Oct. 20, 1936. J. P. L. HODSON 2,057,949

HAND TOOL FOR TURNING SCREW STOPPERS OR CAPS

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Fig. 1.

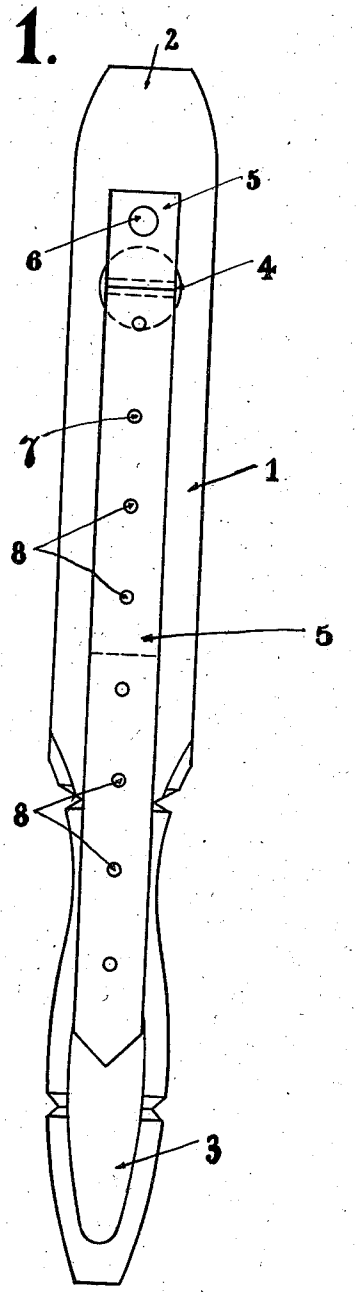
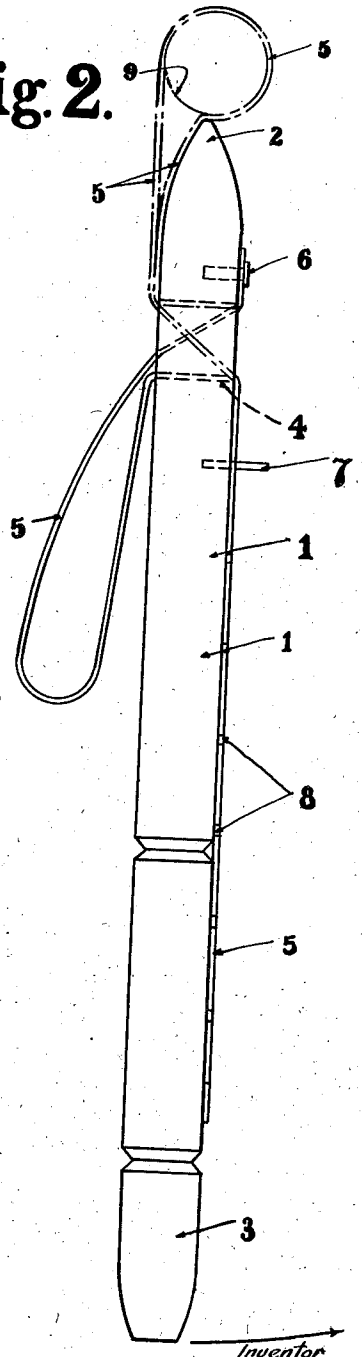


Fig. 2.



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HAND TOOL FOR TURNING SCREW-STOPPERS OR CAPS

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In Great Britain May 29, 1935

1 Claim. (Cl. 81—3.1)

This invention has for its object the provision of a new or improved hand tool for turning screw stoppers or caps of bottles, jars or other containers and which are sometimes difficult to remove or tighten up sufficiently by hand alone.

According to the invention, the hand tool comprises an arm or lever having a flexible leather or other strap or the equivalent secured thereto and passed in the form of a loop through a hole therein at an appropriate distance from one end, the arrangement being such that the loop can be applied around the periphery or head of the screw stopper or cap. The end of the tool is provided with a sharp cap engaging portion and when this is placed against the periphery of the cap and the loop is properly adjusted to fit the size of the cap, the lever may be turned so as to contract the loop around the cap to such an extent that it will frictionally grip the cap and permit the latter to be rotated.

