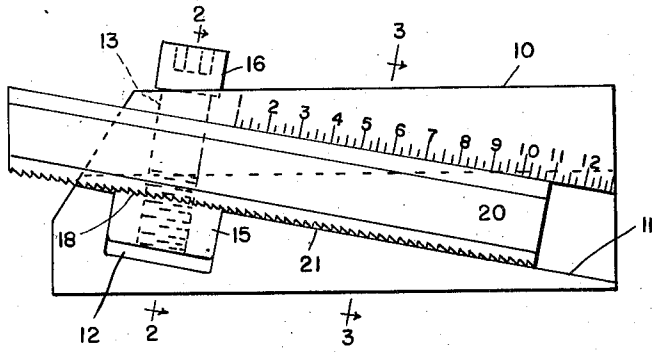
March 30, 1948. W. BARKS 2,438,630

TOOLHOLDER

Filed May 25, 1944

FIG.1.



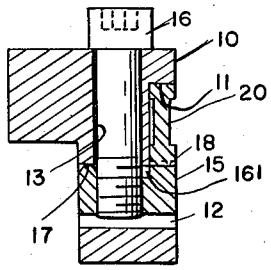


FIG.2.

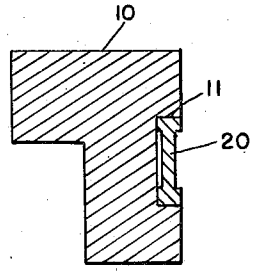
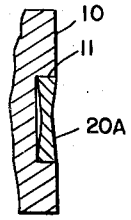


FIG.3.

FIG.4.



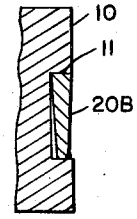


FIG.5.

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TOOLHOLDER

William Barks, Detroit, Mich., assignor to Clifford C. Stone, Detroit, Mich.

Application May 25, 1944, Serial No. 537,339

2 Claims. (Cl. 29—96)

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The present invention relates to cut-off tools and holders for use in engine lathes, screw machines and the like.

Among the objects of the invention is to overcome certain objections to the present forms of tools and holders, and provide a tool-holder combination in which the tool or blade is positively prevented from slipping in the holder.

Another object is a blade holder which provides for returning the blade to its former position if it should be necessary at any time to remove it from the holder.

Still other objects and advantages will be apparent to those skilled in the art upon reference to the following description and the accompanying drawings in which

Fig. 1 is a side elevation of the holder and blade.

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

Fig. 3 is a sectional view on line 3—3 of Fig. 1.

Figs. 4 and 5 are views similar to a portion of Fig. 3 but showing the other blade shapes.

As indicated in the drawings, the holder 10 may be of conventional form and size but is provided with a rectangular groove 11 extending along one face thereof, the groove being arranged at an angle to the base surface of the holder.

Near the forward end of the holder, there is provided a through passage 12, the upper wall of which is slightly above or is in the same plane as the lower wall of groove 11 and arranged at the same angle. This passage preferably has its side walls parallel or substantially so and is open to a passage or bore 13 extending to the top of the holder 10, the bore being at right angles to the line of groove 11 and the upper wall of the passage 12.

Lying within the passage 12 and having a sliding fit between the side walls thereof is a clamping block or plate shown as a nut 15 into which is threaded a suitable bolt or screw 16 loosely fitted in the bore 13. It is, of course, obvious that means other than the bolt may be used to move and lock this member in blade locking position.

As best shown in Fig. 2, the block or nut 15 is preferably channeled lengthwise of the holder 10, as at 151, and, at the side of the channel away from the groove 11 is provided with a rounded surface 17, while at the other side of the channel, the wall is serrated as at 18 to provide small teeth extending up into the groove 11.

Acting in cooperation with the holder as described above, is a blade or tool 20 provided on its under edge with similar teeth 21 adapted to interfit with those on nut 15.

It will be readily seen that when the nut 15 is tightened against the blade, there is no possibility of any tool slippage. Further, because of the shallow groove and the fact that the screw 16 exerts its pressure through the body of the holder, no "spring" of the walls of groove 11 can possibly occur.

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In addition to the features already described, it is proposed to provide the holder 10 with a numbered scale arranged along one side of groove 11 whereby to enable an operator to return the blade 20, after removal, to its former position.

Figs. 4 and 5 are added to show the use of blades of a different cross-section, these being indicated at 20A and 20B. Such blades will also be serrated as is blade 20.

Now having described the invention and the preferred embodiment thereof, it is understood that said invention is to be limited, not to the specific details herein set forth, but only by the scope of the claims which follow:

I claim:

1. A tool holder and blade combination consisting of an elongated holder body having a longitudinally extending angularly arranged groove in its side wall and a through passage near its forward end, said passage having its upper wall substantially in the plane of the lower side wall of said groove, a nut in said passage, a bolt extending down through said body and threaded into said nut, one edge of said nut extending into said groove and provided with serrations presented to said groove, and a tool blade in said groove and correspondingly serrated on its lower edge.

2. A combination according to claim 1 in which the opposite edge of said nut has an upper rounded rib arranged parallel to said groove.

WILLIAM BARKS.

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