(No Model.)

G. W. MASON.

BOTTLE STOPPER.

No. 570,602. Patented Nov. 3, 1896.

Fig. 1.

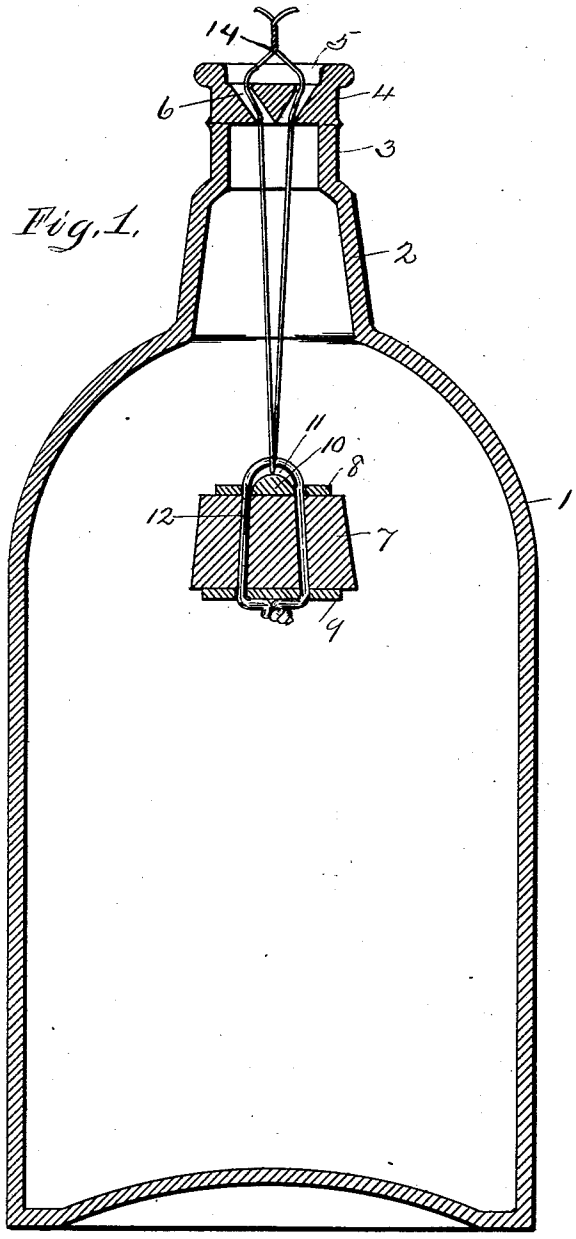


Fig. 2.

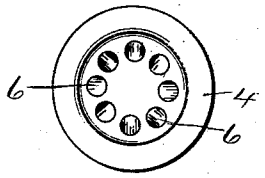


Fig. 3.

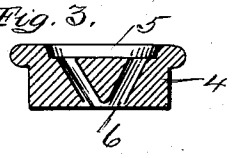


Fig. 4.

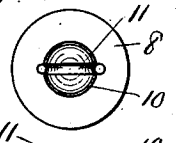


Fig. 5.

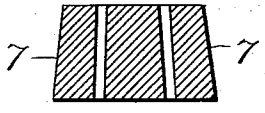
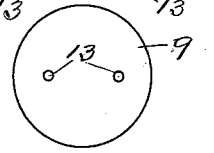


Fig. 6.

Fig. 7.



Witnesses:
Geo. W. Lavin
John C. Thompson

Inventor,
George W. Mason.
by his attorney.
H. C. Harrison.

UNITED STATES PATENT OFFICE.

GEORGE W. MASON, OF SHARON, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 570,602, dated November 3, 1896.

Application filed February 24, 1896. Serial No. 580,540. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. MASON, a citizen of the United States, residing at Sharon, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved bottle and cork for the same; and it consists in a device for refilling and recorking of the bottle and of certain details of construction and combination of parts to be hereinafter more fully described.

