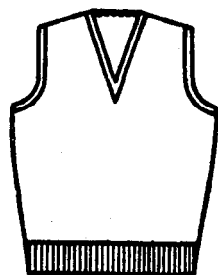


FIG. 98 SLIPOVER

Sliver - A condensed assemblage of processed fibres of uniform width without twist.

Slough-Off - Bulk of weft yarn which slips off the pirn and gets entangled in the fabric.

Principal cause - Loose winding of the yarn on to the weft pirn.

Slub - In a yarn, a thickened place having tapering ends and a diameter several times that of the adjacent normal yarn.

Principal Cause - This defect is often caused by the presence in the yarn of fragments of undrafted roving or slubbing that have not been cleared during winding.

Slub Yarn - It is a type of fancy yarn having slubs at intervals.

Slubbing - A slightly twisted continuous strand of fibres produced on a slubbing machine.

Slubbing Dyed Yarn - Yarn spun from wool which has been dyed in

top or sliver form.

Slubby Yarn - A yarn that contains unintentional slubs.

Slug - A defect consisting of an abruptly thickened place in a yarn usually caused by the inclusion of fly or clearer waste along with the regular yarn.

Slumberwear - An underwear used by ladies while sleeping.

Slurgalling - A term applied to variation in loop length along a single course or between courses.

Small Stuff - All cordage of sizes less than 13 mm.

Smash - Ruptured cloth structure characterized by many broken warp ends and floating picks.

Principal Causes - Shuttle trap, breakage of one or both heald straps causing the healds to drop and damage the warp, defective picking motion, etc.

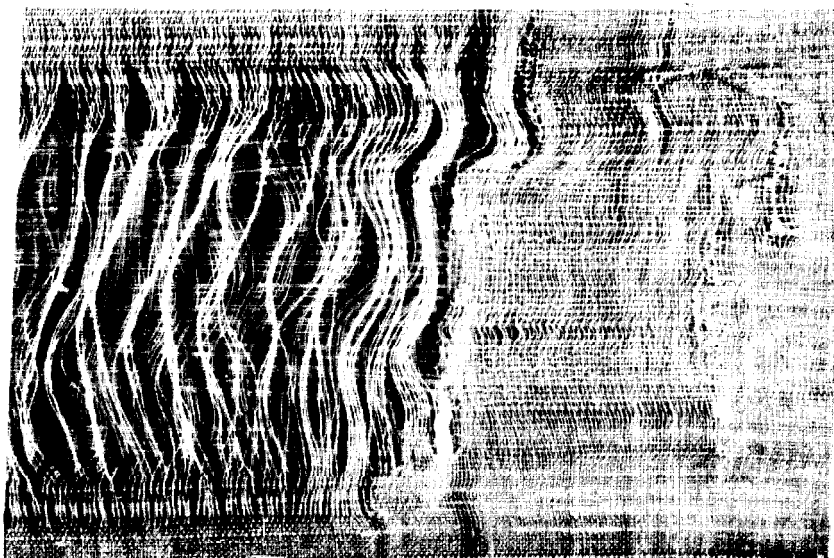


FIG. 99 SMASH

Snag

- (a) A yarn, or fibres or filaments from a yarn, standing out from the fabric as a long loop.
- (b) A defect in a knitted fabric caused by thread or threads which have been accidentally caught and pulled out of position.

Principal Causes - This defect is caused by a yarn, fibres or filaments from a yarn, catching on a sharp projection and being drawn out from the structure.

Snag-Resistance - The ability of a hosiery fabric, held under a pre-determined and uniform tension, to resist a downward penetra-

tion and pull of an adjustable snagging needle.

Snap - This occurs/happens when a hard particle is lodged under the doctor blade of a roller printing machine and holds the blade away from the engraved roll, thus allowing colour to escape on either side of the particle.

Snarl Yarn, Snarly Yarn - A yarn that shows excessive tendency to twist round itself if held with insufficient tension. It is also known as kinky yarn.

Snarls - Small curly portions in a yarn with twist.

Snow Cap - A type of balaclava cap made of two folds of knitted fabrics one of which is white and the other dyed; used at high altitudes (see 'Balaclava Cap').

Soaking - Treatment applied to skein or cake of rayon yarn preparatory to throwing.

Soaking (Silk) - A process of treating raw silk with oil-in-water type of emulsion to soften the gum and render the threads pliable for winding, throwing and knitting.

Soaping - A process of removing unfixed dyestuffs from the substrate by using soap/detergent solutions and of obtaining true shade.

Sock, Socks - Knitted footwear where the length of the leg portion extends to about mid-way between the ankle and the knee. It has either a rib top or elastic top. Also known as 'Half Hose', 'JURAB' and 'Sox'.

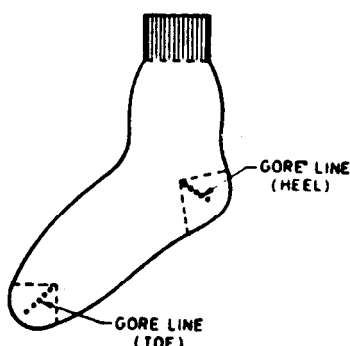


FIG. 100 SOCK

Soft Fibre - Fibres obtained from the outer part of the stems of various dicotyledonous plants namely, jute, flax, hemp, etc.

Soft Silk - Thrown silk yarn, undyed or dyed, from which the gum has been removed.

Soft Twist Yarn - A yarn with twist less than normal.

Soft Waste - Waste which is soft in nature and which has a little or no twist produced during the spinning process; obtained mostly in machines such as scutchers and cards; also includes clearer laps, sweepings, fly, etc.

Soiled yarn - An individual yarn, in either warp or weft, i.e. discoloured by dirt, oil or other contaminants.

Principal Cause - This defect is caused by the contamination of the yarn prior to or occasionally during weaving.

Solid Design - See 'Intarsia Design'.

Solid Yarn - Yarn in which all the fibres are of the same colour.

Solubilised Vat Dye - A water soluble dye obtained by treating vat dye with suitable chemicals to make it in soluble and substantive form and is generally a sodium salt of sulphuric ester of leuco vat dye which is applied on textile material in presence of sulphuric acid and sodium nitrite or potassium dichromate.

Solution Dyeing - See 'Dope-Dyeing'.

Solution-Dyed Yarn - See 'Dope-Dyed Fibre or Filament'.

Solvent Dyeing - Dyeing carried out from a continuous non-aqueous phase.

Note - Water may be added to assist the dyeing process.

Solvent-Assisted Dyeing - Dyeing carried out from an aqueous dyebath containing a small proportion of an organic solvent in solution/emulsion which normally acts to accelerate dyeing.

Sorting (Wool) - Classification and separation of a fleece into parts on the basis of quality of the fibre.

Sound - A trade term adopted by the Australian Wool Board to indicate the condition of wool with the necessary tensile strength to undergo processing economically.

Sounding Line - See 'Lead Line'.

Soundness - Capacity of wool to withstand tension.

Souple Silk - Silk which has been dyed and from which only a part of the gum has been removed.

Soupling - A softening process applied to continuous-filament silk yarns that are to be dyed in the gum. The yarns are treated in warm soap solution, and softened in an acid tartrate bath. Such treatments normally remove some of the gum, leaving 10 percent to 15 percent of gum on the fibre.

Souring - A process of treatment of textile materials in a bath of dilute acid.

Sox - See 'Sock, Socks'.

Space Dyeing - The production of multicolour yarns by the application of various colourants at intervals along a yarn by printing or other methods.

Space-Dyed Carpet - Carpet in which the pile yarns have been previously dyed or printed at irregularly spaced intervals along their length with one or several colours to produce a multicolour pile effect.

Spandex - A man-made fibre in which the fibre forming substance is a long chain synthetic polymer comprising of at least 85 percent of segmented polyurethane.

Special Middle - Indicates a quality of raw jute (see 'Grading of Jute').

Special Top - Indicates the best quality of raw jute (see 'Grading of Jute').

Speciality Hair Fibres - Term applied to all commercially useful textile fibres from domesticated animals other than sheep but usually implies to Angora goat hair, Pashmina and fur fibres.

Specific Strength - A synonym for tenacity.

Specific Stress - The ratio of force to mass per unit length (this ratio is equal to the stress per unit linear density). It is expressed as mN/tex or N/tex.

Specimen - A specific portion of material or laboratory sample upon which a single test is performed or which is selected for that purpose.

Speckle Printing - Printing of an encapsulated dye where the capsule breaks during the process of development.

Specks and Leaves (Jute) - Spots of dry leaves and bark which appear above the root portion of the jute fibre and affect the appearance of the fabric. This is due to defective retting.

Specky Fabric - Dyed fabric which has small specks of white colour or of lighter shade appearing on the cloth.

Principal Causes - Presence of oil spots, neps or vegetable matter, fibrillation of silk filaments, etc.

Spider Silk - The product mainly of Nephila madagascariensi. One characteristic of spider silk is its fineness; the diameter of the filament of Epeira diadema is about one-twentieth of that of silk filaments, spider silk can be spun and woven but with great difficulty.

Spiked Willey - See 'Willey, Double or Single Cylinder'.

Spiking - The use of spikes fixed to one edge of a hinged table to facilitate the even laying up of fine materials. The table top is tilted vertically for hanging the material, and back to the horizontal for cutting.

Spindle Tape - A woven narrow fabric of width normally not greater than 50 mm (2 in.) usually of high warp density, and designed for the transmission of power to pulleys of small diameter, e.g, as on textile spinning and twisting machinery.

Note - In some sections of the textile industry, similar or somewhat similar tapes up to 100 mm (4 in.) in width are known as listings.

Spinner's Waste - All types of waste produced during the conversion of fibres into yarn.

Spinning

- (a) The process of making yarns or cordage from fibres, tow or liquid materials.
- (b) The formation of a yarn by a combination drawing or drafting and twisting operation applied to prepared fibre masses, such as rovings.
- (c) The extrusion by pressure through a spinnerett of a liquid or solution into a coagulation medium which produces a solid filament or filaments.
- (d) The formation of a yarn from filaments by the combination of cutting and breaking, together with drafting and twisting in a single series of operations.

Spiral Yarn - A yarn made by twisting a thick, soft twist thread with a fine hard twist thread.

Spirality - Distortion of a circular-knitted fabric in which wales follow a spiral path around the axis of the tube. It is caused by using yarn i.e. twist-lively, the direction and degree of spirality being influenced by the direction and degree of twist-liveliness.

Note - Fabrics made on circular knitting machines have an inherent inclination of the courses to the wales. This should not be confused with spirality.

Splash Yarn - Yarn spun from printed roving prepared from bleached top.

Splice

- (a) **Rolled Splice** - The term used for tying knot in two single threads or cords. Two single yarns of each of cords to be spliced are pulled apart and held tight. Knots are tied in single yarn of one cord with single yarn of the other in such a way that two knots in

singles have at least 8 cm distance between them.

- (b) Sewn Splice - The term used for sewn joints in tyre cord trade. This is made by applying a zig-zag stitch on two cord ends lying side by side.

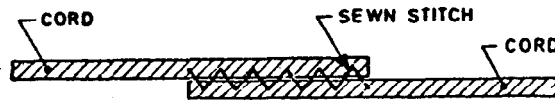


FIG. 101 SEWN SPLICE

Splicing

- (a) The joining of two rope ends by interlacing the strand of hosiery by knitting extra yarn(s) along with the main yarn.
- (b) A term applied to reinforcement of any portion of hosiery by knitting extra yarn(s) along with the main yarn.

Split - The space between two adjacent wires of a loom reed. The term is also used for a wire of the loom reed.

Split Foot - The foot of a knitted footwear where the sole is knitted from a different yarn than that used in knitting the instep.

Split Selvedge - See 'Patent Selvedge'.

Split Sole - The sole of the split foot.

Split Yarn - A yarn which appears in the fabric as a thin yarn.

Principal Cause - This defect is often caused by abrasion or excessive tension during winding or weaving which breaks a part of the yarn (e.g. a filament of a continuous filament yarn or a ply of a two-fold yarn) i.e. subsequently held back during weaving.

Splits - Fabrics woven with split selvedges.

Sponge Cloth - See 'Eponge'.

Sponging - The process of steaming piece goods on a perforated steel steam box to obtain shrinkage.

Spool - See 'Cheese'.

Spool (Axminster and Gripper-Spool) - A double-flanged bobbin in which a number of threads of pile yarn are wound in a predetermined order for use in spool Axminster and gripper-spool looms.

Spool Axminster - See 'Axminster Carpet'.

Spool Bobbin - A term used in worsted spinning for a single-flanged bobbins on which weft yarn is spun.

Spool Gripper Axminster - See 'Gripper-Spool Axminster' under 'Axminster Carpet'.

Spooling - The winding of yarn or sliver on spools.

Sports Pullover - A V-necked pullover with coloured stripes at the neck, cuffs and the border; generally used by sportsmen.

Sports Shirt (Knitted) - A half or short-sleeved shirt of short length and with collar; generally used by sportsmen.

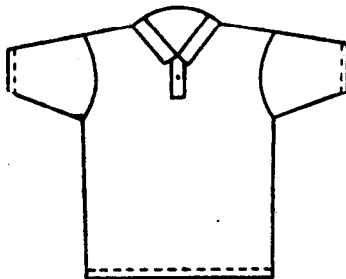


FIG. 102 SPORTS SHIRT

Spotting - A process of removing by special solvents or agents the spots or stains on a textile material.

Spray Dyeing - The application of colourant to a substrate by using a spray gun with the object of producing ombre effects.

Spray Marking - A method of outlining patterns prior to cutting by spraying over the lay, leaving the pattern area as a silhouette which can then be cut out.

Spray Printing - A form of stencil printing where application of colourant is done by spraying only (see 'Stencil Printing').

Spread Loop - A needle loop expanded over two or more wales.

Note - Applied to stockings, the term refers to expansion over two wales and the stockings are described as 'mesh' or (technically) 'half-point transfer'. The stitch has ladder-resistant properties.

Spring-Lay Rope - A combined rope which is constructed as a wire rope having alternate strands of hemp and wire.

Springs - Rope made out of coir or man-made fibre up to 192 mm diameter used for towing purposes.

Springy - A trade term adopted by the Australian Wool Board to indicate the ability of wool to recover readily from compression.

Spun-Dyed Yarn - See 'Dope-Dyed Fibre or Filament'.

Spun-Dyeing - See 'Dope-Dyeing'.

Spun-Silk (Yarn) - Yarn made from waste silk and pierced cocoons,

by dressing and spinning; it is composed of short lengths of filaments ranging from 2.5 to 20 cm.

