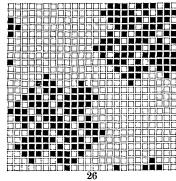
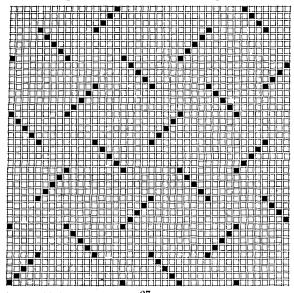
SATIN WEAVES AND SOME OF THE USES TO WHICH THEY ARE APPLIED.

(From the Journal of Fabrics, Eng.)

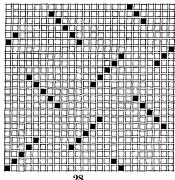
N arranging small figures of a geometrical character, satins are very largely and very advantageously. in the case of Fig. 26, there are two spots set across one another, but this arrangment is very unsatisfactory, as we have the figures running diagonally across the piece at an angle of 45 deg's, and the threads at the edge of each figure are working more nearly plain than those in the middle of the figure, and would become tighter than the rest, and have a tendency to produce" cock-



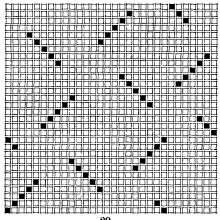
led" effects in the cloth; therefore, to obviate this, and to produce more equal distribution of the figures, satin order is resorted to, and having obtained the requisite space for each figure, care must be taken that in each diagonal of figures, the figures are set across each other. In Fig. 27 is shown, by means of lines, the direction each spot should be in, so as to preserve this order of alternation. In this diagram, there are 4 sets of 5 figures, as in one set,



we should have 2 figures in one direction and 3 in the other, therefore, the pattern must be extended to 4 times 5 figures, to allow an even number for the total, and to have each figure set across its neighbor. If this arrangement be carefully examined,

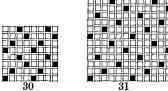


we shall see that the 1st, 3rd, and 5th figures of the first set of figures are in the same direction, and the 2nd and 4th in the opposite direction; and in the second set of figures this arrangement is entirely reversed, and these two sets of figures are then transposed



for the third and fourth series. Fig. 28 shows a similar arrangement for 8 figures. In this case the figures are arranged in pairs, to achieve the same object as above. Fig. 29 is again a similar arrangement of 10 figures. Satin order is also very largely used for the arrangement of floral figures, but in this class of figuring, great care has to be exercised in the filling up of the ground, so as, as far as possible, to avoid stripes either in the way of the

weft or warp; for the reason, this 4 end satin or satinet, and the 6 end satin are very often employed, as it is practically impossible to produce stripes by these arrangements. For the benefit of the uninitiated, these two irregular arrangements are appended. Fig. 30 being the 4 end satin, which is simply an ordinary 4 end twill, with the 3rd and 4th ends transposed; Fig. 31, the 6 end satin is partly arranged on a base of 2, with the 5th and 6th ends transposed. Satins are also used to distribute figures in gauze weaving, and some very pretty effects are also produced by having various kinds of crossing, in satin order, arranged in such a manner that they interlace and bend the weft out of its course.



Satin order is again indespensable in the manufacture of mohair and silk weft plushes, and in this class of fabric, not only must the series of plush picks form a plain pick with the ground, but these series must be arranged in satin order, so as to distribute the points where each series begin, and then each complete series must again be distributed in satin order, otherwise the binding place will show lines diagonally across the piece. In conclusion we would draw the attention of the student, and the young designer, to the arrangement and use of satin orders in all the various forms, and we have no hesitation is saying that if he study carefully the uses to which he can apply them, he will be convinced of their great utility and advantage.