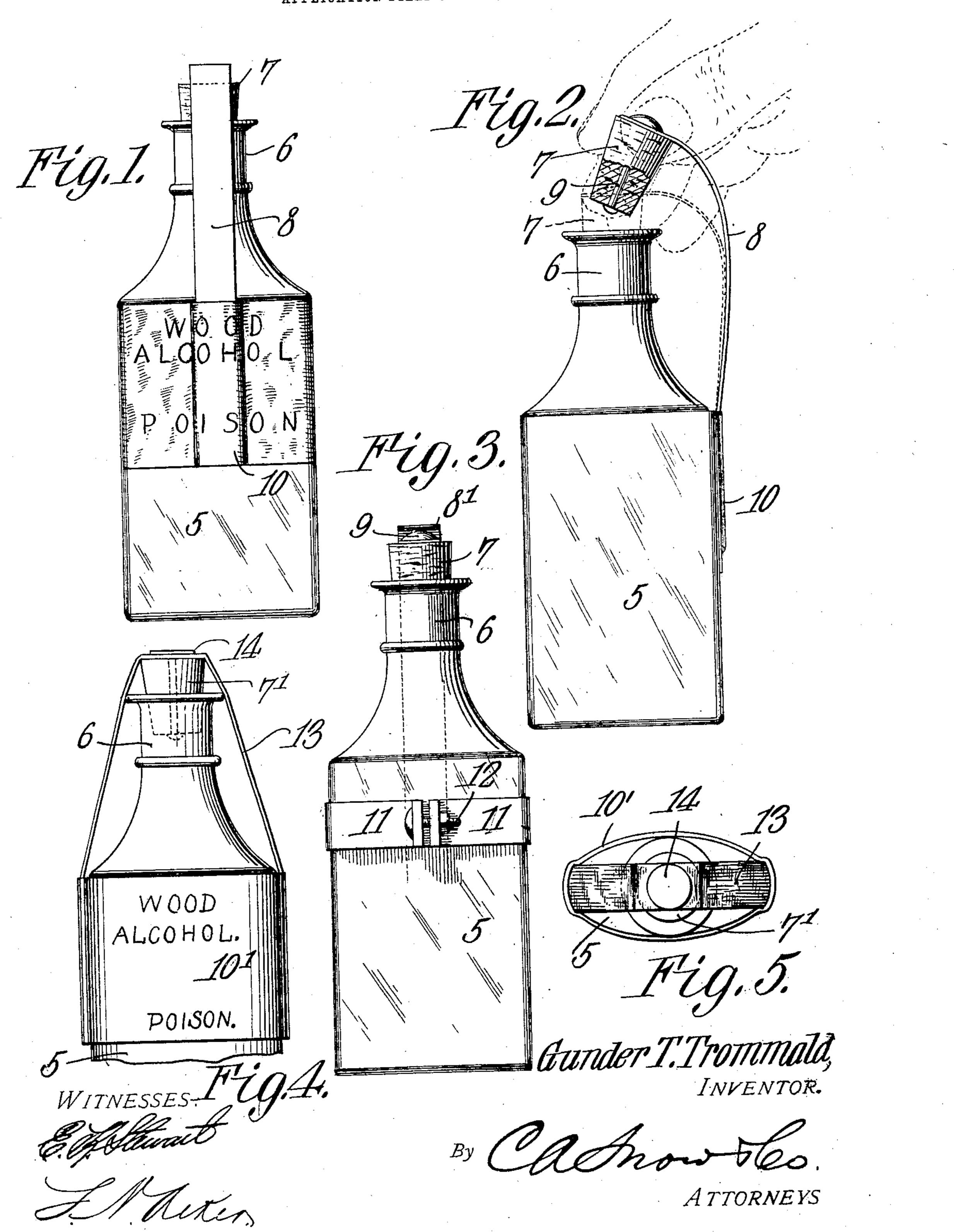
G. T. TROMMALD.

BOTTLE ATTACHMENT.

APPLICATION FILED MAR. 21, 1907.



UNITED STATES PATENT OFFICE.

GUNDER THEODORIC TROMMALD, OF PORTLAND, OREGON.

BOTTLE ATTACHMENT.

No. 865,545.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed March 21, 1907. Serial No. 363,594.

To all whom it may concern:

Be it known that I, Gunder Theodoric Trommald, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have 5 invented a new and useful Bottle Attachment, of which the following is a specification.

This invention relates to stoppers for bottles, jars and similar containing vessels and more particularly to improved means for retaining the stopper in position on the vessel thereby to prevent accidental displacement of the same when the stopper is removed from the vessel.

The object of the invention is to provide a stopper or closure which is permanently attached to the containing vessel so as to prevent the same from becoming lost or misplaced when the stopper is removed to expose the contents of the vessel.

