

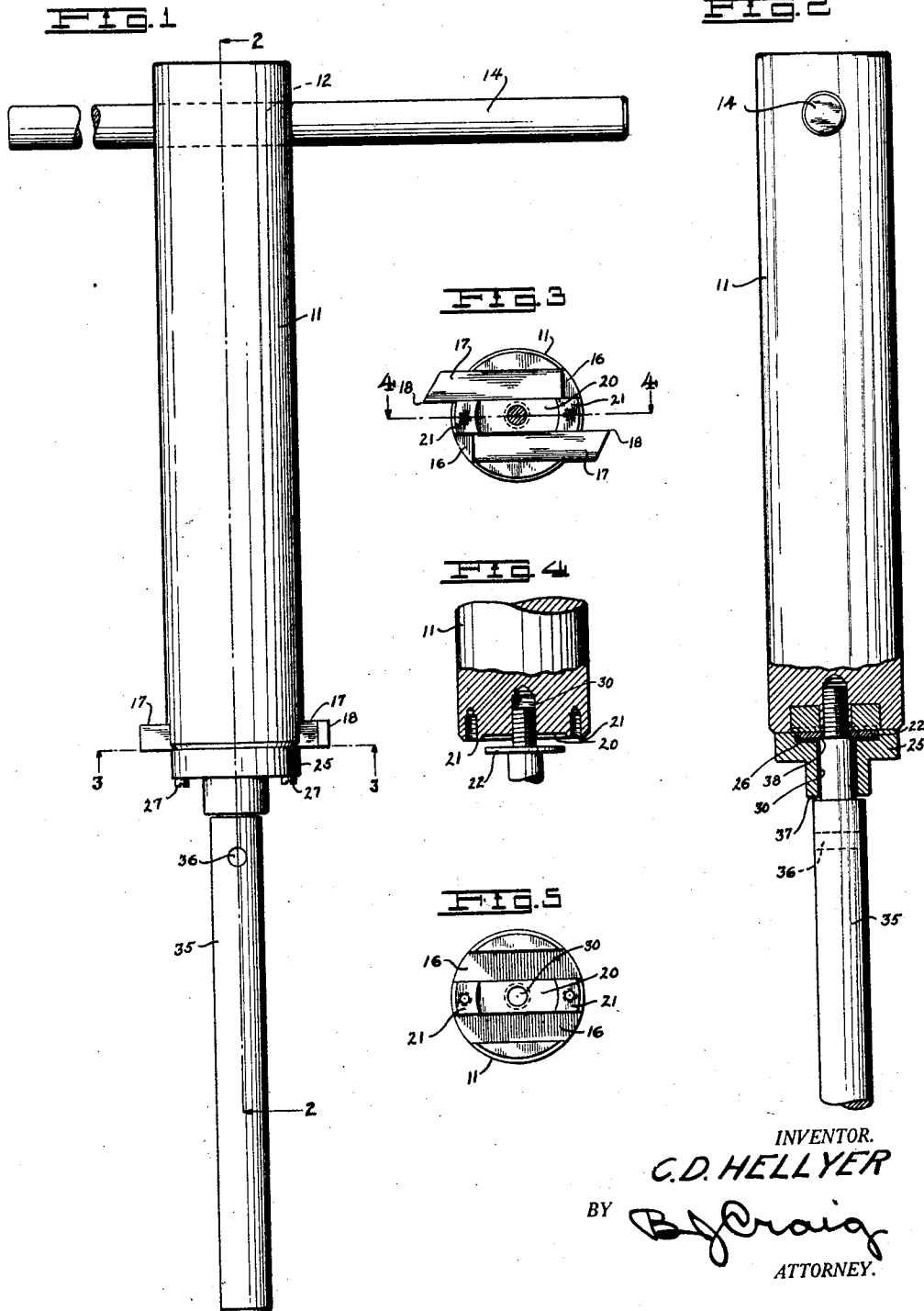
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CUTTING TOOL

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UNITED STATES PATENT OFFICE.

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CUTTING TOOL.

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This invention relates to cutting machines.

The general object of the invention is to provide an improved rotary cutting tool which is particularly adapted for operating on inaccessible parts of various devices.

One of the specific objects of the invention is to provide an improved cutting tool comprising a handle portion, a cutter, and a pilot wherein the cutter is held in cutting position by the pilot.

A further object of my invention is to provide a tool including a handle and a pair of slidable cutting knives, together with a pilot which is adapted to be moved to position to hold the cutting knives fixed.

