

No. 782,780.

PATENTED FEB. 14, 1905.

E. P. DOLE.  
BOTTLE STOPPER.  
APPLICATION FILED JUNE 3, 1904.

Fig. 1.

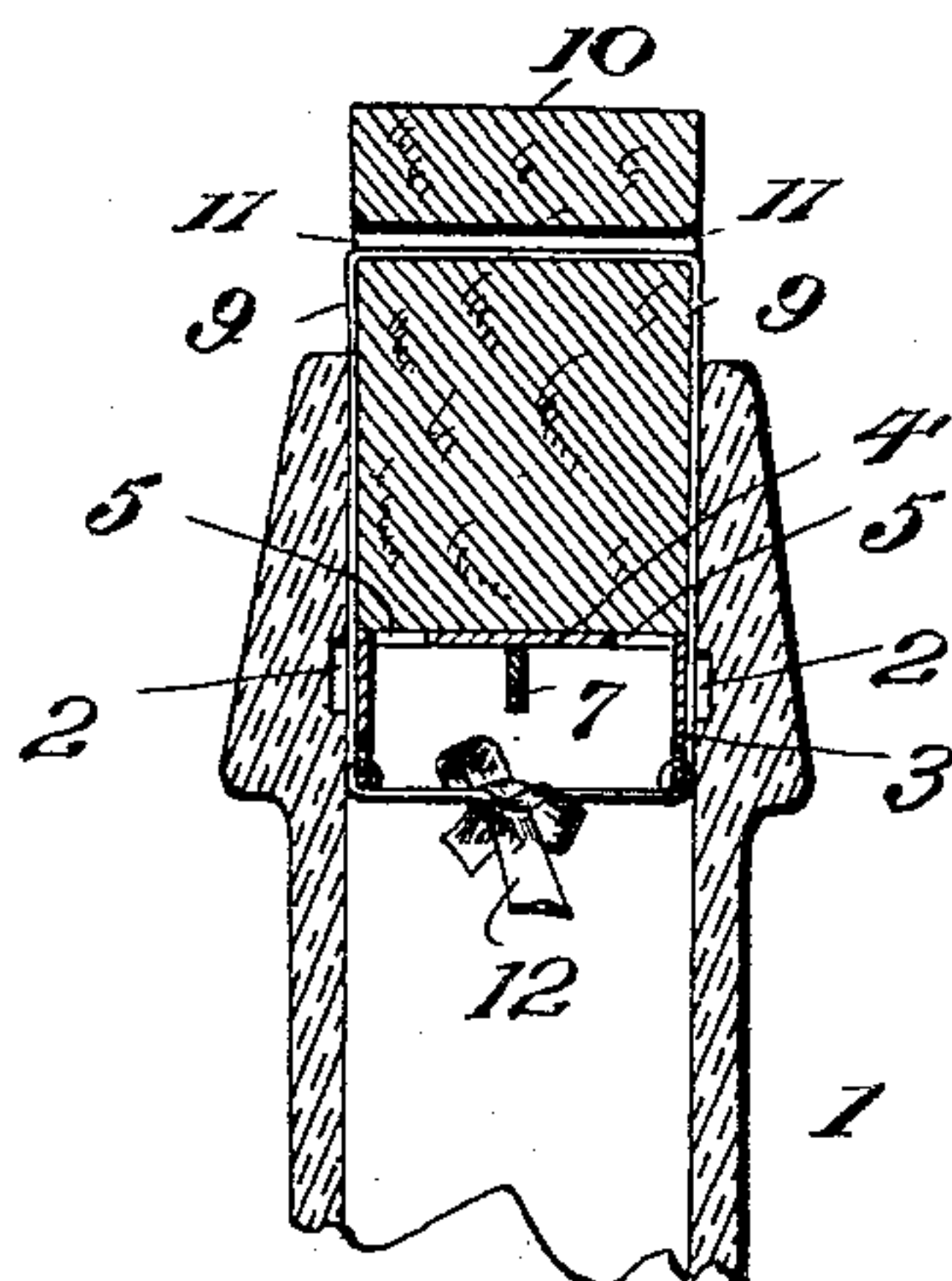


Fig. 2.

