Mar. 6, 1923. 1,447,370.

W. E. WINN.

CAN OPENER.

FILED JUNE 11, 1921.

Fig. 1.

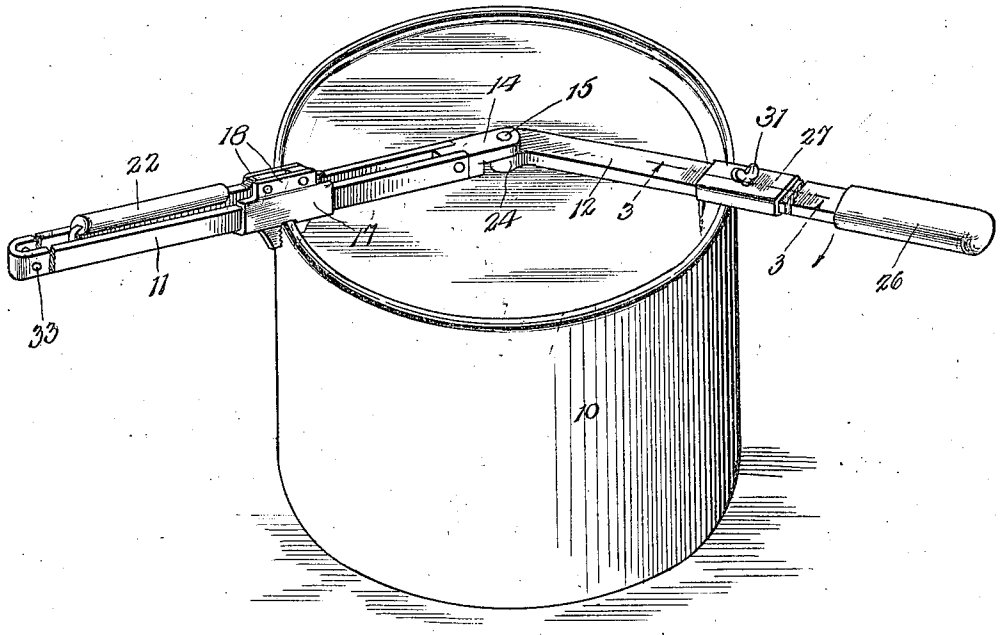


Fig. 2.

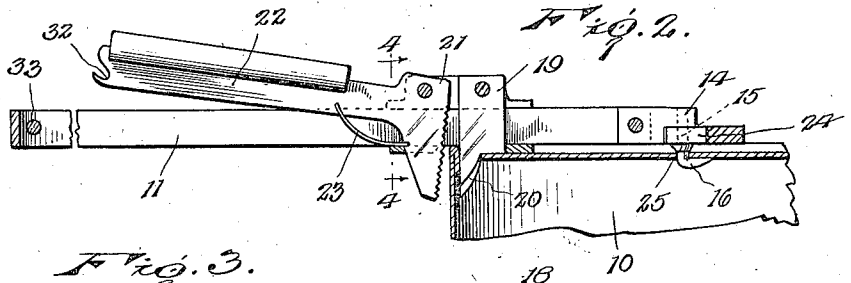


Fig. 3.

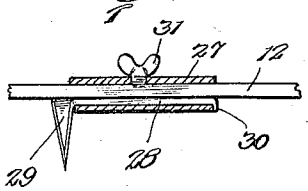
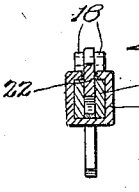


Fig. 4.



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UNITED STATES PATENT OFFICE.

WESLEY E. WINN, OF LOS ANGELES, CALIFORNIA.

CAN OPENER.

Application filed June 11, 1921. Serial No. 476,734.

To all whom it may concern:

Be it known that I, WESLEY E. WINN, citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Can Openers, of which the following is a specification.

This invention relates to an improved can opener and has as one of its principal objects to provide a device of this character which may be readily operated for opening a can with ease and facility and wherein likelihood of slipping of the opener from the can and consequent possible injury to the operator will be reduced to a minimum.

