

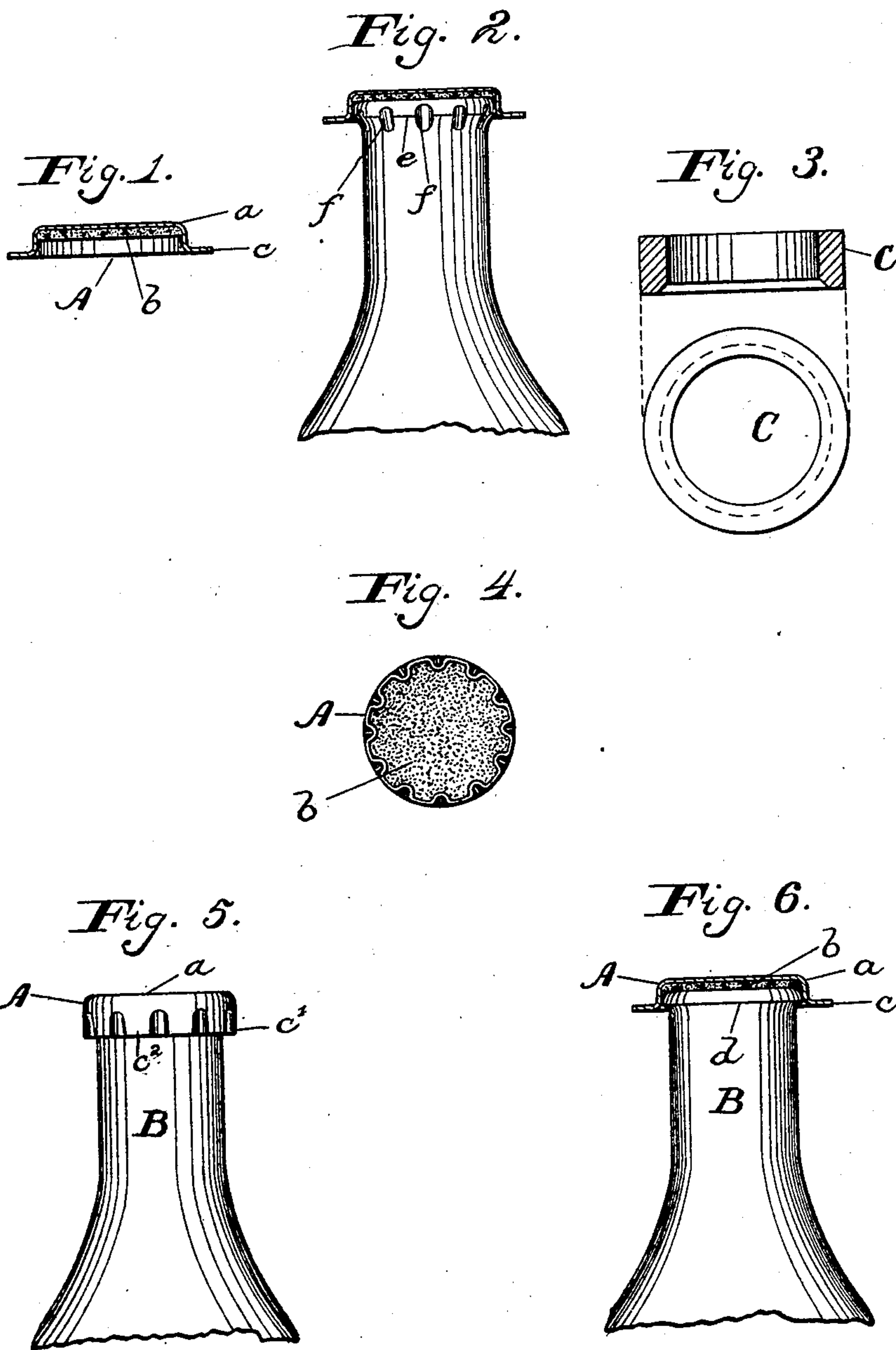
No. 674,692.

Patented May 21, 1901.

H. S. BREWINGTON.
METAL CAP FOR BOTTLES.

(Application filed Sept. 22, 1900.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

HENRY S. BREWINGTON, OF BALTIMORE, MARYLAND.

METAL CAP FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 674,692, dated May 21, 1901.

Application filed September 22, 1900. Serial No. 30,805. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. BREWINGTON, a citizen of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Metal Caps for Bottles, of which the following is a specification.

