# Posselt's Textile Journal

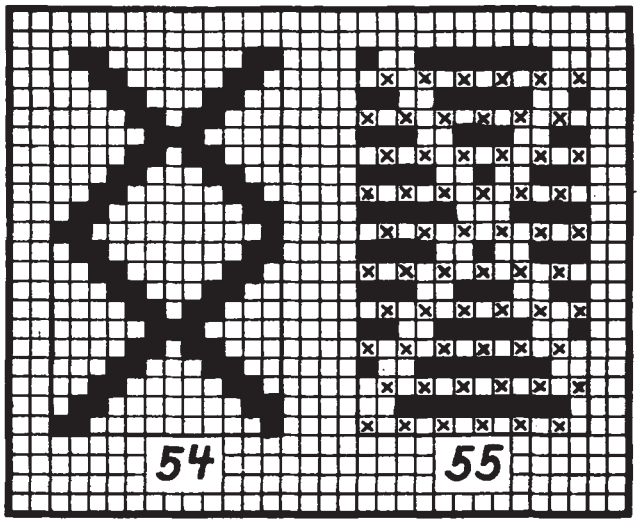
**Vol. XIV.** **June, 1914.** **No. 6**

## WELTS, PIQUÉS, WORSTED COATINGS, MATLASSES, QUILTINGS, BEDSPREADS

*(Continued from April issue.)*

### Cut Effects Produced by Means of an Extra Filling.

In some instances, the cut-effect, *i. e.*, the figure formed on the face of the fabric by means of suitably




arranged depressions is produced by means of an extra filling, the latter in this instance taking the place of the extra warp referred to when dealing with weaves Figs. 45, 46 and 47.

At the places where a depression in the face of the fabric is desired, in this instance the extra pick (which otherwise floats on the back of the fabric), is then made to come on the face of the fabric, pulling at this place the latter down, *i. e.*, producing the characteristic cut effect in the fabric structure. The most frequently used arrangement of face and figure (*i. e.*, face and back picks) is 1 : 1.

This class of fabric structure will be readily understood by reference to Figs. 54 and 55.

Fig. 54 is a motive of an effect desired to be produced in the fabric by means of stitches showing on the face of the fabric and pulling the latter down in these places. *Full* squares indicate the arrangement of the stitches, *i. e.*, depressions desired, and mean *down* in the fabric or as they are indicated in the actual working design Fig. 55, and where *down* or *sinkers* are used for it. Repeat of motive 12 by 10. Two repeats in its height are given.

This motive is shown applied to a weave in Fig. 55, using the arrangement of one pick face to alternate with one pick figure, *i. e.*, back. For face, the plain weave is used; for back, motive Fig. 54 is used, considering its *empty* type for risers.

### Using Two Systems of Warp and Filling to Produce Cut Effects.

Excellent cut-effect designs can be produced by using 2 systems of warp in connection with 2 or more systems of filling. The extra systems of threads are either only used for producing the design, *i. e.*, not to exchange position with their mate systems, or such exchange may be made use of. In the first instance, the figure picks might be considered as stuffer picks. Both systems of fabric structure will be dealt with separately.

