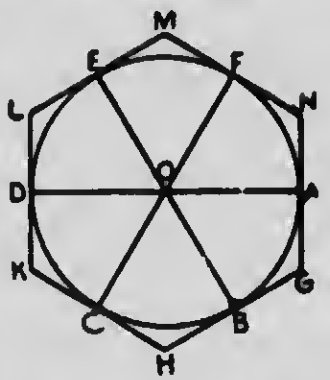
2. **If tangents to the circle be drawn at the angular points of the hexagon ABCDEF, the tangents form another hexagon, which is said to be about the circle.** The equality of the sides **GH, HK,** . . . . may be tested with the dividers, and the equality of the angles **GHK, HKL,** . . . with the bevel.




3. If we wish to construct a regular hexagon with sides of given length, we describe a circle with radius of this length, and in it inscribe a regular hexagon as in § 1.

4. **To inscribe a regular octagon in a circle:**

We may construct at the centre eight angles, each of 45°, and join the ends of consecutive radii bounding these angles; or, perhaps more conveniently, we may proceed as follows: Draw two diameters at right angles to one another and join their extremities. We thus have a square in the circle. Through the centre, using parallel rulers, draw diameters parallel to the sides of the square. The quadrants are thus bisected, and we get eight equal angles at the centre. Joining ends of the successive radii which bound these angles, we have an octagon inscribed in the circle. The accuracy