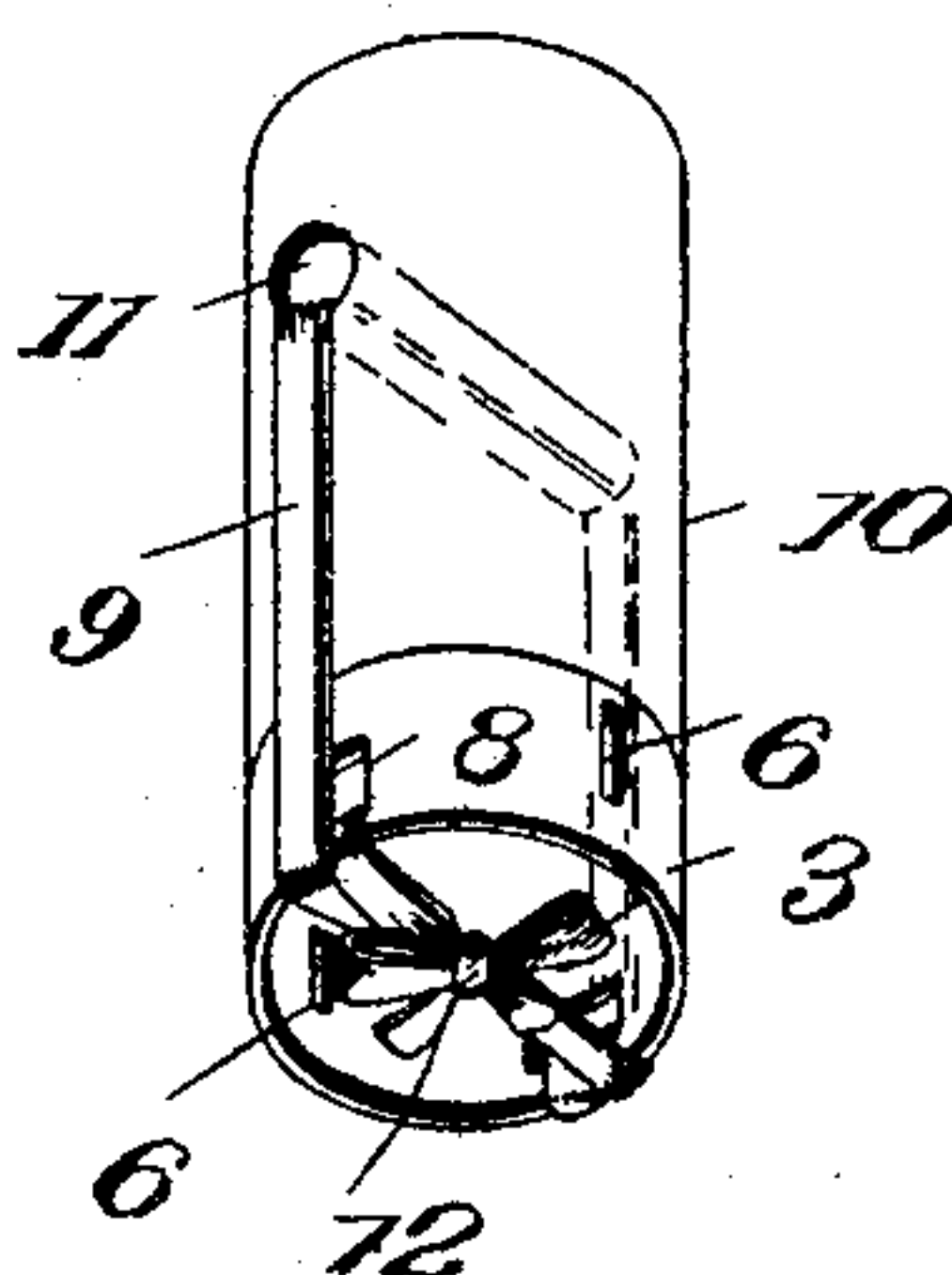


Fig. 3.

