Dec. 5, 1944. C. W. JOHNSON 2,364,219

CAN OPENER

Filed July 26, 1943

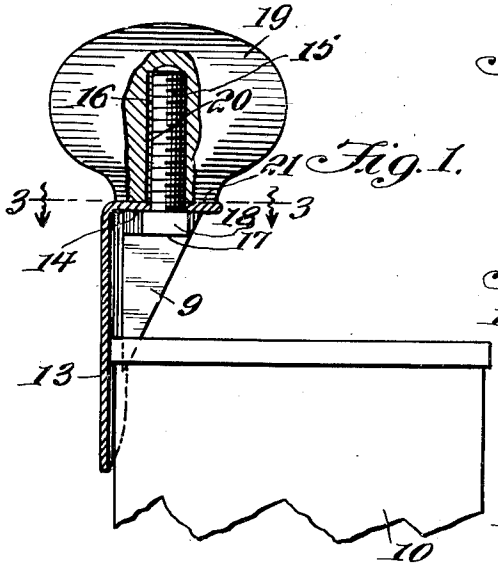


Fig. 1.

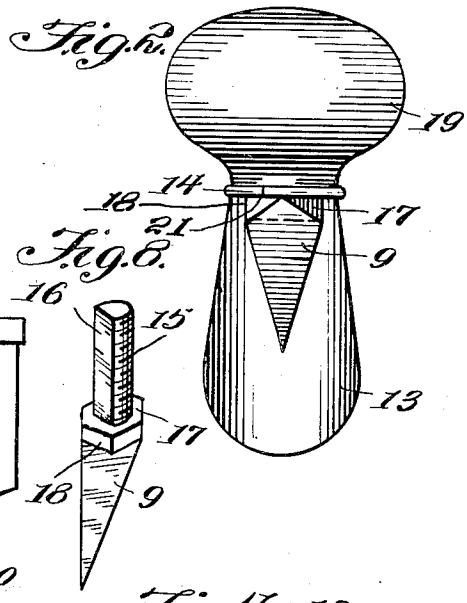


Fig. 2.

Fig. 6.

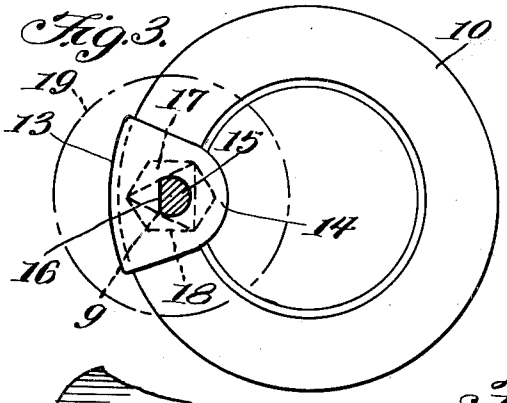


Fig. 3.

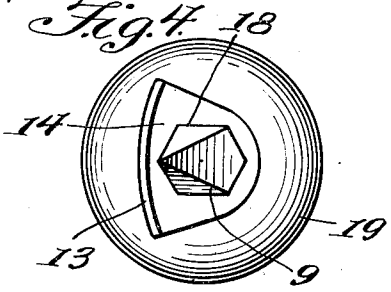


Fig. 4.

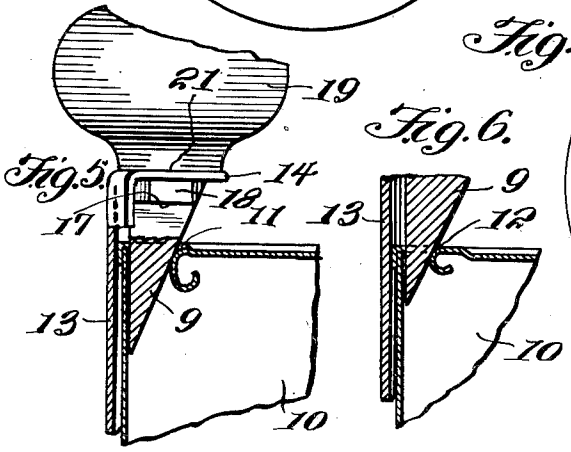


Fig. 5.

Fig. 6.

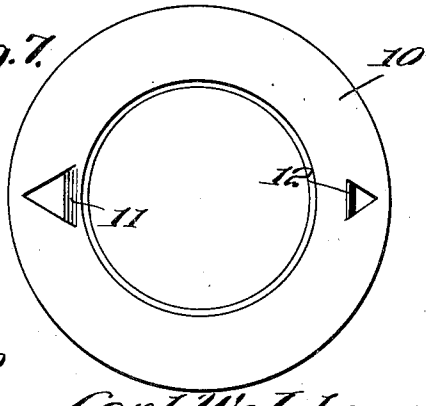


Fig. 7.