Spyndle - A unit of length used in the determination of count or grist of jute yarn; it is equal to 14400 yd (or 13167 m).

Square Fabric - See 'Balanced Cloth'.

Square Rope - It is made up of 8 strands, being laid 2 over and 2 under with 4-strands of right-hand and 4-strands of left-hand twist. The rope is highly flexible and practically unkinkable and is normally made of manila, sisal or man-made fibres.

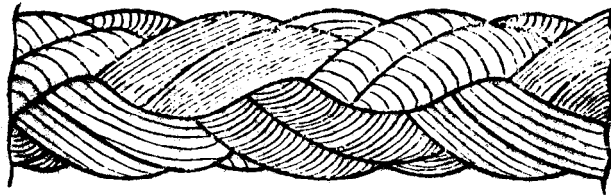


FIG. 103 SQUARE ROPE

St Helena Hemp - See 'Phormium'.

Stabilized Fabric - See 'Anti-Shrink Fabric'.

Stabilized Finish - Treatment applied to a textile material to increase its resistance to dimensional changes during washing and use.

Stagger - In rayon sizing, the placing of bundles of yarn in the basket in rows alternating in the order of bricks in a wall.

Staining

- (a) Any adventitious (undesirable) colour, e.g., dye, dirt, oil and metallic contamination on textile material.
- (b) The fugitive or permanent colouring of material, e.g., in histology for identification.

Stain Release - The ability of a textile floor covering to release stains rapidly, readily, and without damage to the fibres and colour, on application of the appropriate processes.

Stains - It is a general term covering discolouration, spot or mark on fabrics.

- (a) Colour Stains (Dyestuff Stain) - An unwanted coloured mark on a fabric.
- (b) Doctor Stain (Streak) (Printing) - A wavy white or coloured streak in the warp direction on printed cloth. This is caused by damaged or incorrectly set doctor blades on the printing machine, presence of dried colours or impurities in the emulsion etc.

- (c) Off Side Printing Stain (Printing) - Colour stain on the back of the fabric due to excessive penetration of dyestuff during printing.
- (d) Oil or Grease Stain - Conspicuous yellow, black or brown spot on cloth due to the presence of oil or grease.
- (e) Oily Warp - Oil or grease stains appearing in warp yarns in a fabric.
- (f) Oily Weft - Oil or grease stains appearing in weft yarns in a fabric.
- (g) Rust Stain - Brown or black stain on fabric due to rust.

Principal Causes - Use of rusty reed, water dropping on fabric from rusty pipe, careless piling of damp cloth on stillages with rusted nails, etc.

Stains (Wool) - A trade term adopted by the Australian Wool Board to indicate wools, discoloured by urine, sweat, rain, brands, bacterial or fungal attack, which are unscourable.

Standard Atmosphere - See 'Atmospheric Conditions for Testing'.

Standard Condition - The condition of a textile material when it reaches moisture and temperature equilibrium with standard atmosphere for testing.

Standard Moisture Regain - Commercial moisture regain accepted as standard (see also 'Commercial Moisture Regain').

Standing Bath - A bath i.e. preserved for further use and freshened up by the addition of necessary amount of dyestuff and/or chemicals.

Standing Place - See 2(a) under 'Bar'.

Staple - A lock or tuft of fibres of similar properties. Hence a lock or tuft prepared to demonstrate fibre length. In bulk, a mass of fibres having a certain homogeneity of properties, usually length

Staple Length - A measure of fibre length of a typical and representative sample from a bulk.

Starch - A carbohydrate component of plants used in sizing (see 'Size') and finishing. Its use in these operations depends on its adhesive or film-forming power.

Starting Place - See 2(a) under 'Bar'.

Static - Accumulation of electrostatic charge on fibres, yarns or fabrics when they rub against each other or against the insulated parts of the processing machinery.

Stay Tape - A narrow strip of firmly woven fabric, plain weave and non-stretch, usually with linen warp and cotton weft, used for strengthening or controlling various parts of a garment.

Steely - Wool lacking character, with a glassy sheen. Produced on pastures deficient in certain trace elements.

Steeping

(a) General - The treatment of textile materials in a bath of liquid, usually, though not necessarily, without continuous or intermittent agitation. The term is also applied to processes whereby the materials are impregnated with a liquor, highly squeezed, and then allowed to lie.

(b) Flax - The process of retting flax straw by immersion in an aqueous liquor.

Stencil Printing - The application of colourant to a substrate by brushing on or spraying through a stencil usually cut in thin sheet metal or water-proofed paper.

Stenter; Tenter - An open-width fabric-finishing machine in which the selvages of a textile fabric are held by a pair of endless travelling chains maintaining weft tension.

Note 1 - Attachment may be by pins (pin stenter) or clips (clip stenter).

Note 2 - Such machines are mainly used for:

(a) drying,

(b) heat-setting of thermoplastic materials, and

(c) fixation of chemical finish.

Stentering - The stretching to required width and drying of cloth.

Sticker - A distortion in the weave characterized by tight and slack places in the same warp yarn of a fabric.

Principal Causes - Movement of warp yarns restricted due to some knot or slub catching lease-rods, drop wires, healds, reeds; or due to rolled ends; etc.

Sticks - See under 'Jute Fibre Characteristics'.

Stifling - See 'Sechoiring'.

Stitch - Generally, the fundamental repeating unit produced by sewing material with one or more sewing threads.

Stitch Bonding - The conversion of a batt of fibres into a fabric by closely arranged parallel rows of stitches, using externally supplied threads.

Stitch (Knitting) - An intermeshed loop or loops.



FIG. 104 STITCH (KNITTING) (PLAIN)

Stitched Place - An area where the interlacing of the warp and weft threads does not conform to the planned weave.

Principal Causes - This defect is frequently caused by one or more ends being lifted out of sequence by an adjacent end of heddle.

Stitches (Jute Bags)

- (a) Herakle Stitch - It is a more complex form of stitch than the other types and the stitching rate is fairly high.

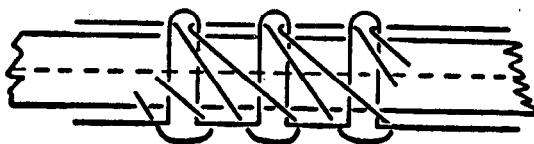


FIG. 105 HERAKLES STITCH

- (b) Lock Stitch - It is very strong and does not pull out easily if the twine is broken somewhere. But the stitch is not as elastic as the chain stitch and the production rate is low. Jute lock stitch is often applied as a safety stitch, which is a second line of stitching close to another stitch at the seam.



FIG. 106 LOCK STITCH

- (c) Overhead Stitch - It is most commonly used for heavy duty sacks. Correct lengths of twines are doubled and allowed to pass through the fabric and then round the edge of the fabric. The seam obtained is very strong, but the production rate is rather low



FIG. 107 OVERHEAD STITCH

- (d) Chain (Union or Anteus) Stitch - It has sufficient extensibility to stand stretching under impact loading. Union machine is used and the stitching rate is high. But, if there is a fracture anywhere in the stitching twine, it tends to pull out more easily in this stitch compared with other types of stitches. Chain stitch is also used as a safety stitch which is a second line of stitching close to another stitch at the seam.

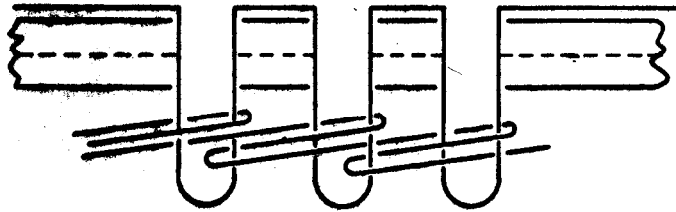


FIG. 108 CHAIN STITCH

Stitch Density - The number of stitches per unit area of a knitted fabric

Stitching; Undershot - A weft ways float on the back or face of the fabric, usually extending over several warp yarns.

Principal Causes - This defect is caused by the shuttle leaving the shed prematurely and travelling above or beneath the warp threads due to incorrect loom geometry, incorrect angle of shuttle launch, poor condition of shuttle, or ends clinging together.

Stock Dyeing - Dyeing of staple fibres before carding and spinning. A process commonly used in production of woollen spun yarns.

Stock Solution - A relatively concentrated solution of a dye or a chemical which is diluted with water considerably when used.

Stockings - Knitted footwear where the length of the leg portion extends to just below the knee. It has either a 'rib top' or 'turn-over top'. Also known as 'JURAB' and 'Three-Quarters Hose'.



FIG. 109 STOCKING

Stockinette - A plain-knitted tubular cotton fabric of loose texture; generally used for cleaning machinery and for wrapping meat. Also known as 'Mutton Cloth'.

Stoting - Hand stitching to draw together two cut edges of material.

Stoving - Bleaching wool, silk, hair or other keratinous materials in a moist condition with sulphur dioxide in chamber. (Wet stoving is the treatment of materials with a solution of a sulphite or bisulphite)

Stowage Loops - Tape, webbing or cordage loops for stowing the rigging lift cables or wires in a pack.

Straight Line System - A production system in which single garments or parts are assembled by passing through a series of consecutive operations performed by different operators.

Straight Reeled Skeins - The skeins made by direct reeling i.e. without re-reeling, e.g., CHARKHA and domestic basin reeling.

Strand

(a) A single fibre, filament or monofilament; or

(b) Single ordered assemblage of textile fibres having a high ratio of length to diameter and normally used as a unit including slivers, rovings, single yarns, cords, braids, ropes, etc.

Strand Core - A core of jute, manila, hemp, sisal or other suitable material used in the centre of the strands in the manufacture of steel-wire ropes.

Strap - See 'Sling'.

Strazza (Italian) - See 'Gum Waste'.

Streak - See (b) under 'Stains'.

Strength - The ability of a material to resist rupture induced by external forces, e.g., breaking strength, tear strength, bursting strength; etc.

Stress, General - The resultant internal resistance to deformation developed within a specimen subjected to an external force, e.g., tensile stress, shear stress, or compressional stress.

Note - Stress usually reaches a maximum at the time of rupture. When a textile material is subjected to a stress below that causing rupture, the stress gradually decays with time.

Stretch - A 'process change' accompanied by an increase in dimension.

Stretch Yarns - Yarns made from thermoplastic fibre, usually in the form of continuous filament, which are capable of pronounced degree of stretch and rapid recovery.

Stretch, Warp - The amount of stretching sustained by warp yarn during sizing operation.

Striated Patterned Carpet - Carpet in which the constituent pile yarns are composed of several single yarns of different colours, lightly twisted.

Strick (Flax/Jute) - A small bunch of flax straws, of scutched flax, or of hackled flax, of a size that can be held in the hand.

Note - In the jute section of the textile industry, it is also known as strike, and refers to a bunch of jute similar to a 'head' but smaller, usually 1-2 kg.

Strike - The initial rate of dyeing.

String Vest - A coarse net-type cotton vest made from fabric knitted on Raschel warp knitting machines; used as undershirt at high altitudes.

Strings - Small pieces of thread inserted at the selvages of fabrics to indicate defects. Also known as 'Flaggings'.

Stripping - The removal of dye from fibre.

Strong Merino (Wool) - See 'Merino'.

Strop - A length of wire, cable, cordage or webbing, with loop ends or metal fittings attached to increase the distance at deployment between two components of a parachute assembly.

Strusa (Italian) - See 'Frison'.

Stuffer Yarns - Warp threads which reinforce the substrate of a woven carpet.

Stump Sock - A tubular knitted fabric shaped on the machine according to the requirement and closed at one end; used as a covering for the stump of the amputated portion of the body.

Style - A trade term adopted by the Australian Wool Board to categorize wool in relation to character, soundness, condition, degree of vegetable matter contamination, weathering and degree of dust contamination. Style categories are described as 'Extra Super Spinners', 'Good Spinners', 'Average Topmakers', etc.

Style, Printing - A concise, though not necessarily complete, indication of the method of production of a print in terms of the process or the class or classes of dye used (or both).

Sublimation Printing - A process employing dyes that sublime readily and have substantivity for the substrate to which they

are applied.

Substantive Dyes - Same as direct dyes.

Substantivity - The attraction between a substrate and a dye or other substance under the precise conditions of test whereby the latter is selectively extracted from the application medium by the substrate.

Substrate (Textile Floor Covering) - A construction, integral with use-surface and composed of one or more layers, which serves as a support for the use-surface and possibly stabilizes the dimensions and/or acts as a cushion. Certain textile floor coverings without pile need not have a substrate distinct from the use-surface.

Suede Cloth - A fabric finished in such a way as to imitate suede leather.

Suint

- (a) Excretions for the sweat glands of sheep, principally consisting of potash salt; or
- (b) The water-soluble portion of yolk.

SUJAE - An Indian term for a bed cover in wide width with woven coloured designs of either diamond or honeycomb effect.

Sulphur Black Tendering - It denotes the degradation of sulphur black dyed cotton materials during storage due to the formation of sulphuric acid.

Sulphur Dye - A dye i.e. normally applied from sodium sulphide solution.

Sunn Hemp - A soft fibre obtained from the inner bark of sunn plant, Crotolaria Juncea. The fibres are long (45 to 150 cm), grey or brown with a wide range of colour and quality due to differences in preparation. It is used mainly for twines and cordages. It is also known as 'Sunn Hemp', 'Bombay Hemp', 'Madras Hemp', 'India Hemp', 'Sana', etc.

Sunray Pleats - Pleats radiating from a single point usually the centre of full circular skirts.

Superfine Merino Wool - See 'Merino'.

Suppression (Shape) - The creation of shape by removal of material from the surface area of the garment.

Surah - A soft, light-weight, lustrous fabric woven in twill weave giving plain effect.

Surfactant - An agent soluble or dispersible in a liquid, which reduces the surface tension of the liquid. (A contraction of 'Surface-Active Agent').

Surgical Lint - A highly absorbent sterilized fabric in plain weave, with a raised fleecy surface used for surgical dressings.

SUSI - Fine plain weave cotton fabric with narrow coloured and white warp stripes. Warp and weft yarns are bleached.

SUTLI - An Indian term for twine used for packing purposes.

SUZNI - See 'SUJAE'.

Swealing

(a) Migration of dye into the angles of folds and creases during drying of a fabric.

(b) Partial removal of colour, dirt, or a grease into the surrounding fabric, caused by improper technique in removing stains by hand from a fabric by aqueous or solvent treatment.

Note- The resulting mark is frequently referred to as a 'Sweal-Mark'.

Sweat Ends - A trade term adopted by the Australian Wool Board to indicate sweaty staples adhering to fleece extremities and pieces.

