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FINGER-SUPPORTED BOTTLE OPENER

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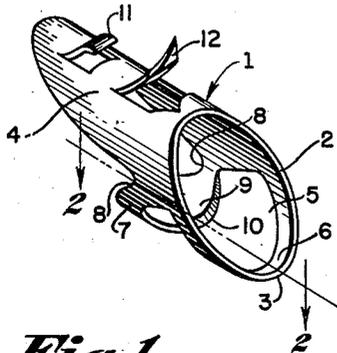


Fig. 1

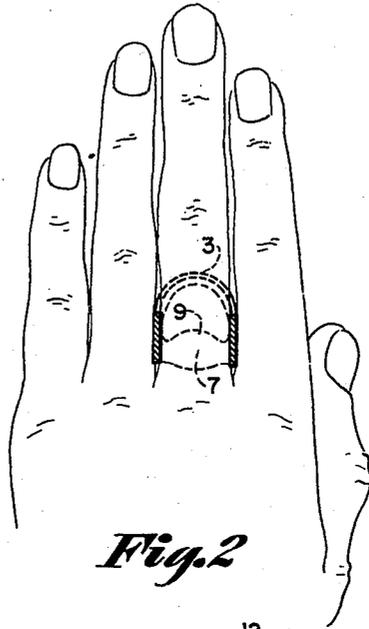


Fig. 2

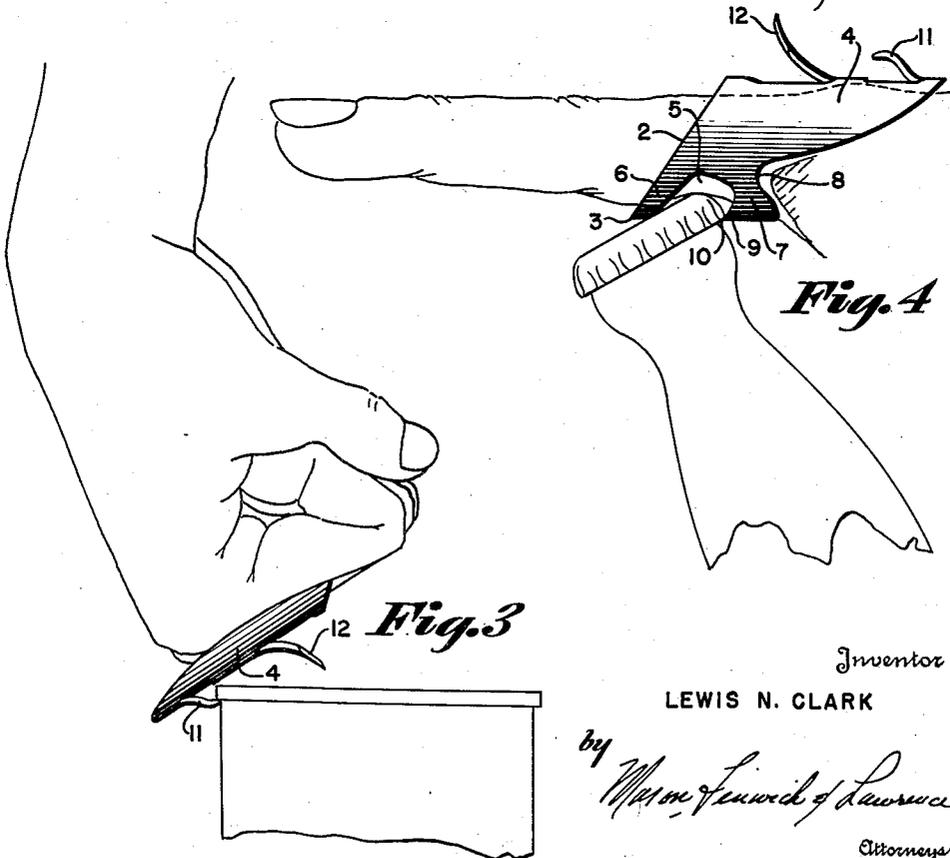


Fig. 3

Fig. 4

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FINGER-SUPPORTED BOTTLE OPENER

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1 Claim. (Cl. 81—3.46)

1

This invention relates to a finger-supported combined can and bottle opener.

The principal object of the invention is to provide a bottle or can opener which does not require any auxiliary support, either for the opener or for the can. The device thus becomes particularly adapted to the portable vending of bottled or canned beverages by a vendor who circulates among the patrons, as at a ball park.

Another object of the invention is to provide a finger-supported opener, so constructed and arranged as to refer the opening pressure, whether it be for bottle caps or cans, to the movement of the wrist, thus relieving the supporting finger from major stresses, permitting repeated opening operations without undue fatigue of the finger.

A more specific object of the invention is the provision of a can opener of the type described, having a plate portion extending from the knuckle a substantial distance toward the first joint of the base digit of the finger, affording a support for the back of the base digit, fulcrumed against the can, avoiding discomfort in the can opening operation by distributing the puncturing pressure over an extensive area of the finger.

