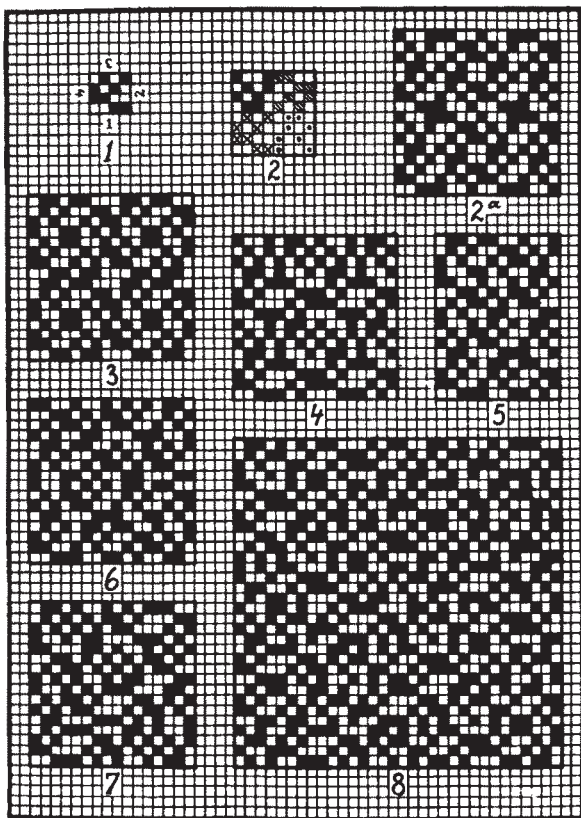


merals where such a change in the starting of the motive has been made.

Crepé weaves thus constructed impart a uniform,



balanced effect to the face of the fabric in which they are used, omitting any possible line effects.

(To be continued.)

PILE FABRICS.

(Continued from page 33.)

Astrakhans.

These fabrics are also formed by adding an extra pile-warp to a single cloth, otherwise interlaced with

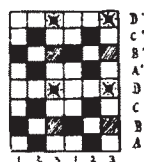


Fig. 21

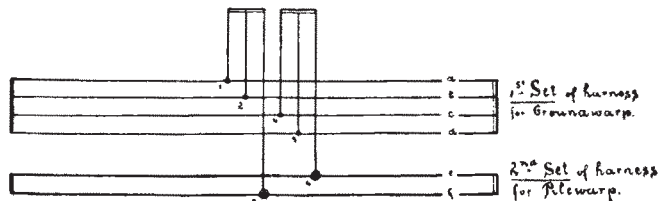


Fig. 22

plain, basket, rib, or common twill weaves, and are the nearest related (some weaves being exactly the same) to the velvet weaves previously given. We may either cut this pile (plush) or leave the pile uncut (terry), or we may use both in the same fabric, producing in

this way some of the most beautiful novelties for ladies' cloaking-trimmings, and similar fashionable articles.

Two systems of warp (ground and pile) and one system of filling are called for. Of these, the ground-warp, by interlacing with the filling, forms the body of the fabric structure, while the pile-warp through being interlaced to this ground structure and raised at certain intervals over wires (as required by the design), forms the face of the fabric.

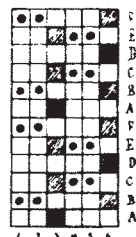


Fig. 23

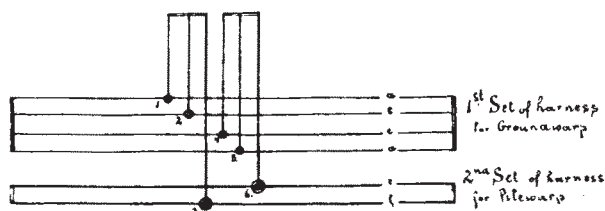


Fig. 24

ORNAMENTATION OF ASTRAKHAN FABRICS.

Fancy effects upon otherwise plain interlaced Astrakhan fabrics can be produced by various combinations. Among these are found: The use of different colors in the pile-warp; varying the length of the pile; combining terry and velvet effects, forming either terry figures upon velvet ground, or velvet figures upon terry ground.

Fig. 21 represents the weave for a plain Astrakhan fabric.

Repeat: 3 warp-threads and 4 picks; the entire pile warp (see numerals of reference 3 and 6) is raised at once over the wire as shown in picks D and D'.

Warp: 2 ends ground 1 end pile.

Fig. 22 represents the drawing-in of the warp on its corresponding two sets of harnesses.

Fig. 23 illustrates another weave for Astrakhans.

Warp: 2 ends ground 1 end pile.

Each pile warp thread is drawn on a separate harness, as shown in Fig. 24.

Fig. 25 illustrates weaving of a fabric interlaced with weave Fig. 23, showing 2 picks ground B, C and E, F, to alternate with one wire, A and D respectively. For inserting wire A harness f raises warp-thread 3, whereas for wire D, harness e raises warp-thread 6. The interlacing of the body structure is done with the 4-harness basket-weave having the two warp-threads between the pile threads working the same; also the pick before and after inserting the wire.

Fig. 26 is another weave for this class of fabrics.

Warp: 2 ends ground to alternate with 1 pile.

Filling: 2 picks ground to alternate with one wire.