A further object of the invention is to provide a supporting arm having one end thereof rigidly secured to the containing vessel and its opposite end pivotally connected with the stopper said arm serving to retain the stopper in the neck of the vessel as well as to form a support for the same when the stopper is removed from the vessel.

A still further object of the invention is to generally improve this class of devices so as to increase their utility, durability and efficiency as well as to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a front elevation of a containing vessel provided with a stopper constructed in accordance with my invention. Fig. 2 is a side elevation of the same showing in full lines the stopper in open position and in dotted lines in closed position. Fig. 3 is a rear elevation illustrating a modified form of the invention. Fig. 4 is a side elevation of a portion of a bottle illustrating a further modification. Fig. 5 is a top plan view of Fig. 4.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved device may be used in connection with bottles, jars and similar containing vessels and by way of illustration is shown in connection with a bottle of the ordinary construction in which 5 designates the body portion, 6 the neck and 7 the stopper or closure.

The attachment consists of a supporting arm 8 preferably formed of spring metal and having one end

thereof curved laterally and pivotally connected with 55 the stopper 7 in any suitable manner as by a pin or stud 9, the opposite end of the arm being interposed between the adjacent wall, of the bottle and a retaining strip 10.

The strip 10 is preferably formed of cloth, linen or 60 other fabric and is glued or otherwise rigidly secured to the bottle and adjacent end of the arm 8, said strip constituting a label on which may be stamped or otherwise printed the name of the liquid contained in the vessel thus dispensing with the ordinary label and permitting 65 the contents of the vessel to be exposed to view when said vessel is formed of transparent material.

Attention is called to the fact that the spring action of the arm 8 on the end of the stopper serves to normally and yieldably retain the latter to its seat in the 70 neck of the bottle and thus assist in preventing the same from being forcibly ejected should the liquid in the bottle ferment.

It will also be observed that the cork or stopper 7 is mounted for rotation on the pivot pin 9 so that the 75 stopper may be rotated within the neck of the vessel and thus loosen the same preparatory to extracting the stopper.

In order to remove the stopper it is merely necessary to partially rotate the latter and then exert a slight 80 lateral and upward movement on the same when the stopper may be detached so as to permit the bottle to be filled or the contents thereof emptied.

It will be observed that the spring arm 8 not only serves to yieldably support the stopper to its seat but 85 also forms a handle or finger piece by means of which the stopper may be supported in open position when emptying or filling the bottle.

In Fig. 3 of the drawings there is illustrated a modified form of the invention in which the support 8' is 90 retained in position on the bottle by means of a pair of clamping arms 11 having their adjacent ends bent laterally and pierced by a pin or similar fastening device 12.

If desired the spring 8 instead of exerting a yieldably 95 downward pressure on the cork may be so constructed as to exert an upward pressure on the cork and thus automatically move the latter to open position as soon as the cork is rotated in the neck of the vessel.

A further modification is illustrated in Figs. 4 and 5 100 of the drawings in which the cork or stopper 7' is held within the neck of the bottle by an elastic retaining band or strap 13 an intermediate portion of which is secured to the stopper in any suitable manner, as by a headed pin 14 while the opposite ends of said band are 105 extended downwardly and fastened to the adjacent sides of the bottle by means of the strip or label 10'. In this form of the device the strip or label preferably

extends entirely around the body of the bottle so as to assist in preventing accidental detachment of the elastic band.

In order to remove the stopper shown in Figs. 4 and 5 it is merely necessary to partially rotate the latter in the neck of the bottle and then exert a slight upward pressure on said stopper which expands the elastic band 13 so that the stopper may be readily detached.

While the device is shown and described in connection with a bottle it is obvious that the same may be used with equally good results on jars, test tubes and other containing vessels.

Having thus described the invention what is claimed

is:

1. A containing vessel having a closure, a label secured to the vessel, and a supporting arm one end of which is interposed between the vessel and label and the opposite end thereof connected with the closure.

2. A containing vessel having a closure, a retaining

band secured to one wall of the containing vessel, and a 20 supporting arm one end of which is interposed between the retaining band and the containing vessel and the opposite end thereof pivotally connected with the closure.

3. A containing vessel having a closure, a strip of spring metal secured to one wall of the containing vessel and 25 having its upper end deflected laterally over and in contact with the closure, and a fastening means piercing the deflected end of the metal strip and closure and forming a pivotal connection between the two.

4. A containing vessel having a removable stopper, a 30 retaining band secured to the vessel, and means interposed between the retaining band and vessel and operatively connected with the stopper for normally retaining said stopper in closed position.

In testimony that I claim the foregoing as my own, I 35 have hereto affixed my signature in the presence of two witnesses.

GUNDER THEODORIC TROMMALD.

Witnesses:
GEO. W. CALDWELL,
MAUDE R. FRANKS.