No. 700,312. Patented May 20, 1902.

D. A. FARRELL & H. E. KRESSE.

NON-REFILLABLE BOTTLE.

(Application filed Aug. 31, 1901.)

(No Model.)

Fig. 1.

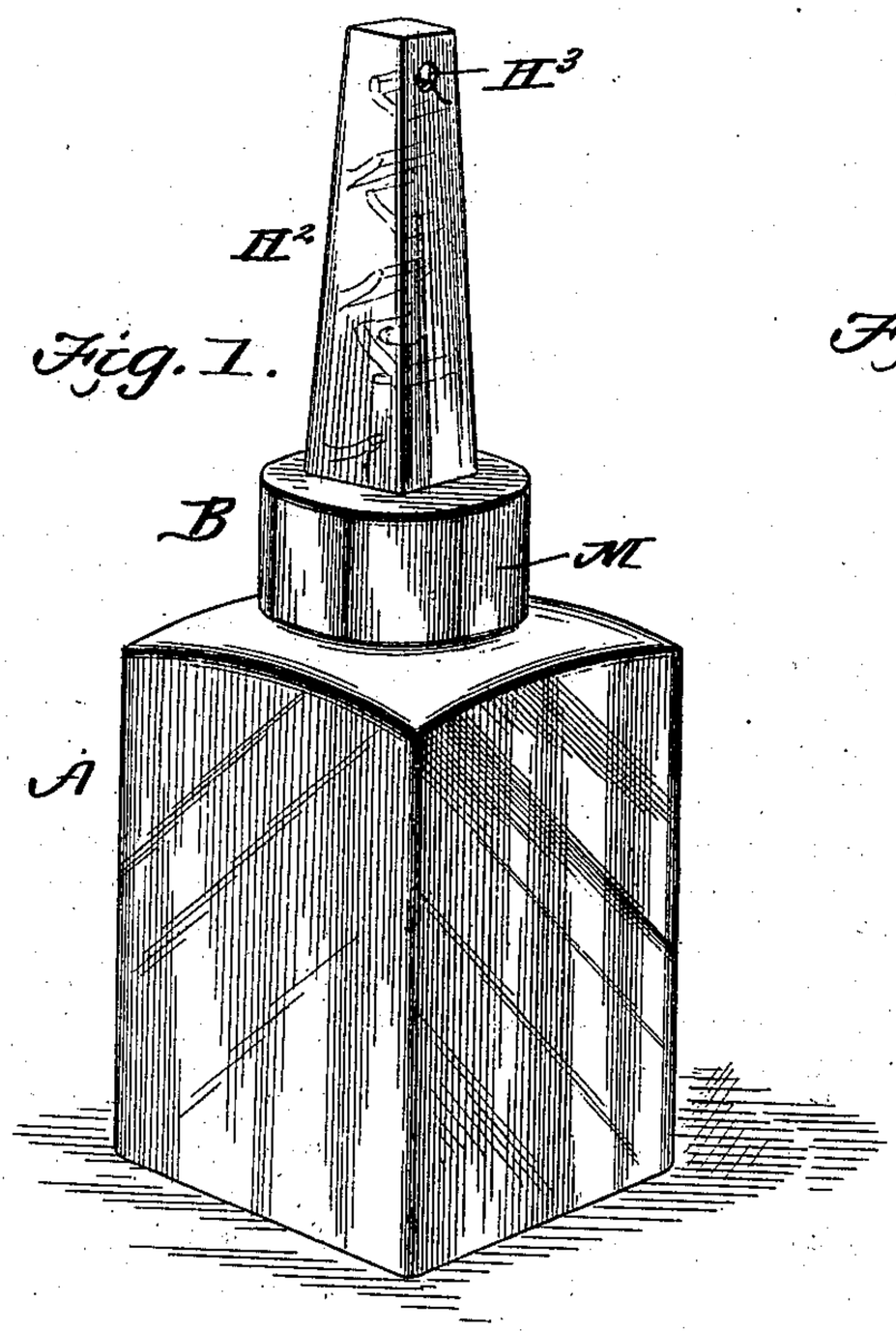


Fig. 2.

