Aug. 4, 1931. F. QUARNSTROM 1,817,393

COMBINATION CAN AND BOTTLE OPENER

Filed June 18, 1929

Fig. 1.

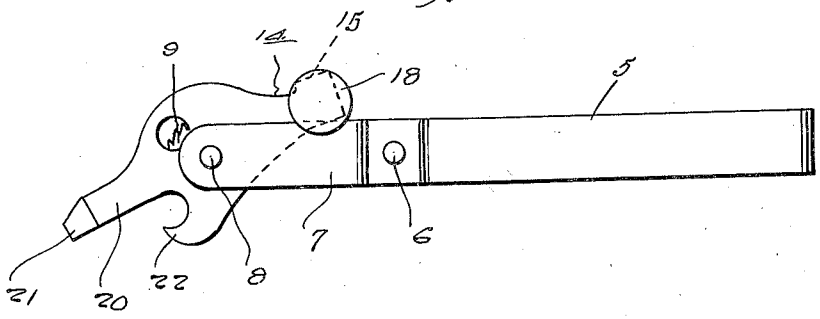


Fig. 2.

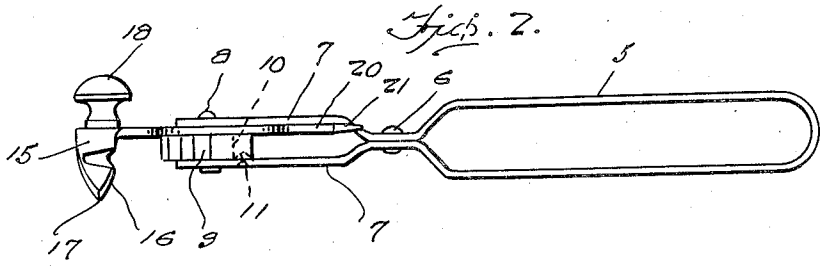


Fig. 3.

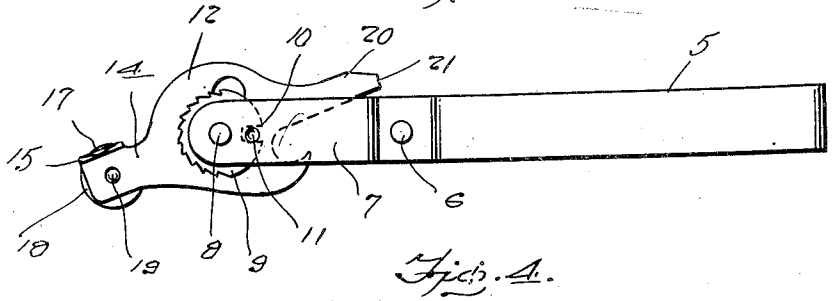
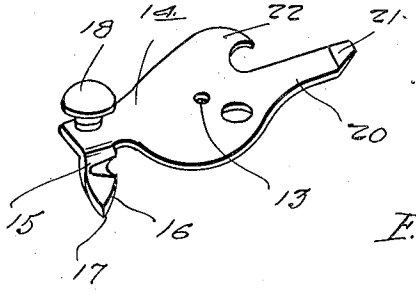


Fig. 4.



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UNITED STATES PATENT OFFICE

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COMBINATION CAN AND BOTTLE OPENER

Application filed June 18, 1929. Serial No. 371,895.

This invention relates to what may be termed broadly as a combination can and bottle opener, the said invention has as its prime object the provision of a hand implement which will be found equally useful for opening cans as in the manner of a conventional can opener, and which will also be found thoroughly reliable for removing the crown cap of bottles, jar closures and for many other analogous purposes.

A very important object of this invention is to provide a device of the character above mentioned which is simple in construction, can be manufactured and retailed at a nominal cost, thoroughly reliable and efficient in use, practicable, durable and otherwise adapted for the purpose designed.

Other objects and advantages of the invention will become apparent during a study of the following description taken in connection with the accompanying drawings, wherein:

Figure 1 is a side view of a hand implement constructed in accordance with this invention and showing the same in a position best suited when used for removing crown bottle caps.

Figure 2 is a view taken substantially at right angles to that of Figure 1 and showing the device in the position best suited when used as a can opener, and

Figure 3 is a side elevation of a device, the parts being in a position relative to one another as in Figure 2.

Figure 4 is a detail perspective view of the plate illustrating the manner in which the cutter is formed integral therewith.

With reference more in detail to the drawings, it will be seen that the device consists of a suitable handle 5, said handle being preferably formed of an elongated strip of metal, preferably steel, bent intermediate its ends in a substantial U, the legs of which converge inwardly toward one another at their intermediate portions to be connected through the medium of a rivet 6, said legs then diverging outwardly from one another at their point of connection to terminate in spaced parallel end portions 7—7. Thus it will be seen that the handle 5 is forked at one end, said forked end containing a pivot pin 8. Between the members 7—7 of the fork there is mounted on the pivot pin 8 a ratchet wheel 9. As illustrated, the ratchet wheel 9 is toothed only on the effective part of its circumference.