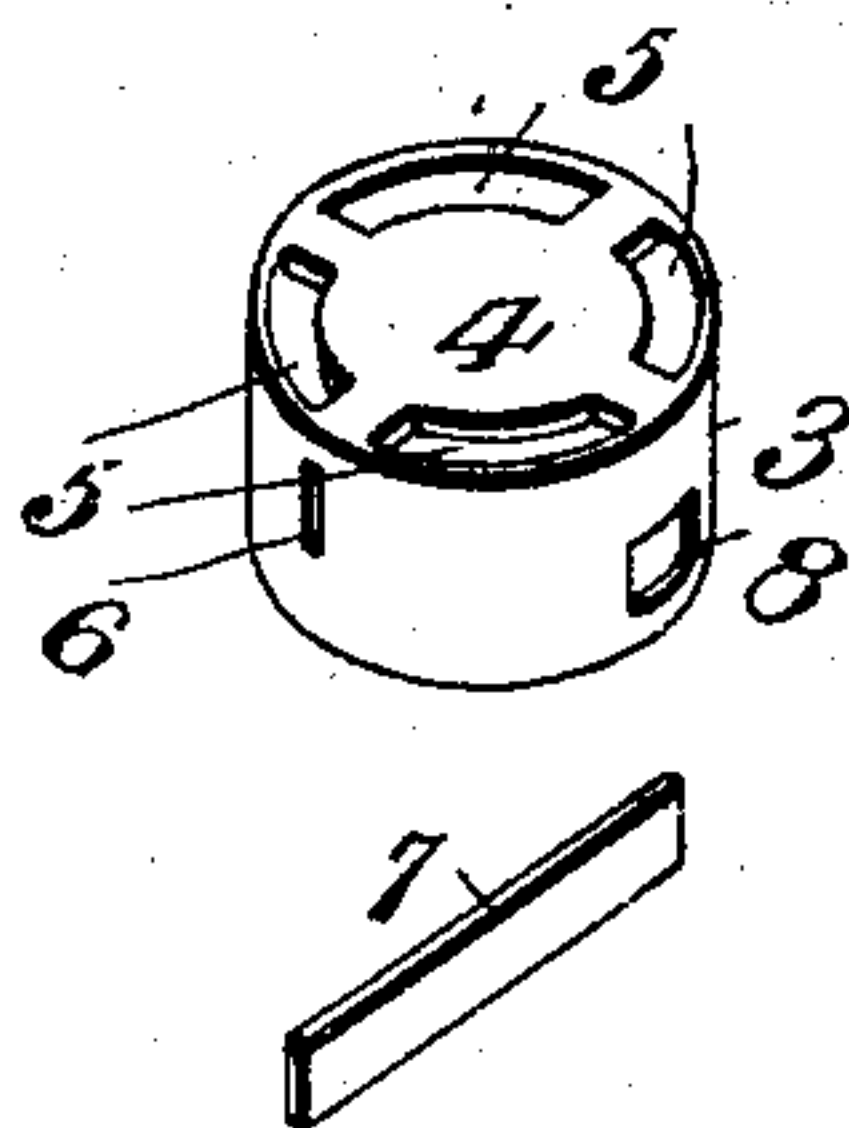
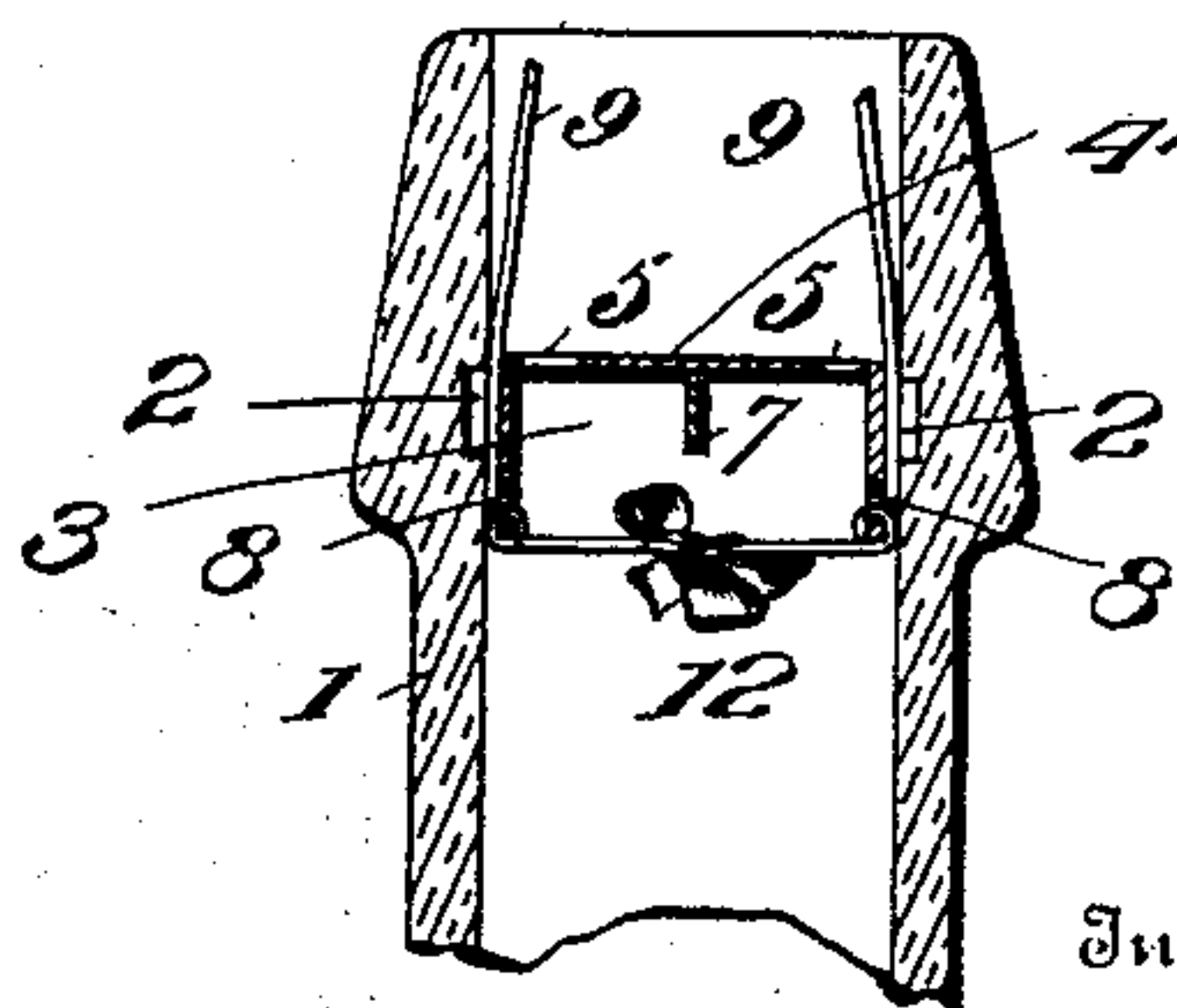


