Vol. XX.

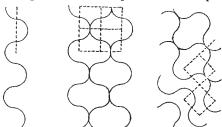
May, 1917.

No. 5

POINTS ON JACQUARD DESIGNING.

Designs Constructed on the Ogee.

The ogee base is largely used by the textile designer when patterns are required to be repeated, and



ig. 1 Fig. 2

where it will be found to form a most suitable foundation for stripes as well as all-over patterns, more particularly with the first, since it provides a suitable framework upon which various conventionalized plant forms (especially those which have entwining or creeping characteristics) may be built up.

The simplest form of ogee is shown in Fig. 1, consisting of two arcs (or semi-circles) placed on opposite sides of a centre line (shown dotted) and moulded together at the point where they come in contact with the line so as to form a double curve.

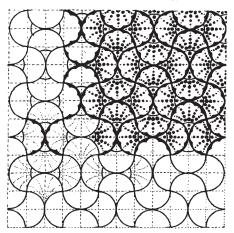


Fig. 4

Fig. 2 shows the doubling of the ogee base, as was shown in Fig. 1, in order to make it suitable for allover patterns. The principle observed in planning this foundation consists of arranging two wave lines so that the curves are in opposite directions, their outer curves coming into close contact with each other at every repeat of the waves.

Fig. 3 shows the waves of the ogee placed in a diagonal direction, and where both, the single and the double ogee bases are shown running upwards from right to left at an angle of 45 degrees.

Fig. 4 shows the ogee base double, as well as arranged to run in both, a vertical and a horizontal direction, showing the ogee base adapted to the formation of an all-over repeating pattern. The construction lines for both the ogee foundation and the secondary spots are clearly shown in the border, arranged outside the finished portion of the design.

Fig. 5 shows the conventionalizing of a plant arranged upon the single ogee base, showing also the principle of ornamenting each half of the wave line with exactly the same shape of leaves and flowers springing from the point in the stem, where the two arcs are moulded together. This method of construction renders it easy for the designer to form symmet-



Fig. 5

rical designs, which are not only evenly distributed, but also contain variety, owing to the opposite direction of the wave in the base.

To show up the waviness of the stem to more advantage, a straight stripe of twill (shown shaded) is run *underneath* the floral design, giving the figure the appearance of resting upon or clinging to it.

The second stripe of figure in this design is dropped in order to bring its flowers opposite the leaves in the first stripe, and prevent the barrenness which would result if both were kept side by side, *i. e.*, level.



Fig. 6

Fig. 6 illustrates the method of arranging a pattern from the geranium upon the ogee base, the principles of construction being similar to those previously described in connection with design Fig. 5, with the exception that the second stripe in Fig. 6 is not dropped, there being no flowers used that could produce barrenness.



Fig. 7

The secondary stripes, introduced to separate the main lines of the figure, are also based on the ogee, showing three different methods of interlacing them when designs of an entwining character are desired.

Fig. 7 shows the ease with which a trailing leaf pattern can be arranged upon the base shown at Fig. 2. Spots are introduced to fill the spaces left by the outward curves of the base lines.

Fig. 8 illustrates a modifying of the ogee lines so as to produce irregular wave effects. Two of these irregular wave lines are introduced, which interlace or cross over and under each other, the space between



Fig. 8

them being filled with pinhead spots, to imitate twisted ribbon work. The ground is then ornamented by making plant forms appear to spring from underneath the ribbon effect.

Wool-like Cotton Yarns and Fabrics.

The same refers to an English invention of imitating wool effects in cotton yarns and fabrics, the latter presenting both the feel and appearance of woolen goods. This feature is obtained by spinning mixtures of cotton dyed different shades, then shrinking the yarn with caustic soda, sulphuric acid or other known agent, and subsequently manufacturing them into the desired fabrics.

TERRY PILE FABRICS.

Their Quality, Production, and Cost.

By H. Barlow.

Contents: Positive Formed Loops. Negative or Uncontrolled Pile. Three-pick Terry. Four-pick Terry. Five and Six-pick Terry. Two-pick Terry. Selection of Yarns. Warp Yarns. Filling Yarns. To Show Difference in Twist. Preparation of Warp and Filling. Sizing Terry Yarns. Manufacturing Notes. The Shed Lines. Shedding. Temples. Reeds. Terry Motions. Reed Moved. Reed Stationary.

All who have experience in cotton manufacturing agree that the question of producing a fabric of good appearance at lowest price and this with a maximum production per loom, depends mainly upon the conditions of work and material being better understood, supervised, and intelligently directed. Only in that way can quality be maintained, and production increased, without additional expense to the mill. The foregoing remarks apply more particularly to the manufacture of negative pile fabrics, for the fact that the loop is formed in an uncontrolled manner, that control in the actual formation of the loop is limited, and therefore such conditions and influencing factors have been brought into action as will compensate for positive control, and tend to the production of a satisfactory loop fabric.

The term "terry" denotes a fabric having a loop or uncut pile. The loop in such fabrics may be formed in either of two ways, viz:

- (a) Positive or controlled.
- (b) Negative or uncontrolled.

Positive Formed Loops.

These are made by inserting a wire in a special shed so that all threads required to loop form the top shed line, the wire being beaten up to the fell of the cloth by the reed in the usual manner. The pile threads are bound under the next pick, and into the cloth on subsequent picks. The foundation texture is produced by the ground warp and the filling. All pile threads lifted over wires are left as loops on the withdrawal of the wire. The depth of the pile is, therefore, regulated by the depth and thickness of the wires. By this method, loops can not be made on both sides of the fabric, but on the upper side only. Typical examples of this class are terry upholstery fabrics, tapestry and Brussels carpets. Cut and looped piles are frequently used for figuring purposes in the same fabric.

NEGATIVE OR UNCONTROLLED PILE.

This method is adopted in the production of such looped pile fabrics as terry toweling, terry dress and trimming fabrics, bath mats and counterpanes; this class of negative pile fabrics only will be dealt with.

The negative pile may be formed equally on both sides of the cloth, and is always a loop pile, attempts to cut the loops having so far proved unsuccessful. The makes of cloth are referred to as 3, 4, 5 and 6 pick terries, according to the number of picks inserted per loop. Two warps (wound on separate beams) known as terry and ground warps are used.

When weaving a 3-pick terry, instead of beating up each pick in succession to its ultimate position in the cloth, the first pick is pushed forward by the reed until within a predetermined distance of the fell of the cloth (about §") according to the length of loop required, the reed being controlled so that a complete