No. 715,399. Patented Dec. 9, 1902.

A. A. LOW.

MEANS FOR SECURING CLOSING CAPS PERMANENTLY WITH VESSELS.

(Application filed Feb. 24, 1902.)

(No Model.)

Fig. 1.

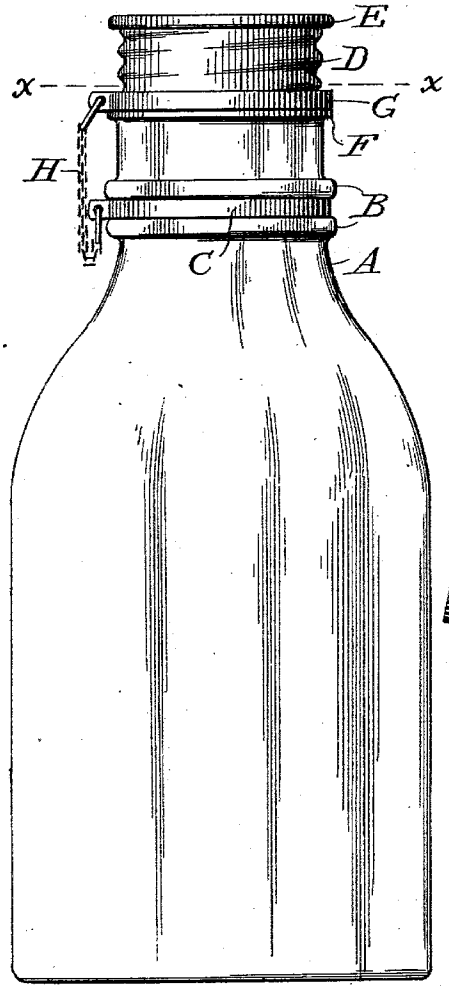


Fig. 2.

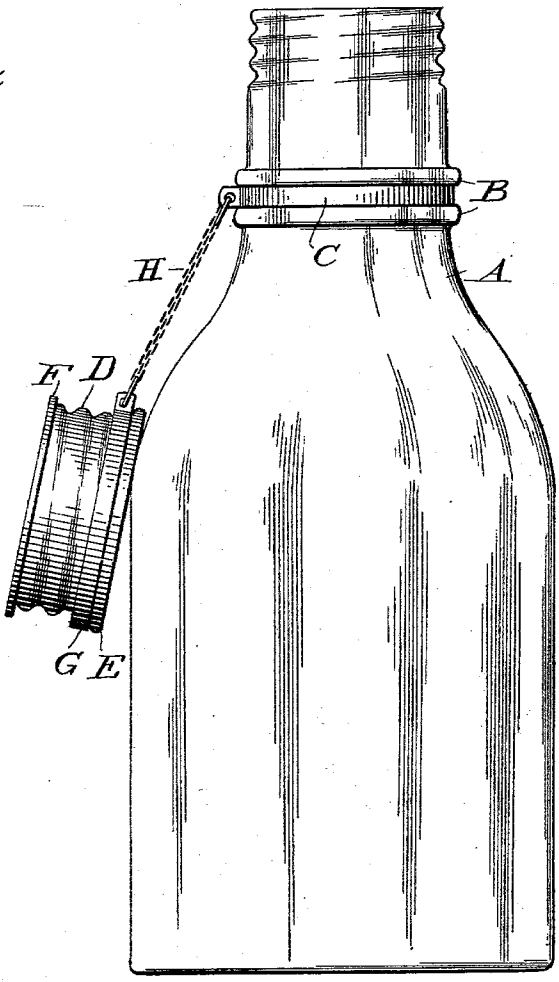
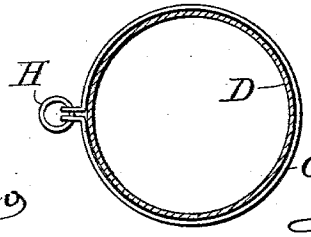


Fig. 3.



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UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF BROOKLYN, NEW YORK.

MEANS FOR SECURING CLOSING-CAPS PERMANENTLY WITH VESSELS.

SPECIFICATION forming part of Letters Patent No. 715,399, dated December 9, 1902.

Application filed February 24, 1902. Serial No. 95,292. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Means for Securing Closing-Caps Permanently with Vessels, of which the following is a specification.

My invention relates to means for attaching the closing-caps to vessels in such a manner that the closing-caps will always be retained and also that in closing-caps which are of the class called "screw-caps" the caps may be screwed upon the vessel without interfering with the said retaining means; and to this end my invention consists in certain elements in combination, fully specified hereinafter and claimed at the end of this schedule.

In order that those skilled in the art to which my invention appertains may understand, construct, and use my invention, I will proceed to describe it, referring to the drawings herewith and forming part of this specification, in which—

Figure 1 is an elevation of a bottle provided with my retaining means. Fig. 2 is a top view of the same. Fig. 3 is a detail of ring.

A is the bottle-neck above the body of the same.

B represents rings raised upon the exterior of the neck A.

C is a band of metal or other suitable material located between said raised rings B to locate said band.

D is a cap provided with a screw and screwed upon the top of the vessel in the ordinary manner.

E is a circumferential enlargement of the screw-cap D at its top and milled upon its surface.

F is a flange turned outward upon the screw-cap D at its lower end.

G is a band secured upon cap D between flange F and enlargement E and has upward and downward play between said points and also circumferential play, so that the cap D may be turned at will without turning the band G.

H is a chain or other flexible connecting-link attached in any suitable manner to both band G and to band C.

I prefer to fasten the bands G and C together by passing the end links of the connecting-chain H through holes made in the ends of the bands and closing up the links. For this purpose the ends of the bands are flared outward and are bound together by said links when passed through the holes made therein and then pinched together.

The operation of my invention will be readily understood from the above description.

I am aware that it is not new to secure caps upon vessels by chains and flexible retainers; but I am not aware that screw-caps which must be turned circumferentially to fasten them to vessels have ever before been permanently secured upon vessels in such a manner as not to interfere with their circumferential movements, except by employing a connection which is so long as to practically prohibit their use.

By my invention a minimum length of retaining connection is employed and is available without the attending inconvenience of those used prior to my invention.

Having now fully described my invention and the manner in which I have embodied it, what I claim as my invention, and desire to secure by Letters Patent, is—

In a means for retaining sealing-caps with vessels, the combination consisting of the cap provided with a circumferential enlargement at its top, and an outwardly-trending flange at its bottom; a band encircling said cap, and free to move circumferentially and longitudinally between said enlargement and said flange; and provided with ears to receive an attachment, by which said band is secured to the said cap; a flexible attachment connected at one end with the said ears of said band and at the other connected to a band located upon the neck of a vessel between beads formed upon said neck, the said neck-band being closed upon the said neck by passing the end of the said attachment through ears upon the ends of said neck-band, and a vessel-neck having channel formed between beads on said neck, all constructed, arranged and combined to operate, substantially as specified, whereby the said neck-band is restricted as to vertical motion and the cap-band is unrestricted in its movements upon the said cap.

Signed at New York city, in the county of New York and State of New York, this 26th day of January, A. D. 1902.

ABBOT AUGUSTUS LOW.

Witnesses:

M. A. WARREN,

E. W. MURPHY.