

No. 774,023.

PATENTED NOV. 1, 1904.

J. S. ALSTON.
CAP FOR BOTTLES.

APPLICATION FILED JUNE 1, 1904.

NO MODEL.

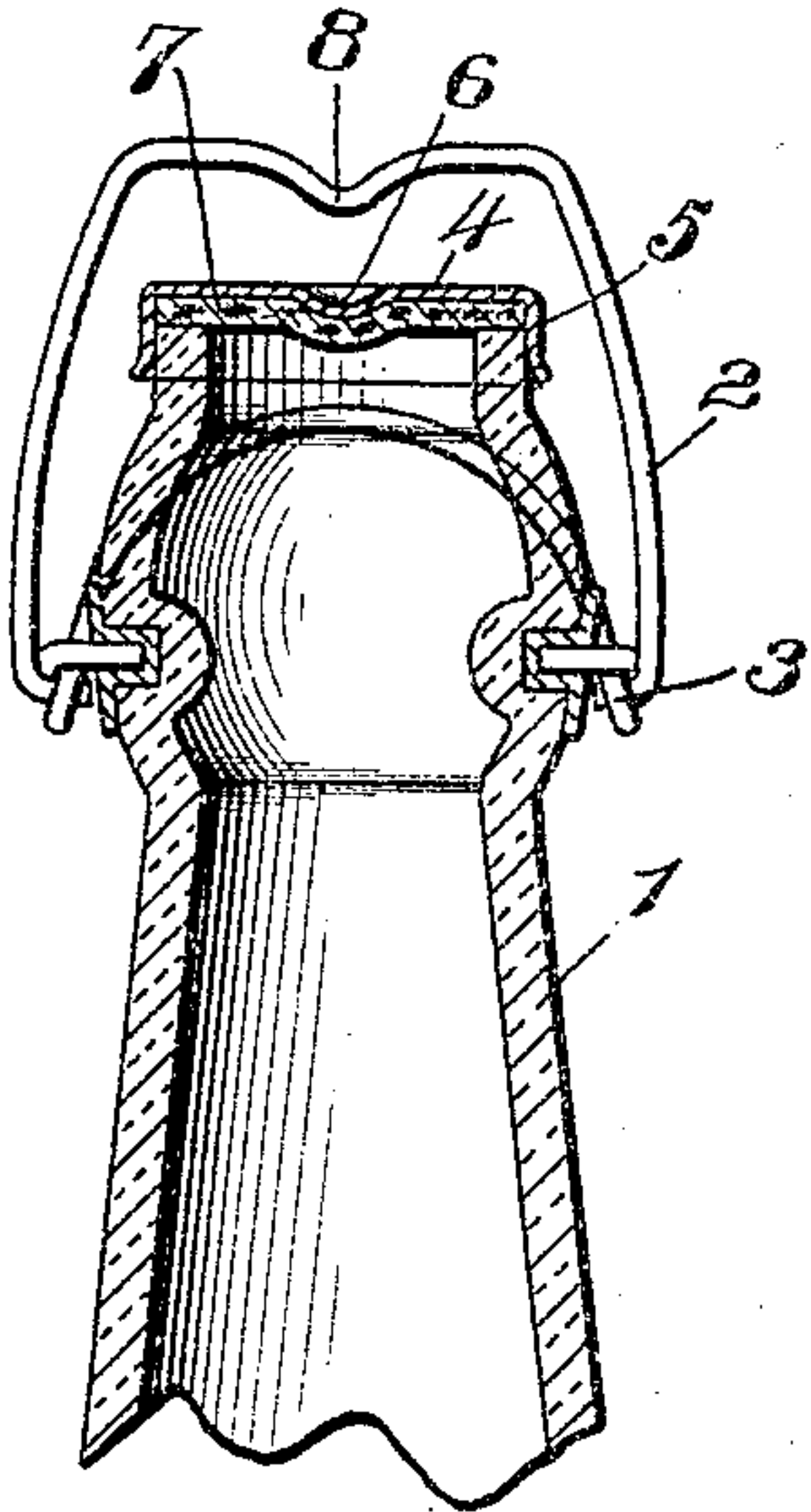


Fig. 1.