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 782,780, dated February 14, 1905.

Application filed June 3, 1904. Serial No. 210,929.

*To all whom it may concern:*

Be it known that I, EDMUND P. DOLE, a citizen of the United States, residing at Honolulu, in the Island of Oahu and Territory of Hawaii, 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 appertains to make and use the same.

My invention relates to certain new and useful improvements in stoppers for bottles, jars, and similar vessels, and has for its object to provide a stopper which when properly placed in position to seal the contents of the vessel will denote the origin and character of the same and render it impossible after the vessel has been once opened to be refilled and again closed in such manner as to fraudulently indicate that it had never been previously opened.

It is well understood by the public that after a given liquor or other commodity has acquired a celebrity by reason of the purity of quality or origin of manufacture dishonest persons are prone to refill the bottles or other vessels in which the same is sold with inferior products and with the view of fraudulently making it appear that the contents of the bottle or other vessel is the same as originally placed therein.

My invention is designed to prevent such fraudulent use of an original bottle or other vessel by the employment of a specially-designed stopper of simple and economic construction and readily secured in place, while at the same time it is readily removable when desired.

With these ends in view my invention consists of a metallic base adapted to be located within the neck of a bottle or similar vessel and to be automatically locked therein, and cork of suitable material secured to said base by a flexible ribbon or band in such manner that the cork cannot be removed from its base and from the neck of the bottle or other vessel without first destroying the integrity of the band between the cork and its metallic base, and thus clearly indicating that the said vessel has been opened, all as will be hereinafter and in detail explained.

In order that those skilled in the art to which my invention appertains may know how to make and use my improved stopper and fully appreciate its advantages, I will proceed to describe the same, referring by numerals to the accompanying drawings, in which—

Figure 1 is a central vertical section of the neck of an ordinary bottle with my improved stopper secured in position therein to seal and protect the contents. Fig. 2 is a perspective view of my improved stopper in proper condition for introduction into the neck of a bottle. Fig. 3 is a perspective view of the metallic base portion of the stopper and the spring locking plate or bar removed therefrom; and Fig. 4 is a view similar to Fig. 1, but with the cork removed and showing the original band or connection between the cork and its metallic base severed in order that the cork may be released from the base.

Similar numerals indicate like parts in the several figures of the drawings.