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2,364,219

CAN OPENER

Carl W. Johnson, Phoenix, Ariz.

Application July 26, 1943, Serial No. 496,193

1 Claim. (Cl. 30—16)

This invention relates to a can opener and has for an object to provide a can opener consisting of only three simple parts, a guide, a blade, and a knob for forcing the blade through a can cover while the guide engages the can to direct puncturing movement of the blade.

A further object is to provide a device of this character in which the blade is formed with an integral threaded shank which enters the knob and also an integral head or shoulder upon which an extension of the guide is supported, the head having wrench faces to which a tool may be applied to hold the shank stationary while the knob is screwed down tight against the extension on the opposite side thereof from the head to assemble the parts.

A further object is to provide apparatus of this character which will be formed of a few strong, simple and durable parts, which will be inexpensive to manufacture, and which will not easily get out of order.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter full described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming a part of this specification:

Figure 1 is a side elevation, with parts in section, of a can opener constructed in accordance with the invention, applied to a can.

Figure 2 is a front elevation of the can opener.

Figure 3 is a cross sectional view of the can opener taken on the line 3—3 of Figure 1 showing a flat side of the shank engaging a flat wall of the opening in the guide extension to prevent turning of the blade in the guide.

Figure 4 is a bottom plan of the can opener.

Figure 5 is a detail sectional view showing the can opener in use to form a large puncture in the can.

Figure 6 is a detail sectional view showing the can opener in use to form a small puncture in the can.

Figure 7 is a plan view of a can showing punctures formed therein by the blade to provide a pouring opening and a vent opening.

Figure 8 is a detail perspective view of the blade.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, 10 designates a can such as a condensed milk can, oil can or other can. The can opener constructed in accordance with the invention is adapted to form a substantially triangular pouring opening 11, or a substantially triangular vent opening 12 in the can, see Figure 7. The can opener comprises a guide 13 formed of a blank of sheet metal slightly concave in cross section and provided at its upper end with an outwardly directed extension 14 which projects at substantially a right angle to the guide to overlie the can, and which is substantially flat throughout.

The can opener blade 9 is in the form of an inverted pyramid in shape to cut a triangular puncture in the can when forced through the cover of the can. The blade is provided with an integral threaded shank 15 which extends upwardly from the large end of the blade and is provided with a flat side 16. A shoulder 17 is formed integral with the large end of the blade at the bottom of the shank and is provided with wrench faces 18.

A knob 19, of sufficient size to be nicely received in the cupped palm of the operator's hand, is provided with a threaded bore 20 to receive the shank 15. The knob is provided with a flat base 21 adapted to engage the upper face of the extension 14 while the shoulder 17 of the blade engages the bottom face of the extension and limits advance of the threaded shank 15 into the opening 20 of the knob.

To prevent turning of the blade in the guide the extension 14 is provided with an opening 15 to receive the threaded shank 20, one wall of the opening being flat as shown at 16 of Figure 3 to engage the flat side 16 of the threaded shank 15. To assemble the guide, the knob, and the blade, it is simply necessary to insert the shank 20 of the blade through the opening 15 of the extension 14 then screw the knob 19 down onto the shank 20 until it engages the extension 14 and clamps the extension against the shoulder of the blade. The wrench faces of the shoulder permit a wrench being used should the thread of the shank become corroded.

In operation the guide 13 is disposed against the side of the can with the point of the blade engaging the top of the can where the puncture is to be made. The knob 19 is then grasped in the hand and forcibly moved downward to cause the blade to puncture a pouring opening of suitable size or a vent opening of suitable size. The deeper the blade is driven the larger the opening will be.

From the above description it is though that

the construction and operation of the invention will be fully understood without further explanation.

What is claimed is:

A can opener comprising an arcuate guide plate adapted to closely conform to the side of a can, an extension on the upper end of the guide plate projecting forwardly at a right angle to said guide plate adapted to overlie the top of the can and having an aperture, a blade of inverted substantially pyramidal contour below the extension, a threaded shank for the blade non-rotatably projecting through said opening, a knob threadedly engaged on the shank, the knob and the blade engaging the upper and lower sides of the extension respectively to clamp the parts of the opener in assembled relation, and a polygonal shoulder formed at the base of the shank to increase the bearing area of the connected end of the blade against the under side of said extension and to provide a tool engaging means.

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