

No. 646,018.

Patented Mar. 27, 1900.

F. W. COOK, JR.  
SPRINKLING STOPPER.  
(Application filed Dec. 27, 1899.)

(No Model.)

Fig. 1.

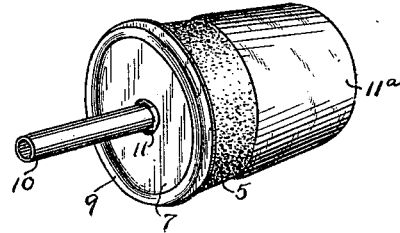


Fig. 2.

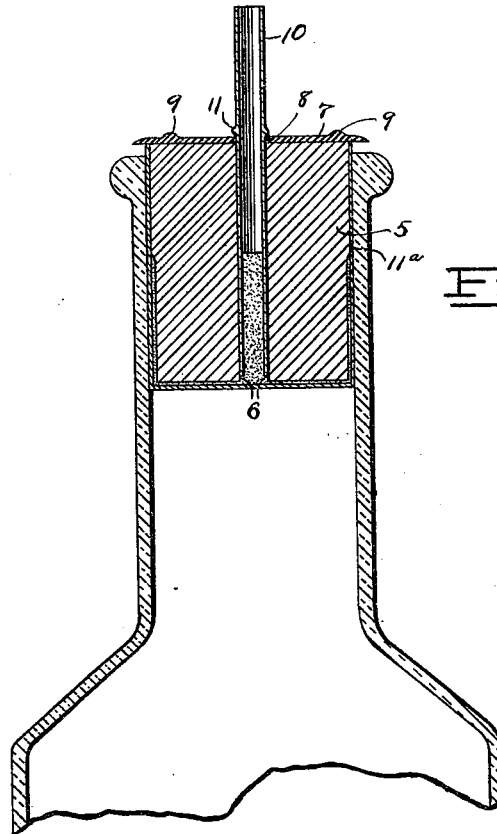
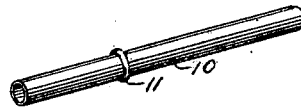


Fig. 3.



Witnesses  
Frank J. Campbell.  
George Chandler.

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By His Attorneys,

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# UNITED STATES PATENT OFFICE.

FREDERICK W. COOK, JR., OF SAN ANTONIO, TEXAS.

## SPRINKLING-STOPPER.

SPECIFICATION forming part of Letters Patent No. 646,018, dated March 27, 1900.

Application filed December 27, 1899. Serial No. 741,759. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK W. COOK, Jr., a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Sprinkling-Stopper, of which the following is a specification.

This invention relates to stoppers in general, and more particularly to that class known as "sprinkling-stoppers," in which an opening is formed through which the contents of the bottle may be discharged by jolting, the object of the invention being to provide a construction for special use in bottles for holding ammonia, bichlorid of mercury, and other liquids that are injurious to cork and in which the cork is protected and the opening through the stopper is normally closed.

A further object of the invention is to provide a structure which is simple and cheap of manufacture.

In the drawings forming a portion of this specification and in which similar numerals of reference designate like and corresponding parts in the several views, Figure 1 is a detail perspective view showing the stopper equipped in accordance with the present invention. Fig. 2 is a central section of a bottle-neck provided with a stopper, the exterior paper covering being extended throughout the length of the stopper. Fig. 3 is a detail perspective view of the discharge-tube.

Referring now to the drawings, the present invention comprises a body portion 5, which is preferably of cork, although it may be of any other suitable material, and centrally of which is formed a longitudinal passage 6. A cap-plate 7 in the form of a disk is disposed upon the upper end of the body portion 5 and has a central perforation 8, which alines with the passage 6. The plate 7 is in the form of a disk and has a strengthening-bead 9 adjacent its rim. Passed through the perforation 8 and into the passage 6 is a discharge-tube 10, of any suitable metal and of such length as to reach from the lower end of the body portion to a point beyond the upper end thereof, this tube having an external flange 11, which rests against the plate 7, and not only limits the movement of the tube into the

passage 6, but acts to hold the plate 7 against displacement.

In order to prevent the egress of fluid through the tube 10 during shipment and storage, the lower end of the stopper is dipped into molten wax, which forms a coating upon the outer face of the body and upon the lower end thereof, the wax also rising into the tube 10, in which it hardens, thus not only preventing the passage of liquid through the tube, but protecting the accessible portions of the body of the stopper.

As an additional protection a casing 11<sup>a</sup>, of waxed paper, may be applied to the stopper while the wax is yet warm, and when the wax has hardened it will act to hold this paper casing securely in place. This paper casing may continue throughout the length of the stopper, as shown in Fig. 2 of the drawings, or may terminate short of the upper end, as illustrated in Fig. 1.

It will thus be seen that not only is the body of the stopper protected from the effects of the contents of the bottle, but the tube is also protected, and it is effectually closed.

The bottle is shipped with the stopper in place, as illustrated in Fig. 2, and when it is desired to shake out any portion of the contents it is only necessary to insert an instrument through the tube and force the wax out of the tube, when the bottle may be inverted and jolted, with the result that the contents will be sprinkled in the well-known manner.

It will of course be understood that any suitable materials may be employed for the several parts of the structure and that any desired proportions may be used without departing from the spirit of the invention.

What is claimed is—

1. A stopper comprising a body portion, a passage through the body portion, and a coating and filling for the surface and passage of the body portion respectively applied thereto in a molten state.

2. A stopper comprising a body portion having a central passage, a tube in the passage, and a coating for the body portion, and a filling for the tube applied thereto in a molten state.

3. A stopper comprising a body portion, a passage through the body portion, and a coat-

ing and filling of wax for the surface and passage of the body portion respectively, applied thereto in a molten state.

4. A stopper comprising a body portion  
5 having a central passage, a tube in the passage, and a filling and coating of wax for the tube and the surface of the body portion, respectively, applied thereto in a molten state.

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

FREDERICK W. COOK, JR.

Witnesses:

WM. OCHSE,  
W. C. BURNS.