Sweated Wool - See 'Pulled Wool'.

Sweater - A generic term for tight-fitting knitted outer garment such as cardigan, pullover and slipover.

Sweeping Waste - Sweepings from the floors or from various rooms in a textile mill.

Swelled Edges - An effect achieved by a row of stitching sewn at a specific and regular distance from the finished edge of a garment.

Swelling Agent - A substance that causes the total liquid imbibition of a fibre to increase.

Swimming Costume - See 'Bathing Costume'.

Swimming Trunk - See 'Trunk'.

Swiss Rib - See 'Rib Fabric (Knitted) (2 x 2)'.

Swollen Fibre Diameter (Cotton) - The diameter of a fibre when swollen to its maximum extent in 18-percent caustic soda solution.

Sydney Woolpack - A double-warp hemmed twill sacking pack with loose top, measuring 137 x 69 x 69 cm (normally with 102 ends/dm and 35 picks/dm), weighing approximately 521 g including top without stripes.

Syndet - A detergent i.e. not a soap (a contraction of 'synthetic

detergent').

Synthetic - A term to denote man-made fibres or filaments produced by the polymerization of monomers.

T-Shirt (Knitted) - A half-sleeved or short-sleeved outerwear with round neck and with folded rib tape attached to the neck and sometimes to sleeves and bottom also.

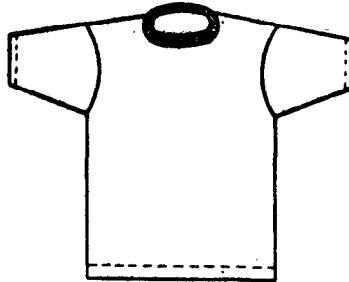


FIG. 110 T-SHIRT

T-VYCOME Yarn - See (k) under 'Coir Yarn'

Tab (or Header) - A short length of plain weave fabric, normally woven at each end of a roll of tyre cord fabric for the purpose of supporting and holding the cords in proper position with respect to each other.

Tab Collar - Shirt collar made with two short tabs which fasten under the tie knot together, to the shirt neckband, or with a collar button.

Tabby

- (a) A soft silk fabric usually printed, plain woven and employing untwisted raw silk as warp and weft.
- (b) A full width sample of tyre cord, usually one metre long with two tabs at its ends to enable its removal from the roll.

Tabilized - Crease-resistant process of linen, cotton and spun rayon fabrics.

Tack Tear - The measurement of the resistance of a coated fabric to tearing under conditions simulating an installation that has been tacked in place.

Tacking - Machine or hand stitching, sometimes decorative, to reinforce parts of a garment (see 'Bar Tacking'). In some sections of the industry this term is also used to describe the temporary joining together of parts of a garment, prior to final sewing (see also 'Basting').

Tacking Cut - Small sewing holes along the selvedge of the fabric.

Note - Tacking is sewing of cloth along edges to protect face of cloth during wet processing.

Taffeta Ribbon - A ribbon of silk or of rayon or other man-made fibre of plain weave with usually high warp density and very fine almost imperceptible, rib generally with a woven tubular selvedge of contrasting weave.

Taffetta - A term applied to various cloths made with the plain weave, especially when made of rayon or silk. Tafettas are closely woven, smooth and crisp, and characterized by a fine cross rib. This rib is due to the construction, as the ends considerably outnumber the picks.

Tail End - The finishing end of a woven piece or a package of yarn.

Tail Ends (Defect) - Uncut weft-ends protruding out of the selvedge; more common in automatic looms.

Tailing - See 'Ending'.

Take-Up

(a) The dimension in length of yarn on twisting.

(b) The difference between the straightened and woven lengths of warp threads due to their bending around the weft threads.

Tammies - Plain weave piece-dyed glazed fabric from cotton warp and wool weft.

Tannery Wool - See 'Pulled Wool'.

Tape - A woven narrow fabric not exceeding 10 cm in width and not exceeding 3.4 g/m/cm width.

Tape (Knitted) - A knitted fabric strip of narrow width with or without selvedges.

Tape Elastic - A textile tape containing rubber or other elastomers to permit rubber-like stretch in at least one direction.

Tape Length - The distance between the successive cut marks inserted during sizing of warps.

Tape Sizing - A process of applying size to the warp.

Taped Seam - A seam which includes straight tape, normally used to prevent or control stretching and for strength.

Taper Splicing - See 'Point Splicing'.

Tapered Rope - Rope with strain-bearing part thicker than the rest of the rope.

Tapestry - A closely woven figured fabric of compound structure in which the pattern is developed by the use of coloured yarns in the warp or in the weft or both; a fine binder warp and weft may be incorporated. It is normally used for upholstery.

Note - Originally, the term was applied to furnishing fabrics in which the design was produced by means of coloured threads inserted by hand as required. Modern tapestry fabrics are woven on jacquard looms, coloured yarns being used to produce the desired pattern. There are various cloth structures in which two or more warps and wefts of different colours and in some cases of different materials may be used. The face of the cloth is usually of uniform texture, the design being developed in various colours, but in some tapestry fabrics figures of the brocade type formed by floating some of the threads, are also found.

Taping - A defect in sized warps in which groups of ends are stuck together by size to give a tape like appearance.

Taping, Dry - Preparation of weavers beam directly from crepe yarns without the application of size.

Tar Sewn - Sewing done with bitumenized yarn or twine.

Tare Mass (Weight) - The mass of all external and internal packing materials of a case, roll or other type of containers including the mass of bobbins, tubes, etc.

Tarpaulin - A made-up article, such as wagon cover, usually made of tarpauling or other heavy cloth.

Tarpauling - Double warp jute tarpaulin cloth in a plain weave made wholly of jute with double warp and single weft, interwoven weighing not more than 610 g/m^2 (18 ounces/yd²) having the number of warp threads not more than 118/dm (30/in.) and weft threads not more than 55/dm (14/in.).

Tarry Fabric - A medium to heavy weight cotton fabric woven with loop piles on one or both sides. The loops may cover the entire surface or form stripes, checks, designs, etc. (see 'Pile Fabric').

Tartan - 2-and-2 twill woollen and worsted fabrics woven in elaborately coloured check designs and worn as shawls or plaids over the shoulder and as kilts in Scotland.

Tasar Silk - Silk of natural copperish colour obtained from a species of wild lepidopteran insect (Antheraea Mylitta) belonging to the Assamensis group. It feeds on the leaves of a variety of forest trees such as Asan (Terminalia Tomentosa), Arjun, (Terminalia Arjuna), Ber (Zizyphus Jujuba), Sal (Shorea Robusta), and Himalayan Oak (Quercus Serrata), and is habitant of Bihar, Orrisa, Madhya Pradesh, West Bengal and Andhra Pradesh.

Tassels - An ornamentation, consisting of tufts of loosely hanging pieces of yarn, tied at equal intervals on both ends (widths) of the mufflers or shawls. Also known as 'BUMBLES'.

Tear - An opening in the structure of a fabric in which several warp or weft yarns, or both, are severed.

Tear (Wool) - The ratio of weight of top to noil produced in combing.

Tear Drop (Cannage) - A fabric condition characterized by short elliptical deviations of one or more adjoining picks. Tear drops are most pronounced in taffetas and cross grain weaves.

Principal Causes - Efficient warp tension, incorrect harness timing, over-sized warp, uneven penetration of sizing solution, etc.

Tear-Off Cap - A piece of fabric, lightly sewn over the opening of a pack, and torn off by tension in the static line, allowing the parachute to deploy.

Tearing Strength - The force required to start or continue a tear in a fabric under specified conditions.

Teaze - See 'Willey'.

Teazer - See 'Willey, Dust'.

Teddy Cloths - Fleece finished coating fabrics made of wool or mohair.

TEENSUTI - An Indian term for a very strong cotton fabric in plain weave made from three-ply yarns.

Teg - Same as hog but the term is used to denote finer wool.

Teg Wool - See 'Hog Wool'.

Temperature Range Properties - A qualitative technical evaluation of the behaviour of a dye obtained by examination of the influence of temperature on the uptake of dye in a given time under specific conditions.

Temperband Cord - 3-ply manila or sisal cord, hard laid in the 'S' direction, used in jute spinning frames as tension aids for bobbins.

Temple Cutting - Fracture or damage of the warp yarns, weft yarns, or both, adjacent to the edge of the fabric.

Principal Cause - This defect is often caused by hooked, flattened, or otherwise damaged temple pins during weaving.

Tenacity - The breaking load of a material under test divided by the linear density of the unstrained material expressed as mN/tex.

Tender - Wool that will break relatively easily when tension is applied.

Temple Mark - Holes or surface disturbances along the selvedge of a fabric due to bad or improperly adjusted temples.

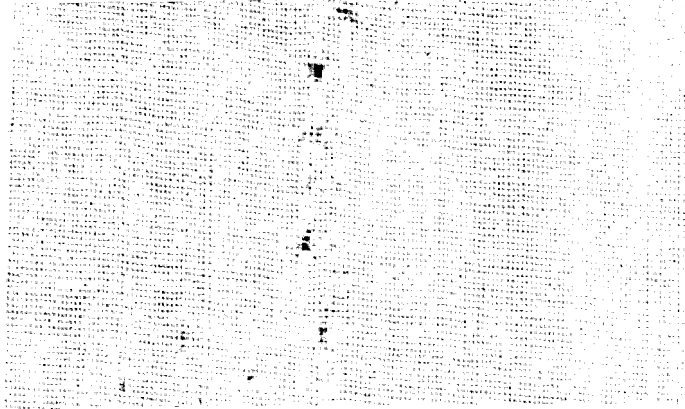


FIG. 111 TEMPLE MARK

Tender Sports - Places abnormally weakened during any of the operations through which the cloth passes. These are latent defects which cannot be detected in normal inspection.

Tennis Cloth - Cotton warp and wool weft 2-and-2 twill weave fabrics.

Tennis Flannel - All wool 2-and-2 twill weave fabrics made from worsted yarns of white or off-white colours.

Tennis Shirt (Knitted) - A white sports shirt; generally used by tennis players [see 'Sports Shirt (Knitted)'].

Tennis Socks - See (a) under 'Anklet'.

Tensile Strain - The relative length deformation exhibited by a specimen subjected to a tensile force. Strain is expressed as a fraction of the nominal gauge length; also as a percentage (see also 'Elongation').

Tensile Strength

- (a) **General** - The strength shown by a specimen subjected to tension as distinct from torsion, compression or shear.
- (b) **Specific** - The maximum tensile stress expressed in force per unit cross-sectional area of the unstrained specimen, e.g., kilogram per square millimetre.
- (c) **True** - The maximum tensile stress expressed in force per unit cross-sectional area of the specimen at the time of maximum load.

Tensile Stress - The resistance to tensile deformation developed

within a specimen subjected to tension by external force. The tensile stress is commonly expressed in two ways. Either as the force per unit cross-sectional area of the unstrained specimen or as the force per unit linear density of the unstrained specimen, the latter is more frequently used in textile testing and is referred to as specific stress.

Tensile Test - A test to measure the resistance of a material to a force tending to stretch the specimen in one direction.

Note - The tearing test is not regarded as a tensile test.

Tension Bar - See (4) under 'Bar'.

Tent Cloth - Dense cloth usually waterproofed and used in the fabrication of tents.

Tent Line - A 3-or 4-strand line used for tent guys and other purposes.

Tentering - See 'Stentering'.

Terry Fabric (Knitted) - See 'Plush Fabric (Knitted)'

Terry Off - A band in a terry section that has no terry loops.

Principal Cause - This defect is caused by incorrect let-off motion.

Terry on Plain - Terry loops appearing within a plain area of a terry fabric.

Principal Cause - This defect is caused by incorrect let-off motion.

Teschengurt - Short lengths of tape or webbing, across and external to the rigging lines, joining adjacent lobes of the peripheral hem to increase the rate of inflation of the parachute.

Tex - The direct decimal system based on metric units as the universal system for describing the linear density (mass per unit length) of fibres, filaments, slivers, and yarns; it is also the name given to the combination grams per kilometre (see also 'Count of Yarn'). The multiple and sub-multiples recommended for use in preference to other possible combinations are as follows:

Grams per metre or kilograms per kilometre - kilotex,

Milligrams per kilometre - millitex,

Decigrams per kilometre - decitex.

Texipique Fabric - See (c) under 'Pique (Weft Knitting)'.

Textile - Originally a woven fabric; the term is now applied to any manufacture from fibres, filaments or yarns, natural or

man-made, obtained by interlacing.

Note - For example, thread, cords, ropes, braids, lace, embroidery, nets and cloths made by weaving, knitting, felting, bonding, and tufting are textiles.

Textile Floor Covering - An article having a use-surface composed of textile material and generally used for covering floors.

Textile Floor Covering With Pile, Pile Carpet - A floor covering having a textile use-surface formed from a layer of yarns or fibres projecting from a substrate.

Textile Floor Covering Without Pile - A floor covering composed of a non-pile textile use-surface and possibly a substrate.

Textile Floor Covering with Knotted Pile, Knotted Pile Carpet - Carpet produced by knotting the pile-forming yarns around the warp yarns of the substrate.

Textile Floor Covering with Needled Pile, Needled Pile Carpet - Pile carpet produced by the needling (see 'Needling; Needle Bonding') of textile materials, and bonding by physical or chemical processes or by a combination of both. The pile may be either cut or looped.

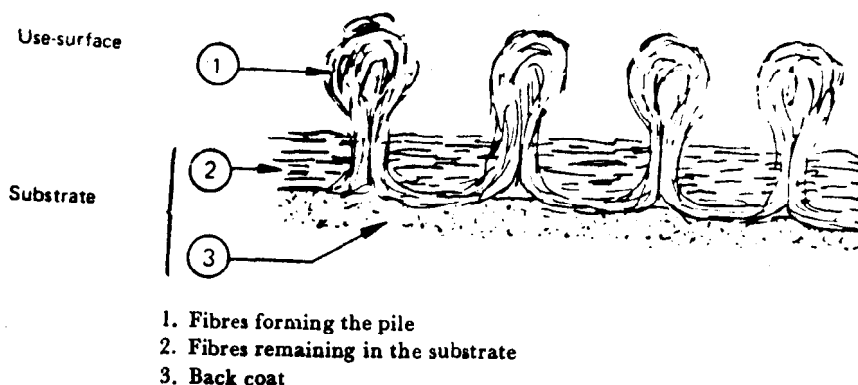


FIG. 112 EXAMPLE OF TEXTILE FLOOR COVERING WITH NEEDLED LOOP PILE

Textile Floor Covering Without Pile, Formed of Bonded Textile Material - Textile floor covering without pile, in which the use-surface is composed of entangled textile materials bonded together by a mechanical, physical, or chemical process, or by a combination of two or more of these processes.