Preferably only one end of the flexible strap will be permanently attached to the arm or lever and the other end will be adjustably secured thereto in such a manner as to enable the loop to be varied in size to suit different sizes of screw-stoppers or caps. Also the operative or abutment end of the arm or lever which serves as the fulcrum will preferably be tapered or pointed to afford a knife edge at that end.

In any particular instance the loop of the strap applied to the screw stopper or cap will be somewhat larger than the periphery of said stopper or cap so as to enable the arm or lever to be fulcrumed upon the outer surface of said strap to tighten the loop upon the stopper or cap in the manner of a brake band or strap.

In order that the invention may be clearly understood and readily carried into effect, the same will now be more fully described with reference to and by the aid of the embodiment illustrated in the accompanying drawing; wherein:—

Figures 1 and 2 are respectively a front elevation and a side elevation of the hand tool for turning screw stoppers or caps.

Referring to the drawing, the tool comprises a wooden, metal or other arm or lever 1 of rectangular cross-section tapered at one end to afford an edge or fulcrum 2 and provided or formed at the other end with an appropriate handle 3. A hole is bored through the arm or lever at 4 a short distance from the tapered end thereof and at right-angles to the edge affording the fulcrum 2. One end of a flexible leather strap 5 is permanently secured by a nail or screw 6 to the arm or lever 1 at a position between the tapered or fulcrum end and said hole 4 and upon one of the faces which are parallel to said edge 2, whilst a pin or peg 7 is driven into the arm or lever 1 and projects from this face at a short distance from the hole 4 preferably on the handle side thereof, as shown. The leather strap 5 is threaded through the hole 4 in the form of a loop (see Figure 2) and its free end is formed with a series or through holes 8 along its length, which holes 8 can be selectively engaged with or passed over the pin or peg 7 according to the size of loop required in any instance.

In use the loop of the strap 5 is applied around the periphery of the stopper or cap 9 to be turned (see dotted line position in Figure 2), and the adjacent tapered end of the lever 1 is brought into abutment with the strap 5 upon the stopper or cap 9 so as to tighten the loop until it frictionally grips the periphery over a large arc, preferably three-quarters or more of the circumference. Continued turning movement of the lever 1 in the tightening direction (as indicated by an arrow in Figure 2) will increase the frictional grip and then turn the stopper or cap 9 so as to slacken it. Obviously the loop can be applied to the stopper or cap in a reverse manner and the lever turned in a clockwise direction to tighten the stopper or cap in or upon the neck of the bottle or other container, and further that the length of the loop can be readily made to suit different sizes of stoppers or caps by engaging the pin or peg in different holes in the strap to suit requirements.

It will be seen that the present invention provides a simple and efficient tool for slackening or tightening up screw stoppers or caps of bottles, jars, or other containers with ease, the power available being in accordance with the length of the arm or lever and the distance of the hole in the arm or lever from the fulcrum.

I claim:

A hand tool for turning screw caps comprising a rectangular handle provided with a substantially sharp cap engaging edge, an opening extending through said handle at right angles to said cap engaging edge and adjacent thereto, and a loop element in its operative position extending through the opening and having its ends positioned on one side of said handle, one end of said loop being fixed to said handle and the other end being free and provided with means whereby it may be selectively secured to said handle, the portion of said loop adjacent said fixed end being adapted to lie along the other side of the

handle and over the end of said cap engaging edge between the cap and said edge when the tool is in use and the handle is positioned to extend radially from the cap, so that the cap engaging edge will forcibly press that portion of said loop firmly against the cap, thereby fixing the cap engaging edge and that portion of the loop between the fixed end of the loop and the cap engaging edge lying along the other side of the handle, the remainder of said loop extending freely from the cap engaging edge and around the cap and downwardly along the other side of the handle and outside of that portion of the loop lying between the fixed end and the cap engaging edge, the free end of the remainder of the loop extending through the opening to the first mentioned side of the handle and being free of and unimpeded by any other portion of the loop to render such remainder of the loop adjustable as to size and permit of ready take-up thereof.

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