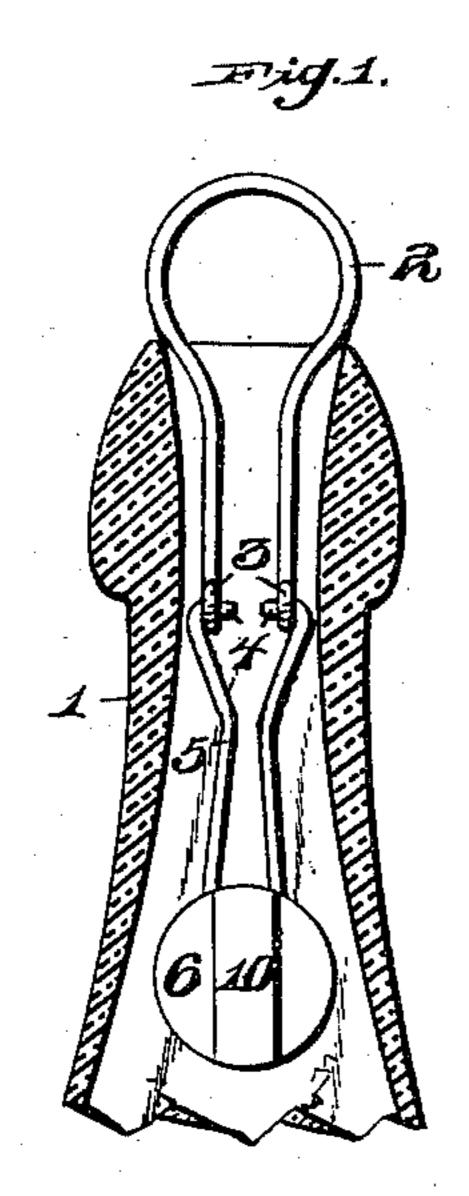
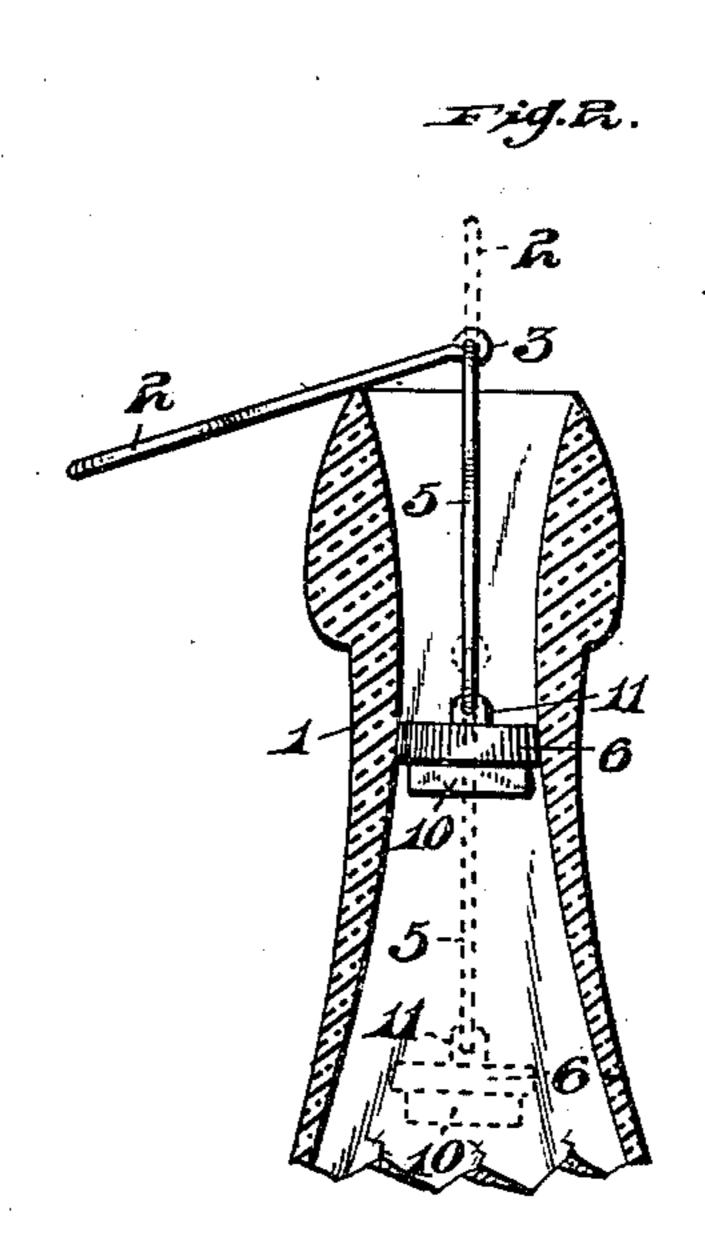
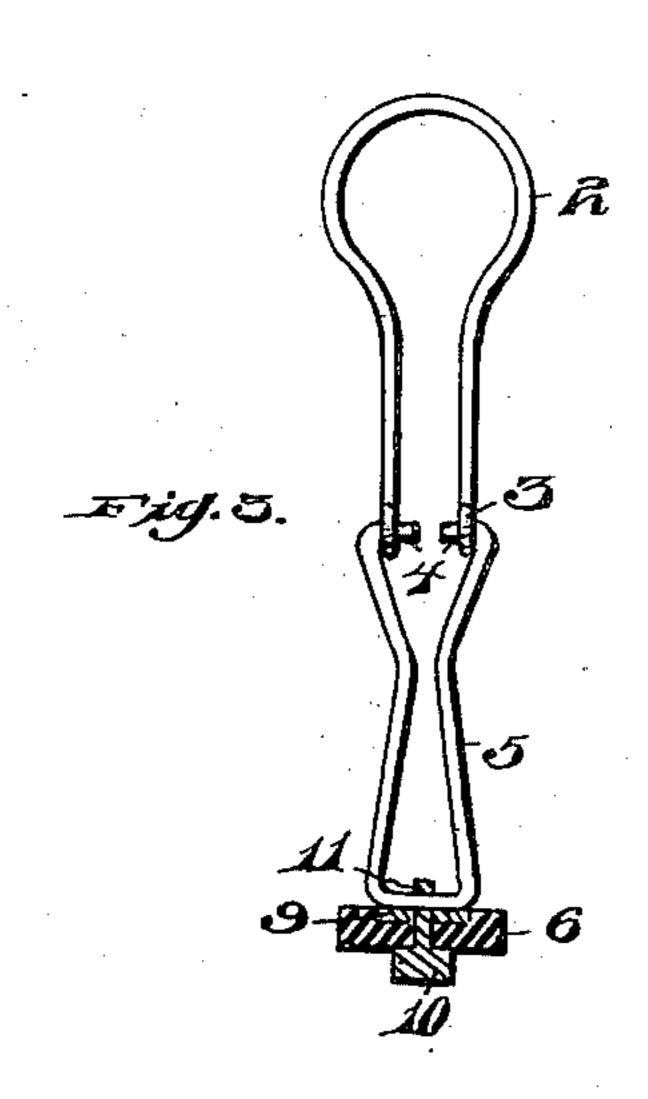
J. HARRIS. BOTTLE STOPPER.