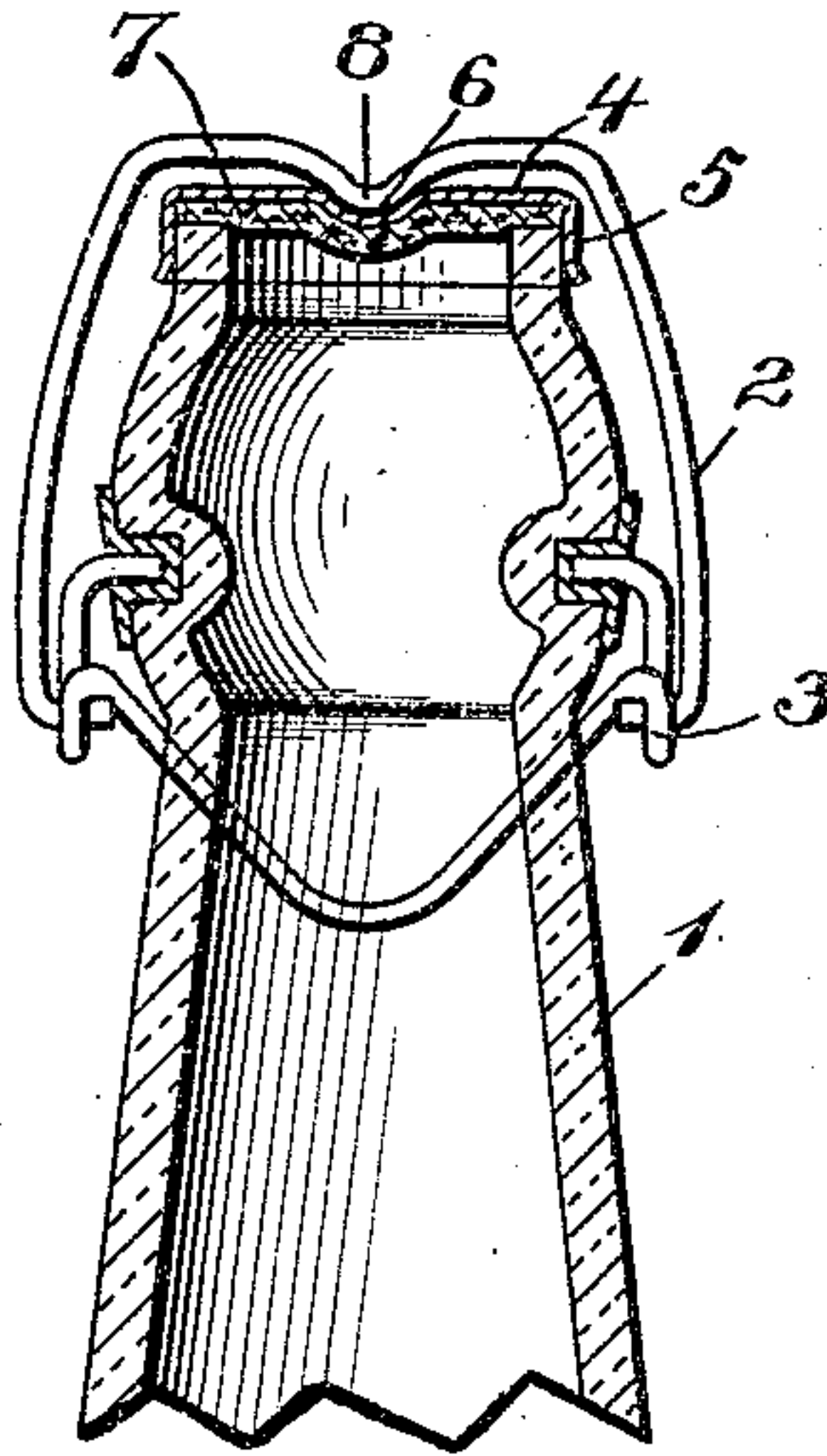


Fig. 2.

