Isidoro Zomboni

Improved Stopple for Bottles.

PATENTED
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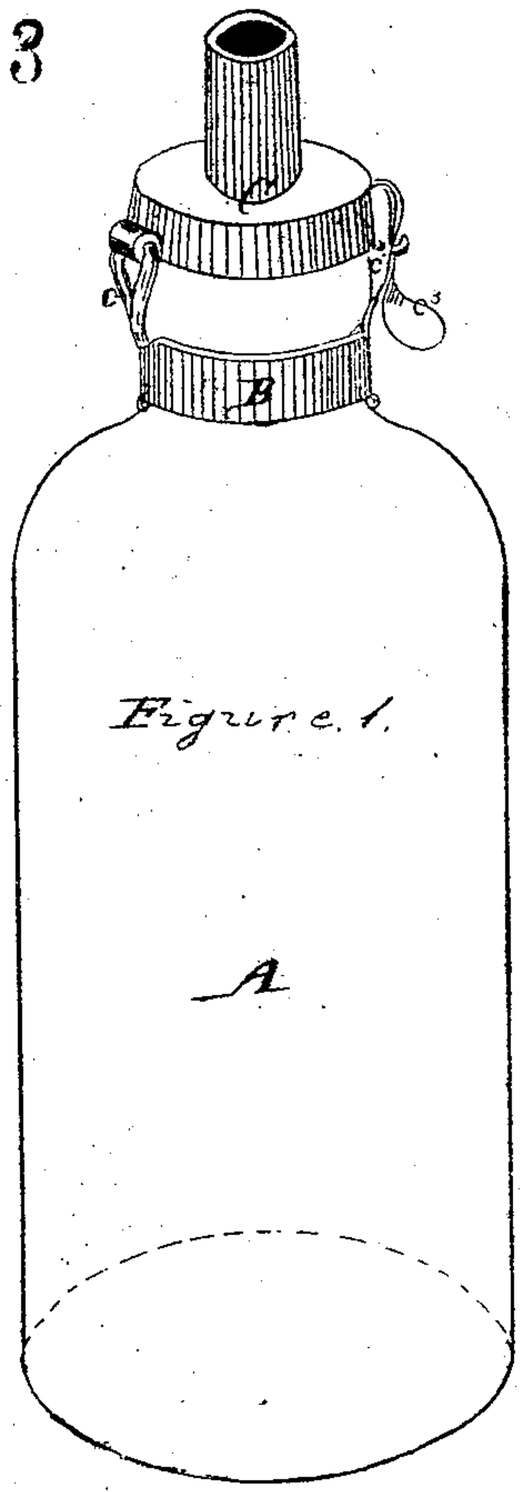


Figure 1.

A

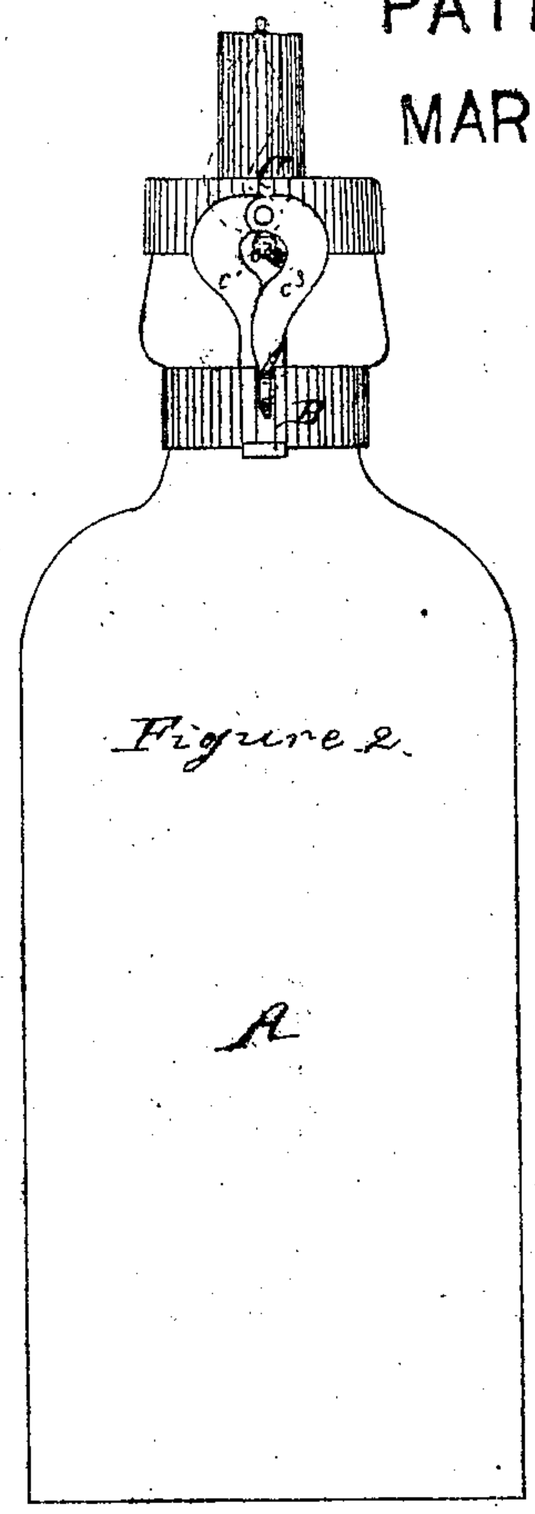


Figure 2.

A

Figure 3.