The invention has as a further object to provide an opener embodying means whereby the can may be securely gripped by the opener to hold the can as well as to prevent disengagement of the opener from the can as the knife or cutter of the opener is manipulated for opening the can.

And the invention has as a still further object to provide an opener of this character wherein the gripping means as well as the knife or cutter are adjustable so that the device may be employed for opening cans of different sizes.

Other and incidental objects will appear hereinafter.

In the drawing:

Figure 1 is a perspective view of my improved can opener in conjunction with an ordinary can, illustrating the manner in which the opener is applied to the can,

Figure 2 is a fragmentary longitudinal sectional view particularly illustrating the gripping jaws of the device and showing the manner in which said jaws are disposed to grip the can, a portion of the can being shown in section,

Figure 3 is a longitudinal sectional view taken on the line 3—3 of Figure 1, looking in the direction of the arrows, and

Figure 4 is a transverse sectional view taken on the line 4—4 of Figure 2.

In the drawing, I have shown my improved device in connection with an ordinary can 10 and in carrying the invention into effect, I employ pivotally connected jaw and knife carrying arms 11 and 12 respectively. The arm 11 is slotted longitudinally substantially from end to end thereof and secured to the inner end of the arm is a head having an overhanging reduced extension 14 from which depends a pin or post 15. This pin terminates in a piercing prong 16 projecting forwardly beyond the extension at substantially right angles to the pin in a plane below the arm. Slidably mounted upon the arm is a gripping member comprising a sleeve 17 embracing the arm and provided with spaced upstanding elongated ears 18. Rigidly secured at its upper end between said ears is a fixed gripping jaw 19 which extends downwardly through the slot of the arm. The projecting portion of this jaw is formed with a beveled outer cutting edge 20 sloping to the lower end of the jaw to provide a piercing point. Pivotally mounted at its upper end between the ears 18 to confront the fixed jaw is a movable gripping jaw 21 which, like the fixed jaw, extends downwardly through the slot in the arm and projects beneath the arm. Preferably, the movable jaw is formed with a roughened or toothed working face confronting the working face of the fixed jaw to coact therewith, and projecting laterally rearward from the upper portion of the movable jaw is an integral actuating lever 22 adapted to freely rock in the slot in the arm. The movable jaw is, as clearly illustrated in Figure 2, normally spring pressed away from the fixed jaw preferably by means of a leaf spring 23 engaging the lower side of the sleeve 17 and having its ends secured in notches formed at suitable points in the jaw and lever respectively. As will also be noted, in the normal position of the movable jaw, the lever 22 inclines upwardly and rearwardly out of the slot in the arm and is depressible against the tension of the spring 23 for shifting the movable jaw toward the fixed jaw to coact therewith, when the free end of the lever will, as clearly brought out in Figure 1, be disposed in the slot in the arm. At its upper edge the lever is pref-

erably provided with a rounded rib presenting a smooth surface to the hand of the operator.

The arm 12 is formed at its inner end with a laterally directed pivot lug 24 through which is freely received the pin of the arm 11, it being observed in this connection that by providing the head of the arm 11 with the reduced extension 14, the arms lie flush at their lower sides. Beneath the lug 24 the pin is provided with a stop collar or shoulder 25 coacting with the lug. At its outer end the arm 12 is provided with a suitable handle 26 and slidably mounted on this arm is a cutter carrying sleeve 27. Disposed between the lower side of said arm and the sleeve is a knife 28 provided at its forward end with a depending V-shaped obliquely directed cutting blade 29 and having its rear end portion bent, as clearly indicated in Figure 3, to provide a securing lug 30 coacting with the bottom wall of the sleeve at its rear edge so that the knife will thus be securely held against accidental displacement. Threaded into the upper side of the sleeve is a clamp screw 31 which may be manipulated for clamping the sleeve and knife in adjusted position upon the arm.