#### (*a*) Producing Cut Effects with Two Systems of Warp and Filling without Exchanging Mate Systems of Threads.

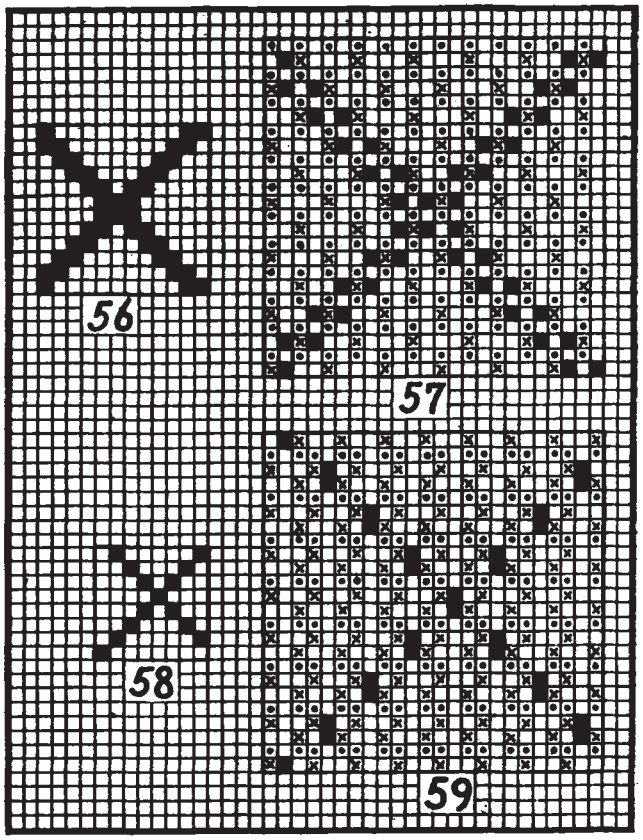
As a rule, this system of designing refers to the cotton industry. The plain weave, as a rule, is used for interlacing the ground structure, *i. e.*, face of the fabric. The arrangement, *i. e.*, combination of warp and filling of the ground structure to that of the figure threads varies to suit the character of the fabric desired to be made, the most often used arrangements being 1 : 1 and 2 : 1, the latter combination being the one most often met with.

ARRANGEMENT IN WARP AND FILLING 1 : 1.

Figs. 56 and 57 are given to explain this combination of the two systems of warp and two systems of filling.

Fig. 56 is the motive or design to be used for arranging the depressions in the fabric structure.

Fig. 57 is the complete weave necessary for producing this effect. All uneven number of warp-threads and picks are face structure, interlacing with



the plain weave as shown by *cross* type. At the stuffer picks, *i. e.*, every even number picks, all the face warp is raised, all figure or back warp being down, see *dot* type. Motive Fig. 56 is now transferred onto weave Fig. 57 (see *full* type) considering only face picks for that purpose in the latter. Repeat of weave, 24 warp-threads and 24 picks, calling for 8, 10 or better, 12 harness fancy draw for its execution on the loom.

ARRANGEMENT IN WARP AND FILLING 2 : 1.

Motive Fig. 58 and weave Fig. 59 are given to illustrate subject. For every effect spot in motive Fig. 58, two successively taken risers (see *full* type) are used in weave Fig. 59, which repeats on 24 warp-threads and 24 picks, and can be drawn on 7, 9, 11, 13, etc. harnesses. A great many designers permit the figure warp in addition to its float over the two face picks (previously referred to) to float over one or the other of the joining back picks, thus making a float over three picks.

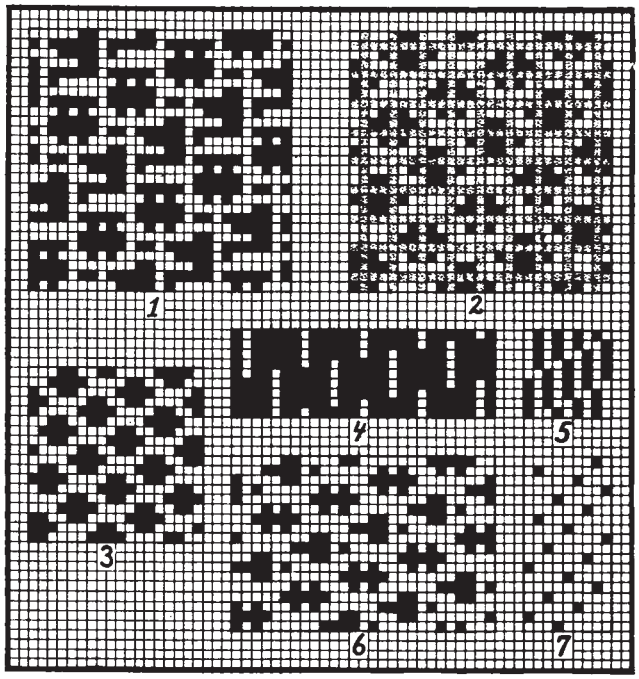
This procedure is not advisable and positively can not be used to advantage with fabrics where depressions in a straight line are called for in the design, since in such a case the binder warp would continually float above the stuffer, *i. e.*, back pick. At the same time we must remember that the cut-effect produced in the fabric will be more pronounced if the figure warp is held down by the two joining back picks.