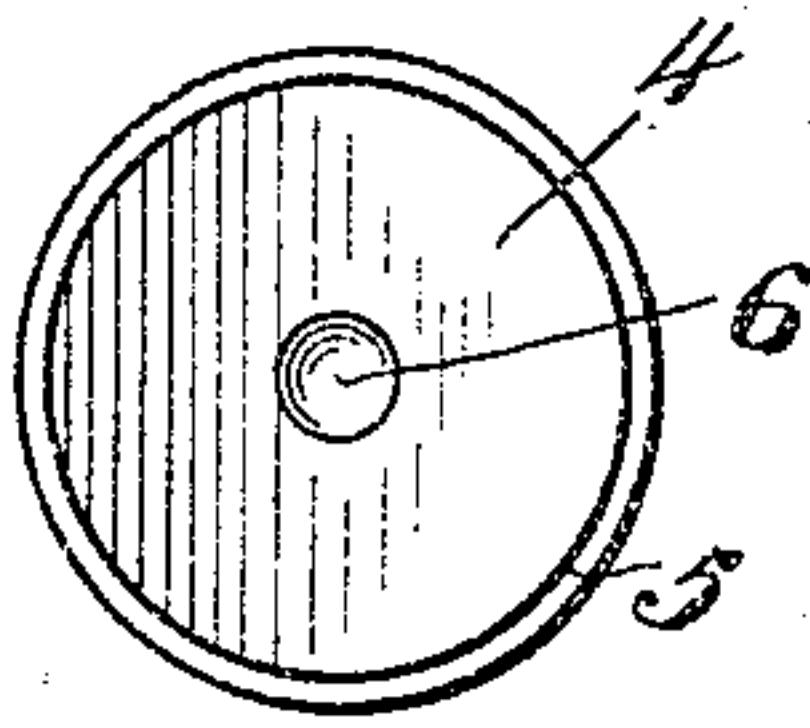


Fig. 3.

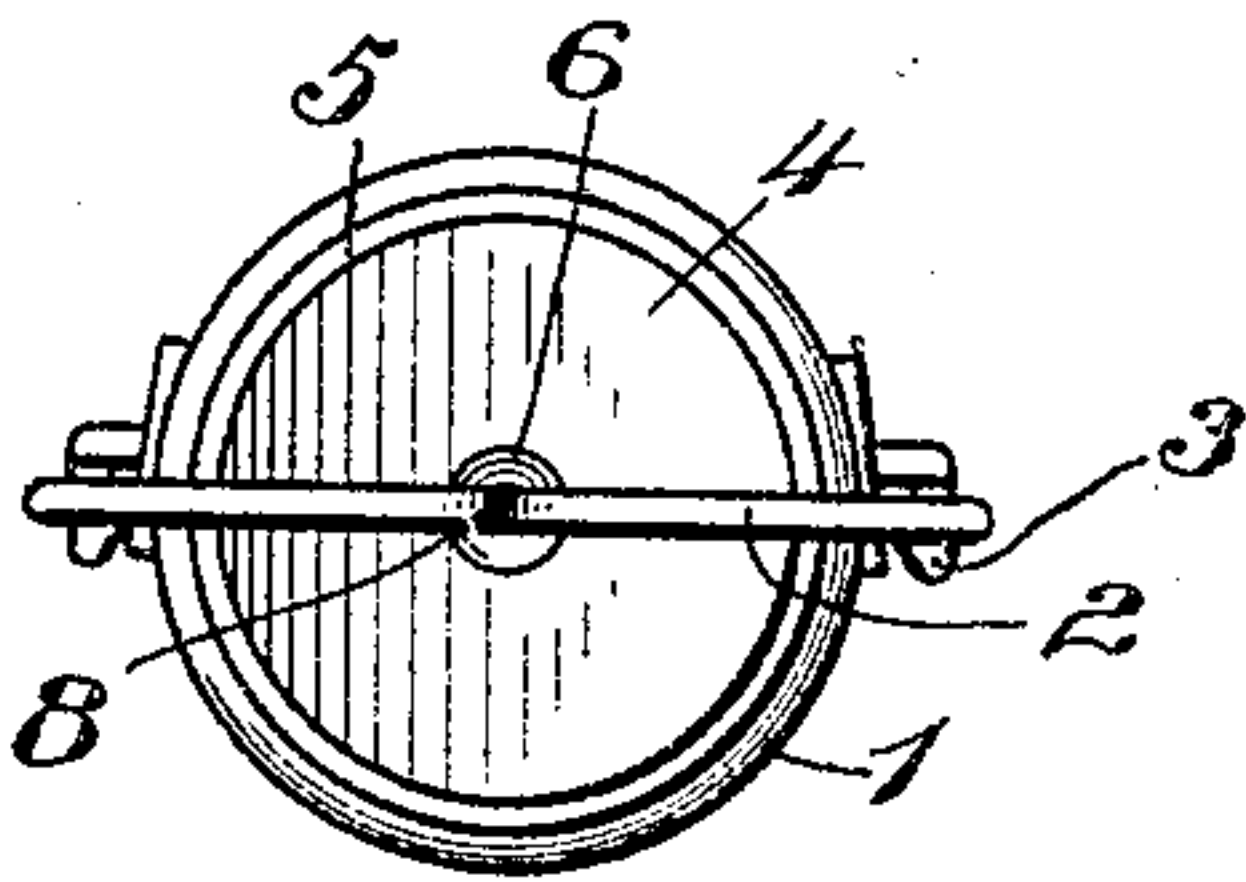


Fig. 4.

