V. XICOVICH.

BOTTLE ATTACHMENT.

APPLICATION FILED NOV. 4, 1909.

956,466. **Patented Apr. 26, 1910.**

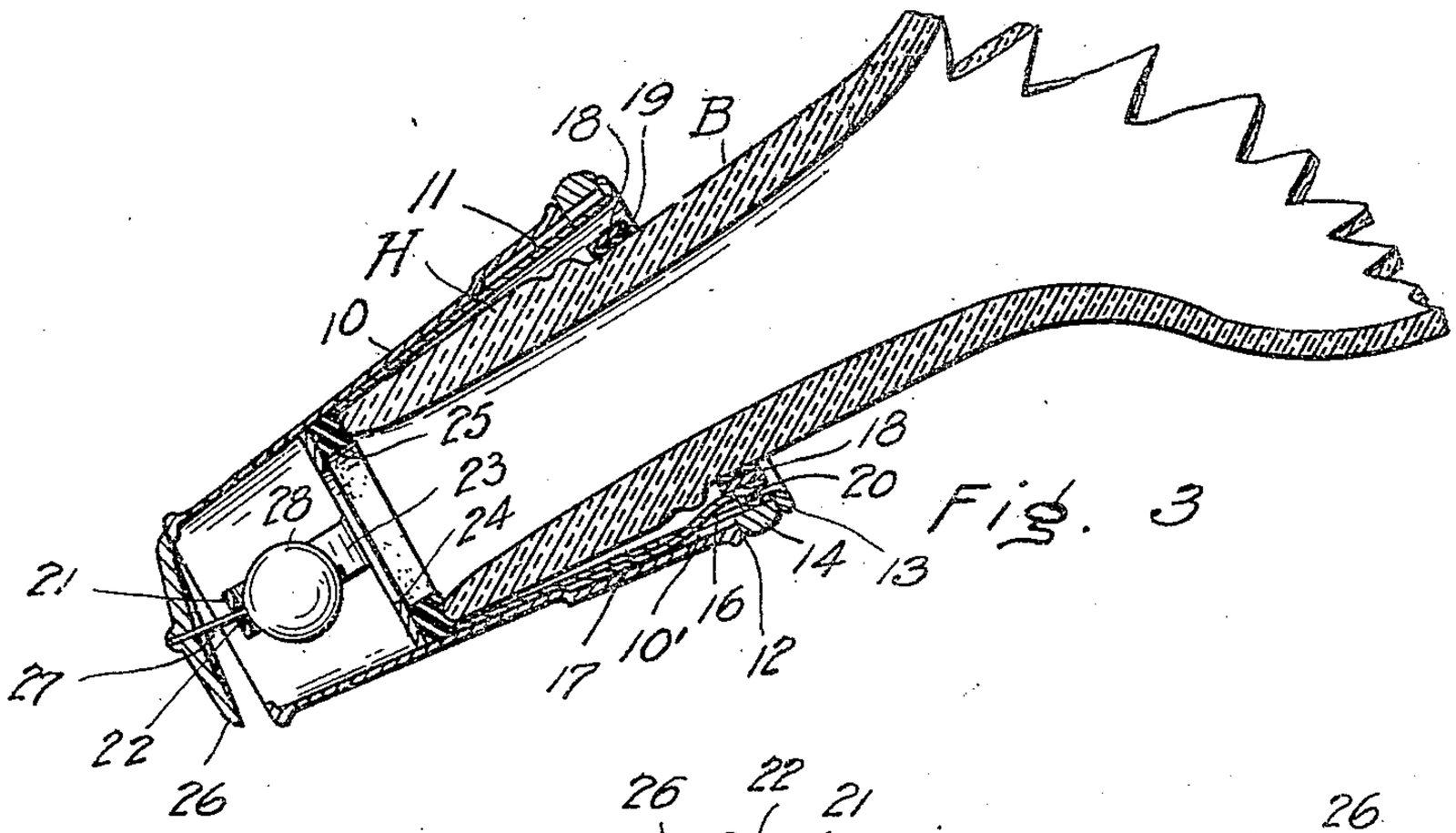

Fig. 3

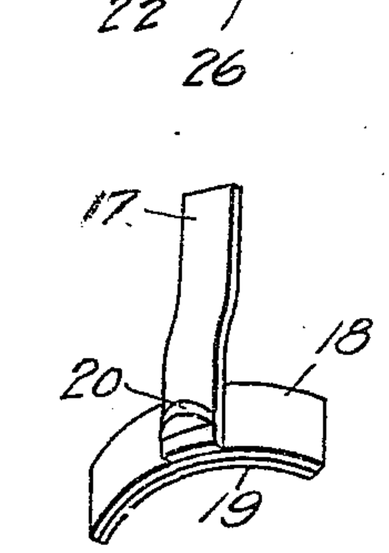

Fig. 5

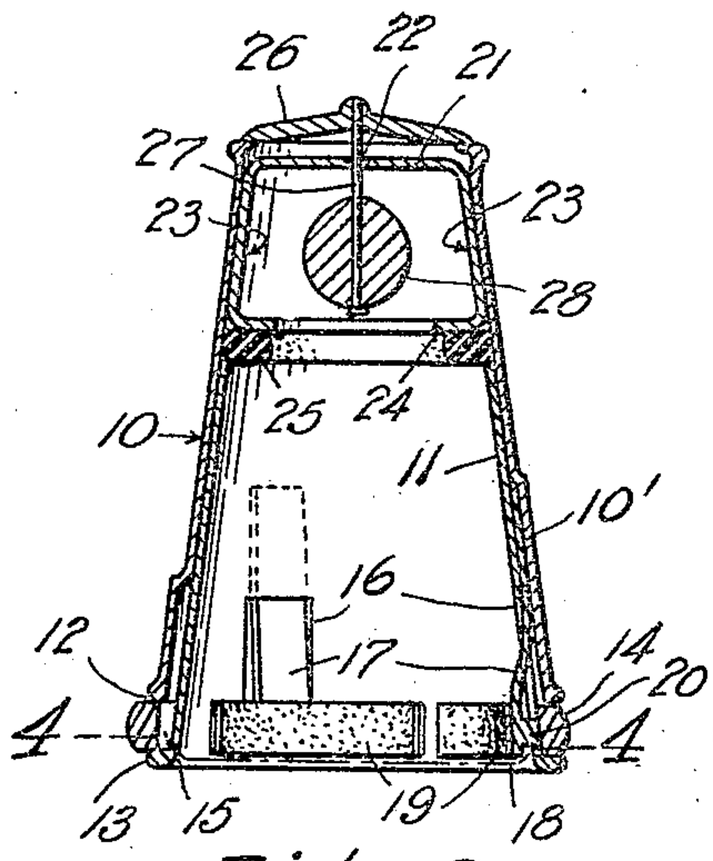

Fig. 2

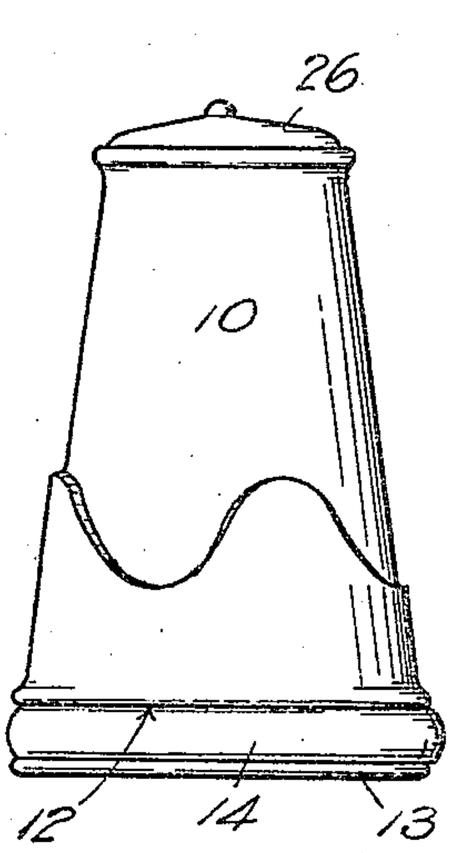

Fig. 1

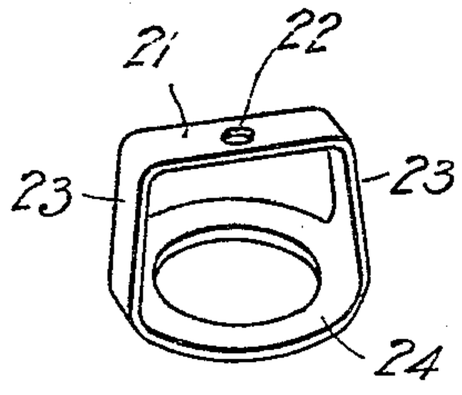

Fig. 6

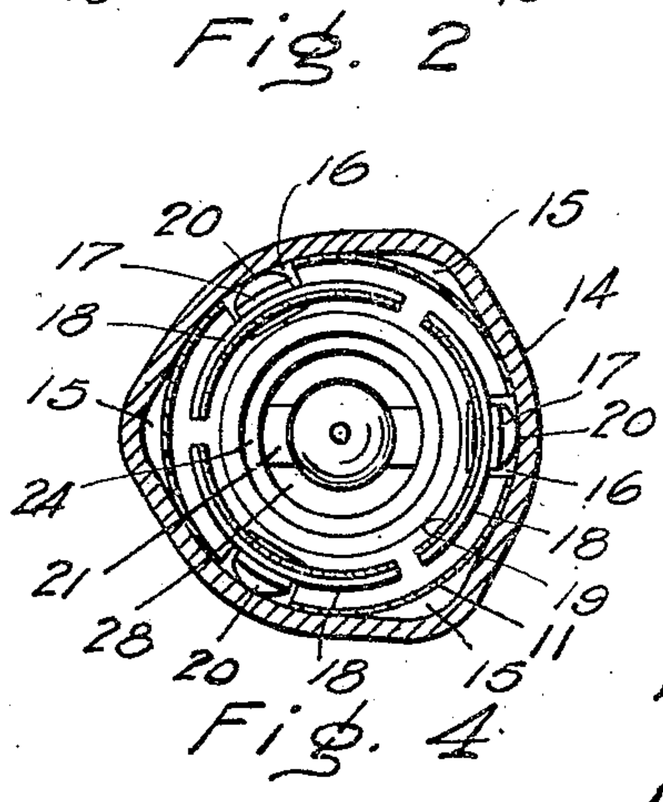

Fig. 4

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BOTTLE ATTACHMENT.

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To all whom it may concern:

Be it known that I, VICTOR XICOVICH, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Bottle Attachments, of which the following is a specification.

The object of the invention is to provide an improved cap or closure for a bottle, which is readily secured to or disconnected from a bottle; which will open with the proper tilting of the bottle for pouring the liquid contents therefrom; and which will close upon the bottle being restored to an upright position.

The invention consists in the novel construction and combination of parts, as hereinafter described and claimed.

In the accompanying drawings, where similar reference characters designate corresponding parts throughout, Figure 1 is an elevational view of a bottle cap and closure constructed in accordance with my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a longitudinal section thereof taken at an angle from