(*To be continued.*)

## A STUDY IN TEXTILE DESIGN.

### How to Analyze a Double Cloth Weave.

Double cloth weaves, when printed are in most all cases given in one color, or by the designer in his work




are indicated in one kind of marks, for the use in the weave room as well as his own future reference.

Most double cloth weaves, for the moment, are bewildering to the eye, and it will be necessary to analyze them to clearly understand their construction and at the same time be sure that no mistake has crept in. The latter is always liable to occur in connection with any complicated double cloth weave; the compositor in the printing establishment in setting crochet type for weaves may make a mistake anytime and which mistake in many instances is never discovered since the parties connected with bringing the matter in print neither have the knowledge what it means or most likely do not care to know, and the author who furnished the original copy may never see proofs until matter is in print. Again, in copying a complicated double cloth weave, even the best designers are liable to take matters easy and as mentioned before "mistakes in complicated double cloth weaves are apt to be met with anytime," hence the advantage of its analysis, previously to using any complicated double cloth weave given.

We must have a clear understanding of the weaves used for face and back structure, their proportion used in the repeat of the weave, as well as the plan observed for their stitching, etc., in order to be able to calculate as to proper fabric structure. Again, a heavy-weight fabric may have to be reproduced in light-weight, hence the weave for the face structure only needed.

How to proceed is best explained by means of a practical example and for which reason the accompanying seven illustrations are given and of which,

Fig. 1 shows us a double cloth weave given for reproduction. We notice at once that it refers to a fabric to be constructed with two systems of warp and two systems of filling, both arranged 2 ends face : 1 end back; 27 warp-threads and 27 picks in repeat of complete weave.

To obtain the face weave cover every third end warp and filling ways, *i. e.*, every back warp-thread and back pick with a different color, as shown in Fig. 2, and where *stenciled* type shows this color as painted onto certain warp-threads and picks of weave Fig. 1. This then brings us the face weave prominently before us (see *full* type in diagram Fig. 2) and which we then copy, omitting every stenciled square, warp and filling ways. Weave Fig. 3 is the result, repeating on ($27 \div 3 = 9 \times 2 =$) 18 warp-threads and 18 picks; a granite weave obtained from the 18-leaf satin, filling effect, for its foundation, by adding seven additional spots to every foundation spot.

In order to obtain the weave for the back structure and the stitching of the two fabric structures into one, copy every third pick, *i. e.* every back pick of weave Fig. 1 for a new diagram, obtaining in turn Fig. 4. In the same every third thread (2, 5, 8, 11, 14, 17, 20, 23 and 26) refers to the interlacing of the back structure, *i. e.*, those places in which the back warp is raised and where all the face warp-threads have been raised at the same time so as not to interlace with the back picks.

Separating these nine threads quoted before, from diagram Fig. 4, gives us weave Fig. 5, the 9-harness corkscrew, for the weave of the back structure.

Subtracting diagram Fig. 4 from weave Fig. 1 gives us diagram Fig. 6, which shows us the face weave plus the places of stitching the back warp into the face filling, in order to unite the two structures into one fabric, technically known: the stitching used.

Separating in turn these back warp threads from diagram Fig. 6 and combining them by itself, results in weave Fig. 7, a displaced satin filling effect, repeating on 9 warp-threads and 18 picks and which is the stitching used in double cloth weave Fig. 1.