Feb. 23, 1926. 1,574,085

C. HAMMER

METAL CAP

Filed Feb. 2, 1925

Fig. 1.

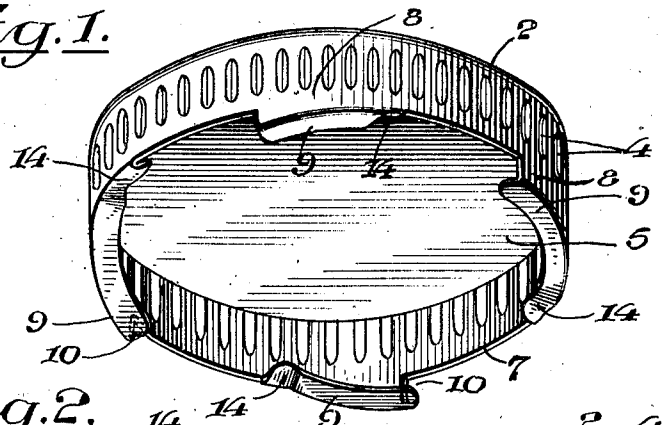


Fig. 2.

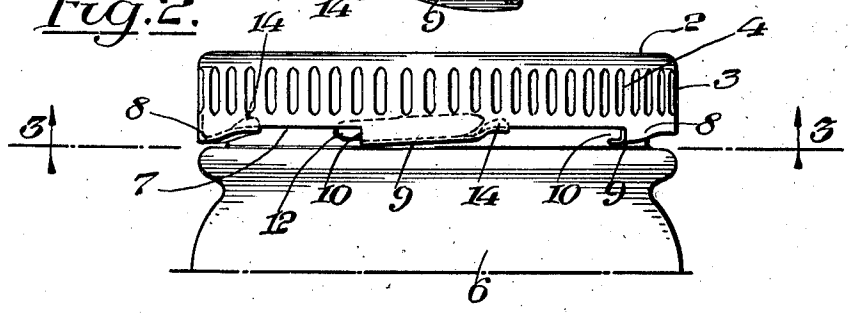


Fig. 3.

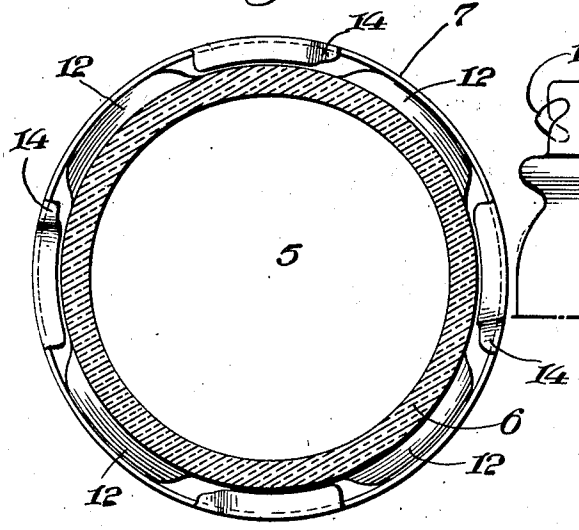
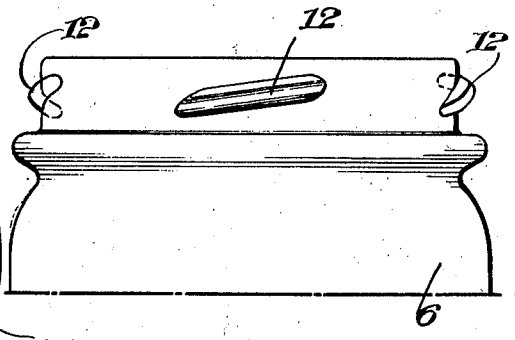


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES HAMMER, OF HOLLIS COURT BOULEVARD, QUEENS COUNTY, NEW YORK.

METAL CAP.

Application filed February 2, 1925. Serial No. 6,197.

To all whom it may concern:

Be it known that I, CHARLES HAMMER, a citizen of the United States, residing at Hollis Court Boulevard, in the county of Queens and State of New York, have invented certain new and useful Improvements in Metal Caps, of which the following is a specification.

This invention relates to metal caps or closures for glass containers or receptacles and the like and particularly to that style of cap commonly designated in the trade as lug caps for use on glass bottles or containers having lugs or divided threads, the object of the invention being to provide an improved reusable metal cap or closure of this class which may be made cheaply to fill the demand for an inexpensive cap.

One of the objects of the present invention is the provision of a metal cap or closure having an improved form of locking or holding lug which will engage or grip the threads of a glass container a considerable distance lengthwise of such lugs thereby more effectively to draw down the cap on to the container and insure a tighter seal and also prevent the working off of the cap in the handling of the package and in which the lugs will also have a stop face to limit the turning on movement of the cap.