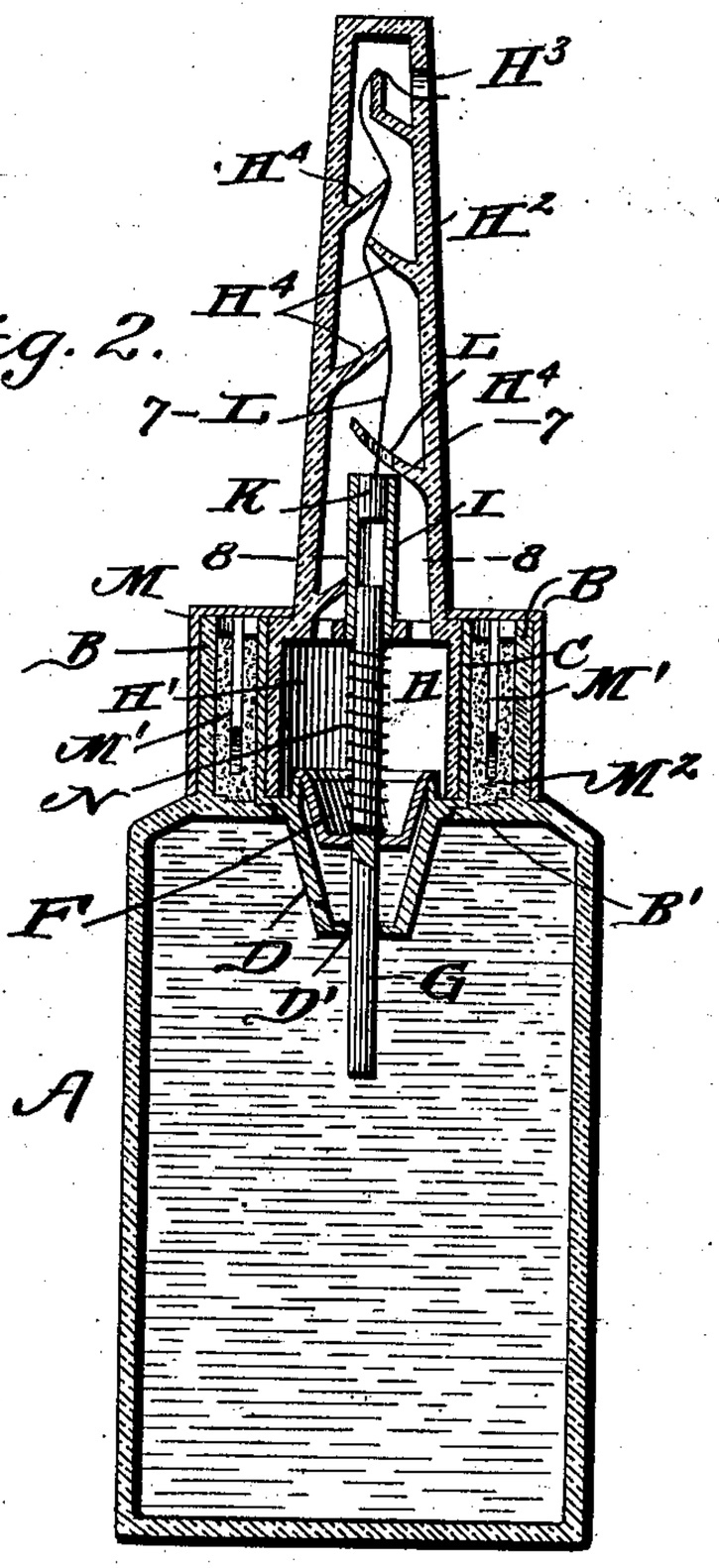


Fig. 3.

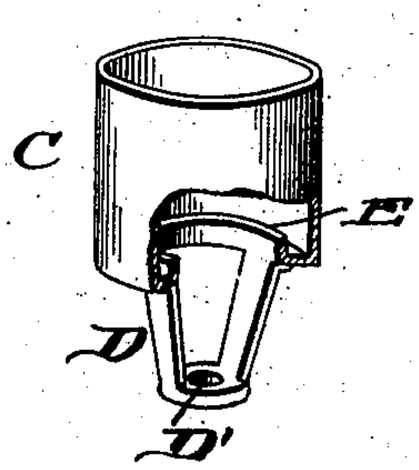


Fig. 4.

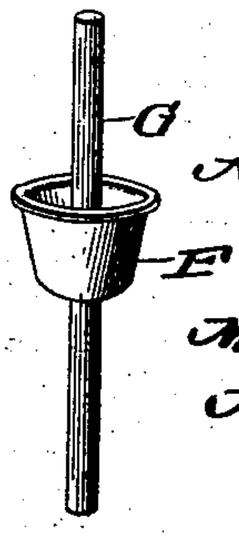


Fig. 5.

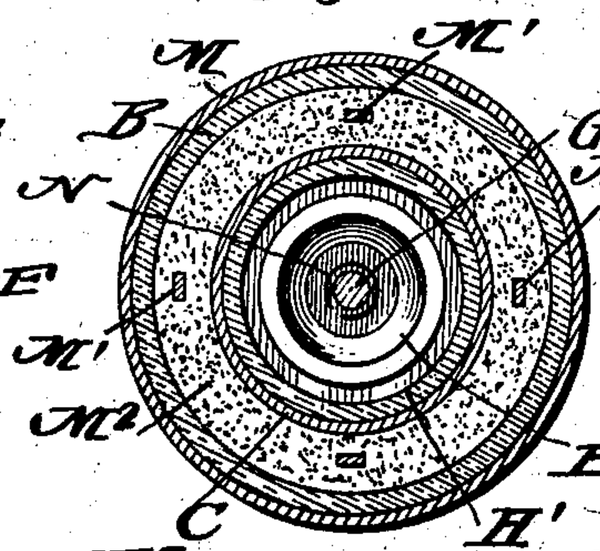


Fig. 6.

