(No Model.)

H. E. G. LUYTIES.

BOTTLE STOPPER.

No. 366,732. Patented July 19, 1887.

Fig. 1.

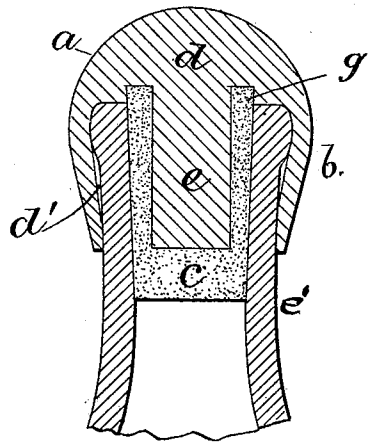


Fig. 2.

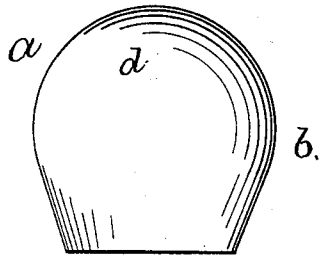
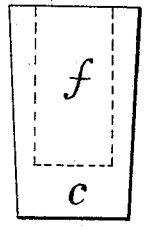


Fig. 3.



ATTEST:
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UNITED STATES PATENT OFFICE.

HENRY E. G. LUYTIES, OF NEW YORK, N. Y.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 366,732, dated July 19, 1887.

Application filed May 24, 1887. Serial No. 239,189. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. G. LUYTIES, a citizen of the United States, residing at the city of New York, in the county and State of New York, have invented a certain new and useful Improvement in Corks for Bottles, of which the following is a full, clear, and exact specification.

My invention relates to certain improvements in bottle-stoppers; and the object of my improvement is to provide a means for strengthening the body of the stopper, and also to render the joint between the neck of the bottle and the head of the stopper both gas and liquid tight.

The ordinary form of bottle-stoppers composed entirely of cork-wood, when used with bottles containing gaseous liquids—as, for instance, champagne-bottles—are subject to deterioration and shrinkage under certain atmospheric conditions, and consequently leakage will invariably take place at the joint formed between the neck of the bottle and the head of the cork. The purpose of my improvement is to overcome these disadvantages, and this I accomplish by the construction shown in the accompanying drawings, in which—

Figure 1 is a vertical section of a stopper made according to my improvement shown applied to a bottle. Figs. 2 and 3 are side elevations of the two parts forming the stopper shown separated.

Let *a*, Fig. 1, represent the bottle-stopper as a whole, which is made of india-rubber or analogous substance combined with cork. This stopper is composed of the two parts *b* and *c*, which parts may be united together in any suitable manner, either by cementing or otherwise. The main part *b*, which constitutes the body of the stopper, is molded or otherwise formed out of rubber, and is so made as to extend over and downward onto the neck of the bottle, so as to completely inclose or envelop the upper part of the neck of the same, as is clearly shown in Fig. 1, thereby forming, as it were, a tight-fitting cap for the top portion of the neck of the bottle. It consists of the annular top or head *d*, having the central stem, *e*. The side or outer edge of the head is prolonged downward, so as to form an annular hollow neck part, *d'*, which is made tapering on its inner surface to make it conform to the taper of the neck of the bottle. The other portion of the stopper consists of a cylindrical piece of cork-wood hollowed out to form a socket, *f*, suitable to receive the rubber stem *e* of the body *b*. This case or covering *c*, which incloses the stem, is closed at the bottom, so as to prevent any contact of the rubber with the liquid in the bottle.

On the under side of the head *d* of the rubber body, and surrounding the stem *e*, is formed an annular groove, *g*, which receives the upper edge of the cork casing *c*.

The rubber body *b* is so formed that it fits tightly on the top edge of the neck of the bottle *e'*, and extends over and around its side, enveloping the same like a snugly-fitting cap, packing the joint, which is necessarily formed where the head of the cork and top edge of the bottle meet. By this means leakage is entirely prevented.

The stopper may be wired in the bottle in the usual manner, if desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a bottle-stopper consisting of a body of rubber having a stem covered with cork and an annular neck part adapted to inclose the neck of the bottle, as set forth.

2. A bottle-stopper consisting of a rubber body provided with a central stem and having an annular recess surrounding said stem adapted to receive the neck of the bottle, and a cylindrical cork provided with a socket to receive said stem, as set forth.

3. The combination of the body *b*, having extended and tapered side portion, *d'*, and stem *e*, with the cylindrical cork piece *c*, provided with socket *f*, as set forth.

HENRY E. G. LUYTIES.

Witnesses:

LOUIS BECKHARDT,

HENRY WILSON.