Textured Pile - See (f) under 'Pile'.

Textured Surface - A variation in surface level caused, e.g., by embossing or differential needling.

Thatching Twine - A twine used for securing reeds while thatching roofs.

Textile Floor Covering with Stitched-on Pile; Stitched-on Pile Carpet - Pile carpet in which the pile is attached to the substrate by stitching.

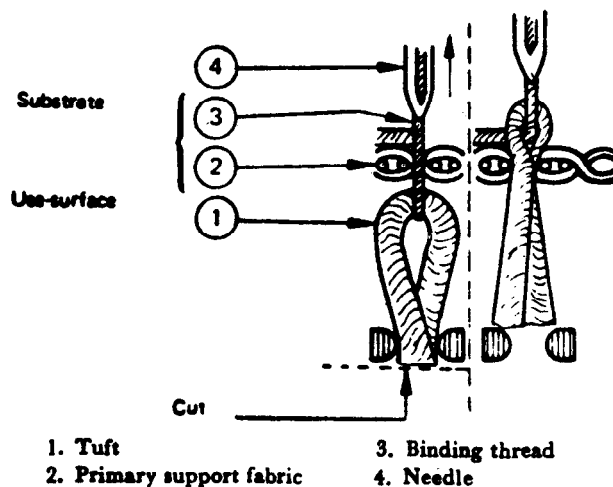


FIG. 113 EXAMPLE OF CUT PILE CARPET PRODUCED BY INSERTION OF TUFTS OF PILE STITCHED ON BY NEEDLE (LONGITUDINAL SECTION)

Thermosol Dyeing (Thermosoling) - A continuous dyeing process used for thermoplastic fibres by which the dye is first deposited on the fibre surface by padding in aqueous dispersion of dye and then diffused and dissolved in the fibre by the application of dry heat for 30-60 seconds at 180°-230°C depending upon the particle size of the dye, volatility of the dye and solubility of the dye in the fibre and the thermal properties of the fibre.

Thick End - See 'Wrong End'.

Thick Place - A bar across the width of a fabric due to closer spacing of picks or due to coarser weft yarns [see also (2) and (5) under 'Bar'].

Thick Weft - See (5) under 'Bar'.

Thickner - A substance of a gelatinous or gummy nature i.e. used to increase the viscosity of printing, dyeing, or finishing pastes or liquors.

Thickness Gauge - The thickness, in mm, of tyre yarns or tyre cords.

Thin Place - A bar across the width of a fabric due to wider spacing of picks or due to finer weft yarns [see also (2) and (5) under 'Bar'].

Thread - The result of twisting together in one or more operations two or more single, folded, or cabled yarns.

Note 1 - The term is frequently used to describe single

yarns.

Note 2 - In the natural silk industry, thread is used as a synonym of fold, e.g., 3 thread 13/15 denier yarn.

Thread Marking

- (a) Temporary stitches to mark the fitting lines of a bespoke garment.
- (b) Marking key positions such as pockets and darts by means of threads inserted through all the piles of a lay with a thread marking machine.

Threads Per Unit Length (Woven Fabric) - The number of weft yarns (picks) in a specified length of fabric.

Note 1 - The traditional unit of length has been the inch but the value should now be expressed as 'threads/cm' although the actual count may be made over 1 cm, 2.5 cm, 5 cm or 10 cm, according to the nature of the fabric.

Note 2 - Counting may be done at the following stages of manufacture:

- (a) In the loom - The position of the count should be agreed. It is usually taken between the fall of the cloth and the take up roller, with cloth under weaving tension.
- (b) Loomstate - The count is taken after the cloth has been removed from the loom and is relaxed from weaving tension, but before it is subjected to any further treatment that modify its dimensions.
- (c) Finished - The count is taken when no further processing in the piece is contemplated.

In all cases, the condition of the cloth at the time the count was taken should be specified.

Threads Per Unit Width (Woven Fabric) - The number of warp yarns (ends) in a specified width of fabric. [See 'Threads Per Unit Length (Woven Fabric) Notes 1 and 2].

Three-Quarters Hose - See 'Stockings'.

Three-Thread Overlock Stitch - See (b) under 'Overlock Stitch'.

Throwing - Doubling and twisting of filamentous yarns.

Throwing (Silk) - A process of winding with or without soaking and doubling and twisting of raw silk to make it into yarn suitable for knitting, weaving, etc.

Thrums - Those unwoven parts of warp yarn at the beginning and end of the loom beam which are cut off and generally used for

joining broken warp threads during weaving.

Ticket Number - The number assigned to a sewing thread to designate its approximate linear density.

Note - The ticket number is an indicator of the fineness of thread. The smaller the number, the finer the thread and the larger the number, the coarser the thread.

Ticket Pocket - A small pocket placed either at the waist or just above it on the right side of upper garment made in the same style as the other pockets on the garment.

Ticking - See 'Bed Ticking'.

Tie and Dye (Fabric) - A fabric dyed by 'Tie and Dye' method.

Tie and Dye Method (Tie Dyeing) - A handcraft method of producing patterns on a fabric by gathering small portions of the cloth and dyeing them with thread into compact knots by virtue of which the tied areas resist the penetration of the dye on subsequent dyeing and thus remain undyed, forming a pattern of small dots on a dyed ground. These dots may be white or coloured depending upon the original fabric used.

Ties - A narrow width neckwear passing underneath the collar and tied with an elegant knot in the front.

Tight End - A warp yarn or a part of it woven in the cloth under excessive tension.

Tight Pick - A pick woven in the cloth under excessive tension.

Tight Selvedge - See (k) under 'Defective Selvedge'.

Time-to-Break - The time interval during which a specimen is under (a generally increasing) tension, to reach the breaking load.

Note - Time-to-break does not include the time required to remove slack from the specimen. On machines supplied with an autographic recorder, the time-to-break is indicated by the time elapsing after the pen registers the initial strain or deformation sustained by the specimen until the pen registers the maximum force.

Tinted Fabric - A fabric which is coloured with fugitive or easily removable colouring matter commonly used for the purpose of identification.

Tinted Yarn - Yarn coloured with a pale fugitive dye to distinguish it from other similar yarns.

Tinting

(a) A process of colouring fibres with a fugitive dye.

- (b) The colouring of yarns, fabrics, etc, to a very light shade.

Tip-Sheared Pile - Pile of a carpet, originally consisting of loops of different lengths, which has been subjected after manufacture to a shearing process to cut the tips of the longer pile loops.

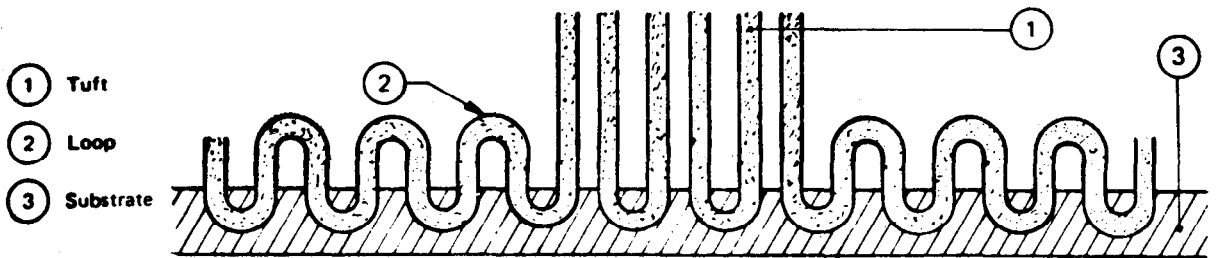


FIG. 114. TIP SHEARED PILE (LONGITUDINAL SECTION)

Tippy - A trade term adopted by the Australian Wool Board to indicate the upper end of the (wool) staple:

- (a) Thin and tapered, usually weathered.
- (b) Black tipped staples, usually heavy in condition.

Tippy Wool - Wool in which the tip portions of the fibres have been so damaged by natural weathering as to have markedly different dyeing properties from the root portions.

Tissue - Fine fabric, made from silk or man-made fibre, richly coloured and ornamented and usually interwoven with gold and silver threads. It is used as dress material.

Tissue Taffeta - A very light-weight, 'Taffeta'.

Toe Gore Line - See 'Gore Line (Toe)'.

Top

- (a) The sliver that forms the starting material for the worsted and certain other drawing systems, and i.e. usually obtained by the process of combing and is characterized by the following properties:
 - (1) The absence of fibres so short as to be uncontrolled in the preferred system of drawing,
 - (2) A substantially parallel formation of the fibres, and
 - (3) A substantially homogeneous distribution throughout the sliver of fibres from each length-group present.
- (b) The form or package in which the sliver is delivered,

e.g., ball top and bump top (see also 'Oil-Combed Tops, Dry-Combed Tops and Wool Top').

(c) Indicates a quality of raw jute (see 'Grading of Jute').

Top Dyed - Fibres dyed in top form.

Top Dyeing - The dyeing of wool or other fibres as slubbing or top in package form.

Top Finishing - Post-combing gilling of slivers.

Top Side - Of trousers. The front section of trousers, extending from the trousers' bottom to the waistband, and between the inside and side seams.

Top Sliver - Combed and finisher-gilled sliver ready for drawing.

Top Stitching - Forming exposed stitching normally sewn at a uniform distance from a seam. Mainly used as reinforcement or decoration.

Top-Dyed Yarn - Yarn made from dyed tops. Also known as 'Ingrain Yarn'.

TOPA - An Indian term for 'Balaclava Cap' and 'Monkey Cap' (see 'Balaclava Cap' and 'Monkey Cap').

Topping

(a) The application of further colouring matter, not necessarily of the same hue or class, to a dyed substrate in order to adjust the latter to the desired final colour.

(b) A light cut on a shearing machine; also called 'Ending'.

Torn - Self descriptive.

Torn Selvedge - See (c) under 'Defective Selvedge'.

Tosh - It is an unembroidered shawl of normal size 2 x 1 m manufactured out of fine variety of merino wool. It is imitation of shahtosh [see 'Shahtosh (Shahtush)'].

Total Pile Fibre Content - All yarns or fibres used to form the tufts or loops above and within the substrate, including the dead yarns [see 'Dead Yarn (Carpet)'].

Toughness (or Specific Work of Rupture) - It is the energy per unit mass required to rupture the specimen. It is the integral of the nominal stress strain curve and is calculated by dividing the work of rupture by the mass of the specimen under test.

Tow

(a) Flax or Hemp - Any substantially clean fibre of less than

scutched length,

- (b) Man-made Fibres - A large number of filaments collected into a loose strand or assemblage substantially without twist.

Tow to Top Converter - Machine to cut or break continuous filaments and to form them into continuous sliver ready for further processing on the worsted system in a single step without necessitating carding.

Towelling - A variety of coarse, absorbent fabrics (huck-a-back, honeycomb, terry weave) woven in continuous length with or without heading, usually made of cotton or linen, used for making towels, bath robes, beach wear, etc.

Tracing Cloth - A cloth specially prepared for use of draftsman in making ink tracings. The base fabric is a lawn from fine combed cotton yarn and free from slubs, thick and thin places or other imperfections. Filled on one side and given a firm, parchment like transparent finish.

Tracing Line - A 3-strand line used for lacing up tent curtains and other purposes.

Trail Rope

- (a) A rope trailed by a balloon over the ground to decrease the ground speed and to regulate the height automatically when near the ground by varying the weight of the rope carried by the balloon.

- (b) A rope carried in an airship for ground handling.

Trajectory Band - A band of webbing carried over the upper surface of an envelope to reduce deformation under load.

Tram - Soft silk yarn consisting of raw silk threads (usually two) twisted together with a few turns, say, 1 to 2 per cm; used for weft.

Trammage - A puckered area in a crepe fabric.

Principal Cause - This defect is caused by failure to insert wefts of alternately S and Z twists when so required by the structure.

Transfer Printing - Transfer of a coloured design from paper to another substrate, normally under the influence of heat and/or pressure.

Transparent Velvet - A light-weight, soft, sheer velvet in derivative of plain weave.

Trapped Shuttle - The effect created is that of distorting the fabric and stretching the yarn and slackness being woven into the

fabric upon start-up of loom.

Principal Cause - This defect is caused by loom stopping abruptly, trapping the shuttle in the shed.

Trash (Cotton) - Foreign matter present in bales of raw cotton, excluding abnormal items such as stone, timber, pieces of old iron, etc.

Note 1 - Normal whole seeds, either ginned or unginned, are frequently excluded from this category, but broken portions of them and also whole or broken undeveloped seeds are usually regarded as trash.

Note 2 - The main component of trash is chaff including bits of seeds, leaves and stem. Dirt in the form of soil or sand is another component of trash. Fragments of foreign fibres, as sisal, jute, hemp, etc, are sometimes regarded as trash but usually receive special reference when easily recognizable.

Trawl Twine - A 3-ply twine used in the manufacture of trawl nets. The twine is made from sisal, manila or man-made fibre, and sometimes cotton yarn.

Triacetate

Constitution : Cellulose triacetate.

Characteristic : Cellulose Acetate wherein at least 92 percent of the hydroxyl groups are acetylated.

Tricot - A fine closely knitted fabric made with a number of yarns on a tricot machine, running length-wise on one side and crosswise on the other. Originally, a warp-knitted fabric with two full sets of warp threads each set making a 1-and-1 lapping movement but in opposite directions. The term is now used in a generic sense to cover many types of warp-knitted fabrics.

Note - Though these fabrics are normally made from man-made fibre yarns, the term does not imply any particular yarn content.

Tricotine - A hard textured fabric woven with a steep twill weave. It resembles 'gaberdine' but has a distinct double twill line running from left to right.

Trimmings - The accessories required for making and ornamenting of any article of dress, curtains, hangings or drapery. The term trimming has wide applications. To the tailor, trimmings are canvas linings, buttons etc.; to the designer or dress maker, these are linings, braids, buttons, hooks and eyes, tapes, ribbons etc.

Trimmings (Knitted) - Strips of knitted fabric of fancy character used generally for the purpose of decorating or adorning clothing but often fulfilling a utilitarian purpose.

Triple Sheer - A tightly woven, sheer fabric with a fine flat surface.

Trivinyl - Terpolymer of acrylonitrile, a chlorinated vinyl monomer, and a third vinyl monomer, none of which represents as much as 50 percent of the total mass.

Tropical Worsteds - Light-weight worsted suitings.

Tropped Shuttle - The effect created is that of distorting the fabric and stretching the yarn and slackness being woven into the fabric upon start up of loom.

