

F. DOLL.
BOTTLE-STOPPERS.

No. 195,587.

Patented Sept. 25, 1877.

Fig. 1.



Fig. 3.

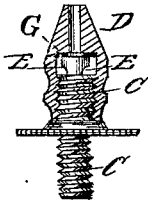


Fig. 4.

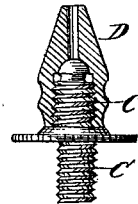
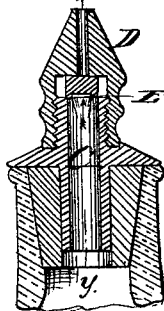


Fig. 2.



Witnesses
Fred G. Dieterich
E. C. Walford.

Inventor
Frederick Doll

by

Daniel Breed
att'y

UNITED STATES PATENT OFFICE.

FREDERICK DOLL, OF NEWARK, NEW JERSEY, ASSIGNOR TO WILLIAM HENRY HALL.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. **195,587**, dated September 25, 1877; application filed December 8, 1876.

To all whom it may concern:

Be it known that I, FREDERICK DOLL, of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In the accompanying drawings, Figure 1 is a vertical section of my improved bottle-stopper, showing the holes in the upper end of the tube C and the central bearing thereon. Fig. 2 is also a vertical section made transversely on the line *xx*, Fig. 1. Figs. 3 and 4 are modifications.

My invention relates to that class of bottle-stoppers which are opened and closed by means of screw-cap, and for one of which a patent was granted to William Henry Hall September 13, 1864.

My invention consists of a novel construction and arrangement of devices for improving bottle-stoppers, all of which will be fully understood by the following specification.

In my improved bottle-stopper the cork A may be fitted to the tube C, having flange B, in the usual manner.

The perforated screw-cap D has a central chamber, and also a bearing fitted to the upper end of tube C, which has lateral openings E leading to the chamber in cap D, so that the liquid may flow as indicated by arrows in Fig. 1.

A washer, G, Fig. 3, of rubber or other material, may be used if found necessary, and I do not limit my invention to a flat bearing on the top of the tube C, so long as the cap and tube fit closely when screwed together.

The above construction is very simple, there being only two castings, and very little work in fitting up these two castings. It is also cheap and durable.

A single turn, or even a half-turn, of the screw-cap D, will either open or close the stopper at pleasure.

Having described my invention, I claim—

The combination of the cork tube C, cast with a cap on its upper end, and having lateral openings E, with the perforated screw-cap D, having a central chamber, and also a bearing to fit the top of tube C, all constructed to operate substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

FREDERICK DOLL.

Witnesses:

DANIEL BREED,
THOMAS C. CONNOLLY.