that defined in Fig. 2 and with the device shown applied to a bottle which is in a somewhat inverted position. Fig. 4 is a sectional view taken through 4—4 of Fig. 2, as seen from below. Fig. 5 is a perspective view of one of the cap-clamping elements. Fig. 6 is a perspective view of a cap member.

The reference numeral 10 indicates a case or outer shell which is of a substantially coniform shape and is open at both ends. Within such case is a liner 11 extending from some distance below its lower edge 12 to about the midlength thereof, whereat they are rigidly joined, as by soldering. The lower edge of said liner is turned outward to provide a peripheral flange 13; between which and the edge 12 of the case is confined a ring 14 which, as shown in Fig. 4. is provided interiorly with a plurality of spaced recesses 15. Said liner is slotted, as at 16, for the passage therethrough of vertically arranged metal arms 17 which have their upper ends respectively housed and fixedly secured to the case within cavities 10′ provided therefor in the latter. To the lower ends of each of said arms is an arc-shaped plate 18 having their concave faces which are upon the inner sides desirably covered with a layer of rubber, or an equivalent, as indicated by 19. Upon the outside of each of said arms is a lug 20 arranged to protrude outwardly through the respective slots of the liner and pressed into continuous contact with the inner periphery of the ring 14 through the resiliency of the associated arms. When the ring is rotated to cause the recesses 15 thereof to be in radial planes with the respective lugs, the plates 18 are spread radially outward by the resilient power of the arms; but when the ring is partially rotated to present the concentric portions of its periphery, or the parts intermediate such recesses, to the various lugs then the plates are forced inwardly to occupy the positions in which they are represented in Figs. 2, 3 and 4, and thus serve for clamping members to secure the cap to the neck B of a bottle, as illustrated in Fig. 3.

In proximity to the mouth or upper end of the casing is a bar 21 extending diametrically across the opening and is provided with an aperture 22 which is disposed to be in the axis of the casing. This bar may have its ends secured directly to the case or, as illustrated in the drawing, be integrally connected by angularly disposed extensions 23 with an annular shaped partition 24 which is secured within the casing in proximity to the upper end of the liner 11. Said partition is desirably placed at such a distance from the liner to afford a shoulder to accommodate an elastic gasket 25, such as of rubber, therebetween. The purpose of this gasket is to afford a non-leakable joint between the end of a bottle and the casing so that when pouring liquids from the bottle it will have egress only through the mouth of the case.