Another specific object of the invention is to provide a bottle opener of the type described, having spaced portions encircling the front of the finger, one fulcruming against the bottle cap, the other forming the lifting lip, the space between the two being positioned in the zone of the muscular bulge on the front of the base digit, preventing cramping.

Still another object of the invention is to provide a finger-supported opener having lateral recesses in its lower end fitting the webs between adjacent fingers, assisting in maintaining the position of the opener on the finger and preventing pain or discomfort through pressure of the opener against said webs under operating stresses.

Other objects of the invention will appear as the following description of a preferred and practical embodiment thereof proceeds.

In the drawing which accompanies and forms a part of the following specification, and throughout the several figures of which the same reference characters have been employed to denote identical parts:

Figure 1 is a perspective view of the combined bottle and can opener;

Figure 2 is a section taken along the line 2—2 of Figure 1;

Figure 3 is a side elevation of the device, illustrating its can opening position;

2

Figure 4 is a side elevation of the device, illustrating its bottle opening position.

Referring now in detail to the several figures, the numeral 1 represents the combined bottle and can opener as a whole. It is a substantially cylindrical rigid member, preferably of metal, of such size as to slip on the base digit of the middle finger. It may be described as a ring having one end 2, terminating in a plane oblique to the axis of the cylinder, the ring being worn with this end facing toward the end of the finger, and having the advance portion at the front of the finger, adapted to be engaged by the middle digit when the finger is bent, for holding the ring in place.

The ring is formed with an elongated saddle plate 4, of transversely cylindrical curvature adapted to embrace the back of the base digit of the finger, and being of such length as to extend over the knuckle. The lower part of the ring is of such length as to extend from the advance portion 3 of the oblique end to the ball of the hand at the base of the finger, said lower part having an intermediate opening 5 defining spaced bands 6 and 7, encircling the front of the finger.

The saddle plate 4 is of graduated arcuate depth progressing from shallow toward the knuckle end to deep adjacent the band 7. The band 7 is laterally recessed at 8, at its juncture with the saddle plate, the recesses 8 being shaped to fit around the webs which join the ring supporting finger with the adjacent fingers.

The band 7 is convex toward the opening 5, the concave portion forming a lip 9 terminating in a knife edge 10. The saddle plate has a struck-out hooked fulcrum lug 11, and forward of this, a struck-out sharp puncturing lug 12.

Figure 4 illustrates the use of the invention as a bottle cap remover. The finger is held, as shown, and does not necessarily participate in the bottle opening function except merely as a support for the opener. The bottle is held in one hand, the cap inserted in the opening 5, as shown, with the fulcrum band 6 on top of the cap and the lip 9 in engagement with the edge of the cap. Since the finger is inactive, the muscular bulge at the opening 5 is relaxed and readily pushed in, as shown, to admit the bottle cap to the opening. With the parts in this position the wrist is now moved to tilt the hand upwardly, putting pressure through the band 6 upon the top of the cap, and at the same time tilting the lip 9 upward about the band 6 as a fulcrum, detaching the lid. To open a can, the latter is

3

held in one hand and the hand which carries the opener is doubled into a fist, as shown in Figure 3. The saddle plate 4 is brought adjacent the can and the fulcrum lug 10 hooked under the same edge of the can. The wrist is then turned to bring the puncturing lug 11 into contact with the top of the can. In the execution of this movement the first effect is to bring the back of the base digit of the finger into flat contact with the saddle plate 4, thus distributing the rather forceful puncturing pressure over an extensive area of the finger surface, avoiding discomfort. When the fingers are bent into the first position shown in Figure 4, the tensed muscles in the ball of the base digit of the finger which carries the opener can protrude freely through the opening 5, avoiding cramping of the finger.

In both the bottle and can opening operations the recesses 8 permit the opener to engage the webs between adjacent fingers uniformly, without creating any localized painful pressure.

When the device is idle, it can be conveniently retained in place by bending the middle finger so as to bring the middle digit into engagement with the advance portion 3 of the forward end, so as to press the outer edge of the band 7 into light engagement with the ball of the hand adjacent the base of the middle finger.

While I have in the above description disclosed what I believe to be a preferred and practical embodiment of the invention, it will be understood by those skilled in the art that the details of construction and arrangement of parts, as shown and described are by way of example and not to be construed as limiting the scope of the invention.

4

What I claim as my invention is:

Finger ring type bottle opener comprising a cylindrical finger encircling member having one end terminating in a plane oblique to the axis of said member, said oblique end being adapted to face toward the end of the finger with its foremost portion at the front of the finger, said member being formed with forward and rearward bands on the front separated by an opening for the insertion of a bottle cap, said forward band being flush with said oblique end and being a fulcrum to rest on the top of the bottle cap, said rearward band having a convex forward edge extending into said opening for engagement with the flange of the bottle cap, and a rear convex edge adapted to rest against the ball of the hand adjacent the base of the finger, said member being formed with an elongated finger supporting plate on the back extending longitudinally beyond the zone of said bands in a direction away from said oblique end to a point beyond the knuckle, the sides of said plate and the sides of the rear edge of said rearward band forming lateral recesses fitting the webs between the finger that supports the opener and the adjacent fingers.

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