dagger. The cam *H* is supposed to be set where the lifting point of the dagger will have reached the highest desired point on the lifting curve when the lay is about ¼ of an inch from the back centre.

Sometimes it will be found impossible to set the lifting cam *H* high enough without its striking the lay, to get the required elevation of the feeler wires and at the same time have them bed properly, *i. e.,* when the feeler wires are resting in the slot, the dagger *G* should barely touch the curved part of the arm on which the lifting cam is bolted. Care must be taken when setting the lifting cam to have sufficient space between the point of the knock-off lever and the lifting cam, to allow the stop motion dagger *G* to drop between them, failing to do this it will not stop the loom.

To get these desired positions, it is only necessary to lengthen the connector, (which connects the feeler wire crank and the stop motion dagger socket *I*) by a few strokes of a hammer—less than $\frac{1}{16}$ of an inch added will make a great change in the appearance of things and will give ample working room, both for the cam and for the shuttle.

The knock-off lever can now be set, and this when the shipper is locked should be about ¼ inch from the block which prevents its throwing over too far. It should be remembered that this block is only for the purpose of preventing the knock-off lever from going too far, and the casting should never be drawn up closer than ¼ of an inch to this check block by the shipper handle. If it is, the continuous pounding given it every time the loom is started, will break the castings.

When setting the lever on the shipper handle rod to adjust the knock-off lever, be sure to have a little space between it and the side of the curved knock-off lever with which it is engaged, as otherwise it will be apt to interfere with the free working of the shipping device and also the stop motion. With the shipper handle thrown off, the safety shield *J* can now be adjusted, care being taken to set the spring *M* which raises it, far enough away from the end of the stop motion dagger *G* to avoid touching it. This spring *M* should only touch the angle lever which raises the safety shield, when the shield is fully raised. This setting will do the work perfectly and preserve the spring.

These directions, while giving the principles involved, do not imply that positions of the different parts cannot be adjusted to meet the ideas of the fixer. Variations in work may call for slight changes in the setting of some parts.

To sum up, the stop motion if properly set should have:

(1) The proper setting of the cam stand as to height and its relation to the rocker pin.

(2) Room for free adjusting of the cam without striking the lay.

(3) Stop motion dagger, in conjunction with the feeler wires, long enough to clear knock-off point before feeler wires leave filling.

(4) Feeler wires resting in bottom of lay slot, at same time as stop motion dagger rests on curved arm which supports cam.

(5) Knock-off lever set with at least ¼ inch clearance from check on arm.

(6) Spring which raises safety shield set out of the way of stop motion dagger and lightly resting on crank which raises shield when the shield is at its highest position.

(7) Clearance between stop motion dagger and knock-off lever when feeler wires are leaving filling.

(8) On rear end of dagger socket means of balancing, in order to get a light dropping of feeler wires when needed. This extra weight should be screwed firmly to position and never allowed to swing loosely on dagger casting, as this would cause an uneven dropping of the feeler wires.

The small flat spring (which pushes down the stop motion dagger and the feeler wires) is there for the purpose of giving a steady and quick return motion to the feeler wires and all spring should be off by the time the wires are resting on the filling, as otherwise the feeler wires may be the means of looping or kinking the filling. This is done by means of the adjusting screw which stands close beside the spring.

(*To be continued.*)

DICTIONARY OF TEXTILE TERMS.

Logwood: The wood of a large tree Hæmatoxylum campechianum, which grows abundantly in the West Indies, Mexico and parts of Central America. Logwood was introduced as a dye soon after the discovery of America. Logwood extracts are prepared by extracting the wood with hot water and evaporating the solution under reduced pressure at a temperature not too high. The wood is extracted a second and a third time, yielding inferior grades of extract. The wood contains woody fibre, water, mineral matter, hæmatin, hæmatoxylin, and other substances. It varies in composition. Logwood as a direct dye produces a reddish brown color of no practical value. Combined with iron, aluminium, chromium, or copper, logwood produces valuable dyes of different colors. That is to say, it requires metallic mordants. Wool has enough affinity for the coloring principle of logwood to absorb sufficient of it to produce a good color when afterwards mordanted. Cotton, even when strong solution is used, absorbs only enough logwood to fix the mordant, for a good color, a second dyeing is necessary. Cotton or wool mordanted and then dyed with logwood retains an excess of the coloring matter held somewhat loosely. Where a high degree of fastness is required, the excess is fixed, or made insoluble, by a second mordant bath. The operation is called *saddening.* The appearance of cotton dyed with logwood is improved by soaping. Soaping often follows dyeing, to remove coloring matter held only loosely by the fibre and to soften the material. Chip-logwood sells for less than the logs themselves, because, after cutting up into chips, they increase in weight. Also, called *Campeachy Wood.*

Lomond Tartan: A Scotch tartan having broad, white bars to relieve the green, blue and black plaids.

Lona: A loose cheap cotton material, similar to common cotton duck, made and used in Mexico.