The bottle closure proper consists of a circular lid or disk 26 formed of a diameter to cover the opening or mouth of the case. This disk is rigidly connected at its center with a pendent stem 27 extending through the aperture 22 and having rigidly secured to the lower end of the stem a relatively heavy body 28.

The operation of the invention is as follows: By turning the ring 14 so that its recesses 15 are radially opposite the lugs 20 of the spring arms 17 the latter spring outwardly to allow the group of attached clamping elements 18 being expanded enough to permit their passing freely over the head of a bottle. The device is placed upon a bottle as described and pressed downwardly with the left hand of the operator

to cause the gasket 25 being compressed sufficiently to insure a non-leakable joint thereat with the bottle-end, and whereupon the ring 14 is turned with his right hand to cause the several rubber lined elements 18 being brought into clamping condition with the bottle-neck, as represented in Fig. 3. With the device thus secured to the bottle, when the latter is tilted the weight of the body 28 will have a tendency to cause the connected stem 27 to assume a vertical position and in so doing the lid 26 will be tilted outwardly, bearing against the casing rim above and affording an opening below, as shown in Fig. 3, and have the lid accommodate itself to the pouring of the liquid from the bottle. When the bottle is returned to an upright position the weight of the body 28 acting downwardly will cause the lid to be held with its axis in the axis of the bottle and to marginally rest upon the case 10.

Having described my invention, what I claim as new and desire to secure by Letters-Patent of the United States, is—

1. In an attachment for a bottle, in combination with a shell open at both ends to respectively afford a mouth and a socket for the head of a bottle, a bar extending diametrically across the shell in proximity to the mouth end thereof, a stem extending through an aperture provided in the bar, a lid for the mouth of the shell secured to said stem above the bar, a weight secured to the stem below the bar, of a ring provided interiorly thereof with a plurality of cam-faces, a plurality of bottle-clamping elements, means normally tending to move said elements outwardly, and means secured to the aforesaid means to coact with said cam-faces provided in the ring for moving the elements inwardly into clamping positions and effected through the turning of the ring.

2. An attachment for a bottle, having a shell, a ring provided interiorly thereof with a plurality of cam-faces, a plurality of bottle-clamping elements, means normally tending to move said elements outwardly, and means secured to the aforesaid means to coact with said cam-faces provided in the ring for moving the elements inwardly into clamping positions and effected through the turning of the ring.

3. An attachment for a bottle, having a shell, a liner extending below the lower edge of the shell and terminating in an outwardly extending flange which is arranged in spaced relation with the shell, a ring provided interiorly thereof with a plurality of cam-faces and rotatably seated in the space intermediate said flange and the adjacent edge of the shell, a plurality of bottle-clamping elements interiorly of the liner, means normally tending to move said elements outwardly, and means secured to the aforesaid means to coact with said cam-faces provided in the ring for moving the elements inwardly into clamping positions and effected through the turning of the ring.

4. In an attachment for a bottle, a shell which is open at both ends, a ring provided with a plurality of spaced recesses in its inner periphery, a plurality of spring arms secured at their upper ends to the inside of the shell, a bottle clamping element secured to the lower end of each of said arms, a lug upon the outer side of each arm and positioned to engage the inner periphery of said ring, an apertured bar extending across the shell in proximity to the upper end thereof, a lid for the upper end of the shell, a weight positioned below said bar, and a stem extending through the aperture of the bar and rigidly connected at its ends with the lid and the weight.

5. In an attachment for a bottle, a conform shell which is open at both ends, a liner in the lower portion of the shell, said liner extending below the lower edge of the shell and terminating in an outwardly projecting flange, a ring positioned between said flange and the adjacent edge of the shell and provided with a plurality of spaced recesses in its inner periphery, a plurality of spring arms secured at their upper ends to the inside of the shell, a bottle clamping element secured to the lower end of each of said arms, a lug upon the outer side of each arm and positioned to engage the inner periphery of said ring, an annular shoulder within the shell and intermediate its length, a gasket subjacent to said shoulder, an apertured bar extending across the shell in proximity to the upper end thereof, a lid for the upper end of the shell, a weight positioned below said bar, and a stem extending through the aperture in the bar and rigidly connected at its ends with the lid and the weight.

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