Principal Causes - This defect is caused by loom stopping abruptly, trapping the shuttle in the shed.

True Wool - Non-medullated wool fibre.

Trunk - A knitwear having the shape of briefs but stronger in quality used for bathing or swimming. Also known as 'Bathing Trunk' and 'Swimming Trunk'

Truss - A bundle or small bale of jute, suitably covered or wrapped but neither hooped nor machine-pressed.

Try-On - The individual fitting of a garment for the purpose of confirming the size, shape and fit, either before or after the garment is completed.

Tsatlee Silk - Chinese hand-reeled silk which is uneven and is more imperfect than filature silk. It is sometimes called 'Book-Silk'.

Tubed Twine - A twine encased in a plastic covering, generally used as a domestic clothes line.

Tubing - Braided, knitted or woven fabric of cylindrical form having width of 10 cm or more (circumference of 30 cm or more). (see also 'Sleeving').

Tubular Bag - Bags fabricated from continuous tubular cloth.

Tubular Fabric - Fabric made on circular knitting machines.

Tubular Welt - A welt produced on a rib machine by knitting on plain needles and rib needles, alternately, to form a tubular section of plain fabric. This is followed by knitting both the sets of needles together on a rib basis. Also known as 'French Welt'.

Tubular Yarn - See 'Aerated Yarn'.

Tuck Ripple - Relief fabric produced on the basis of tuck stitches (see 'Relief Fabric').

Tuck Stitch - The stitch made when a needle retains one loop and

takes on one or more additional loops before casting them off.

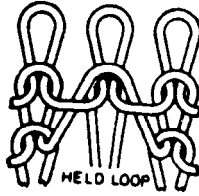
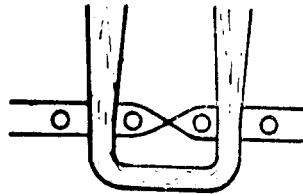


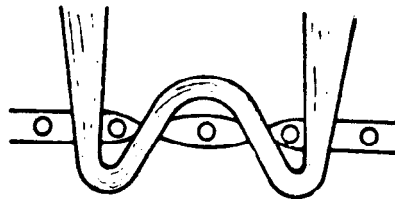
FIG. 115 TUCK STITCH (SHOWN FROM BACK OF FABRIC)

Tuft - A length of yarn, e.g. I-,J-,U- or W-shaped, or a length of yarn in the form of a knot, the leg or legs of which form the pile of a carpet.

Note - Flocked and certain bonded carpets are not considered as being composed of tufts. In the case of jacquard weave carpets, the length shall be considered as length of tuft taken from a portion of a carpet with a surface of a single colour.

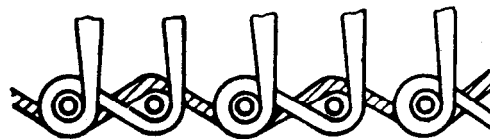


U-shaped tuft

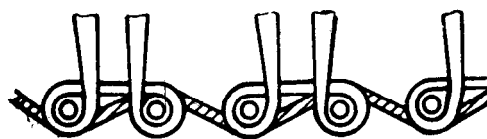


W-shaped tuft

FIG. 116 EXAMPLE OF TUFTS



Persian knots



Turkish knots

FIG. 117 EXAMPLE OF TUFTS IN THE FORM OF KNOTS

Tucking - A defect caused by a tuck loop or loops inadvertently produced in a knitted fabric.

Tuft or Loop Column - Tufts or loops running in a line parallel to the direction of manufacture.

Tuft or Loop Row - Tufts or loops running in a line at right angles to the direction of manufacture.

Tufted Textile Floor Covering With Pile; Tufted Pile Carpet - Carpet in which the pile yarns are fixed in a previously manufactured base and then secured by coating or an adhesive. Examples are given in Fig. 118 and 119.

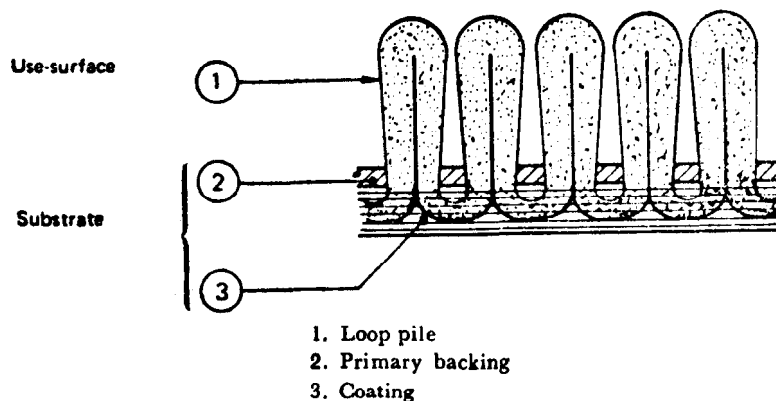


FIG. 118 TUFTED LOOP-PILE CARPET (LONGITUDINAL SECTION)

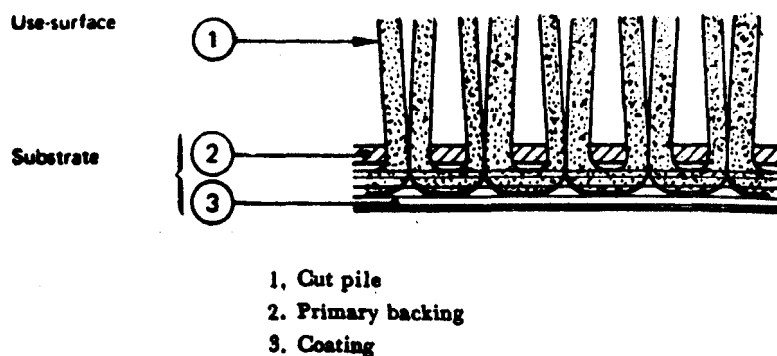


FIG. 119 TUFTED CUT-PILE CARPET (LONGITUDINAL SECTION)

Tufting Twine - A twine used for making tufted carpets or mats.

Tulle (Lace) - A fine, soft, very light-weight, machine-made net with hexagonal mesh, made from silk yarns.

Tulle (Woven) - A very fine net fabric made in plain weave from silk yarns.

Turn-Ups - Of trousers. The bottoms of trouser legs, folded and turned back on the outside, with the raw edges hemmed on the inside.

Turn-Over Top - Top (of socks or stockings) which is made sufficiently longer than usual to be turned outside during use. Also known as 'Turned Top'.

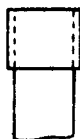


FIG. 120 TURN-OVER TOP

Turned Top - See 'Turn-Over Top'

Turned Welt - See 'Inturned Welt'.

Tussah - A fabric made from tussah silk.

Tussah Silk - See 'Tasar Silk'.

Tussore - A plain fabric having ribbed effect and used for coating.

Tweed - Originally a coarse, heavy-weight, rough-surfaced wool fabric for outerwear, woven in Southern Scotland. The term is now applied to fabrics made in wide range of weights and qualities from woollen-spun yarns in a variety of weave effects and colour-and-weave effects. The name tweed is derived from a river Tweed in Scotland.

Twill Weave - The weave that produces diagonal patterns on the surface of the cloth. In the jute industry, generally 2 x 1 simple twill weave is used.

Twill Ore Pocket - A selvaged twill bag measuring about 76 x 51 cm (normally with 102 ends/dm and 31 picks/dm), and weighing approximately 794 g used for packing mineral ores.

Twin Set, Twin Suit - A set of ladies' outerwear consisting of JUMPER and cardigan (worn together); generally of the same shade and quality. Also known as 'Twin Suit'.

Twine - Two or more yarns twisted together to produce a balance structure of continuous length. It is generally used for tying, packing and sewing.

Twist

- (a) The spiral disposition of the components of a yarn which is usually the result of relative rotation of the two ends.
- (b) The number of turns per unit length of a yarn expressed as turns per metre (tpm) or turns per inch (tpi).
- (c) S-Twist - The twist in yarn due to which its spirals are in line with central portion of letter S, when the yarn

is held in a vertical position.

- (d) Z-Twist - The twist in yarn due to which its spirals are in line with central portion of letter Z, when the yarn is held in a vertical position.

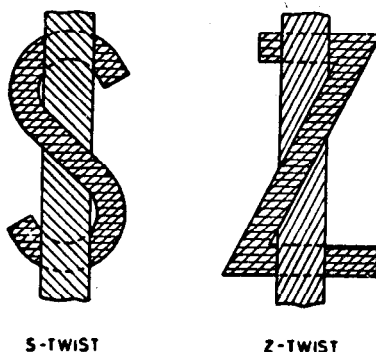


FIG. 121 TWIST

Twist Factor, Twist Multiplier - A measure of the 'twist hardness' of yarn determined by the multiplication of the turns per unit length by the square root of the linear density on a direct system, or the division of the turns per unit length by the square root of the count on an indirect system. Typical examples of units of twist factor are:

- (a) Turns/cm multiplied by the square root of linear density of yarn in tex;
- (b) Turns/in. divided by the square root of cotton count of yarn.

Note - Unit (a) is the recommended SI Unit.

Twist Liveliness - The effect caused by unbalanced torsional forces in any yarn, of sufficient magnitude which gives rise to difficulties in processing or defects in the resulting fabric.

Note - Examples of this are snarling in processing and spirality in knitted fabrics.

Twist Release - The extension in length of yarn on untwisting, expressed as a percentage of the length of twisted yarn.

Twist Setting - Any of the several methods used to fix or set the twist in yarns to prevent snarling, tangling, or kinking.

Twist Take-Up - The decrease in length of yarn on twisting, expressed as a percentage of the yarn before twisting.

Note - As the length of yarn before twisting may not be known, the length of the yarn after untwisting may be treated as equal to the length of the untwisted yarn for practical purposes.

Twist, Cable - A twine, cord or rope construction in which each successive twist is in the opposite direction to the preceding twist.

Twist, Hawser - A twine, cord or rope construction in which the single and first ply twists are in the same direction, as in S/S/Z or Z/Z/S construction.

Twist-On-Twist - Descriptive of a folded yarn in which the direction of the folding twist is the same as that of the single twist.

Note - The use of this term to indicate a specific direction of twist should be discouraged.

Twisted Yarn - See 'Folded Yarn'.

Twisting - See 'Doubling'.

Twistless Yarn - A yarn prepared without twist in order to obtain special properties, e.g., increased softness and dyeability.

Twitty - Describes yarn of irregular thickness and twist, and brittle in places.

Twitty Yarn - An irregular yarn or slubbing in which local concentrations of twist have accentuated the irregular appearance.

Two-Thread Overlock Stitch - See (a) under 'Overlock Stitch'.

Type - A trade term adopted by the Australian Wool Board to indicate style, fineness, length, fault and colour, and defines ultimate processing system i.e. woollen or worsted suitability.

Type Writer Ribbon Fabric - A very fine quality fabric of plain weave, made from single combed yarns in very high thread counts and cut into strips and specially finished. Continuous filament nylon is also used as alternative to cotton.

Tyre Cord Fabrics; Tyre Cord Warpsheet - Fabrics which comprise the main carcass of pneumatic tyre. These have a planar textile structure consisting of tyre cord warp with widely spaced weft threads.

Tyre Fabrics - Fabrics used in the construction of pneumatic tyres, such as casing plies, breakers, chafers, etc. These include tyre cord fabrics and tyre canvas (cross woven) fabrics.

Tyre-Cord - Cabled yarn made from natural or synthetic fibres for use as reinforcement in tyres.

Ultimate Fibre - A botanical cell of leaf and bast fibres.

Umbrella Cloth - A closely woven fabric in plain, twill, satin or combination weave used for covering umbrellas. The fabric may be of cotton, silk, man-made fibres or blends of two or more such fibres which is usually given a waterproofing finish.

Under Pants - See (c) under 'Drawers'

Under-Raised - Insufficient coverage of the ground structure of a raised fabric.

Principal Cause - This defect is caused by the incorrect setting of the raising machine or an insufficient number of passes of the fabric through the raising machine.

Undercoat (Innercoat) - Short fine growth of downy woolly fibres in a mixed fleece of undomesticated sheep, goat and fur bearing animals.

Underfelt - See 'Scrim'.

Underlay - A coherent layer of textile or other material, placed between the floor covering and the floor.

(a) Combined Underlay - See 'Combined Underlay, Combined Backing'.

(b) Separate Underlay - An underlay placed on the floor and independent of the textile floor covering.

Underpressing - The pressing operations carried out during assembly of the garment, usually seam opening.

Undersides - Of trousers. The back section of trousers, extending from the trousers bottom to the waistband, and between the inside and side seams.

Underwear (Knitted) - Knitwear worn next to the skin and under other garments, e.g., drawers, vest, etc.

Undrawn Yarn/Fibre-Filament - Extruded yarn (fibre-filament) the component molecules of which are substantially unoriented and which exhibits predominantly plastic flow in the initial stages of stretching.

Note - Undrawn yarn represents an intermediate stage in the production of man-made fibre yarns.

Undyed Crease - In a printed fabric, a well defined lengthways streak from which the colour is missing.

Principal Cause - This defect is caused by passing a creased fabric through the printing machine.

Uneven Appearance - A fabric i.e. unacceptable in terms of overall character.

Principal Causes - This defect may be due to numerous small blemishes, e.g. uneven yarn, small slubs, that individually would not constitute a fault.

Uneven Dyeing - A fabric which shows variation in shade throughout

the piece at regular or irregular intervals.

Principal Causes - Faulty dyeing methods or materials, difference in count or twist in yarns in the fabric, etc.

Uneven Raising - Irregularities in the appearance of a raised fabric where areas of under-raising and/or over-raising are present.

Principal Causes - This defect may be caused by variations in the fabric structure or in processing prior to raising, or due to lack of control of the raising machine

Uneven Selvedge - See (m) under 'Defective Selvedge'.

Uneven Width - Variation in the width of the fabric.

Principal Causes - Uneven weft tension during weaving, defective stentering, etc.

Unevenness - The nonuniformity of the linear density of a continuous strand or portion of a strand. Following three principal expressions for unevenness are in use:

- (a) Unevenness, Coefficient of Variation - The square root of the average of the squares of the deviation of linear density from the average linear density, expressed as a percentage of the average linear density within the tested length of strand.
- (b) Unevenness, Percent Mean Deviation - The average of the absolute values of the deviation of linear density from the average linear density, expressed as a percentage of the average linear density within the tested length of strand.
- (c) Unevenness, Percent Mean Range - The average of the ranges of linear density found within units of equal length, expressed as the percentage of linear density within the tested length of strand.

