Suggestions For Design Based On Mohammedan Or Saracenic Art.

By E. H. Hankin.

The most striking peculiarity of Mohammedan or Saracenic art is the employment of extremely complicated geometrical patterns. The actual methods by which these patterns were drawn and designed are unknown to modern artists.

The methods of constructing these designs are not simply methods of draughtsmanship, but may be described as methods of design, as by their means it is possible and easy, not only to copy old patterns, but also to design new ones in conformity with the rules of geometrical art. The patterns in themselves are not what we might call beautiful, but merely provide the foundations for novelties in design, to be worked up by the artist.

Geometrical patterns may be divided into (1) Square, (2) Hexagonal, (3) Octagonal, and (4) Arabesques.

In the first class the space to be decorated is divided into squares; part of these help to form the pattern.

The method of drawing the second class of patterns, the hexagonal, is also widely known, and calls for no special description. For their construction, lines are drawn crossing each other at angles of 60°, dividing the space into equilateral triangles.

Fig. 1 illustrates a plan for the construction of such a pattern; showing that only some of the pattern lines are coincident with the construction lines. Others of the lines of the pattern are drawn crossing the construction triangles from the apex of one to the apex of another.

Examples having the octagon for their bases are shown in Fig. 2, at A, B, C and D.

Whether or not a draughtsman should use templates in the actual employment of these patterns is a matter of individual taste, although their use will greatly help to simplify the designer's work.

The complicated octagonal patterns usually contain octagons of two sizes, which may always be regarded as derived one from the other, by the following very simple construction.

In Fig. 3 an octagon is drawn in which opposite angles are shown joined in pairs, by lines such as A B and C D. The result of drawing these lines is to leave an eight-pointed star (shown by thicker lines) in the centre of the octagon. Taking the point A as a centre, another octagon (shown by dotted lines) is constructed so that one of its angles fits into the angle E of the eight-pointed star. At G this second octagon is drawn separately. We now have a large octagon, a small octagon, and an eight-pointed star. These three figures, combined in different ways, form the majority of octagonal patterns.

The method of construction of a pattern by means of templates is shown in Fig. 4. The large octagon template is first employed to cover the ground with large octagons overlapping by two of their sides, as shown on the right-hand side of the illustration. For clearness the letters A, B, C, D, E, F, G, and H have been inserted, to indicate the extent of one of these octagons.

The small octagon templates must now be used, drawing small octagons with their centre lines coinciding with the alternate angles of the large octagons, as shown on the left-hand side of the illustration. The numerous lines crossing at a point (see K and L) do not form a pleasing feature. Nor will the case be
improved when a square is drawn in the small octagon, as shown at M and N. However, matters are completely changed provided certain of the lines are taken out, as shown in illustration Fig. 5, obtaining in this way a pattern of remarkable gracefulness in spite of its apparent simplicity. It is difficult to imagine that this result would have been obtained so successfully had the design been formed without the help of a rational geometrical method.

The construction of another octagonal pattern is shown in Fig. 6. In this case the large octagons are drawn, not in contact, but at some distance from each other. The distance is such that the space between any four adjacent octagons could just be filled by another large octagon. The small octagon template is now brought into use. As shown on the right-hand side of the figure at A, it is placed with its centre coinciding with the angle of a large octagon. Six sides of the small octagon are drawn in. The operation is repeated round each of the other angles of the large octagon, by means of which the eight-pointed star is formed. The other large octagons are similarly treated, after which, with a few additional lines, completes the pattern. These are so simply placed as to require no explanation, being the complete design shown in Fig. 7.

The eight-pointed star alone, without the help of any octagons, may also be used to form patterns. Examples of this are shown at E, F, G and H in Fig. 2.

In E (Fig. 2) eight-pointed stars are placed in contact; in F some of the eight-pointed stars are drawn complete, others being overlapped by their neighbors. Pattern G is formed from eight-pointed stars, and H is a common border pattern formed also from eight-pointed stars.

(To be continued.)

WORLD COTTON CONFERENCE.
Liverpool: June 13th to 15th.
Manchester: June 16th to 22nd.

The Second World Cotton Conference was truly a representative gathering. Delegates from 18 different countries attended. At the Conference, all acknowledged experts of the subjects allotted to them, provided for consideration and discussion, twenty-four technical papers. Leading problems now confronting growers and manufacturers were given serious thought. The subjects covered the growing of cotton; the compressing, ginning, baling, warehousing, and transportation of cotton; financing the cotton crops and cotton imports; forecasting of crops; spinning characteristics of cotton; statistics; research; yarn and cloth contracts; humidity and ventilation; factory accidents; preparation of cloth for finishing; hours of labor; financing cotton mills; and international credits.

Besides the discussions of the papers, some of which were held in Liverpool and the remainder in Manchester, the programme of the Conference included many items of a social character.

Lieutenant-Colonel J. J. Shute, president of the Liverpool Cotton Association, thought that it was peculiarly appropriate that the first of these conferences having taken place in the country where the greatest amount of raw cotton was produced, the second conference should be opened in the city which was incommensurably the centre where the greatest amount of raw cotton was received. The history of the connection of Liverpool with cotton went back nearly two centuries. In 1757 the first bag of cotton was received into that port. In 1821 the first statistics of cotton were tabulated.

The Rt. Hon. Lord Emmott, the President of the Conference, believed we were going to win through the present difficult period. He had a firm faith that before long there would be needed, as was needed in the past, millions of bales of cotton a year. Cotton would still be far the cheapest and most widely used of the raw materials out of which the textiles of the world were made, and the clouds which surrounded this and other trades would presently pass, and cotton would become king once more.

One of the lessons this Conference would teach was that world peace was necessary to the prosperity of everyone. It would show that nations did not grow prosperous on the misfortunes of other nations.

The Hon. Richard J. Manning, ex-Governor of South Carolina, speaking for the American delegates, said they were deeply grateful for the warm senti-