Nov. 22, 1949 C. R. HITCHCOCK 2,488,912

BOTTLE CAPPER

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Fig. 1.

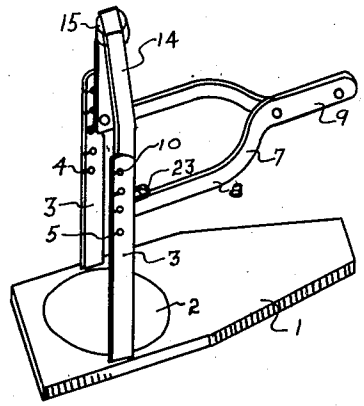
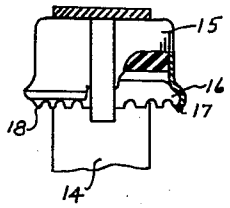


Fig. 3.



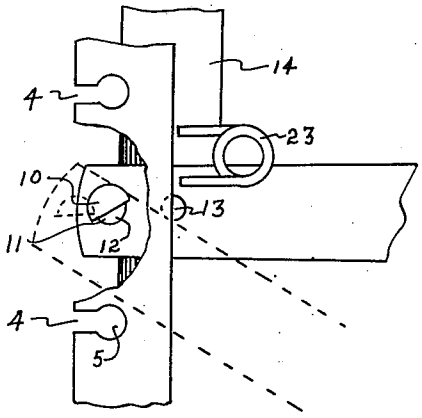
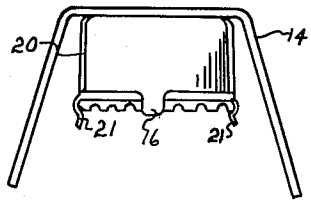


Fig. 2.

Fig. 4.



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BOTTLE CAPPER

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3 Claims. (Cl. 226—84)

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My invention relates to improvements in bottle cappers. The objects of the invention are to provide a hand operated bottle capper in which the leverage between the handle and the cap holder is so compounded that very easy operation is obtained; to provide a simple means of construction which enables the capper to be easily adjusted for varying heights of bottles, and also to provide means for securing a cap in the cap holder which will retain said cap in position until it is affixed to the bottle. A still further object is to provide means for locating the cap holder directly above the bottle position when the operating handle is raised to the required height.

Fig. 1 is a perspective view of the invention.

Fig. 2 is a detail view showing the method of pivotally mounting the fork to the bottle capper standards.

Fig. 3 is a side view, part in section, of the cap and holder.

Fig. 4 is a rear view of said holder.

In the drawings like characters of reference indicate corresponding parts in each figure.

The numeral 1 indicates a base which is preferably fitted with a circular rubber pad 2 for receiving a bottle to be capped. Extending upwardly from the base and on opposite sides of the pad 2 is a pair of standards 3 each having a plurality of slots 4 extending inwardly from one of its edges. Each slot terminates in a circular opening 5.

A fork 7 consisting of prongs 8 and a handle 9, all of which are preferably made from a piece of strap material, is provided adjacent the free ends of the prongs 8 with pivot pins 10 which are adapted to be journalled in any pair of the slots 4. The pivot pins may be in the form of a shouldered rivet with part of the shank 11, see Figure 2, cut away as at 12 so that the shank 11 when turned to the position shown in dotted line may pass out from its circular opening 5 through the entrance of the slot and the fork be fulcrumed in any other pair of slots desired. The pivot pins may be economically stamped out from the material forming the prongs 8 if desired to provide a member capable of being removed from the slots in the manner above described.

Pivotally mounted on pins 13 which pass through the prongs 8 is a bale 14 to which a cap holder or socket 15 is secured. The socket is preferably stamped with a lug 16 extending downwardly from its periphery, see Figs. 1, 3 and 4, which lug is inwardly bent as at 17 to engage the flared rim of an unused bottle cap

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18 when inserted into the socket 15. An inverted U-shaped spring 20 is held between the socket 15 and the bale 14. The free ends of said spring are bent as at 21 to form clips for releasably supporting a bottle cap 18 by its lower edge when inserted into the socket 15.

In order to substantially align the bottle cap and socket 15 with the top of the bottle when about to cap said bottle, a U-shaped spring 23 is connected at its free ends to one or both prongs 8 of the fork 7 and to the lower portions of the bale 14, the point of connection of said spring being above and in substantially vertical alignment with the pivot pins 13 of the fork.

In use, the device is adjusted to the height of the bottle to be capped by inserting the pivot pins 10 into the appropriate slots 4 of the standards 3. A bottle cap 18 is pressed into the socket 15 and is retained in position by the lug 16 and the spring clips 21. A bottle is then placed on the pad 2 below the bale 14 and the handle 9 is depressed, guiding, if necessary, the socket 15 onto the neck of the bottle. The depression of the handle forcing the socket downwardly will close the crimped edge of the cap onto the bottle neck and will release said edge from engagement with the clips 21, so that on raising the handle subsequent to closure there will be no tendency to lift the bottle. During the depression of the handle with the cap on the bottle the spring 23 will be flexed as the angle between a prong 8 and the bale 14 increases but when the socket is free from the bottle the bale will assume a position relative to the fork 7 approximating an angle of ninety degrees.

What I claim as my invention is:

1. A bottle capper comprising a base, a pair of standards spaced apart, a fork having a handle, the free ends of said fork being pivotally connected to said standard and a bale having a capping socket pivotally connected to the fork adjacent its free ends, said bale extending upwardly above the handle and said socket being disposed at the apex of the bale.

2. A bottle capper comprising a base, a pair of standards spaced apart, a fork having a handle, the free ends of said fork being pivotally connected to said standards and a bale extending upwardly above the fork, said bale having a capping socket at its upper end, and resilient means for maintaining the bale at substantially right angles to the longitudinal axis of the fork.

3. In a bottle capper having a pair of standands, a handled fork pivotally connected to said standards and means operated by the swinging

movement of the handle for closing a cap onto a bottle, the standards having a plurality of substantially horizontal slots with parallel sides extending inwardly from an edge of each standard and each slot terminating in a circular opening of greater diameter than the width of the horizontal slots, the pivot connection on each fork having opposed flattened sides and opposed arcuate sides, the width of the pivot connection between flattened portions being such as to pass through the parallel sides of a slot and the portion between arcuate sides being such as to rockingly fit the circular portion of the slot.

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The following references are of record in the file of this patent:

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