

tool which will turn a curved surface with the same radius as indicated by this circle.

The form of such a tool may be approximated by drilling a hole of the correct size in a piece of steel and grind-

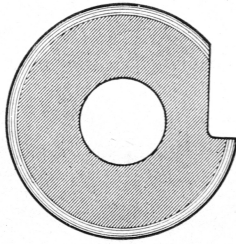


Figure 138—A circular forming tool.

ing away the metal until only a half of the circumference is left. With this tool a disc having a circular edge is turned up. After hardening the disc, a notch is ground in the edge, as shown in Figure 138. This cutter will be used to form the actual gear cutter, the profile of which is turned first on one side and then the other, after

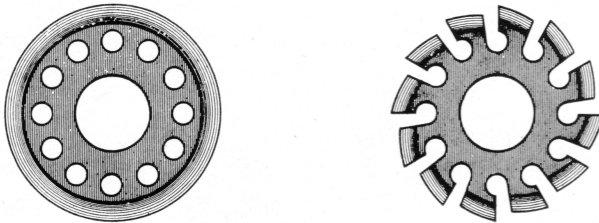


Figure 139—Method of relieving a gear cutter.

moving the slide rest the amount determined from the drawing.

In the absence of a regular relieving tool the cutter may be relieved as illustrated in Figure 139. First a series of equally spaced holes is drilled in the cutter blank, after which it is notched. Then the teeth are bent outward by forcing a taper pin into each hole.