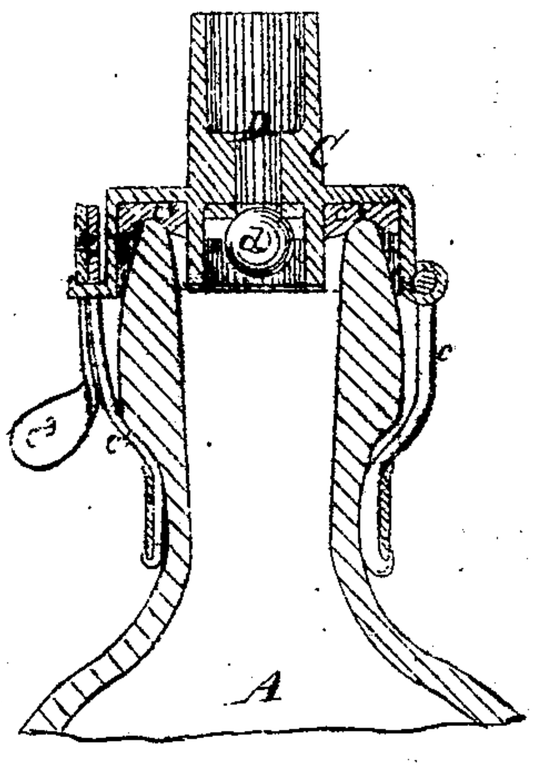
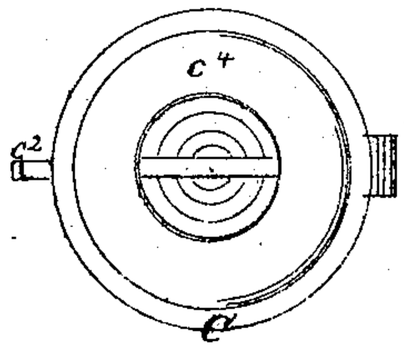


Figure 4.



Witnesses:

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By his Attys

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United States Patent Office.

ISIDORO ZAMBONI, OF ST. LOUIS, MISSOURI, ASSIGNOR TO HIMSELF, PETER ZOPPI, AND JOHN RUEDY, OF SAME PLACE.

Letters Patent No. 75,233, *dated March* 3, 1868.

IMPROVED BOTTLE-STOPPER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISIDORO ZAMBONI, of St. Louis, in the county of St. Louis, and State of Missouri, have made certain new and useful Improvements in Stopples for Bottles; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to an improvement in stopples for bottles for containing such liquids as soda-water, seltzer-water, or other effervescing liquids, that by their volatile and gaseous nature require a stopple firmly secured to the neck of the bottle for the purpose of keeping it in position.

The invention consists in producing a metallic cap-piece, hinged to the neck of the bottle, and provided with a locking-clamp for securing the other side of the cap to the bottle. A rubber packing is to be fitted into an annular groove in the cap, and arranged to shut down tightly to the top end of the neck of the bottle, so as to make a perfectly air-tight joint between the parts. The cap may be used with or without a central aperture for filling the bottle, but if the aperture be used, it is to be provided with a globe-valve for closing it against the escape of the contents of the bottle through that passage.

To enable those skilled in the art to make and use my improved stopple, I will proceed to describe its construction and operation.

Figure 1 of the drawings is a perspective elevation of a bottle fitted with one of the improved stopples.

Figure 2 is a side elevation of the same.

Figure 3 is a sectional elevation of the neck of the bottle and the stopple.

Figure 4 is a bottom plan of the stopple or cap.

The bottle A has a metallic band, B, around its neck, to which is secured, by means of the hinge c, the cap or stopple C. A locking-clamp, c^1, is secured to the band B on the opposite side of the neck from the hinge c, and extends up above the pin c^2, which projects from the side of the said cap, and overlaps the same, so as to hold it or lock it down to the bottle. The piece c^3 is jointed to the top end of the piece c^1, and falls down over the pin c^2, as is clearly shown in fig. 2, so as to hold the cap down firmly to the bottle, and prevent the clamp c^1 from becoming detached from its pin. The pieces c^1 and c^3 should be jointed together so as to cause them to have a spring a little laterally, in order to allow them to overlap, as shown in fig. 2. This springing of the pieces will cause them to remain in their proper locking position when the bottle is closed, though it be subjected to severe jarring, incident to transportation.

When the cap is to be opened, the piece c^3 is to be thrown up into the position shown by the dotted lines in fig. 2, and then the clamp c^1 may be pushed back off of the pin c^2, so as to allow the cap to be opened, the connection between the said clamp and band B being such as to allow the top end of the clamp to be moved far enough sideways to disengage it from the pin c^2. An annular groove in the bottom of the cap C shuts down over the top end of the neck of the bottle, and into this groove a packing, c^4, of India rubber, or other suitable substance, is placed, and by means of this packing a perfectly air-tight joint is formed between the cap and the bottle.

In filling the bottle with some kinds of effervescing liquids, it may be desirable to close the cap first, and fill the bottle through an opening in it. For this purpose the cap C may be provided with a central orifice, D, through which to fill it. At the bottom end of this orifice will be a small bell-valve, d, which will be capable of being forced down from without, so as to allow fluids to enter around it, but when the bottle is full, and the external pressure removed, the bell will be forced by the confined gases up tightly to its seat.

Having described my invention, what I claim is—

The cap C, when provided with a packing-surface, c^4, and combined with the bottle A by means of the hinge c, and latch c^1 c^2 c^3, substantially in the manner shown and described.

ISIDORO ZAMBONI.

Witnesses:

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