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2,430,651

BOTTLE CAPPER

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Fig. 1.

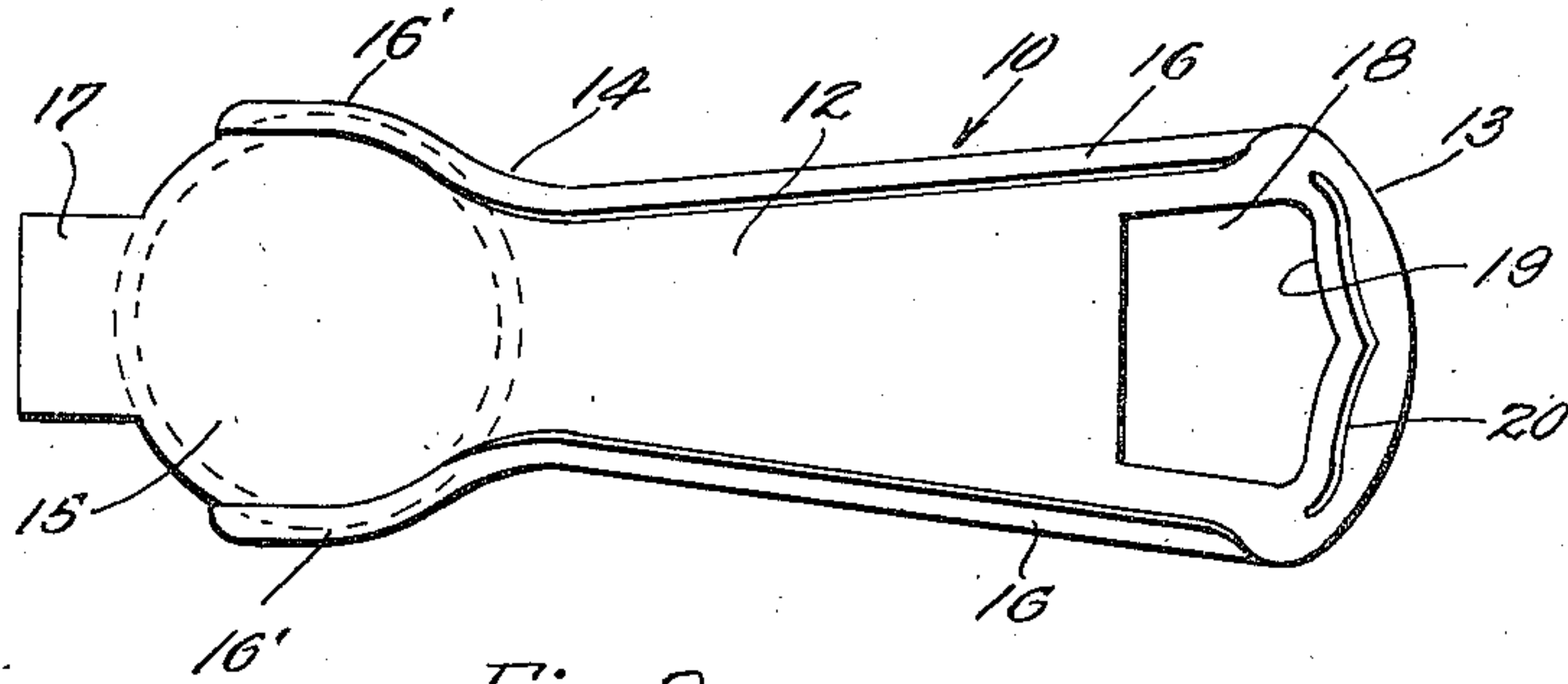


Fig. 2.

