Jan. 19, 1926. 1,570,306

W. JOHNSON

COMBINATION BOTTLE OPENING TOOL

Filed July 20, 1925

Fig. 1.

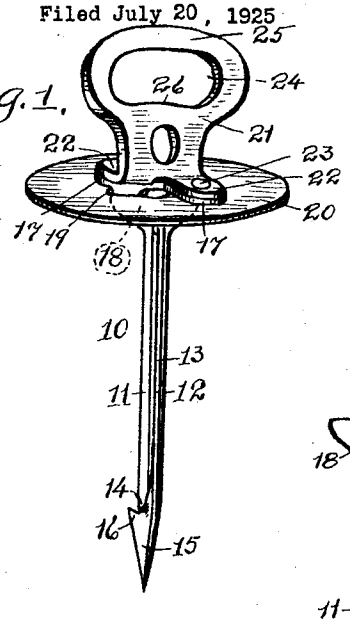


Fig. 2.

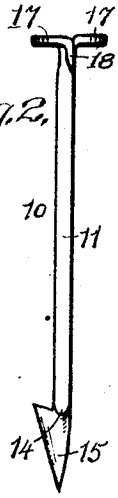


Fig. 3

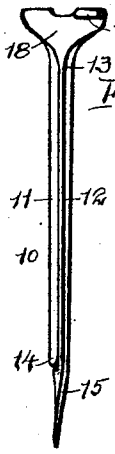


Fig. 4.

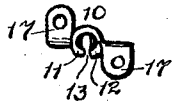
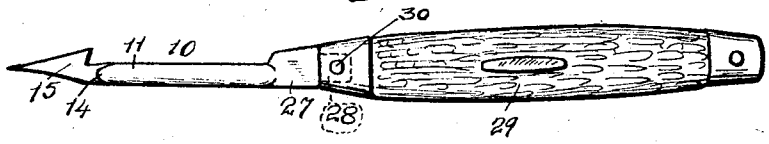


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM JOHNSON, OF CHICAGO, ILLINOIS.

COMBINATION BOTTLE-OPENING TOOL.

Application filed July 20, 1925. Serial No. 44,707.

To all whom it may concern:

Be it known that I, WILLIAM JOHNSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Combination Bottle-Opening Tools, of which the following is a specification.

The tool of the present invention is of the same general character as that shown in my co-pending application Serial No. 5,689, filed January 30, 1925, and the present invention pertains to certain features of construction having to do primarily with the uniting of the various parts comprising the tool in such a way as to provide the necessary strength and rigidity, and also in such a way as to provide a groove or channel through the barb of the tool for the purpose of affording a vent for the equalizing of bottle pressures when the tool is used for the removal of corks.

The tool is designed for the purpose of removing bottle stoppers, or closures of various kinds, including corks, crown seals, milk bottle closures, ring corks or the like, and is also useful in various other ways too numerous to mention.

In the drawing:

Figure 1 is a perspective view of the tool;

Fig. 2 is a side elevation of the barb and the shank;

Fig. 3 is a side elevation taken at right angles to that of Fig. 2;

Fig. 4 is a view looking downwardly on the upper end of the shank; and

Fig. 5 is a modification showing the shank configured for mounting in a knife handle.

The tool comprises a shank 10 which is of substantially U shaped cross section, and is formed by bending or folding a strip of metal in such a way as to provide two sides 11 and 12 which are separated by a groove or channel 13 open on the side opposite the bend or fold. As shown, the side 11 is shorter than the side 12 of the shank and terminates at the point 14. The companion side 12 is extended and flattened to afford a point 15 provided with a barb 16. The shank at its upper end has the sides or sections oppositely turned or extended to furnish angularly disposed tongues 17—17, which tongues constitute lateral extensions from an enlarged flattened head 18 formed by flattening out or spreading the material which merges into the sides of the tubular shank.

The barbed shank is entered through a slot 19 in a disk or plate 20 in such a way as to bring the flattened head 18 into registry with the slot, and to bring the tongues 17 into face contact with the upper side of the disk or plate, and the parts thus positioned are held in clamped relation by the provision of a handle 21 stamped from a plate of metal and provided with oppositely extending feet 22 which rest upon and register with the tongues 17 and are rigidly united therewith by provision of rivets 23 which extend through each superposed foot and tongue and through the proximate portion of the disk, with the result that this riveting of the parts in the manner specified serves to firmly and permanently unite the three sections of the tool together. The handle is preferably provided with an opening or orifice 24 which affords a bridge piece 25 and an opposite edge or lip 26 of a size and shape to afford the means for removing crown bottle seals in the customary manner.

In Fig. 5, I have shown the barbed shank provided with a flattened upper head 27 formed by closely compressing the two sides of the shank together, which head terminates in a reduced shank 28, the configuration of this end of the barbed shank being that commonly observed in the formation of knife blades, so that the shank may be mounted within a knife handle 29 of conventional shape in lieu of one of the blades thereof, the usual pivot pin 30 affording the pivotal mounting for the shank.

When the tool is used for the purpose of removing corks from bottles, the pointed end of the shank will be slipped down between the cork and the wall of the bottle neck until the barb passes the inner end of the cork, after which the tool will be turned to bring the barb into transverse relation with the lower end of the cork. In this insertion of the shank, the groove or channel will establish a vent or passage for the equalizing of pressures inside and outside of the bottle, so that the cork may thereafter be readily removed without the difficulty frequently experienced where there is a pressure or vacuum within the bottle, and without excessive foaming which is frequently encountered where corks are withdrawn in

the customary manner before the pressures are equalized.

The disk 20 affords a guard to prevent the shank from being driven in too far into the bottle or other receptacle, and at the same time maintains a firm union of the parts together and affords a desirable space for the display of advertising or the like in cases where the tool is used as an advertising novelty.

Where the handle is used for the purpose of removing bottle caps, the shank will serve the purpose of a handle in affording the necessary leverage for prying up the cap, and the tool is useful as, for instance, in the removal of paper caps from milk bottles in which case the paper caps will be punctured and afterwards pried up by the engagement of the barb with the underside of the cap.

I claim:

1. In a combination tool, a shank provided with a barbed point, the upper end of the shank being laterally extended to afford a flat head provided with oppositely disposed tongues, and a handle having opposite laterally extending feet registering with said tongues and united thereto, substantially as described.

2. In a combination tool, a shank of channeled formation having one of its sides extended to provide a barbed point and having a vent groove formed between the sides of the shank, the upper end of the shank being laterally extended to afford a flat head provided with oppositely disposed tongues, and a handle having opposite laterally extending feet registering with said tongues and united thereto, substantially as described.

3. In a combination tool, a shank of channeled formation having one of its sides extended to provide a barbed point, the upper end of the shank being laterally extended to afford a flat head provided with oppositely disposed tongues, and a handle having opposite laterally extending feet registering with said tongues and united thereto, substantially as described.

4. In a combination tool, a shank of channeled formation having one of its sides extended and terminating in a barbed point, the opposite end of the shank being laterally flared to afford a flat head provided with oppositely extending tongues, a disk provided with a slot through which the flattened head is entered with the tongues bearing against the face of the disk, a handle provided with laterally extending oppositely disposed feet registering with said tongues, and rivets entered through the superposed feet and tongues and through the proximate portions of the disk, substantially as described.

WILLIAM JOHNSON.