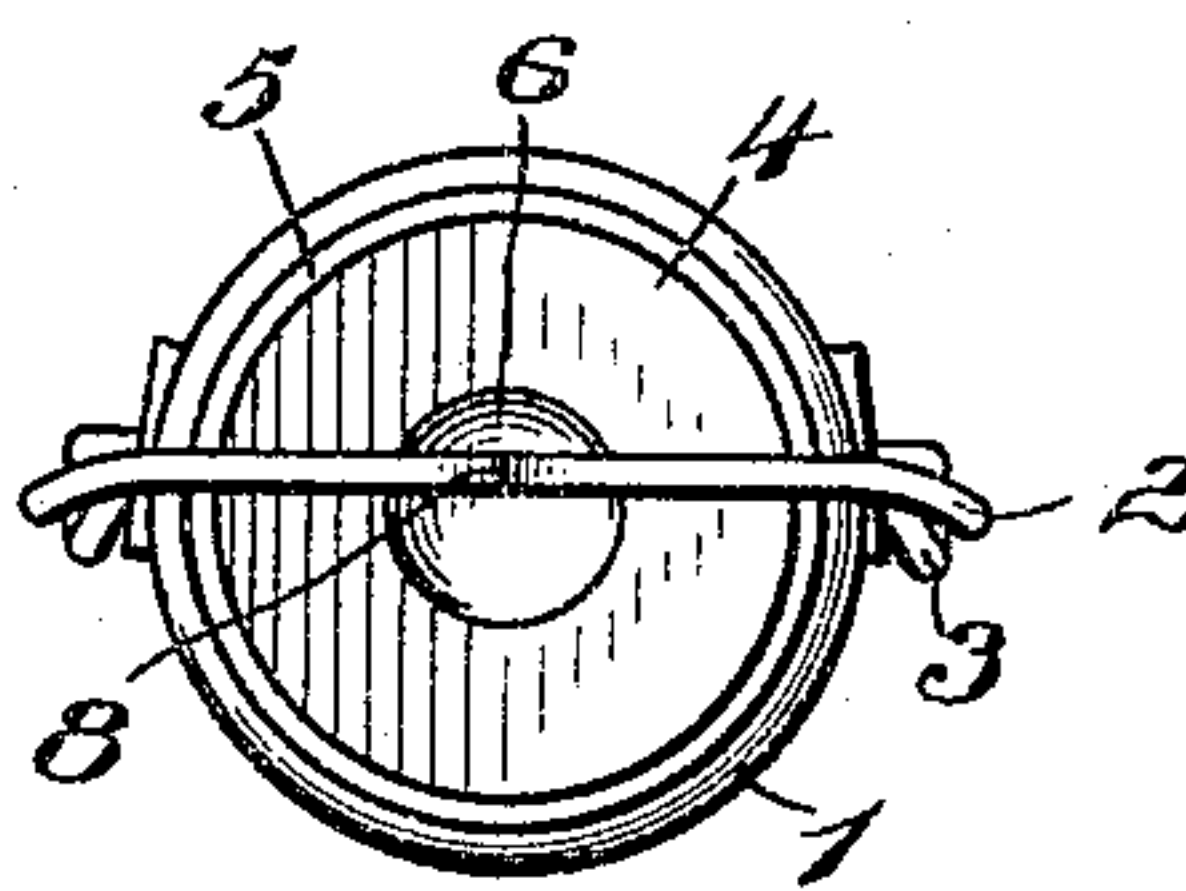


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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CAP FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 774,023, dated November 1, 1904.

Application filed June 1, 1904. Serial No. 210,627. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. ALSTON, a citizen of the United States, residing at Atlantic City, in the county of Atlantic and State of New Jersey, have invented certain new and useful Improvements in Caps for Bottles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to caps for bottles, and has for its object to provide a device of this class which is intended to be used in connection with a wire locking-bail.