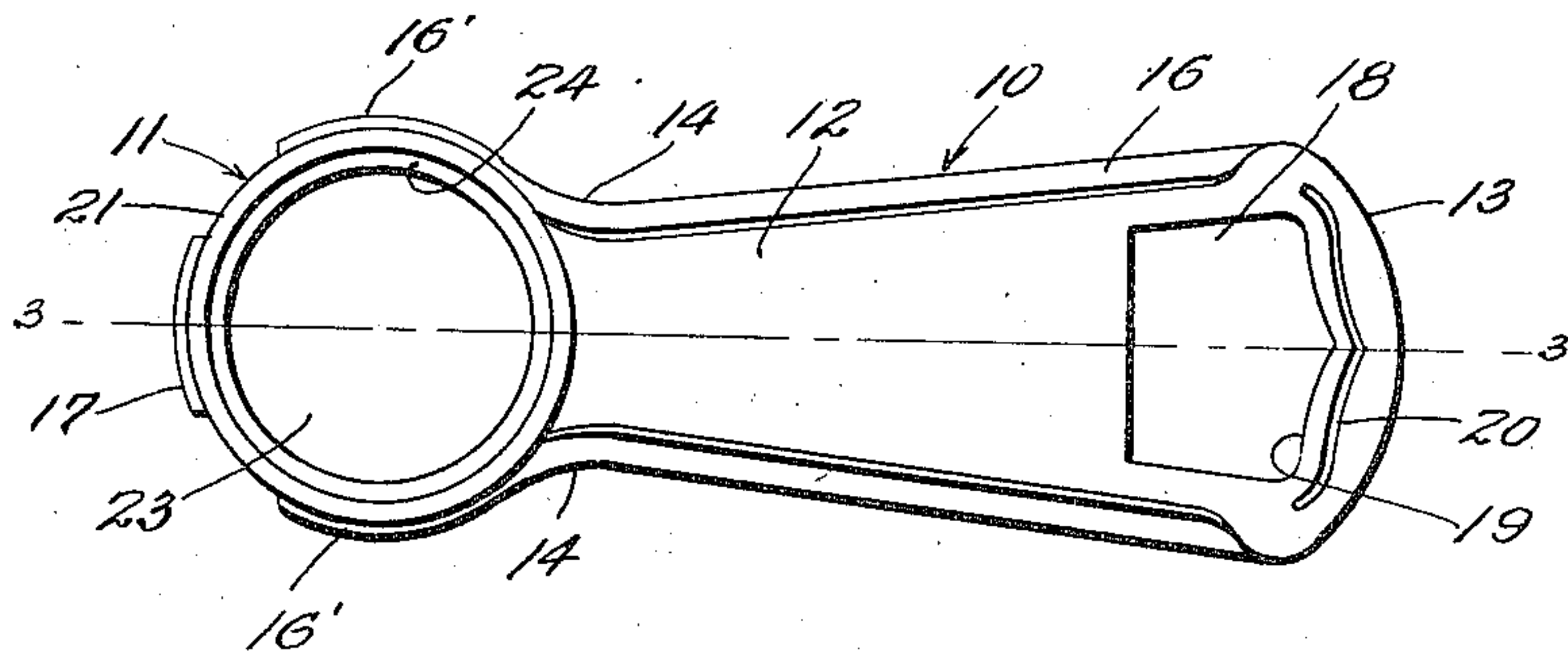


Fig. 3.