The body structure is interlaced with the 2 by 4 (filling effect) rib weave, being placed so as to have the two ground threads, situated in the fabric near each

other, work opposite; *i. e.*, the ground-threads working on each side of a pile-thread raise and lower at the same picks.

Fig. 27 shows a fabric section being more partic-

ularly given to show the interlacing of the two systems of pile-threads. Pile-thread *A*, shown in outlines, forms loops *S* and *F*, while the other pile-thread, shown in black, forms loops *S'* and *F'*. Letters and numerals of reference in Figs. 26 and 27 correspond.

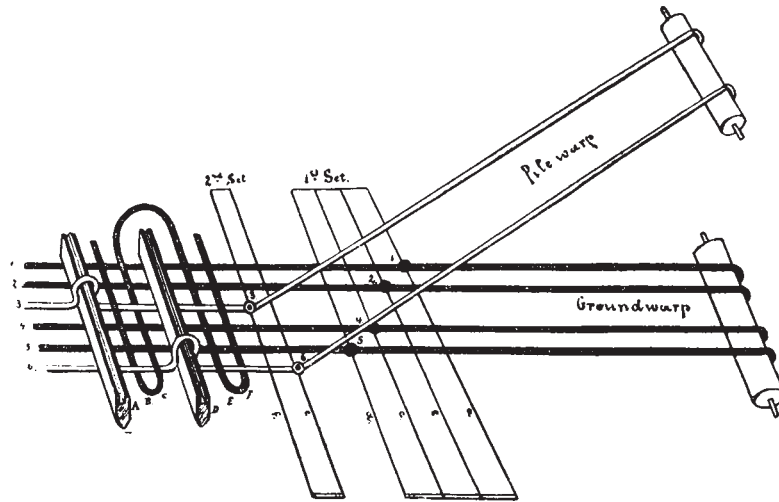


Fig. 25

ularly given to show the interlacing of the two systems of pile-threads. Pile-thread *A*, shown in outlines, forms loops *S* and *F*, while the other pile-thread, shown in black, forms loops *S'* and *F'*. Letters and numerals of reference in Figs. 26 and 27 correspond.

Double Plush

The end gained at in the manufacture of double plush as compared to the single plush previously explained consists chiefly in production, producing in this instance two single plush fabrics with one operation of the loom. In the manufacture of double plush the wires so conspicuously referred to in speaking of warp

previously explained, its pile-warp-threads, running across the centre or interior of the fabric, are cut automatically by means of an attachment on the loom, known as the cutting knife.



Fig. 27

Various methods for exchanging the pile-warp in weaving double plush, as also the different ways of interlacing (or fastening) these pile warp-threads to the ground-cloth of each fabric, are in practical use.

Fig. 28 illustrates the section of such a double-plush fabric. In this, four distinct sets of warp-threads are

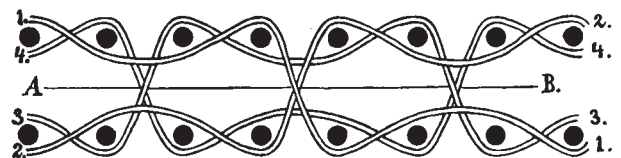
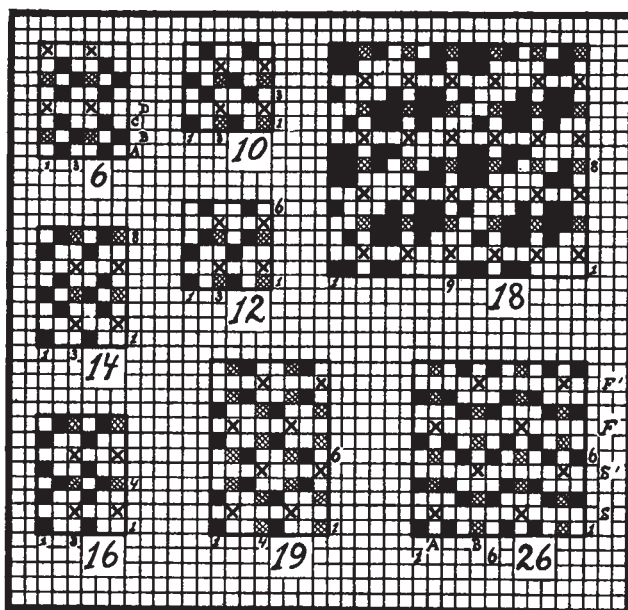


Fig. 28

shown, indicated respectively by numerals of reference 1, 2, 3 and 4. These four warp-threads and the sixteen sections of picks shown illustrate one repeat of the arrangement of the warp and filling, as well as the method of intersecting both systems, technically known as their weave. Line *A-B* in the diagram, indicates the direction for cutting the pile-warp.



pile fabrics, are omitted. The pile warp-threads, after interlacing into the body structure of one of the single fabrics, pass across to the body structure of the other fabric, where in turn they interlace before returning

PREPARING FABRICS FOR DYEING.

This refers to a late English patent in which textile fabrics are prepared for dyeing by subjecting them to a direct rubbing face-contact with one or more fixed bars, the edges of which impart a frictional bending action to the passing cloth which loosens or frees the "make," shakes off impurities, and partly eliminates the cover-fibres. When the cloth is passed over several bars, intermediate tension rollers are to be used.