With this object in view my invention consists in providing a cap which is designed to be used but once, and while the cap is to be used in connection with a wire locking-bail the cap is in no way connected to said bail, and is entirely independent as an article of manufacture.

A further object of my invention is to provide a cap and a locking-bail therefor, said cap and locking-bail being so constructed that an absolutely uniform pressure is exerted on the cap by the locking-bail, so that the contact of the cap with the bottle is absolutely uniform around the mouth of the bottle, thereby insuring a perfectly-tight covering for the bottle.

Referring to the accompanying drawings, Figure 1 is a sectional view taken through the neck of a bottle, showing the bottle-cap in position and the bail in a raised position. Fig. 2 is a similar view showing the bail in a locked position. Fig. 3 is a top plan of the cap. Fig. 4 is a top plan of the cap, showing the bail in a locked position and centrally engaging the cap. Fig. 5 is a similar view showing the bail engaging the cap with a depression when unnecessarily large, this view being for the purpose of illustrating the position of a bail upon a cap improperly constructed and to one side of the center.

Before entering into a detail description of my invention it is well to state that caps constructed similarly to my device are old and

well known, but experiments have shown that caps of this character designed to be used in connection with a locking-bail which are independent of the locking-bail have been found not to be practical for the reason that the bail does not centrally engage the cap, and thereby exerts an uneven and unequal pressure upon the cap, and therefore does not cause the cap to uniformly engage the mouth of the bottle.

Referring to the accompanying drawings by reference-numerals, like numerals of reference indicate the same parts throughout the several figures, in which—

1 indicates the neck of the bottle.

2 indicates the bail, and 3 the locking member, these devices being constructed and secured to the bottle in any well-known manner, but preferably as shown.

4 indicates a metal cap, which is provided with the annular wall or flange 5 and a slight circular depression 6 in the center of said cap. 7 indicates a disk of cork, secured in said cap, as shown in Fig. 1.

The bail 2 is provided with a slight bend 8, as shown.

Having thus set forth the several parts of my invention, its operation is as follows: The cap is applied to the bottle by placing the same in position. The bail is then brought into position, as shown in Fig. 1, and the locking member 3 is carried down into a locked position, as shown in Fig. 2. This movement draws the bail down upon the cap and causes the downwardly-bent portion 8 of the bail to enter the slight circular depression 6 in the cap, the bail being bent downward at 8 in such manner that the contact between the bail and the cap is exactly in the center of the cap, and, as shown in Fig. 2, the range of contact between the bail and cap is very slight. This is due to the specific form of the depression 6 in the cap, for should the depression 6 be greater than that shown or, for instance, as illustrated in Fig. 5, the bail 2 would engage the cap eccentrically, as clearly shown. A further advantage derived from this particular construction, as shown in Figs. 1, 2, 3, and 4, is that the depression 6 is so slight that the cork disk 7 is practically flat, so that when the cap is drawn down over the bottle all tend-

ency of the disk to crack is eliminated, those caps similarly constructed heretofore being of such a character as to warrant an undue bending and cracking of the cork disk when
5 the same is drawn down against the bottle, thus causing a cracking and breaking of the disk which renders the cap useless and renders a perfectly-tight contact impossible. It is therefore seen that the vital point in this
10 cap is the slight centrally-located annular depression, which will allow the cork disk to remain flat against the inside of the cap, and a slight downward bend in the bail, which will engage the cap only within the said slight
15 depression, the remaining portion of the bail being at all times out of contact with the cap, so that the point of contact is in the center of the cap, which means a perfectly uniform contact between the cap and the bottle. This
20 central contact between the bail and the cap tends somewhat to draw the center of the cap farther down than the edges thereof, thereby causing the cork disk to more firmly engage

the mouth of the bottle and insures a perfectly tight and uniform contact therewith. 25

Having thus set forth my invention, what I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In a cap for bottles, the combination with a bail having a slight downward bend therein, 30 of a cap of metal provided with a slight circular depression in the center thereof, a cork disk within said cap lying flat against the inside thereof before pressure is put on the cap, whereby a perfectly flat and even surface 35 of the disk is presented to the bottle and all bending and cracking of the disk is obviated, the said bend in the bail being adapted to engage the said depression in the cap, substantially as described. 40

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

JOHN S. ALSTON.

Witnesses:

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