The wheel 9 at its opposite peripheral edge is notched as at 10, and a stop pin 11 projects from one of the forked members 7 inwardly for reception into the notch 10, thereby maintaining the wheel 9 in a substantially stationary position. Between the wheel 9 and the remaining member 7 there is arranged a flat plate like member 12, said member being provided with a somewhat centrally disposed opening 13 through which said pivot pin 8 extends to permit free rotation of the plate 12 about the said pivot pin 8. Both the wheel 9 and plate 12 are formed of case hardened metal to provide a strong and durable structure. The plate 12 has formed integral therewith and standing out therefrom, the cutter and can opening devices. The plate 12 merges into a shank-like extension 14 said shank 14 having a lateral extension 15 which is bent down at right angles to the plane of the flat plates 12, said extension 15 being in itself a knife blade having a cutting edge 16 and an end edge or point 17. Thus it will be seen that the cutter or knife 15 is at right angles to the plane of oscillation of the handle 5, said cutter or knife adapted to cooperate with the relatively stationary wheel 9 for cutting out the top or lid of a can, the handle being moved to and fro, for this purpose. Thus it is to be noted that the operation is similar to like can openers of a similar nature.

A suitable handle member or knob 18 has a shank portion 19 extending through the said shank portion 14 of the plate 12 and so disposed that when pressure is applied thereto the knife 15 may be forced into the top or cover of the can, as is apparent.

In longitudinal alinement with the shank portion 14 the plate 12 is provided with an even longer shank portion 20, said shank portion 20 merging into a beveled reduced extremity 21. It is to be noted that the shank 20 is of suitable length so that when the plate 12 is disposed in the position illustrated in Figures 2 and 3, or when the device is to be

used as a can opener, the said shank 20 will abut the handle 5 adjacent the connected portion of the leg members of the handle, thus permitting the handle to bring the necessary pressure to bear on the plate 12 which is conducive for better operation of the device as a can opener, as will be apparent. On one edge of the plate 12 and extending in a direction opposite to the direction of the knife 15 and in cooperative relation with the shank 20 there is provided a prong or spur 22 adapted to engage the bottom edge of bottle closures such as for example crown caps, while the shank portion 20 is disposed upon the top of the cap, in which case it will be seen that the plate 12 is swung into the position shown in Figure 1 whereby the shank portion 14 and handle member 18 will engage with one of the fork members 7, thus cooperating with the handle 5 in utilizing the prong 22 and shank 20 as a bottle opener.

The operation of the invention may be briefly described as follows: The cutting member 16 is pressed through the cover of the can to be opened near the edge of the can and the teeth of the wheel 9 engages with the side of the can. The handle 5 is then rotated back and forth on a substantially horizontal plane, the toothed wheel 9 moving along the side of the can, thus dragging the knife 16 after it, the shank 14 resting upon the upper edge of the can. Obviously the top of the can will be split in a circular manner and the top of the can then expeditiously removed.

When using the device as a bottle opener or capper, the shank 14 is swung to that position shown in Figure 1, so as to abut one of the members 7, the shank 20 then resting on top of the cap, and the prongs 22 engaging the lower edge of the flange or rim of the cap so that obviously upon an upward pull on the handle 5, the device will operate in the manner of a conventional type of decapper, for removing the cap from a bottle.

In view of the foregoing description taken in conjunction with the accompanying drawings it is believed that a clear understanding of the construction, operation, and advantages of a tool of this nature will be quite apparent to those skilled in this art. A more detailed description thereof is deemed unnecessary.

It is to be understood, however, that even though I have herein shown and described the preferred embodiment of my invention that the same is suceptible to certain changes fully comprehended by the spirit of the invention as herein described, and the scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a hand implement of the class described, a handle member terminating at one end in a pair of spaced parallel members, a plate pivotally mounted between said members, longitudinally aligned shanks extending from opposite sides of the plate, a feed wheel rotatably mounted between said members and having an axis common to the axis of the plate, said feed wheel having a portion of the periphery provided with teeth, said feed wheel being further provided on the untoothed portion of its periphery with a radial notch, a pin projecting from one of said members and adapted to engage said notch for maintaining the wheel in a relatively stationary position, one of said shank members at the free end thereof terminating in a laterally disposed angular extension merging into a penetrating point, said extension being further provided with a sharpened edge, the other of said shanks being adapted to abut one of said members for retaining said extension in operative relation with said wheel.

2. In a hand implement of the class described, a handle, a plate pivoted to said handle adjacent one end of the latter, a pair of longitudinally alined tool carrying shanks extending in opposite directions from the plate, said plate being adapted to be rotated to bring one of said shanks into abutting relation with said handle, and the other of said shanks into operative position with respect to the article operated upon.

3. A hand implement of the class described comprising a handle, a plate pivoted to said handle adjacent one end of the latter, said plate having integral therewith a pair of longitudinally alined shanks depending in opposite directions therefrom, the pivotal movement of said plate being adapted to bring one of said shanks into abutting relation with said handle, and the other of said shanks into operative position with respect to the article operated upon, said plate intermediate said shanks being provided with an integral hook-shaped prong extending laterally therefrom and adapted to be operatively positioned with respect to the article to be operated upon by a predetermined one of said shanks.

In testimony whereof I affix my signature.

FOLKE QUARNSTROM.