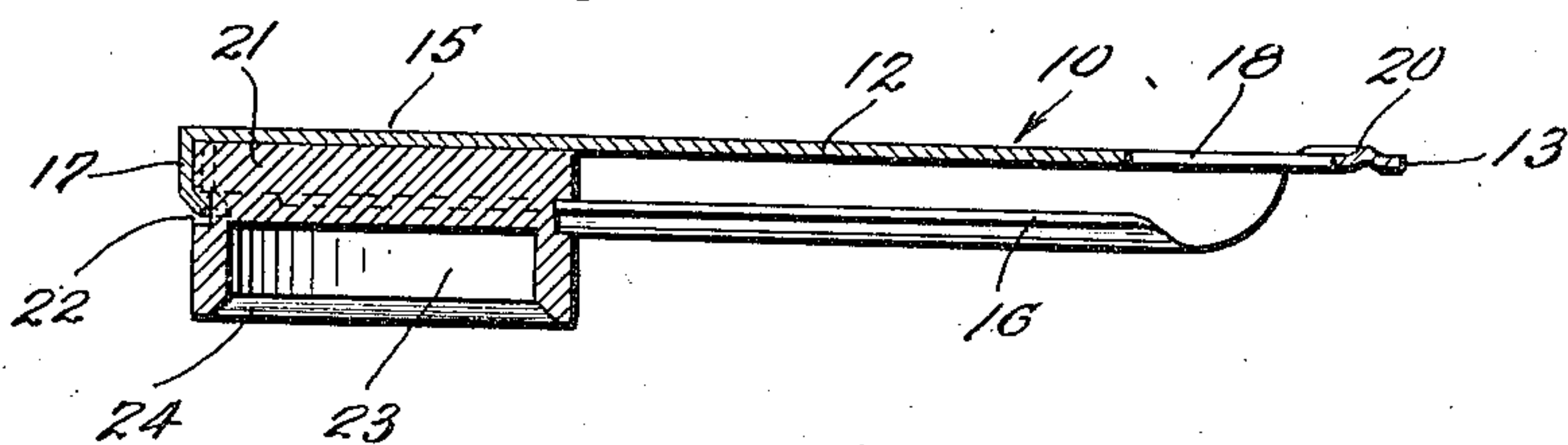
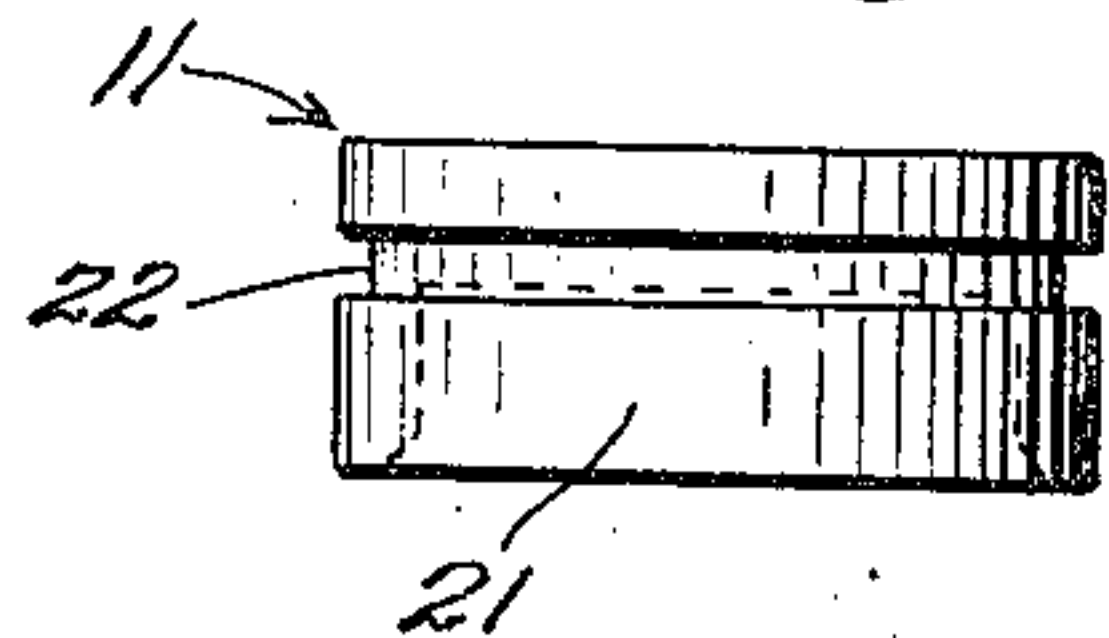


Fig. 4.



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## UNITED STATES PATENT OFFICE

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## BOTTLE CAPPER

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3 Claims. (Cl. 226—84)

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This invention relates generally to the class of kitchen and table articles and pertains particularly to an improved bottle cap remover and replacer or capper.

The caps or closures for receptacles in which many types of carbonated beverages and liquids are marketed, are of such a character that when they have been removed, they are bent or deformed to such an extent that it is not possible to replace them by ordinary means, in such a way as to safely retain the contents in the receptacle, particularly where the liquid in the receptacle contains gas under pressure. Accordingly, various types of auxiliary closures or caps have been devised for use closing the mouth of the receptacle after the regular or ordinary crimped cap has been removed.

The present invention has for its principal object to provide a device, by means of which the usual or ordinary crimped cap with which the mouth of the beverage container is securely closed, may be replaced and secured tightly in position so that the receptacle mouth will be securely sealed against the escape of liquid or gases even though such gases may be under considerable pressure in the receptacle.

Another object of the invention is to provide a combined bottle cap remover and capping device in which the remover and the capper are coupled together in a novel manner so that one may be formed from sheet metal of suitable weight while the other may be separately formed from a heavier metal body.

The invention will be best understood from a consideration of the following detailed description, taken in connection with the accompanying drawing forming a part of the specification, with the understanding, however, that the invention is not confined to a strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

Figure 1 is a view of the underside of the handle and head of the device before the capper is applied.