In the drawings accompanying and forming part of this specification, Fig. 1 is a perspective view of this improved cap looking into the interior thereof with a part of the liner broken away; Fig. 2 is a side view of the cap applied to a container; Fig. 3 is a cross sectional view taken on line 2—2 of Fig. 2 showing the cap applied to a container but before the cap is turned on to the container, and Fig. 4 is a view of one form of container which may be used with this improved cap.

Similar characters of reference indicate corresponding parts in the several views.

Before explaining in detail the present improvement and mode of operation thereof, I desire to have understood that the invention is not limited to the details of construction and arrangement of parts which are illustrated in the accompanying drawings, since the invention is capable of other embodiments, and that the phraseology which I employ is for the purpose of description and not of limitation.

This improved cap comprises a top 2 having a depending flange or skirt 3 provided with suitable corrugations 4. The cap is usually provided with a liner 5 for making a tight seal at the top of the glass container, bottle or jar 6. The lower edge of this cap is what may be designated as a raw or free edge 7, although in a more expensive form thereof those portions of the edge of the cap between the locking lugs could be provided with a beaded or curled edge thereby to prevent rusting and corrosion and the action of the elements and thus provide a more sanitary form of cap as well as one that would prevent cutting of the hands of the user. The skirt is provided at intervals with depending wedge-shaped or segmentally formed extensions or projections 8 shown as four in number although a different number could be used if desired, according to the size of the cap. Each of these projections has a part thereof bent inwardly toward the center of the cap to provide a flat faced inclined holding resilient lip or lug 9 of a single thickness of metal, the entering or forward end of each lug being spaced further from the lower edge and the top of the cap as at 10 than is the rear end of the lug so that the lug is thus gradually inclined throughout its length to properly cooperate with the container lugs or threads 12 shown on the present form of glass container 6.

At the rear end of each lug which substantially merges into the skirt edge, it is depressed or bent inwardly toward the top of the cap to form an abrupt wall or stop 14, that part of the bent rear end in the rear of the stop face running substantially parallel with the edge of the skirt and acting to reinforce such stop and the lug.

From the foregoing it will be seen that when the cap is turned on to the glass container it will, by reason of the distance of the forward end of the lug from the edge of the skirt more easily and quickly engage the thread, in other words be more readily guided on to the thread and its flat side or face will then engage such thread all along the inclined portion of the lug, thus giving an increased bearing to the lug upon the thread of the container and so draw down the closure more effectively upon the upper edge of the container and insure a tighter sealing of the same and also prevent the premature snapping back of the cap during the handling of the sealed package. The clo-

sure may be repeatedly used in an effective manner to seal the container.

On the turning of the cap on to the container it can be turned until the stop of each lug engages the end of the container projection or thread in a manner which will be readily understood. The cap may be made of resilient sheet metal or of any suitable material that will enable the lugs to effectively stand up.

From the foregoing it will be observed that I have provided a comparatively inexpensive metal closure or cap having resilient inclined lugs which can be made very quickly and readily and yet have an efficient gripping means upon the lugs or threads of the container throughout a considerable distance thereof and which can be easily rotated into position and turned off of the container so that it is capable of repeated reuse.

In practice in some forms of caps and glass threads the forward end of each lug may be given a further slight bend outward to further assist in guiding the cap on to the glass thread if desired, but in the present style of cap the inclined form of the lug does away with this.

It is to be understood that by describing in detail herein any particular form, structure or arrangement, it is not intended to limit the invention beyond the terms of the several claims or the requirements of the prior art.

Having thus explained the nature of my said invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the modes of its use, I claim:

1. A metal cap or closure comprising a top having a depending skirt provided at intervals with depending wedge-shaped extensions having a part thereof bent inwardly to form inwardly extending locking lips, each inclined in the direction of its length throughout the major portion thereof with the forward entering end spaced from and below the edge of the skirt and its rear end terminating at the edge of the skirt, the rear end of a locking lip terminating in a stop face.

2. A metal cap or closure comprising a top having a depending skirt provided with inwardly bent locking lips having the forward ends thereof spaced below the lower edge of the skirt and the rear ends merging into the edge of the skirt whereby each is inclined throughout the major part of its length with a part at the rear thereof running substantially parallel with the edge of the skirt.

3. A metal cap or closure comprising a top having a depending skirt provided with inwardly bent locking lips having the forward ends thereof spaced below the lower edge of the skirt and the rear ends merging into the edge of the skirt whereby each is inclined throughout the major part of its length with a part at the rear thereof running substantially parallel with the edge of the skirt, said parallel portion having a part bent inwardly toward the skirt to form a stop at the end of the inclined portion.

4. A metal cap comprising a top having a depending corrugated skirt having at spaced intervals inclined resilient locking lips bent inwardly from the skirt, the forward ends of the lips spaced from the edge of the skirt and the rear ends thereof merging into the skirt and provided with stops, each of the locking lips gradually tapering from its entering end toward its rear end with a part of the stop forming portion running substantially parallel with the lower edge of the skirt.

Signed at Brooklyn, county of Kings, New York, this 3th day of January, 1925.

CHARLES HAMMER.