

JACQUARD MOUNTING

Figuring with One Doup And an Ordinary Jacquard Mounting.

By F. Bradbury.

Simple brocade and geometrical effects of pattern may be produced on a plain gauze or other limited gauze ground by employing only one doup in front of an ordinary full harness mounting.

If two, three or four doups are used along with the Jacquard mounting, the production of variety and elaboration of effect may be so extended as to suggest a full harness mounting with independent doups.

Fig. 1 shows the draft and order of douping with one doup in front of a single lift 400 Jacquard machine. The first 16 threads only are shown, since the remainder are all similarly treated. The longitudinal lines represent the warp-threads and the transverse lines (1 to 16) the harness mails; *S* indicates the doup standard and *D* the doup placed immediately in front of the former.

The warp-threads are first drawn through the harness in the usual and regular order, as indicated by the markings where the horizontal and vertical lines intersect. Afterwards each of the uneven threads counting from the left (1, 3, 5, etc.) is then crossed under the opposite side of the adjacent even threads (2, 4, 6, etc.) and then douped, *i. e.*, drawn through the half harness, doup or slip. All the doups are on the same half harness and passed through the mails on the same doup standard. They must therefore all rise or fall together, either in sympathy with, or without the doup standard.

With the foregoing completed draft, any of the following combinations of figure may be produced. (1) Plain gauze contrasted with plain weave in large or small masses, up to the limit of the figuring capacity of the Jacquard machine. (2) Plain gauze interchanged with either warp or filling figures and plain weave.

The attainment of the foregoing and many other modified results, involves careful attention to the following fundamental technical points.

(1) Whenever the elevation of the doup standard is followed by the elevation of the back standard, a gauze crossing results, *i. e.*, if the doup standard is lifted on the uneven picks and the back standard on the even, a plain gauze structure is formed.

(2) Whenever the elevation of the doup standard is followed by the elevation of the regular standard, no gauze crossing results, *i. e.*, if the doup standard is lifted on the uneven picks and the regular standard on the subsequent even picks, ordinary plain weave is the result, but with the crossing thread working on the gauze side all the time.

(3) If the doup standard and any of the regular standards are lifted on the uneven picks, followed by the elevation of any two or more adjacent back and regular standards on the even picks, no interlacing of any kind occurs, and hence a warp figure will be formed on the surface of the cloth.

(4) A filling figure is obtained by weaving the cloth face downward.

Then, since the production of figured patterns on a gauze ground for the draft given, involves the application and simultaneous combination of the foregoing fundamental data, the doup standard must rise

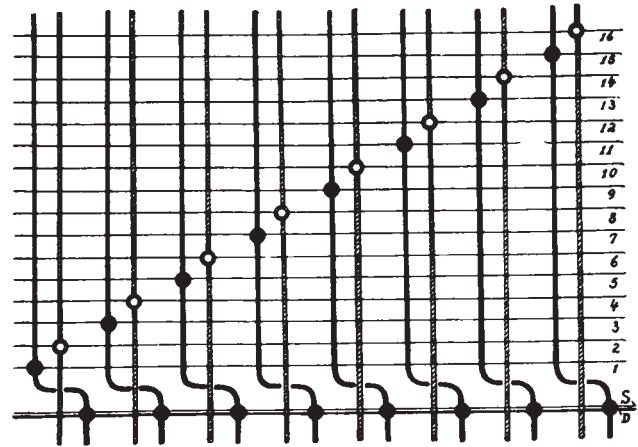


Fig. 1

on every alternate or uneven pick, after which, on each succeeding pick, the back standards of each group must be selected for elevation where gauze texture is required, but on the same even pick where plain weave is necessary, the regular standards must be lifted, while, if any portion of the pattern must consist of warp figures, the back and regular standards must be raised on both picks and repeated to suit the pattern.

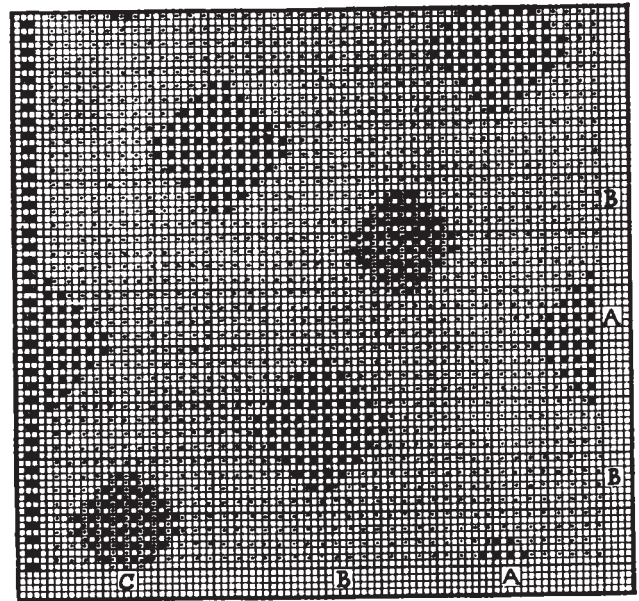


Fig. 2

Fig. 2 is a fully developed point paper design for a small figured pattern produced to demonstrate and suggest the inherent possibilities of the foregoing principle. The gauze portions of the design are marked *A*; the ordinary plain weave part *B*; the warp or filling figure *C*; the lifting marks for the doup standard are indicated by shaded type; the back standards by full type and the regular standards by dot type.