Jan. 6, 1925. 1,522,320

H. G. NORWOOD

TOOL

Filed June 28, 1923

Fig. 1.

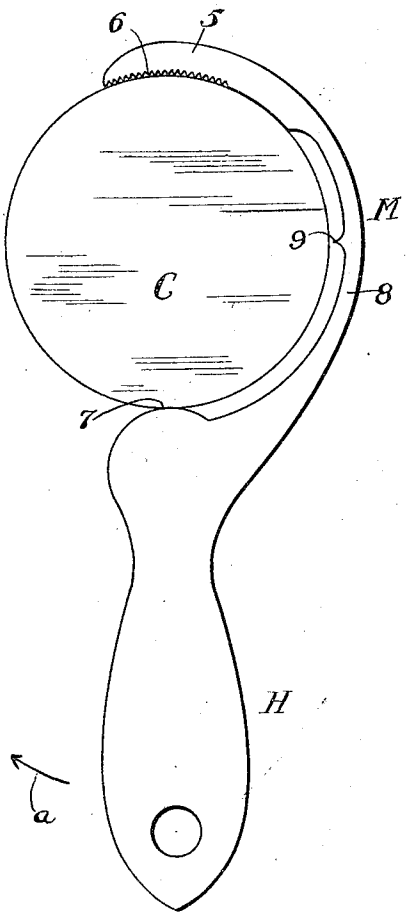
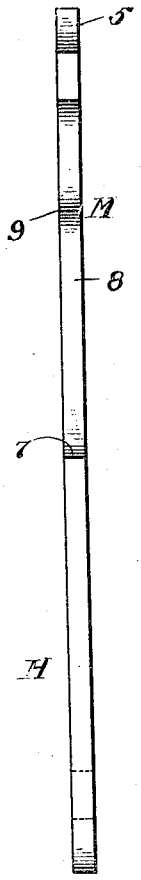


Fig. 2.



Inventor
Harry G. Norwood,

By Bruch & Huggins
Attorney

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UNITED STATES PATENT OFFICE.

HARRY G. NORWOOD, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO JAMES W. MILLER AND ONE-HALF TO CHARLES B. DAVIS, BOTH OF BALTIMORE, MARYLAND.

TOOL.

Application filed June 28, 1923. Serial No. 648,321.

To all whom it may concern:

Be it known that I, HARRY G. NORWOOD, a citizen of the United States, residing at Baltimore, in the county of Baltimore City and State of Maryland, has invented certain new and useful Improvements in Tools, of which the following is a specification.

This invention relates to certain new and useful improvements in tools, and has particular reference to devices primarily adapted for applying and removing screw jar caps on covers.

The primary object of the invention is to generally simplify and improve devices of the above kind.

A more specific object is to provide a tool of the above type embodying extreme simplicity whereby the same may be furnished to the public at a nominal cost, the device also embracing the desired qualities of durability and efficiency.

Another object is to provide a one-piece tool which grips the jar cap tightly, and one in which the gripping action increases in accordance with the increased resistance offered, by the cap, to turning.

With the above general objects in view, and others that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing, wherein like reference characters indicate corresponding parts in the views,

Figure 1 is a plan view of the tool applied to a jar cap, and

Fig. 2 is an edge view of the tool alone.

Referring in detail to the drawing, the form of the invention shown embodies a member M adapted to extend a little more than half-way around the jar cap C, and a handle H.

These members are preferably integral and stamped from a sheet of metal of the required thickness, and it will be seen that the cap embracing member M is a little more than or substantially semicircular.

The member M has its free end portion formed to provide a jaw 5 which is preferably provided with a toothed gripping face 6, and the other end of the member M, at the inner end of the handle, is inwardly curved as at 7 to act as a fulcrum or abutment adapted to slidably contact with the jar cap at a point substantially opposite the jaw 5, a flexible and resilient connection 8 being provided between the fulcrum portion 7 and the jaw 5. This flexible resilient connection 8 preferably consists of an integral piece of the metal formed relatively narrow by cutting away at the inner edge of the member M so that the connection normally lies in spaced relation to the side of the cap as shown. The handle is preferably integral, but it is obvious that an attached handle may be employed, if desired.

In use, the member M is snapped onto the jar cap so as to appear as shown in Figure 1, and the handle is forced in the direction of the arrow *a*. The jaw 5 immediately grips the jar cap and the fulcrum member 7 and handle H shift slightly in the direction of said arrow due to flexing of the connection 8 inwardly toward the cap. A tight grip is thus obtained which increases in accordance with the resistance offered by the cap to turning, and it is therefore possible to readily remove caps which are tightly seated.

If desired, an inwardly extending central abutment 9 may be formed on the connection 8 so as to be normally slightly spaced from the jar cap, and by means of which the connection 8 may be caused to flex at two points after this abutment engages the cap. Also, by providing the abutment 9 with a sharp edge, it will assist in gripping the jar cap.

From the foregoing description, it is believed that the construction and manner of use, as well as the advantages of the present invention will be readily understood and appreciated by those skilled in the art.

Minor changes may be made without departing from the spirit and scope of the invention as claimed.

What I claim as new is:

1. In a tool of the kind described, a substantially semicircular jar cap embracing member having a handle and embodying a gripping jaw and an integral inwardly curved fulcrum member adapted to engage opposite sides of the jar cap, a flexible resilient connection between the gripping jaw and the fulcrum member normally spaced

from the cap when the jaw and fulcrum member are initially engaged therewith and an inwardly central abutment formed on said flexible connection so as to be normally spaced from the jar so that when pressure is applied to said handle said abutment will engage the cap.

2. In a tool of the kind described, a substantially semicircular jar cap embracing member having a handle and embodying a gripping jaw and an inwardly curved fulcrum member adapted to engage opposite sides of the jar cap and a flexible resilient connection between the gripping jaw and the fulcrum member normally spaced from the cap when the jaw and fulcrum member are initially engaged therewith, an inwardly central abutment formed on said flexible connection so as to be normally spaced from the jar so that when pressure is applied to said handle said abutment will engage the cap, said jaw, fulcrum member and connection being an integral piece of metal.

3. In a tool of the kind described a substantially semicircular jar cap embracing member having a handle and embodying a gripping jaw and an inwardly curved fulcrum member adapted to engage opposite sides of the jar cap and a flexible resilient connection between the gripping jaw and the fulcrum member normally spaced from the cap when the jaw and fulcrum member are initially engaged therewith, an inwardly central abutment formed on said flexible connection so as to be normally spaced from the jar so that when pressure is applied to said handle said abutment will engage the cap, said jaw, fulcrum member and connection being an integral piece of metal, and said handle extending outwardly from the fulcrum member.

4. A tool of the class described including a substantially semicircular work embracing member embodying a single piece of metal formed to provide a gripping jaw and an inwardly extending abutment adapted to engage opposite sides of the work and a flexible resilient connection between said jaw and said abutment adapted to lie in normal spaced relation to the work, said flexible resilient connection being provided with an inwardly central abutment normally in spaced relation from the jar, so that when pressure is applied to said tool said abutment will engage the cap.

5. A tool of the class described including a substantially semicircular work embracing member embodying a single piece of metal formed to provide a gripping jaw an inwardly extending abutment adapted to engage opposite sides of the work and a flexible resilient connection between said jaw and said abutment adapted to lie in normal spaced relation to the work, said work embracing member being of slightly more than semicircular form and adapted to be snapped onto the work, and an inwardly central abutment upon said flexible connection normally in spaced relation from the jar, so that when pressure is applied to said tool said abutment will engage the cap.

In testimony whereof I affix my signature.

HARRY G. NORWOOD.