The circle is of great importance to the textile designer, since its curved lines add beauty of form to designs having a geometrical base, tending also to remove any stiffness in appearance which many of them possess.

Though not much used in its purely geometrical form in woven fabrics, there are many ways by which it may be modified to suit the needs of textile design, or by which it may be made to serve as the basis upon which designs can be built.

Figs. 1, 2, and 3 are designs arranged in stripe form, showing facts of this statement; in each instance the circle has been used as the framework, upon which to build the design.

In Fig. 1, three sizes of circles have been arranged to interlace with each other, fullness being afterwards given to the design by the introduction of conventionalized leaves within the circles.

In Fig. 2, circles are placed one-sixth of their diameter apart from each other (see dotted lines) and on the lines of each circle a curled feather effect is built, which is alternately turned in opposite directions so as to make the effect continuous.

In the two designs described, not only the base of the design, but also the stiffness of the stripe is largely hidden by the treatment adopted.

In Fig. 3, which consists of circles interlaced in chain form, the stripe as well as the circular base is emphasized.

Another method of using the circle for foundation of the design is to combine it with some conventionalized flower or leaf, or with some simple form or object with which it will harmonize in the production of figures, which afterwards can be distributed in a suitable manner over the surface of the fabric. The designer should never lose sight of the development of the designs in a manner suitable to the material and the construction and texture of the fabric.

In Figs. 4, 5, 6 and 7 other methods of forming figures from the circle are shown. These have been formed almost entirely by means of the compass, as will be evident after a brief examination of their structure.

Fig. 4 represents a five-petaled flower, formed by dividing the full circle in which the flower is enclosed into five equal parts. Lines are then drawn from these divisions to the centre, and smaller circles are described which have their centres on these lines and their peripheries touching the outer circle. These circles are made large enough to overlap each other, and tapering radial lines are drawn from the centre in order to give the flower the appearance of opening naturally. Flowers with a varying number of petals might be constructed on this principle, and the petals might be modified in shape so as to avoid a sameness of appearance.

Fig. 5, for example, is constructed in such a way as to include six small circles within the bounds of the larger one, and smaller circles still are snipped out to give variety of outline. In the central space between the circles, a small six-petaled flower is introduced to give fullness and precision to the effect.

Fig. 6 illustrates a Japanese method of constructing an ornamental object representing overlapping fans from the lines of the circle, and shows how the outline of the circle may be modified and the interior broken up by arcs in such a way as to add to the attractiveness of the figure.

Fig. 7 shows three circles linked together in chain form, with small twigs attached in the form of pendants.

Figs. 4, 5, 6 and 7 have been drawn with a view to their being utilized in a cloth where warp and filling are of different colors, one portion being intended for filling figure, and the other for warp.

Purely geometrical designs are seldom used in dress goods, but for many woven fabrics (including table linen and damasks) the circle may be used to form patterns of a diaper character on purely geometric principles. The simplest
forms of these are built with the centres of the circle on the square or diamond plan, and the edges touching each other.

By making the circles overlap each other in different ways, a very large variety of designs may be obtained. Thus Fig. 8 is obtained by dividing a circle into six equal parts and then constructing circles of a similar size upon it, using the points where the circle is cut as the centre from which the others are described. In this illustration the gradual evolution of the figure from the circles is shown, the dotted circles being for the purpose of getting the wedge-shaped spots in the ground.

Fig. 9 is a design based upon the semi-circle, and the structural lines overlap each other in the form of scales, and in a smaller form might be made to represent the scales of a fish or the imbrications on the fr cone. In this case they are large, and a small spray effect is introduced to add variety and beauty to the figure.

Design for Carpet.

The new and ornamental design suitable for carpets, rugs or tapis-

try, shown above, has been just brought out by the Alexander Smith and Sons Carpet Company, of Yonkers, New York.