Figure 2 is a view corresponding to Figure 1 but showing the capper secured in position to form the complete device.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2.

Figure 4 is a view in elevation of the capper per se.

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Referring now more particularly to the drawing, the numeral 10 generally designates the handle portion of the opener and capper device of the present invention while the capper proper is generally designated 11.

In accordance with the present invention, the handle 10 comprises a body of sheet metal 12, of suitable length which is of slightly greater width at its outer or free end 13 than at the inner end which is defined by a relatively narrow neck portion 14. At the inner end the neck portion merges with a substantially circular head plate 15, against the inner face of which the capper 11 positions.

Portions of the longitudinal sides of the handle body are bent inwardly to form the flanges 16 and these flanges are extended as indicated at 16', partly around the circular head portion 15 beyond the transverse center thereof from the handle side, being straight initially at the head ends to facilitate the insertion of the capper 11, therebetween.

At the edge of the head portion 15 diametrically opposite from the handle side of such portion, the head part is extended to form the integral lip 17.

At the free or outer end of the handle, the material is cut out between the flanges 16 to form the jaw opening 18, the edge 19 of which forms the jaw proper for engagement under the edge of a bottle cap to effect the removal of the same in the usual and well-known manner.

The material of the handle between the opening 18 and the adjacent end edge, is pressed outwardly in the opposite direction from the flanges 16, to form a strengthening or reinforcing rib 20.

The capper 11 comprises a turned cylindrical body 21 formed of suitable metal, preferably soft steel.

Around the body 21 there is cut, adjacent to one end, the groove 22, which is at the proper distance from the top of the body 21 to receive the edges of the flanges 16 of the handle head plate 15.

After the body 21 has been placed in position against the head plate 15 of the handle with the flanges 16' engaging in the groove 22, the ends of the flanges and the lip 17 are bent inward, with the lip disposed across the adjacent side of the body 21, and the free edge thereof is forced into the groove 22, as shown in Figure 3, to firmly lock the capper to the head end of the handle.

The body 21 is cut out in the end opposite from the head plate 15 to provide the cylindrical recess or chamber 23 which is of a diameter to snugly



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receive a crimped bottle cap such as is commonly employed for closing ginger ale, beer and soft drinks bottles.

The outer edge of the cap receiving recess or chamber 23, is beveled as indicated at 24 to provide a slanting, camming surface which is designed to engage against the outwardly flaring crimped portion of the edge of the bottle cap when the cap is forced up into the recess 23.

In the use of the present device, it will be readily apparent that after the cap has been removed and it is desired to replace it and secure it in sealing position upon the mouth of the bottle, the cap will be laid in position over the bottle mouth and the capper 11 will then be placed over the cap so that the cap will lie within the recess 23. By then striking a sharp blow upon the top of the head plate 15 and consequently upon the capper 11, the cap will be forced down onto the rim of the bottle mouth and as the slanting or beveled edge 24 of the recess 23 comes to bear against the outwardly flaring edge of the cap, such edge will be forced downwardly and inwardly so as to return to its locking engagement under the flange provided around the bottle mouth for this purpose.

From the foregoing, it will be apparent that there is provided in the device of the present application a handy and efficient article by means of which a crimped metal bottle cap of the usual style employed in closing ginger ale, beer and similar bottles, may be easily and quickly replaced to tightly close the bottle mouth, thereby avoiding the necessity of keeping at hand various types of auxiliary caps or closers such as are at present employed.

I claim:

1. A bottle cap replacing device, comprising a relatively long body member forming a handle and provided at one end with an enlarged substantially circular head, a flange formed at opposite sides of the head and extending from the

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handle part way around the head beyond the transverse center of the head, a circular body disposed against one side of said head and having an encircling groove in which said flange is secured, said circular body having a recess formed in the end opposite from the head, to receive a crimp sealed bottle cap, and means forming a camming surface around the outer end of the recess for effecting the constriction of the cap around a bottle mouth when the member is forcibly driven, with the cap therein, onto the bottle mouth.

2. A device as set forth in claim 1, in which the said camming means comprises a beveled surface formed around the outer end edge of the cap receiving recess.

3. A device of the character stated in claim 1, in which the member is designed to be slidably inserted between the said flanges, and a tongue forming an integral extension of the edge of the handle head upon the side of the head opposite from the handle, and adapted to be bent down across the adjacent side of the member for locking engagement in the groove.

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