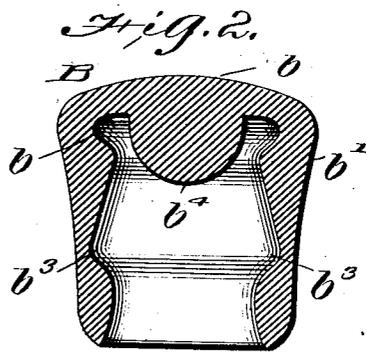
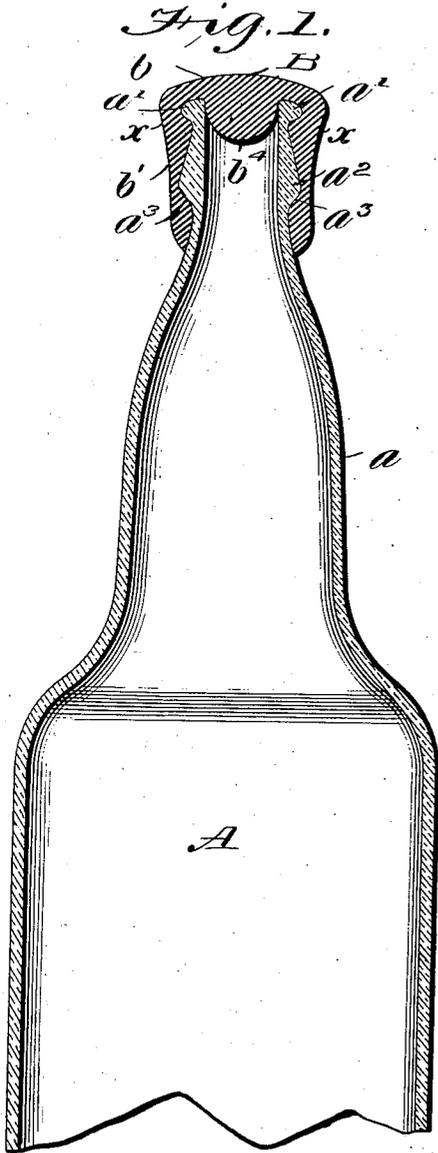


No. 891,109.

PATENTED JUNE 16, 1908.

E. H. SPEECE.  
BOTTLE STOPPER.

APPLICATION FILED OCT. 23, 1907.



WITNESSES  
*J. C. Barry*  
*C. E. Grammer*

INVENTOR  
**EDWARD H. SPEECE**  
BY *Munn & Co.*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

EDWARD H. SPEECE, OF BEATTY, NEVADA.

## BOTTLE-STOPPER.

No. 891,109.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed October 23, 1907. Serial No. 398,748.

To all whom it may concern:

Be it known that I, EDWARD H. SPEECE, a citizen of the United States, and a resident of Beatty, in the county of Nye and State of Nevada, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention is an improvement in bottle stoppers, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

Referring to the drawings forming a part hereof Figure 1 is a vertical section through a portion of a bottle provided with my improved stopper, and Fig. 2 is an enlarged section of the stopper.

The bottle A is of ordinary construction, being provided with a neck  $a$  having at the end thereof an annular shoulder  $a'$  and a second shoulder  $a^2$  below the first shoulder. The upper face of the shoulder  $a'$  is inclined as shown in Fig. 1, and the lower shoulder  $a^2$  is abrupt, this construction being the usual form of bottle neck ends.

The stopper B is of flexible and resilient material such as rubber, and comprises a body  $b$  and a neck  $b'$ . The body portion  $b$  is provided with a spherical elevation  $b^4$  which is adapted to enter the end of the neck, as shown in Fig. 1, and the neck portion  $b'$  is provided with annular depressions  $b^2$  and  $b^3$  for receiving the shoulders  $a'$  and  $a^2$  of the bottle A.

In use when the stopper is placed on the bottle the spherical elevation  $b^4$  engages the inner surface of the neck, and the neck portion of the stopper closely encircles the neck of the bottle, the annular shoulders being re-

ceived in the depressions whereby to firmly maintain the stopper in position. Should there be gas in the bottle the pressure of the gas tends to retain the stopper more firmly in place, the gas acting on the spherical elevation  $b^4$ , which tends to force the lower edge of the neck of the stopper more firmly into contact with the neck of the bottle.

To remove the stopper it is grasped at the points  $x x$ , and drawn upwardly. This pressure tends to loosen the edges of the stopper neck and to also loosen the spherical elevation from the interior of the neck.

It will be evident from the description that the stopper is easily placed and easily removed when manipulated in the proper manner and that the stopper furnishes an efficient closure for the bottle.

I claim—

1. The combination with the bottle having a neck provided on its outer surface at the edge thereof with an annular shoulder and with a second shoulder spaced apart from the first shoulder, of a closure comprising a resilient cap having depressions for receiving the annular shoulders, and a spherical elevation for entering the neck of the bottle.

2. A bottle closure comprising a cap of resilient material, said cap having a body portion provided with a spherical elevation for entering the neck of a bottle, and a neck provided with depressions for receiving the shoulders on the neck of the bottle.

EDWARD H. SPEECE.

Witnesses:

GEO. PROBASCO,  
OTTO JOHNSON.