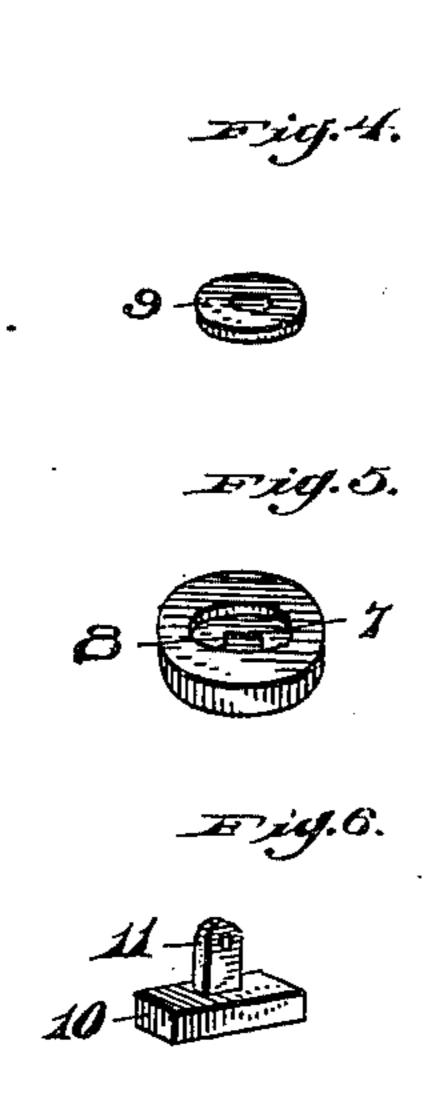
(No Model.)