Another object of the invention is to provide novel means for holding a cutting tool in a holder.

Other objects of the invention will be apparent from the following description taken in connection with the accompanying drawings wherein Fig. 1 is an elevation of a tool embodying the features of my invention; Fig. 2 is a view similar to Fig. 1 with the cutting knives and associated parts in section; Fig. 3 is a section on line 3—3, Fig. 1; Fig. 4 is a section on line 4—4, Fig. 3, and Fig. 5 is a view similar to Fig. 3 with the cutting knives removed.

Referring to the drawing by reference characters, I have shown my invention as comprising a body part 11 which may be a solid cylindrical bar of metal or other material having a hole 12 at its upper end. A handle member 14 may be inserted through the hole 12 for the purpose of operating the tool. The lower part of the body part 11 is indicated as provided with a pair of parallel knife holding slots 16.

Each of the slots 16 is spaced an even distance from the center of the handle and the two slots are preferably of the same depth. Within the slots I mount cutters 17. Each of the cutters is provided with a cutting portion 18.

The end of the body 11 is shown as provided with a central recess 20. This recess provides shoulder portions 21. Arranged within the recess 20 I show a washer-like clamping member 22. This clamping member 22 is thicker than the depth of the recess 20 so that it projects out of the recess.

Upon the lower end of the body 11 I secure a cap member 25. This cap member is provided with an internal cavity 26 which accommodates the clamping member 22. The

cap 25 may be secured in place by screws 27 or in any other desired manner.

The cap 25, the locking member 22, and the lower portion of the body part 11 are shown as provided with co-axial recesses 30. The portions of this recess within the body 11 is provided with threads to accommodate the threaded end of a pilot 35. This pilot may be made of various diameters to suit various conditions and is interchangeable, is shown as provided with a transverse hole 36 to receive a member for adjusting it.

The pilot may be provided with a shoulder 37 which is preferably spaced a short distance from the end of the cap 25. A second shoulder 38 is arranged upon the pilot and is adapted to engage the clamping member 22. When the pilot 35 is rotated it will be apparent that the shoulder 27 will be brought into tight engagement with the clamping member 22, thus forcing the latter against the cutters 17 and holding them firmly in position. Adjustments of the cutter may be readily made by rotating the pilot, adjusting the cutters, and again tightening the pilot.

From the foregoing description, it will be apparent that I have provided an improved adjustable cutting tool which is adapted for a wide variety of uses and which can be cheaply made and is very effective in operation.

Having thus described my invention, I claim:

1. A cutting tool comprising a body part having a pair of transverse slots therein, a cap fitted over said slots, a cutter adjustably mounted in each slot, said cutter having a plane face thereon, a clamping member within said cap, said clamping member having a plane face engaging the plane face on the cutting member, a pilot, and means on said pilot to force said clamping member into engagement with said cutter.

2. A cutting tool, comprising an elongated body part having a pair of transverse slots adjacent one end thereof, a cutter mounted for movement in each of said slots, a pilot threaded in said body, a cap on said body, said cap having a recess therein, a clamping member in said recess, said pilot having a shoulder thereon for engaging said clamping member whereby the cutters are held in adjusted position.

3. A cutting tool comprising a body part having a handle thereon, a pair of transverse slots at one end of said body part, a cutter

- slidably mounted in each slot, a cap arranged upon the end of the body part, said cap having a recess therein, a clamping member mounted within said cap, and adapted to engage said cutters, said body having a recess between said cutters, a pilot threaded into said recess, and means whereby said pilot will cause said clamping member to engage said cutters.
- 10 4. A cutting tool comprising a body part having a handle thereon, a pair of transverse slots at one end of said body part, a cutter slidably mounted in each slot, a cap arranged upon said end of the body part, said cap having a recess therein, a clamping member 15 mounted within said cap and adapted to engage said cutters, said body having a recess between said cutters, a pilot threaded into said recess said pilot having a shoulder thereon for engaging said clamping member to force the latter against said cutters. 20
5. A cutting tool comprising an elongated body part having a pair of substantially parallel transverse slots adjacent one end thereof and extending entirely across said end, a 25 cutter mounted for movement in each of said slots, a removable cap on said body, said cap having a part overlying said slots and having a recess therein, a clamping member in said recess, said clamping member comprising a flat piece of material and means to 30 force said clamping member against each of said cutters.
- In testimony whereof, I hereunto affix my signature.
- CLEMENT D. HELLYER.