Union Canvas (Jute/Cotton) - Closely woven plain weave fabric made with cotton warp and fine jute weft.

Union Dye - A dye or mixture of dyes designed to yield a uniform dyeing on the fibre mixture for which it is devised.

Union Fabric - A fabric made with warp and weft of different fibres.

Union Suit - See 'Combination Suit'.

Union Yarn - Yarn or fabric made by mixing and spinning two or more different kinds of fibres. (e.g., wool and polyester or cotton and polyester fibres, etc.)

Univoltine Cocoons - Cocoons built by a silk-worm race with one generation (life cycle) in a year.

Unkinkable Lay - In this type of lay, the individual yarns are spun with the same direction of twist as the strands themselves. This eliminates the tendency of the rope to kink.

Unraised Fabric or a Fabric of Plain Surface - A fabric having a surface significantly free from raised fibres, nap or pile.

Unwanted Twill - Twill lines introduced unintentionally into the fabric.

Upholsterer's Twine - A 3-ply hemp or flax twine used in upholstery and bedding.

Use-Surface (Textile Floor Covering) - That part of a textile floor covering directly exposed to traffic.

V-Neck - A term applied to neck-opening designed, cut or finished in the shape of letter 'V'. (See Fig. 122 and 123)

Valved Bag - A jute bag with a valve to suit patent filling equipment (see 'Bates Valve').

Vat - A large vessel for holding textiles processing liquor used for bleaching, dyeing, finishing, etc.

Vat Acid Process - A method of dyeing in which the vat dye is first converted in a very fine state of division by reducing the vat dye and neutralising the alkali used in reduction by acetic acid in presence of acid stable dispersing agent and subsequently this non-substantive dispersed dye is deposited on the fibre material and then the fibre material is developed in a bath containing sodium hydroxide and sodium hydrosulphite.

Vat Dye - A water-insoluble dye, usually containing keto groups, which is normally applied to the fibre from an alkaline aqueous solution of a reduced enol (leuco) form, which is subsequently oxidized in the fibre to the insoluble form.

Vatting - A process of conversion of insoluble vat dye into soluble substantive form under alkaline reducing conditions.

Vegetable Dyes - A dye obtained from various forms of vegetable matter, such as, wood, bark, roots, berries etc. e.g. logwood, cutch, indigo, madder, quericitron etc.

Velours - Woollen costume cloth which has been felted and raised and finished with a fibrous surface.

Velvet - A warp pile fabric, usually having a cut pile, rich in appearance and soft to the touch.

Velveteen - A weft pile fabric, similar to 'corduroy' but having a surface uniformly covered with a short full cut pile. The weft

yarn is soft spun, which when cut gives a soft smooth velvety pile.

Venetians - All wool linings or dress-fabrics woven in eight-thread warp satin.

Vent

(a) A short opening in the hem of a garment.

(b) An opening in a garment to provide ventilation.

Vent (Parachute) - An opening, usually at the apex of a canopy.

Vent Cap - A piece of fabric covering the vent, sewn on to the vent hem.

Vent Hem - The hem, usually reinforced by tape, round the periphery of the vent.

Vent Patch - A patch sewn into the crown of a canopy to reinforce the crown or to reduce its porosity.

Vest - A knitted undershirt. Also known as 'BANIAN' and 'GANJI'.

Vicuna (Fibre) - Undercoat hair of the vicuna, an animal of the llama family.

Vicuna Cloth - Usually a worsted warp and woollen weft cloth, felted, raised but close cropped to reveal the weave. It has nothing to do with vicuna.

Vigoureux Printing - See 'Melange Printing'.

Vinylal

Constitution : Linear macromolecules of polyvinyl alcohol with different levels of acetalization.

Example : Acetalized polyvinyl alcohol:

Vinyon - A man-made fibre made from copolymer of vinylchloride and vinyl acetate.

Virgin Wool - 'Pure New Wool' according to International Wool Secretariat. Commercially it means wool that has not been processed or used before and is thus distinctly different from reprocessed wool or reused wool.

Viscose

Constitution : Cellulose II

Example : Regenerated cellulose obtained by the viscose process.

Viscosity (General) - The internal resistance to flow of a fluid.

Note - A term applied specifically to signify the viscosity of a standard solution of cellulose in cuprammonium hydroxide solution, of specified copper and ammonia content; size mixings, printing paste, finishing liquours, etc.

VN Vest - Vest with V-neck and without sleeves.



FIG. 122 VN VEST

VNS Vest - Vest with V-neck and with short sleeves.

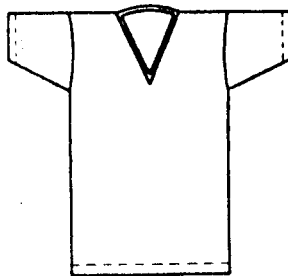


FIG. 123 VNS VEST

Voile - A light weight, approximately square, open textured, plain weave cloth made from fine yarns of sufficient twist to produce round compact thread. Woven one thread per dent unless the number of ends per cm is so high as to render this impossible.

- (a) Semi-Voile - This is a typical cotton voile fabric employing high twisted single yarns for warp and weft using counts 50s and finer spun with a twist factor of 5.5 to 6.0. The yarn is usually not singed and is woven in a reed 52 to 64 with similar picks. Because of the openness of the structure such fabrics are provided 12 mm wide selvege. The cloth is usually woven in 120 cm finished width and bleached/dyed/printed in rich colours for the end use as saree.
- (b) Full Voile - Otherwise known as 2 x 2 voile, this employs two-fold yarns for warp and weft. Singles are usually fine combed. Cotton yarns spun with normal turns per metre whilst doubling is done in the same direction as singles but with a doubling twist factor of 6.0 to 7.0.

Usually the doubled yarn is singed. The ends/cm in reed is low and ranges between 52 to 64. Ends are usually drawn as one per dent in the reed and with 12 mm wide border. The fabric is bleached, dyed or printed for the end use as saree.

- (c) Half-Voile or 2 x 1 Voile - This class of fabric is similar to full-voile except in weft where instead of high twisted two-fold yarn, single yarns of equivalent count is employed.
- (d) Fancy Voile - This is a full voile dress material fabric woven in 90 cm finished width in a reed heavier than that employed for saree and ornamented with extra warp and/or weft figurings.

VYCOME Yarn - See (m) under 'Coir Yarn'

Wadding - A loose, cohering mass of fibres, usually in the form of a sheet or roll used as padding in the making up of garments.

Waist Coat (Knitted) - A V-necked sleeveless garment with full front-opening with a closure device and extending just below the waistline.

Waistband - A narrow piece of material, binding or an assembly attached to the waist of a garment.

Wale - A longitudinal chain of loops in a knitted fabric or garment formed by one needle.

Wales/5 cm - The number of wales in 5 cm measured along a course of a knitted fabric or garment.

Wall Thickness - Thickness of the cell wall of a fibre.

Wall-to-Wall Textile Floor Covering - A textile floor covering which completely covers the floor space on which it is laid.

Warp (Warp Yarn)

- (a) Threads lengthways in a fabric as woven, or
- (b) A number of threads in long lengths and running in the same direction intended for weaving or knitting.

Warp Crack - See 'Crack'.

Warp Knitting - A method of knitting in which the loops made from each warp thread are formed substantially along the length of the fabric, characterized by the fact that each warp thread is fed more or less in line with the direction in which the fabric is produced.

Warp Pile Fabric - See under 'Pile Fabric'

Warp Skip - See 'Harness Skip'

Warp Snarls - A short length of warp yarn that has twisted on itself owing to high twisting or insufficient tension. The snarling may occur during or prior to the weaving process.

Warp Streaks - Short, narrow warpwise bands which are characterized by some difference in shade or lustre from the adjacent normal warp.

Principal Causes - Ends having different dyeing affinities, different dyed lots getting mixed up in the warp, rough healds or drop wires, sharp or cut section on lease reed of warper, variation in count or twist of warp yarns, portions of warp yarns stained with oil or grease which resist dyeing, etc.

Warp Stretch - See 'Stretch, Warp'

Warp Stripe - The presence, in a piece-dyed fabric, of one or more warp yarns of the wrong colour.

Principal Causes - This defect is caused by isolated yarns of different characteristics having been introduced during winding or warping and subsequently reacting differently during dyeing and finishing.

Warp-Knit Fabric - A fabric knitted on a machine that receives yarns from a warp beam and guides each yarn separately from each needle.

Warping - The process of preparing a warp for weaving or knitting. A number of methods are employed such as beam warping, chain warping and sectional warping.

Wash and Wear - A term applied to fabric and garments which satisfactorily retain their original wrinkle-free appearance during wear and after laundering, with little or no ironing. Many of the synthetic fibers possess that property inherently; in case of the other fibers, suitable chemical finishes are employed to obtain this effect.

Washed (or Steeped) Silk - Raw silk which has been soaked in warm soap solution so as to soften its gum and loosen its threads.

Washing Liquor - An aqueous solution employed for the physical removal of extraneous substances from textile material.

Washing-Off - Treatment of textile material in water or detergent solutions to remove substances employed in previous processes.

Waste Silk - Silk from wild and cultivated cocoons which cannot be reeled and silk from the unreelable parts of the cocoons. It also includes the waste produced during the various processes of silk reeling and throwing. It is used as a raw material for spun-silk.

Wastes - Processing by-products in the manufacture of yarn and cloth.

Wasty - A trade term adopted by the Australian Wool Board to indicate wool thinly grown and/or weathered, producing excessive waste during processing.

Water Damage - A stain that has a sharply defined straight or wavy edge and that fades away rapidly to normal colour.

Principal Causes - This defect is caused by deposition of dye, soil or finishing compounds carried by water wicking through the fabric, and represents the farthest point of this migration.

Water Proofing - Process in which the interstices of the fabric as well as the surface of the material are covered with a film or skin in such a manner that the treated material is not only water-repellent, but impermeable to air and moisture.

Water Repellent - Process whereby the fibres of the material are made water-repellent through coating with a hydrophobic substance or by a chemical reaction, but the fabric remains porous to air and does not allow wetting to take place.

Water Spot - An unwanted pale area in a piece-dyed or finished fabric.

Principal Causes - This defect is caused by contamination with water prior to tinting or dyeing or finishing on a pad mangle which results in a reduction of uptake of dye liquor or finishing liquor. The defect is also sometimes observed on dyed and finished fabrics.

Water-Cooled Suit - A suit designed to keep the body temperature within a comfortable range by circulating water through small pipes in the suit.

Water-laid Rope - See 'Cable-Laid Rope'.

Water-Mark (Defect)

- (a) An unwanted moire effect produced by the pressure of the surface of one layer of fabric on another.
- (b) An unwanted light mark on a fabric caused by contamination with water prior to tinting or dyeing on a pad mangle, which results in a reduction in uptake of dye liquor.

Wavy Cloth - A cloth that does not lie flat on a cutting table (see also 'Cockling').

Principal Cause - Section of tight or loose yarns either in warp or weft.

Weak Tie (Breaking Tie) - A piece of cord or thread which is intentionally broken at some stage of the deployment of a parachute in order that the deployment may occur in some predetermined manner.

Weaners - A trade term used in Australia to denote first shearing wool from sheep of over six months age.

Wear Level - The number of wear refurbishing cycles to which an item has been subjected.

Wear Service Condition - The specific conditions under which a garment is worn (e.g., at school, at leisure, or at home).

Wear Test - A test in which textile garments are subjected to wear service conditions and evaluated for performance.

Wear-Refurbishing Cycle - For a specific wear testing programme, one complete series of events that will be terminated by laundering or dry cleaning.

Note - A description of a wear-refurbishing cycle usually includes the number of hours worn and the number of wearings an item receives prior to refurbishing (i.e., laundering or dry cleaning, or both).

Wear-Wrinkle Resistant - A term applied to textile fabrics which satisfactorily maintain their appearance by recovery from sharp folds imposed during wear.

Weathered (Wool) - A trade term adopted by the Australian Wool Board to indicate wool degraded and wastey as a result of exposure to sunlight and moisture.

Weathered Piece - Fabric with discolouration or soil marks on its edges or folds produced due to exposure during storage or transit.

Weaving - The interlacing of warp and weft with one another to form a fabric.

Web Fabric (Knitted) - A plain, circular knitted fabric.

Webbing

- (a) A woven narrow fabric which weighs over 3.4 g/m/cm width (or 2.5 lb gross yd/in. width); or
- (b) A term of classification referring to webbings in general.

Webbing, Elastic - A textile webbing containing rubber or other elastomers to permit rubber-like stretch in at least one direction (see also 'Webbing').

Weft Bar - See (5) under 'Bar'

Weft (Weft Yarn)

- (a) Yarn widthways in a fabric as woven; or
- (b) Yarn inended for use in a fabric widthways.

Weft Bow - Excessive curvature of the weft in a fabric that may or may not extend over the full width.

Principal Cause - This defect is caused by lack of control in fabric manufacturing or processing.

Weft Crack - See 'Crack'.

Weft Curling - See 'Weft Snarls'.

Weft Double Bow - Weft yarns in fabric which exhibit an approximately sinusoidal waveform for more than three quarters of the same length.

Principal Cause - This defect is caused by lack of control in fabric manufacturing or processing.

Weft Kinks - See 'Weft Snarls'.

Weft Knitting - A method of knitting in which the loops made by each weft thread are formed substantially across the width of the fabric, characterized by the fact that each weft thread is fed more or less at right angles to the direction in which the fabric is produced.

Weft Pile Fabric - See under 'Pile Fabric'.

Weft Snarls (Weft Curling, Weft Kinks) - A short length of weft yarn that has twisted on itself owing to high twist or insufficient tension. The snarling may occur during or prior to the weaving process.

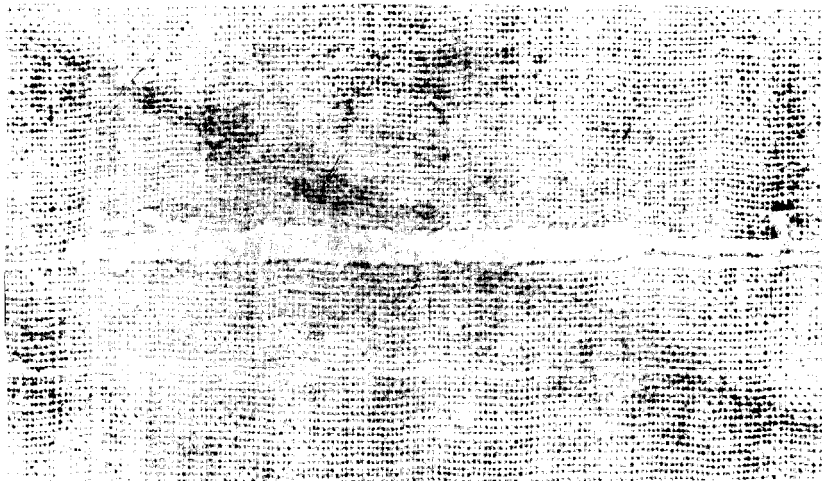


FIG. 124 WEFT SNARLS

Weft Trail (Pulled-In Weft, Lashed-In Weft, Jerk-In Weft) - An extra yarn dragged into the cloth with regular pick.