(Application filed Dec. 8, 1900.)









Witnesses J.C. Gebleman E. E. Cotter.

Inventor Toseph Harris. By McEver Mer.

United States Patent Office.

JOSEPH HARRIS, OF PITTSBURG, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 668,444, dated February 19, 1901.

Application filed December 8, 1900. Serial No. 39,166. (No model.)

To all whom it may concern:

Be it known that I, Joseph Harris, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and 5 State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in bottle-stoppers, and has for one object the provision of novel means whereby the stopper is always retained in the neck of the bottle.

A further object of the invention is to construct a stopper of this class that may be easily opened and closed as desired.

A still further object of the invention is to construct a bottle-stopper that will be ex-20 tremely simple in its construction, strong, durable, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention finally consists in the novel 25 combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, 30 forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a vertical sectional view of the 35 neck of a bottle with my improved stopper applied thereto, showing the position of the same as it is inserted in the bottle. Fig. 2 is a similar view showing the stopper in a closed position and in dotted lines illustrat-40 ing the movement of the same. Fig. 3 is a side elevation of the stopper detached from the bottle, the lower portion of the same being shown in vertical section. Fig. 4 is a perspective view of the washer. Fig. 5 is a per-45 spective view of the stopper proper. Fig. 6 is a view of the plate carrying the apertured lug.

In the drawings the reference-numeral 1 indicates the neck of the bottle, and 2 repre-50 sents the inverted-U-shaped loop, having formed on its free ends eyes 3 for the reception of the inwardly-extending lugs 4 of the loops 5.

The reference-numeral 6 indicates the stopper proper, having annular recessed upper 55 face 7 and a square opening formed centrally therein and designated by the reference-numeral 8.

9 represents a metallic washer seated in the annular recess 7 of the stopper, and 10 in- 60 dicates a plate carrying an upwardly-extending apertured lug 11, said lug passing through the opening 8 in the stopper proper and also through the washer 9. The cross-bar that connects the two arms forming the loop 5 65 passes through the apertured lug 11 and forms a hinge connection between the stopper and the said loop 5.

It will be noted that by pulling on the loop portion 2 the stopper is easily placed in posi- 70 tion in the neck of the bottle, and when it is desired to open the same the loop 2 is depressed. In order to remove the stopper from the bottle or insert the same, the stopper proper, 6, is tilted, as shown in Fig. 1 of the 75 drawings, and may then be easily forced into the neck of the bottle.

The many advantages obtained by the use of my improved bottle-stopper will be readily apparent from the foregoing description 80 taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my 85 invention.

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

In a bottle-stopper, the combination of a 90 loop 2 carrying eyes 3 formed on its free ends, a loop 5 having inwardly-extending lugs adapted to engage said eyes, a stopper having a recessed portion on its upper face, a washer adapted to fit in said recessed por- 95 tion, a plate carrying an upwardly-extending lug adapted to extend through said stopper proper and washer and connected to the loop 5, all parts being arranged and operating substantially as set forth and described.

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

100

JOSEPH HARRIS.

Witnesses:

JOHN NOLAND, E. E. POTTER.