1 represents the neck portion of an ordinary bottle and formed on the interior and near the upper end thereof with a circumferential groove or recess 2, having horizontal parallel walls, as clearly indicated.

3 is a sheet-metal cup of cylindrical or other form in cross-section and adapted to conform with the interior of the neck of the bottle or other vessel. The upper disk or flat portion 4 of this cup is formed with openings 5 of any preferred design and capacity designed to permit the free flow therethrough of the contents of the vessel when the sealing-cork is removed.

6 6 are diametric slots or openings in the side wall of the cup adapted for the passage therethrough of the ends of a flat spring-metal plate or bar 7, which is designed to secure the metal base or cup 3 in position when the ends of the plate or bar 7 spring or snap into the circumferential groove or recess 2 in the interior of the neck of the bottle or other vessel, to thus lock said base or cup against removal.

8 8 are diametric openings in the wall of the base or cup intermediate of the diametric slots or openings 6 6 and designed to receive the ends of a flexible ribbon or band 9 in the manner to be presently explained.



10 is a stopper composed of cork or other suitable resilient material adapted to constitute the seal or closure of the bottle or other vessel in an obvious manner. This stopper 10 is formed with a diametric channel 11 near its upper exposed end adapted for the passage of the ribbon or band 9, the opposite ends of which after being passed through the diametric openings 8 8 in the wall of the base or cup 3, as best shown at Fig. 2, are tied in a suitable knot 12, thus securely connecting the cork or stopper 10 and locking the metallic base 3 together. With the two parts of the stopper thus secured together and with the spring bar or plate 7 located within the base or cup 3 and with its ends projecting through the diametric openings 6 6 the stopper is driven into the neck of the bottle in such manner as to force the ends of the spring bar or plate toward the center, thus buckling said bar or plate and permitting the stopper to move downwardly until the openings 6 6 of the base or cup 3 are in alignment with the circumferential groove or recess 2 in the neck of the bottle, whereupon the ends of the plate or bar 7 will immediately spring into said groove or recess, and thus lock the cup or base 3 in position, and as the resilient cork or stopper 10 is secured to the base or cup by the ribbon or band 9 it will be obvious that the said cork or stopper cannot be removed without the cutting or breaking of the ribbon or band, and this condition will be a clear indication that the original contents of the bottle or other vessel have been removed and the vessel refilled, thus exposing the fraudulent intent. The ribbon or band which constitutes the connection or bond of union between the cork and the base or cup may be made of any suitable flexible material and may constitute a trade-mark or other characteristic emblem to designate proprietorship or the presence only of the connection between the resilient stopper, and the metallic base may constitute the evidence of origin or proprietorship.

While I have shown and prefer the means illustrated and described for connecting together the resilient stopper 10 and the metallic cup or base 3, I do not wish to be limited thereto, as the said two parts may be connected in other ways without departing from the spirit of my invention, which resides in the broad idea of a stopper composed of a re-

silient upper portion secured to a metallic base portion, the latter adapted to interlock with the neck of the bottle or other vessel and the connection between the two members of the stopper being such that the removal of the resilient member from the base will cause or render necessary the destruction of the connecting device, and thus manifest the separation of the parts.

While my improved stopper is particularly designed for use in connection with ordinary bottles having cylindrical necks, it will be understood that it may be designed to conform with bottle-necks other than cylindrical in cross-section and that it may be applied to jars or other vessels with like advantageous effect.

Having described the construction and advantages of my improved stopper, what I claim as new, and desire to secure by Letters Patent, is—

1. A stopper for bottles and other like vessels consisting of a metallic base or cup having a liquid-passage therethrough and provided with means for interlocking with the neck of the vessel; a resilient upper portion or member and means for connecting together the metallic base and resilient upper portion or member, said connection being destructible, substantially as and for the purpose set forth.

2. A stopper for bottles or other vessels consisting of a metallic cup or base with a liquid passage or passages therethrough and provided with a diametric spring-latch adapted to interlock with the recess in the neck of a bottle, and provided also with transverse diametric threading-slots; a resilient body having a diametric passage through the upper portion, and a flexible band or ribbon located within the diametric passage of the resilient body and having its opposite ends threaded through the diametric slots of the cup or base, and connected together intermediate the wall of the cup or base, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDMUND P. DOLE.

Witnesses:

D. G. STUART,  
W. M. HOLLS.