Principal Cause - Failure of the thread holding mechanism to hold the filling from the outgoing bobbin long enough for the temple thread cutter to cut the yarn after a filling change (applicable in case of conventional looms).

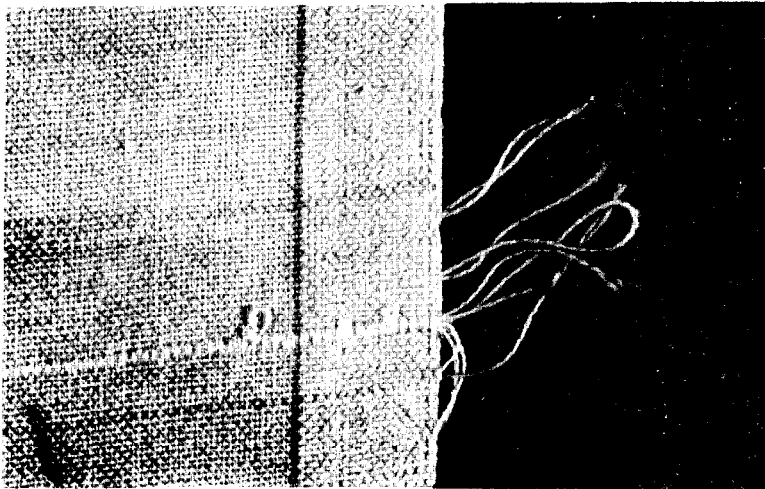


FIG. 125 WEFT TRAIL

Weft-Knit Fabric - A fabric produced by a method of knitting in a crosswise direction as distinguished from warp-knitting.

Weftage (Coir) - The number of transverse strands of yarn in a matting per decimeter (or foot).

Weighted Silk - Silk which has been increased in weight and bulk by the addition of chemicals.

Weighting - A process for adding weight to the yarn or fabric by loading with chemicals or other substances.

Well Bred - A trade term adopted by the Australian Wool Board to indicate wool true to type, embodying style, character, evenness and handle.

Well Drilling Rope (or Cable) - A high quality cable-laid manila rope used for oil-well drilling.

Welt

- (a) The extended edge of a pocket cut. A folded piece of material attached to form a finished edge of a pocket opening.
- (b) A secure edge off a knitted fabric or garment made during, or subsequent to, the knitting process. Welts made during the knitting process usually occur at the starting end of the fabric and are formed parallel to the course.

Seamed welts which are made after the knitting process may occur in any position in the fabric. (See also 'Hem').

Wet Contractile Force - The maximum force developed in yarn or cord of fixed length when dipped in water. It is expressed as force per unit linear density (g/tex or g/d).

Wet Contraction - The maximum shrinkage in length of yarn or cord when dipped in water under a pre-tension. It is expressed as percentage of the original length of a specimen.

Wet Decatizing - See 'Decatizing'.

Wet Spun

- (a) Descriptive of a yarn of flax, hemp, or similar fibre spun from roving that has been thoroughly wetted out in hot water immediately prior to the drafting operation.
- (b) Descriptive of man-made filaments, the coagulation of which is effected by extrusion into a liquid bath.

Wether

- (a) A castrated ram, and
- (b) Wool from second and subsequent shearing.

Whale Line - A 3-strand hemp or man-made fibre line used for catching whales by harpoon. The line is made from hemp or man-made fibre yarn. (See also 'Harpoon Line').

Wheeling Yarn - Coarse multifold knitting yarn spun on the woollen system.

Whipcord

- (a) A twill-woven fabric usually with a steep-warp twill and a clear finish having pronounced ribs.
- (b) A 3-strand cord made from jute, flax or hemp yarn. It is used for fishing.

Whipping - Securing a loose end of a rope by means of a twine. This prevents the rope from unlaying.

White Discharge Printing - The production of coloured design on textile fabrics by dyeing and then printing with discharging agents, which destroy the dye by reduction or oxidation at the printed portions.

White Resist Printing - The production of coloured design on textile fabrics by dyeing it with dyes (which are fixed in two steps i.e. dyeing and developing) and then printing with resisting agent which prevents the development at the printed portions

during developing and thus gives a white effect on coloured background.

White Rope - Untarred cordage.

Whitening, Chalking, Frosting - A change in appearance of a textile floor covering which becomes evident during use by the appearance of whitish regions.

Whiting Line - A 3-strand light-weight line with soft lay used when fishing for whiting and for other purposes. The line is made from hemp or flax yarn.

Whole Back - A garment back cut in one piece, not two or more as is common in tailored garments.

Wick - A loosely twisted, braided or woven cord, tape or tube or a bundle of fibres, generally made of soft spun cotton yarns, which draws up a constant supply of any liquid substance by capillary action, used for illumination e.g. oil in lamps, melted tallow or wax in candles.

Widening - The act of increasing the width of the fabric or garment by increasing the number of wales during knitting to get the desired shape.

Wigan Finish - A firm, starched, plain calendered finish without lustre, applied to light weight sheetings and printed clothes.

Wiggings - A trade term used in Australia to denote wool that has been shorn from around the eyes and head of the sheep.

Willey (Local, Willow, Teaze) - To open and disentangle fibres prior to carding.

Willey, Battering - A machine often employed for the opening of short, fine, dusty and sandy wools. It has a more gentle action than the double or single-cylinder willey, in which four-bladed beaters are used instead of the spiked cylinders. Otherwise, the construction is similar to the 'Willey, Wool' with spiked cylinders.

Willey, Double or Single-Cylinder (Spiked Willey) - A machine usually employed with greasy merino, cross-bred and the long lustre wools prior to washing and generally preceded by an automatic feed. Its action is to open out the greasy and dirty wool and remove dust and heavy foreign matter from the wool before it passes into the washbowl.

Willey, Dust (Cleaning Willey, Shake Willey, Shaker, Picker, Teazer, Wool, Plucker, Blending) - A machine used primarily for opening wool fibre and removing dust and also as a preliminary blending machine.

Willey, Tenterhook (Tenter Hook Willow, Tenterhook Teazer, Cockspur Willey, Fearnought Blending Willey) - An opening and mixing machine which delivers the material in a suitable state for carding.

Willey, Wool (Self-Acting Teazer, Wool Willow, Wool Opener, Devil) - A machine generally used for the cleaning of wool.

Wilton Carpet - A woven carpet in which the pile threads run continuously into the carpet and are treated as an integral part of the weaving process being raised above the surface of the backing to form a pile by means of wires or hooks (warp wires), or by being stretched between two backings (face-to-face weaving). After being woven, the pile may be left as a loop or cut by a bladed wire or, in the case of face-to-face weaving, by the separation of the two fabrics.

Wilton, Figured - A carpet usually woven on a jacquard loom, which bears a design obtained by the use of two to five frames, each of a different colour. Additional colours may be obtained by substitution (planting) of colours in any frame.

Wilton, Mottled (Stippled Wilton) - A carpet similar to plain wilton but woven from plied yarns that have been folded from singles of different colours.

Wilton, Plain - A wilton carpet which bears no surface design. It is normally of a single colour, and if it has a cut pile it may be described as plain velvet. In a variation, hard-twist yarn is used.

Wincey - A light-weight fabric of the flannel type, finer in texture than baby flannel. Originally it was made with cotton warp and wool weft but it may now be made from mixture yarns containing wool.

Winch Dyeing - A dyeing process in which one or more endless lengths of fabric are drawn through the dyebath by a reel or drum rotating above the surface of the dye liquor.

Wind-Sock (Wind Cone, Wind Sleeve) - A wind indicator in the form of a truncated fabric cone.

Winding - An operation of transferring yarn from one form of package to another.

Wool - Primarily, hair from the fleece or coat of the sheep, but extended by usage to include also that of the alpaca, camel, dromedary, llama, vicuna, cashmere goat, and angora rabbit.

Wool Base - The oven-dry mass of wool fibre free from all impurities, expressed as a percentage of the mass of the greasy core sample.

Wool Classing - A highly skilled process by which whole fleeces are separated into different classes before being baled and sold, which assists buyers to obtain their requirements.

Wool Dyed Cloth - Wool fabric in which wool is dyed in yarn or fibre form as distinguished from piece dyed fabric.

Wool Felt (Pressed) - A textile material composed of wool fibres physically interlocked by the inherent felting property of wool and produced by a suitable combination of mechanical work, chemical action, moisture and heat but without weaving, knitting, stitching, thermal bonding or adhesives. The wool fibres used are in the range of quality from 64/70s to 48s.

Wool Opener - See 'Willey'

Wool Plucker - See 'Willey'

Wool Quality - The spinning quality of wool assessed primarily on the basis of fibre fineness. Crimp, waviness, handle, etc, also influence wool quality.

Wool Sorting - A highly skilled process by which fleece and skin wool is divided into various qualities. It is usually carried out by the wool user.

Wool Top - Continuous untwisted sliver of wool fibres from which the shorter fibres or noils have been removed and the fibres brought parallel to each other by combing.

Wool Willow - See 'Willey, Wool'

Wool Yield (Clean Wool Fibre Content) - The weight of wool fibres, free from vegetable matter, grease, dirt and other impurities and adjusted to the standard condition of 13.8 percent moisture content, 1.5 percent alcohol extractable matter content and 0.5 percent ash content; the latter two calculated on the basis of the oven-dry mass of the scoured specimen.

Woollen - Descriptive of yarns, or fabrics or garments made from yarns, which have been produced on the condenser system wholly from wool fibres, new or otherwise, within certain tolerances and allowances.

Note 1 - As an adjective pertaining to wool generally, the term 'Wool' and not 'Woollen' should be used.

Note 2 - The trade term 'Woollen-Spun' is descriptive of any yarn carded, condensed and spun on woollen machinery. Such yarn might not contain any wool. It is preferable, therefore, to avoid the use of the term where possible. The term 'condenser spun' is recommended instead.

Woollen and Worsted Weaves - Term applied usually to fabric structures using woollen-spun or worsted-spun yarns in a variety of weaves, e.g.:

Corded velveteen	:	Corduroy
Corkskew weave	:	Corkskew fabric
Crepe weave	:	Oatmeal fabric

Double plain weave	:	Hairline blankets, All wool shawl
Gaberdine twill	:	Gaberdine worsted
Herringbone weave	:	Overcoatings, Suiting and Worsted trouserings
Honeycomb weave	:	Honeycomb fabric
Plain weave	:	Baize, Blazer cloth, Broad cloth, Camlet, Woollen shirting, Delaine, etc.
Steep twill weave	:	Whipcords
2/2 Twill	:	Blankets, Donegal tweed, Imperial cloth, Kersey, Pilot cloth, Serge, Angola, Tartan
Twilled hopsack	:	Barathea
Warp face satin	:	Amazon, Doeskin, Habit cloth, Lasting, Presidents, etc.
Warp rib	:	Bengaline
2/2 warp rib weave	:	Crepoline
2/1 warp twill	:	Prunella twill
Weft face sateen	:	Italian cloth, Velours, etc.
2/1 weft face twill	:	Cashmere, etc.
Weft rib weave	:	Bradford lustre fabrics

Woollen Carding - Carding with rollers and strippers with intermediate cross-feeds and condenser delivery to obtain a slubbing ready for spinning.

Woollen Cloth - Wool fabric woven from woollen-spun yarns.

Woollen Count

- (a) Dewsbury - The linear density of woollen yarn, expressed as number of yards per ounce.
- (b) Yorkshire - The linear density of woollen yarn, expressed as 256 yd skeins per pound.

Woollen Yarn - A yarn spun from wool which has been carded but not gilled or combed before spinning and in which the fibres cross each other in every direction presenting a rough surface.

Woollen, Blended - Descriptive of yarns, or fabrics or garments made from yarns, spun on the condenser system and containing

not less than 50 percent of wool.

Woollen-Spun - A term applied to staple yarn produced by carding, condensing and spinning on machinery originally designed for the processing of wool into yarn. Such yarns may be from wool, its blends or even non-wool (see also Note 2 under 'Woollen').

Woollenized Jute - The jute fibre when subjected to mercerizing treatment under controlled conditions becomes scrumpy like wool, soft and fluffy; the treated jute with or without further chemical softening treatment is called woollenized jute.

Woolley - Like wool. The term is used to denote soft handle like wool.

Woolpack - See 'New Jute Woolpack', 'Australian Woolpack', and 'New Zealand Woolpack'.

Work Line - Hemp line, tarred, 3, 6, 9 and 12 strands and of 5, 6 and 8 mm diameter used for worming in marine rigging.

Work of Rupture - It is the energy required to bring a specimen to rupture under a (tensile) deformation test. It is the integral of the load-elongation curve and is dependent on the linear density and length of the specimen.

Workwear - Garments designed chiefly to provide a measure of general protection in use. Normally understood to exclude garments for protection against specific hazards where the term 'Protective Clothing' is more generally used.

Worming - The practice of binding spun yarn, or other small cord, into the grooves between the strands of a rope to produce a smooth surface (see Fig. 90).

Worsted - A wide range of fabrics made from worsted yarns. In general they are closely constructed of smooth, well-twisted yarns. Only a minimum of finishing is required and the fabrics are left with a clear surface. For this reason fancy weaves and yarn-dyed materials are commonly used. Worsteds include suiting fabrics, gaberdine, serge, tropical worsted, dress fabrics, crepes, etc.

Worsted Carding - Carding with rollers and strippers but with no condenser delivery or intermediate cross-feeds to obtain sliver.

Worsted Cloth - Wool fabric woven from worsted-spun yarns.

Worsted Count - The linear density of worsted yarn expressed as number of 560 yd hanks per lb. (See also 'Count of Yarn')

Worsted Gaberdine, Khaki, Drab - Khaki drab mixture of dyed merino wool slivers worsted-spun, woven in 2/1 twill weave and given a clear finish.

Worsted Lasting - See 'Lasting'

Worsted Yarn - Yarn made from long parallelised wool sliver from which the short fibres have been removed by combing.

Worsted, Blended - Descriptive of yarn in which the fibres are reasonably parallel and which contains not less than 50 percent of combed wool, or of fabric manufactured from such yarn.