London Shrunk: A special finish for woolens, although in reality not a finish, but simply a very thorough sponging. It was originated by a Mr. Farr, the proprietor of a prominent finishing establishment in London. The goods are finished in the usual manner in all respects until they reach the pressing process, then they are immersed in hot water, immediately taken from this bath and immersed in cold water. The surplus water is then squeezed out and the fabric taken to the steam drying cans, and here the actual shrinking takes place. The hydraulic press in turn is used for pressing and has much to do with the splendid results obtained by the London shrunk finish.

London-tye: A Jacquard harness tied up in such a way that the cards pass from the cylinder over the side of the loom and not to the back as would otherwise be the case.

Londres: Very wide, fulled woolen dress goods of English origin.

Londrin: Light, fulled French and English woolens exported to South America and the Levant.

Loneta: A cotton canvas in Paraguay and other South American countries and a 28-inch wide cotton duck for sails in Chile.

Long Cloth: Is a fine cotton fabric of superior quality, made with a fine grade of cotton yarn of medium twist, usually made 36 inches wide. Originally the fabric was manufactured in England, and subsequently imitated in the United States. The fabric is used for infants' long dresses, from which it derives its name, and for lingerie. Long cloth to some extent resembles batiste, fine muslins, India linen and cambric. It is distinguished from these fabrics by the closeness of its weave, and when finished the fabric possesses a whiter appearance, due to the closeness of the weave and the soft twist of the yarn. It is not used as a dress fabric, chiefly because of its finished appearance which is similar in all respects to fabrics which we have been accustomed to see that are used solely for lingerie, nightgowns, etc.

Long Line Yarn: In flax spinning yarn prepared by hackling, gill preparing, drawing, roving and spinning distinguished from tow yarn as prepared from the short fibres combed from the material during the preparatory processes of roughing and hackling, also the ends from cut line.

Long Staple: Dealing with a long fibre; as applied to cotton it denotes its varieties above 1⅛-inch staple; as applied to wool it indicates such as most suitable for combing purposes (combing wools), vice versa such as most suitable for carding purposes *i. e.,* short staple or clothing wools.

Long Wools: These are very lustrous on account of containing few surface markings, and consequently lack felting property (Mohair, Alpaca, Lincoln, etc.).

Lonk Wool: Of the Black-faced type, but finer and more uniform in fibre. Weight, 4½ to 5 lb. average.

Looker-over: A person who looks over or passes pieces after they leave the loom and after the dyeing or finishing off operations. It is the duty of the looker-over to report damages, etc. Also called *Percher.*

Loom: Literally, a *utensil;* from the Anglo-Saxon *loma,* furniture utensils. The ancient and well known machine for weaving fabrics by interlacing a

series of parallel threads which run lengthwise, and are called the warp or the chain, with another series of parallel threads thrown transversely with the shuttle and which are called the filling, weft, or picks. The essential parts of a loom are: the frame, which supports its working parts; the warp beam, which holds the warp yarn; the cloth roller, upon which the woven fabric winds itself; the harness, its mounting and operating the warp-threads; the reed and batten, the first for beating up the filling, the other for forming the raceway for the shuttle; the shuttle, with its box and picking motion; the whip roller and the breast beam, the first guiding the warp to the heddles, the latter for guiding the woven cloth, from its fell to the cloth roller.

Loom Fixer: The mechanic who attends to the proper running of a loom. Also called *Loom Tackler.*

Looming: Mounting a loom, the English term for our loom-fixing.

Loom Pickers: An attachment to the picker stick of looms, which is brought by the latter into contact with the point, *i. e.,* nose of the shuttle, throwing the latter through the shed.

Loom Race: The raceway in a loom, on which the shuttle travels through the shed.

Loonghees: Rich, narrow cloths, of silk and cotton, sometimes intermixed with golden thread and embroidered, made chiefly in Tatta, in Sindh or Seinde, India.

Loongyees: Colored check cloths, with self-colored crammed edges of mercerized yarns. Used in the East for scarfs.

Looper: A machine used in connection with the manufacture of hosiery. It is operated on the fundamental principle of the sewing machine, but devoid of the modern improvements on the latter. It consists of a large circular dial, having steel points around its outer edge, upon which the loops of the two fabrics to be united are placed, and an oscillating needle carrying the sewing thread, by which they are joined, in the centre of the dial. Also called *Hosiery Seaming Machine.*

Loopha: The article of commerce known as Loopha is a fruit obtained from a species of wild cucumber. The plant has cordate leaves, and the gourd or fruit is about a foot long. In India the plant grows profusely and climbs up the palm trees. The fine meshes of tissue of Loopha are repeatedly branched laterally and intercrossed into a fine network, which resembles a fine sieve. This structure has been hit upon as a suitable medium for filtering and humidifying purposes. In textile factories, where the rooms are heated to 80 or 100 deg. *F.,* it is imperative that the air should be changed often; but when cold air is admitted, or air that has been rarified, it carries with it particles of dust. The latter settles upon the fibrous material that is being worked, and so disfigures the cops, yarn or cloth. To obviate this drawback, Loopha has been used, and the cold fresh air is passed through the fine meshes of its tissue, which clears the air of dust, germs and sooty particles of which the outside air is the vehicle.