In the manufacture and sale of certain specific specialties put up in bottles a vast number of fraudulent articles are sold by refilling the bottles. Therefore the object of my invention is to provide a bottle that cannot be recorked after the contents have been used, thereby preventing any fraudulent preparation being placed in the bottle.

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

Figure 1 is a side sectional elevation of my improved bottle and stopper, which is constructed and arranged in accordance with my invention. Fig. 2 is a detail plan view of the top part of the neck of the bottle detached. Fig. 3 is a sectional side elevation of the same. Fig. 4 is a plan view of the top washer of the cork or stopper. Fig. 5 is a sectional plan view of the same. Fig. 6 is a sectional side elevation of the cork or flexible stopper. Fig. 7 is a view of the lower washer of the stopper.

To put my invention into practice, and thereby provide a bottle that will be rendered useless after the contents have been extracted, I form from glass by means of a suitable mold a bottle 1, and provide the same with a neck 2. This neck 2 is tapering or larger at the base, and is adapted to receive a cork or stopper 7, drawn upward, as will be hereinafter described. The upper portion 3 of the neck 2 is contracted to a smaller diameter and is fitted with a perforated cap 4, perforations 6 being inclined at an angle in a manner that should any small instrument be passed through into the neck of the bottle the same would be stopped by coming in contact with the side walls, thereby preventing any person from grasping the stopper and lifting it into position to close the mouth of the bottle. This perforated cap-piece 4 is attached to and made integral with the bottle 1 by heating the two meeting edges and welding or fusing.

Placed within the body of the bottle 1 is a cork or stopper of peculiar construction, the same being arranged in position before the neck 2 3 has been reduced in size and finished in the ordinary method and before the above-described cap-piece is placed in position. This cork or stopper consists in an annular stopper 7, formed from any suitable flexible material, having a washer 8 on the top and another 9 at the bottom. These washers 8 and 9 are held firmly in position by a piece of wire 12 looped over the one and tied beneath the other. The top washer 8 consists of a circular disk 8, provided at the center with an elevated semispherical portion 10, having a transverse groove 11 formed over the same, and two small openings at the extremities of the said groove 11 for the reception of the tie-wire 12. The lower washer 9 consists simply of a disk 9 with two small circular openings 13, through which the ends of the wire are passed before tying the same. Attached to the upper loop of the wire 12 is a fine flexible wire 14, which projects upward through the perforations 6 and serves as a means of suspending the stopper until the bottle is filled and as a means of forcing the stopper into the neck 2 to seal or close the bottle. A shallow groove 5, not capable of retaining any cork or stopper, is formed in the top of the cap-piece 4 as a means of centralizing a funnel when filling the bottle.

In operation the liquid is poured into the bottle 1 through the perforations 6, and when full the wire 14 is drawn upward with considerable force, which enters and secures the stopper in the neck 2. When this has been

accomplished, the ends of the said wire 14 are separated and the wire withdrawn by simply drawing on a single strand. When this wire 14 has been withdrawn, the spring of the cork or stopper 7 will be sufficient to slightly separate the two washers 8 and 9, and thereby draw the loop of the tie-wire 12 down into the groove 11 of the washer 8, thereby preventing any hooked instrument or other tool being introduced beneath or otherwise engaged with the said loop.

It is obvious that various slight changes may be made in the general details of construction without departing from the general spirit of my invention.

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

1. In combination with a bottle-stopper for the purpose described, the washer 8, provided with an elevated portion 10 on the top surface and a transverse groove or depression 11, as and for the purpose set forth and described.

2. In a bottle-stopper adapted to be drawn upward into the neck of the bottle, consisting of the flexible body portion 7, the lower washer 9, having openings 13, the top washer 8, having a semispherical portion 10, and on the top surface a transverse groove or depression 11, formed in said semispherical portion with openings terminating at the extremities of said groove, and a wire fastening 12, to clamp the parts together, substantially as described.

In testimony that I claim the foregoing I hereunto affix my signature this 20th day of February, A. D. 1896.

GEORGE W. MASON. [L. S.]

In presence of—
GEO. W. LOWEN,
JOHN C. THOMPSON.