Worsted-Spinning - A system of spinning long staple fibre, e.g., Bradford system and Continental system.

Worsted-Spun - A term applied to yarn spun from staple fibre processed on worsted-spinning machinery by carding or preparing, combing and drafting; or by converting a continuous-filament tow and drafting; or from a combination of slivers or rovings from both systems.

Worsted-Spun Yarn - Yarn spun from long fibre (natural, man-made or blends) slivers after removal of short fibres on the rectilinear or noble comb and drawing through gill boxes.

Woven Backing - Carpet backing formed by weaving, either before manufacture of the carpet, or in the course of its production.

Woven Textile Floor Covering With Pile, Woven Pile Carpet - Pile carpet produced on a loom in one or more operations.

Woven Textile Floor Covering Without Pile - Textile floor covering without pile, made on a loom.

Wrecking - Rope made out of manila or man-made fibre usually 80 mm diameter used for marine salvage operation.

Wristlet - A tubular band knitted on round machines with elastic threads laid-in, used by sportsmen for support and protection to the wrist.



FIG. 126 WRISTLET

Wrong Denting - Wrong order of drawing the ends through the reed.

Wrong Draw - Wrong order of drawing the ends through the harness or healds.

Wrong End (Mixed End, Thick End) - A thread which differs in material, count, filaments, twist, lustre, colour or shade from the adjacent normal thread (see also 'Broken Pattern').

Note - In woven or warp-knitted fabrics, the defect would appear as a vertical line running warpway whereas in weft knitted fabrics as a horizontal strip running across the fabric and repeated at regular intervals.

Wrong Weft - See (5) under 'Bar'.

Y-Neck - A term applied to neck-opening designed, cut or finished in the shape of letter 'Y'.

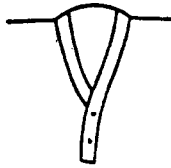


FIG. 127 Y-NECK

Yarn - A continuous strand of textile fibres of filaments with or without twist, suitable for plying, knitting, braiding, weaving or otherwise inter twining to form a textile end product. Yarn occurs in the following forms:

- (a) Spun Yarn - A yarn composed of fibres (short length or staple) twisted together.
- (b) Filament Yarn - A yarn composed of continuous filaments assembled with or without twist.
- (c) Monofilament - A single filament with or without twist.
- (d) Narrow Strip of Material - Such as, paper, cellophane or metal foil, with or without twist.

Note - Varieties include single yarn, plied yarn, cabled yarn, cord, thread, fancy yarn etc.

Yarn Construction - Construction which indicates the material, count of single yarn, number of turns per unit length, number of plies and the direction of twist in the plies.

Yarn Count - See 'Count of Yarn'.

Yarn Dyed Cloth - Fabric made from warp and weft which have been previously dyed in the yarn form.

Yarn Package - A length or lengths of yarn in a form suitable for handling, storing or shipping. Packages may be unsupported as skeins or cakes, or prepared with various winding patterns on bobbins, cops, cones, pirns, spools, tubes or beams.

Yarn Regularity - Pertaining to evenness of yarn.

Yarn Strength Index (YSI) (Cotton) - The breaking load, in grams, of a 100 m skein divided by the linear density of yarn expressed in tex units (see also 'Count Strength Product').

Yarn, Backing - The base yarn that holds the pile in place formed by the stuffer yarn and the warp and the weft.

Yarn, Blended - A single yarn spun from a blend or mixture of

different fibres.

Yarn, Cabled (or Cord) - See 'Cord'.

Yarn, Carded - Yarns made from fibres that have been carded but not combed in the manufacturing process. Most spun yarns are of this type.

Yarn, Combination - A ply yarn twisted from single yarns of different types of fibres, e.g., silk and rayon or viscose and acetate rayon.

Yarn, Cross-Blended - A single yarn spun from a blend or mixture of different type of fibres, e.g., yarn spun from cotton fibre and rayon staple.

Yarn, Fancy - A yarn that differs significantly from the normal appearance of a single or plied yarn due to the presence of irregularities, deliberately produced during its formation.

Yarn, Filament - See (b) under 'Yarn'

Yarn, Flake - Spun yarn containing intentional flakes or unevenness in fibre arrangement.

Yarn, Intermediates - A generic term for products obtained during the conversion of fibres to yarns, including card webs, laps, slivers rovings, tops, etc.

Yarn, Kraft - A yarn made by twisting a strip of paper manufactured from wood pulp by the sulphate process.

Yarn, Self-Blended - A single yarn spun from a blend or mixture of the same types of fibre, e.g., spun rayon yarn produced from staple of different lengths and different counts.

Yarn, Thick and Thin - A continuous filament, novelty yarn of viscose or acetate rayon made purposely uneven in the spinning operation.

Yarn, Union - Yarn made by mixing and spinning two or more different kinds of fibres or yarns.

Yarns, Worsted, Colour Terms - In all the definitions given below, the expression 'colour' includes black and white.

(a) Double Marl - A yarn consisting of one end of two colours that have been roved together (as in marl) twisted with one end of another two colours that have been roved together.

(b) Half-Marl - A yarn consisting of one end of mixture shade or solid colour, twisted with one end of two colours that have been roved together (as in 'Marl').

(c) Marl - A yarn consisting of two identical single ends

twisted together, the single ends being composed of two colours that have been roved together.

- (d) Melange - A yarn spun from tops that have been melange printed (see 'Melange Printing').
- (e) Mixture - A yarn made from fibres of two or more colours blended together.
- (f) Single Marl - A single yarn composed of two colours that have been roved together.
- (g) Single Mottle - A single yarn made as single marl in respect of combination of colours but the marl effect is obtained by spinning from two half-weight rovings of different colours into the single end. (The effect is a sharper contrast of colour than in a single marl.)
- (h) Solid Colours - A yarn made from fibres of a single colour.
- (j) Twist - A yarn consisting of two single ends of different colours twisted together, the single ends being either of solid colours or mixture shades.

Yellowing - The yellow discolouration that may develop on textile materials during processing, use or storage over a long period.

Yield - A general term expressing the proportion of clean wool in a greasy sample. Various specific definitions of yield exist (e.g., Schlumberger dry, Noble oil).

Yoke - The upper section of a garment covering the front and/or back from the shoulder seams, usually to chest level. This section is separately sewn to the main body of the garment.

Yolk - Extraneous matter of animal origin in greasy wool.

Z-Lay - See 'Direction of Lay'.

Z-Twist - See 'Twist'.

Zibeline - A heavy wool costume fabric, heavily milled and raised, and finished with a long pile of fibres on the surface laid in one direction.

TABLE 1 INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

QUANTITY	UNIT	SYMBOL	DEFINITION
Force	newton	N	1 N = 1 kg.m/s ²
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m ²
Frequency	hertz	Hz	1 Hz = 1 c/s (s ⁻¹)
Electric conductance	siemens	S	1 S = 1 A/V
Electromotive force	volt	V	1 V = 1 w/A
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ²

TABLE 2 RECOMMENDED SI UNITS FOR TEXTILES

Sl No. (1)	Characteristic (2)	SI Unit		Application (5)	
		Unit (3)	Abbreviation (4)		
1.	Length	Millimetre	mm	Fibres Samples, test specimens (as appropriate) Yarns, ropes, cordage, fabrics	
		Millimetre, centimetre	mm, cm		
		Metre	m		
2.	Width	Millimetre	mm	Narrow fabrics Other fabrics Samples, test specimens (as appropriate) Carpets, druggets, <u>DURRIES</u> (as appropriate)	
		Centimetre	cm		
		Millimetre, centimetre	mm, cm		
3.	Thickness	Micrometre (micron)	um	Delicate fabrics Other fabrics, carpets, felts	
		Millimetre	mm		
4.	Linear density	Tex	tex	Yarns Fibres Filaments, filament yarns Slivers, ropes, cordage	
		Militex	mtex		
		Decitex	dtex		
		Kilotex	ktex		
5.	Diameter	Micrometre (micron)	um	Fibres Yarns, ropes, cordages	
		Millimetre	mm		
6.	Circumference	Millimetre	mm	Ropes, cordage	
7.	Threads in fabric:			Woven fabrics (as appropriate)	
		a) Lengthwise	Number per centimetre Number per decimetre		ends/cm ends/dm
		b) Widthwise	Number per centimetre		picks/cm
			Number per decimetre		picks/dm
8.	Warp threads in loom	Number per centimetre	ends/cm	Reeds	
9.	Stitches in knitted fabric:			Knitted fabrics (as appropriate)	
		a) Lengthwise	Courses per centimetre Courses per decimetre		course/cm course/dm
		b) Widthwise	Wales per centimetre		wales/dm
			Wales per decimetre		wales/dm

<u>Sl No.</u> (1)	<u>Characteristic</u> (2)	<u>SI Unit</u>		<u>Application</u> (5)
		<u>Unit</u> (3)	<u>Abbreviation</u> (4)	
10.	Stitch length	Millimetre	mm	Knitted fabrics, made-up fabrics
11.	Mass per unit area	Grams per square metre	g/m ²	Fabrics
12.	Mass per unit length	Grams per metre	g/m	Fabrics
13.	Twist	Turns per centimetre Turns per metre	turns/cm turns/m	Yarns, ropes, cordage (as appropriate)
14.	Test or gauge length	Millimetre, centimetre	mm, cm	Fibre, yarn and fabric specimens (as appropriate)
15.	Breaking load	Millinewton Newton	mN N	Fibres, delicate yarns (individual or skeins) Strong yarns (individual or skeins), ropes, cordage, fabrics
16.	Breaking length	Kilometre	km	Yarns
17.	Tenacity	Millinewton per tex	mN/tex	Fibres, yarns (individual or skeins)
18.	Twist factor or twist multiplier	Turns per centimetre x square root of tex Turns per metre x square root of tex	turns/cm x tex turns/m x tex	Yarns (as appro- priate)
19.	Bursting strength	Newton per square metre	N/cm ²	Fabrics
20.	Tear strength	Millinewton, Newton	mN, N	Fabrics (as appro- priate)
21.	Pile height	Millimetre	mm	Carpets
22.	Pile density	Mass of pile yarn in grams per square metre per millimetre pile height	g/m ² /mm pile height	Pile carpets
23.	Elastic modulus	Millinewton per tex per unit deformation	mN/tex/unit deformation	Fibres, yarns, strands

TABLE 3 CONVERSION FACTORS FOR YARN COUNTS - DIRECT SYSTEMS AND TEX

SL NO.	YARN COUNT SYSTEM	SYMBOLIC ABBREVIATION	UNIT OF MASS USED	UNIT OF LENGHT USED	UNIT OF YARN COUNT	CONVERSION FACTORS	
						TO OTHER YARN COUNTS FROM TEX	TO TEX FROM OTHER YARN COUNTS
1.	Tex	Tt	1 g	1000 m	g/1000 m	-	-
2.	Denier	Td	1 g	9000 m	g/9000 m	Td = 9 Tt	Tt = 0.1111 Td
3.	Grist [Jute, Hemp, Linen (dry spun)]	Tj	1 lb	14400 yd (spyndle unit)	lb/14400 yd	Tj = 0.02903 Tt	Tt = 34.45 Tj

TABLE 4 CONVERSION FACTORS FOR YARN COUNTS .- INDIRECT SYSTEMS AND TEX

SL NO.	YARN COUNT SYSTEM	SYMBOLIC ABBREVIATION	UNIT OF LENGTH USED	UNIT OF MASS USED	UNIT OF YARN COUNT	CONVERSION FACTORS	
						TO OTHER YARN COUNTS FROM TEX	TO TEX FROM OTHER YARN COUNTS
1.	Cotton count (spun-rayon staple, spun-silk)	Nec	840 yd (hank)	1 lb	840 yd/lb	Nec = $\frac{590.5}{Tt}$	Tt = $\frac{590.5}{Nec}$
2.	Linen (wet spun)	NeL	300 yd (lea)	1 lb	300 yd/lb	NeL = $\frac{1654}{Tt}$	Tt = $\frac{1654}{NeL}$
3.	Metric (cotton and wool)	Nm	1000 m (hank)	1 kg	1000 m/kg	Nm = $\frac{1000}{Tt}$	Tt = $\frac{1000}{Nm}$
4.	Woollen (Dewsbury)	Nd	1 yd	1 oz	8 yd/oz	Nd = $\frac{31000}{Tt}$	Tt = $\frac{31000}{Nd}$
5.	Woollen (Yorkshire)	Nv	256 yd (skein)	1 lb	256 yd/lb	Nv = $\frac{1938}{Tt}$	Tt = $\frac{1938}{Nv}$
6.	Worsted	New	560 yd (hank)	1 lb	560 yd/lb	New = $\frac{885.8}{Tt}$	Tt = $\frac{885.8}{New}$

APPENDIX

LIST OF INDIAN STANDARDS REFERRED IN THE HANDBOOK

1. IS:177-1977 Cotton drills (third revision)
2. IS:196-1966 Atmospheric conditions for testing (revised)
(Reaffirmed 1984)
3. IS:271-1975 Grading of white, TOSSA and DAISEE uncut
Indian jute (second revision)
4. IS:1349-1964 Methods for determination of wool fibre
content of raw wool (revised)
5. IS:1943-1964 A-twill jute bags (revised)
6. IS:2566-1984 B-twill jute bags for packing food grains
(second revision)
7. IS:2580-1982 Jute sacking bags for packing cement
(second revision)
8. IS:2818 Indian hessian
IS:2818 (Part 1)-1971 General (first revision)
IS:2818 (Part 6)-1977 245 g/m² at 16 percent contract regain
9. IS:2873-1969 Packaging of jute products in bales
(first revision)
10. IS:2874-1964 Heavy cee jute bags
11. IS:2875-1964 Jute corn sacks
12. IS:2938-1964 Method of grading raw silk
13. IS:3667-1984 B-twill jute cloth (first revision)
14. IS:3668-1966 Liverpool twill (L-twill) cloth
15. IS:3750-1966 Jute corn sack cloth
16. IS:3751-1966 Heavy cee cloth
17. IS:3794-1966 Liverpool twill (L-twill) bags
18. IS:3966-1967 DW flour jute cloth
19. IS:3984-1967 DW flour bags
20. IS:4436-1967 Jute bagging for wrapping cotton bales

21. IS:6359-1971 Method for conditioning of textiles
22. IS:9685-1981 Sand bags, unproofed and cuprammonium proofed
23. IS:11205-1984 Classification and terminology of textile floor coverings.
24. IS:11206-1984 Glossary of textile terms - Wool and other animal fibres, their processing and products.