Loop Pile: In pile weaving, uncut pile, also known as *terry pile,* distinguished from *cut* pile, *i. e., velvet* pile which has its loops cut.

Loop Stitch: A stitch composed of a series of loops, the last one of a series being knotted.

Loop Wheel: The wheel on the circular knitting frame which forms the loops and pushes them under the needle beards.

Loop Yarn: A yarn which is made with loops at various distances apart as desired, usually made at two operations. It is largely employed in the production of astrakhan and other fancy fabrics.

Lorrain: A Bradford term for alpaca dress goods made with 2/80's black cotton warp, 80 threads per inch, using 58 picks per inch of 12's alpaca in the grey cloth; interlaced with the 3 up 2 down, 5-harness skip twill, take 2 and skip, this weave being turned 45 deg. for use in the loom.

Louis XIV, Louis XV: Terms employed to designate the styles that prevailed in certain periods of the political history of France, by attaching the name of the ruler or form of government then existing. Similar terms are Régence, Directoire, Empire, etc.

Louisiana: A name sometimes applied to a large number of upland short stapled varieties of cotton.

Louisine: A fine grained, light weight, soft finished silk in basket weave (invisible to the eye); adapted especially for travelling gowns.

Louisine and bayaderé stripes are practically the same, the only difference between the two being that while in the Bayaderé the stripe runs in the direction of the filling, in Louisine the stripe runs with the warp.

Lousiness: A silk term, meaning minute excrescences, balls, slubs or specks, consisting of fibrillæ or sfaldature, on the silk fibre or fabric. A defect that is never seen in the raw or thrown state of silk. It is never seen before the degumming or boiling-off process, although the defect may have been commenced in cocoon-reeling, provided too hot or too prolonged baths have been used in which to soak and reel the cocoons. The specks seem to be simply a tangled rabble of filaments, split off or exfoliated from the original fibre or brin. As far as examination goes the defect has never been confined to any race or quality of silk of the Bombyx Mori. It occurs equally in the various races or breeds of Italian, French, China, Japan, Kashmir, Bengal, or any other kind of Asiatic silk, and it occasionally occurs in silks dyed, whatever may be the color or shade; it is to be noticed sometimes in silks dyed black when unweighted. Also called *Fiocchetti* or *Speckiness.*

Low Middling: Full cotton grade. See Cotton.

Lowry: Name of a cylindrical cotton bale formed from a continuous flat coil, fastened with wire ties and enclosed in bagging. Average weight 250 pounds.

Lump: A length of cloth which is woven double the ordinary piece length, this particular length varying from 100 to 140 yards of warp.

Luminosity: The strength of the light sent to the eye by any color; a luminous color sends more than a non-luminous one.

Luminous Colors: Those, which reflect light in large quantities; the colors of the long wave lengths are more luminous than those of the short ones.

Lunar Caustic: Nitrate of Silver.

Lusettes: A name applied to the silk-worms which die from being unable to molt.

Lustering: A process for giving to woolen cloth a permanent gloss and smooth surface, which will not roughen with wear. The gist of the process consists in winding the cloth to be treated, under proper tension, tightly on a perforated copper cylinder, covered previously with several layers of canvas, cotton duck or burlap, a similar apron being wound around the roll of cloth and securely fastened to it. Several of these rolls of cloth are then placed in a cistern and the cloth boiled for several hours; or in connection with the steam lustering machine steam is passed through the centre of the roller and which has to find its way through the roll of cloth; again, in connection with the decatizing machine, the roll of cloth is placed in a steam chest and steam passed through the roll of cloth either way. Running the finished cloth over highly polished and heated rollers on what is known as a lustering machine, will heighten the lustre of a fabric.

The process which imparts to silk yarn a high degre of lustre by exposing the yarn to the action of steam in an oven at the same time that they are stretched between two highly polished revolving steel rollers. Sometimes written *Lustring;* also called *Glossing.*

Lustre: This term denotes a surface quality with respect to reflection of light, which yields a characteristic sheen, or an effect simliar to that due to a lustrous fabric, such as satin.

Lustre Lining: A lining fabric, made with a cotton warp and a mohair or lustrous worsted filling; woven with the 4-harness filling-effect twill.

Lustre Wools: Characteristic features of the Lincoln and Leicester types of wool. Lustre wools are more or less straight, smooth and stiff. Some wools possess so smooth a surface (lustrous) that they are rather difficult to dye.

Lustro-cellulose: See Artificial Silk.

Luteolin: A yellow crystalline compound ($C_{20}H_{14}O_8$) obtained from weld, producing brilliant yellow shades on cotton when mordanted with alumina.

Luxeuil Lace: General term for hand-made lace of Luxeuil, France. More especially those of a stout, heavy nature; used for tidies, curtains, draperies, etc.

Luxor: A weave of the satin family, with a high finish, but less lustrous than a satin duchesse. A sumptuous fabric, *de luxe,* of a reversible order — both sides alike.

Lye: An alkaline liquid; scouring mixture for wool.

Big Order for Medical Cotton.

The Frank B. Graves Co. of Albany, N. Y., has just received an order from the Federal government for 1,000,000 pounds of army medical cotton and 200,000 pounds of absorbent cotton.