My invention is an improvement in means for closing and sealing bottles; and its object is to provide a metallic sealing-cap provided in its primary condition with an annular flat flange which after the cap has been placed in position on the bottle-mouth is crimped or gathered, so that the said crimps or gathers will engage the top rim of the bottle-mouth.

I am aware that it is not new to seal the mouths of bottles by metallic caps whose sides are primarily stamped into a corrugated form before the caps are applied to the bottle-mouth. The said caps after their sides have been corrugated are applied to the bottle-mouth, and the corrugated sides are then bent in under an annular shoulder at the rim of the bottle-mouth. This cap and its mode of application to the bottle are radically different from my invention.

My invention comprehends sealing the bottle-mouth by a metallic cap which in primary condition has a crown and an annular outwardly-extending flat flange similar in form to a sailor-hat. The cap in this condition is applied to the mouth of the bottle, and then a suitable tool, preferably in the form of a ring, is pressed down around the crown portion of the cap and upon the outwardly-extending annular flat flange, which action forces the metal of the flat flange downwardly and crimps or gathers said metal so that the said crimps and gathers, which consist of the excess material resulting from the depression of the said annular flange, will engage the top rim of the bottle-mouth, and thus securely seal the said mouth.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a sectional view of my improved metallic sealing-cap with its flange in the primary condition. Fig. 2 is a side elevation of the upper portion of a bottle embodying my invention and with my improved sealing-cap in section in its primary condition. Fig. 3 is a diametrical sectional view and also a plan

view of the ring-tool for crimping and gathering the cap-flange while over the bottle-mouth. Fig. 4 is a plan view of the metallic sealing-cap after its flat flange has been crimped or gathered into engagement with the top rim of the bottle-mouth. Fig. 5 is a side elevation of the upper portion of a bottle with the metallic sealing-cap secured on its mouth. Fig. 6 is a sectional view of the cap on another form of bottle-mouth.

My improved sealing-cap A in its primary condition is provided with a crown portion *a*, in which is set a paraffin-coated cork or similar disk *b*, and an annular flat flange *c* extends outwardly from the edge of the crown portion *a*, as shown in Figs. 1 and 2.

The metallic sealing-cap A in its primary condition is applied to the mouth of the bottle. A tool, preferably in the form of a ring C, is then placed around the crown portion *a* of said cap and is forced down upon the annular flat flange *c*, which action tightly crimps or gathers the excess metal resulting from the downward depression of said flange around the bottle-mouth rim and securely seals the mouth of the bottle. It should be especially noted in this connection (see Fig. 5) that all the crimps or gathers *c'* thus formed around the bottle-mouth rim lie entirely within the vertical sides *c''* of the metallic sealing-stopper and do not project outside of the said sides.

Fig. 6 shows a bottle B whose mouth-rim is provided with an annular swell in the form of a bead *d*, and when the flange of the sealing-cap is crimped or gathered around said bead the said crimps or gathers will likely be larger or smaller at one point than at another, and in order to cause the said crimps or gathers to be regularly spaced if desired, which will improve the appearance of the bottle, the bottle-mouth rim is provided with a swell in the form of an outward flare *e*, in which are formed a circumferential row of exterior notches *f*, which receive the said crimps or gathers of the sealing-cap flange.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a bottle the exterior sides of whose mouth-rim are provided with a circumferential row of notches; and a me-

tallic sealing-cap over said mouth-rim and having gathered or crimped portions which take into the said notches and which consist of the excess material resulting from the depression of an annular outwardly-extending flange with which the cap is primarily provided, substantially as set forth.

2. The combination of a bottle whose mouth-rim is provided with an exterior swell, and a metallic flat-topped sealing-cap over said mouth-rim and having gathered or crimped portions under said swell and which consist of the excess material resulting from the depression in a direct line of an annular outwardly-extending flat flange with which the

cap is primarily provided, said flange being parallel with the top of the cap, substantially as set forth.

3. The combination of a bottle whose mouth-rim is provided with an exterior swell having a plurality of notches, and a metallic sealing-cap having a continuous corrugated flange which takes over said swelled mouth-rim, the corrugation engaging said notches.

In testimony whereof I affix my signature in the presence of two witnesses.

HENRY S. BREWINGTON.

Witnesses:

THOS. C. BAILEY,
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