In use, the prong 16 at the inner end of the arm 11 is thrust downwardly through the top wall of the can 10 centrally thereof and, as clearly shown in Figure 2, turned laterally to engage beneath said wall for firmly anchoring the arms 11 and 12 at their inner ends. The slidable gripping member upon the arm 11 is then shifted so that the piercing point 20 of the fixed jaw 19 thereof may, by grasping the arm and bearing thereon, be plunged downwardly through the margin of the top wall of the can to dispose the working face of the jaw at the inner side of the side wall of the can. The lever 22 of the movable jaw 21 is then depressed for shifting the toothed working face of said jaw toward the fixed jaw to firmly grip the upper margin of the side wall of the can therebetween. Thus, the arm 11 is firmly connected with the can for holding the opener in position thereon as well as for holding the can stationary. The sleeve 27 is now adjusted to bring the blade of the knife 28 at the desired point for piercing the top wall of the can and is forced therethrough, when the operator may, by grasping the arm 11 and coincidently holding the lever 22 depressed with one hand, securely hold the can, while the handle 26 of the arm 12 is grasped with the other hand for swinging the arm and drawing the blade 29 through the top wall to cut or sever said wall. I accordingly provide a highly efficient and simple device for the purpose stated and one which may be used with little likelihood of slipping or injury to the user. When the opener is not in use, the arms may be folded upon themselves and the free end of the lever 22 disposed in the slot in the arm 11 so that the device will occupy a minimum space. For retaining the lever depressed, the free end of the lever is formed with a hook 32 which may be removably engaged with a pin 33 extending across the slot in the arm near the outer end thereof.

Having thus described the invention, what is claimed as new is:

1. A can opener including coacting pivotally connected arms, a piercing prong carried by one of the arms engageable through the top wall of a can for anchoring the arms, a gripping member adjustable on one of the arms and engageable with the can for holding the can stationary and comprising a fixed jaw and a pivoted jaw, and an adjustable cutter carried by another of said arms to be actuated thereby for severing said wall of the can.

2. A can opener including coacting pivotally connected arms, a sleeve slidable upon one of said arms, coacting fixed and movable gripping jaws on said sleeve, one of said jaws being formed with a piercing point, and severing means carried by another of said arms.

3. A can opener including coacting pivotally connected arms, a sleeve slidable upon one of said arms, coacting fixed and movable gripping jaws carried by said sleeve, the fixed jaw being formed with a piercing point and the movable jaw having a laterally directed lever for shifting the movable jaw toward the fixed jaw to coact therewith, and severing means carried by another of said arms.

4. A can opener including coacting pivotally connected arms one of which is slotted, a sleeve adjustable on said slotted arm, spaced ears upstanding from the sleeve, a fixed gripping jaw secured between said ears, a movable gripping jaw pivotally mounted between the ears confronting the fixed jaw, said jaws extending through the slot in the arm to a position beneath the arm and the movable jaw being formed with a lever depressible for shifting such jaw toward the fixed jaw to coact therewith, and severing means carried by another of said arms.

5. A can opener including coacting pivotally connected arms one of which is provided with a slot, a pin traversing said slot, coacting gripping jaws shiftable along said arm, one of said jaws having a lever provided with a hook engageable with said pin for holding the free end of the lever depressed in said slot, and a cutting knife carried by another of said arms.

6. A can opener including coacting pivotally connected arms, a knife adjustable upon one of said arms and provided with a de-

pending obliquely directed cutting edge, means for securing the knife in adjusted position, and can gripping means including a fixed jaw and a hinged jaw carried by another of said arms.

7. A can opener including pivotally connected members, a cutting element carried by and adjustable longitudinally of one of said members, relatively stationary and movable clamping jaws carried by the other member, means for normally holding the free end of the movable clamping jaw in elevated position to separate said jaws, and means for holding said movable jaw in depressed position.

In testimony whereof I affix my signature.

WESLEY E. WINN. [L. S.]