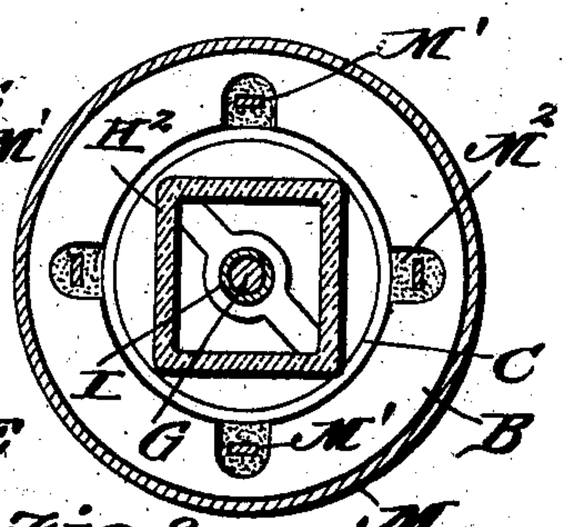


Fig. 8.

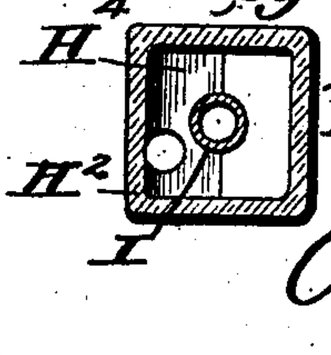
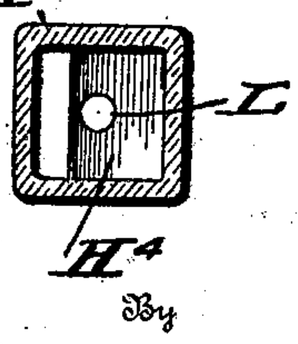


Fig. 7.



Witnesses
J. F. Pattison
Clarence Shaw

Inventors
D. A. Farrell.
H. E. Kresse.
By
Howard & Co
Attorneys

UNITED STATES PATENT OFFICE.

DANIEL A. FARRELL AND HERMAN E. KRESSE, OF ANNISTON, ALABAMA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 700,312, dated May 20, 1902.

Application filed August 31, 1901. Serial No. 73,966. (No model.)

To all whom it may concern:

Be it known that we, DANIEL A. FARRELL and HERMAN E. KRESSE, citizens of the United States, residing at Anniston, in the county of Calhoun and State of Alabama, have invented a new and useful Non-Refillable Bottle, of which the following is a specification.

This invention is an improved construction of bottle, the object being to provide a simple appliance which can be used in connection with a bottle for the purpose of preventing the said bottle being refilled after it has been emptied.

With this object in view the invention consists in the peculiar construction of the various parts and in their novel combination or arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of the bottle having our invention applied thereto. Fig. 2 is a vertical sectional view. Fig. 3 is a detail perspective view of the valve-seat. Fig. 4 is a perspective view of the valve-seat and stem. Fig. 5 is a section on the line 5 5 of Fig. 2. Fig. 6 is a section on the line 6 6 of Fig. 2. Fig. 7 is a section on the line 7 7, and Fig. 8 is a section on the line 8 8, of Fig. 2.

Referring to the drawings, A indicates a bottle, of which B is the neck. A glass cylinder C is arranged in the neck of the bottle, said cylinder having a depending guide D arranged at the bottom thereof, and this cylinder is also formed with an inwardly-projecting annular seat E, upon which seats the valve F, carried by a stem G, the lower end of said stem projecting downwardly through the opening D′, produced in the guide D.

H indicates a stopper which is fitted into the cylinder C, the lower portion H′ or that portion fitting in the said cylinder being circular in cross-section, while the upper portion H^2 is square in cross-section, gradually tapering to the top, which is closed, an opening H^3 being produced in one side adjacent to the top. A series of inclined ledges H^4 are arranged upon the interior of the upper portion of the hollow stopper, and the central tube I is also arranged within the said hollow portion adjacent to the lower end, said tube being adapted to receive the upper end of the valve-stem H. A plug K is fitted into the tube I for the purpose of keeping the valve-stem down, and thereby holding the valve upon its seat prior to the opening of the bottle. A thin wire L is attached to the plug K and passes through an opening L′ in the ledge directly above the end of the tube and then passes around the other ledges and out through the opening H^3. The stopper H is held firmly seated by means of a cap M, which fits over the neck of the bottle and has depending fingers M′, which are firmly embedded in the cement or other material M^2, placed between the cylinder C and the neck of the bottle.

In operation the cylinder C is placed within the bottle and rests upon the inwardly-projecting flange B′, and the valve is then seated within the cylinder, and the stopper, having the plug arranged in the tube, is then placed within the cylinder, so that the valve-stem is held down, firmly seating the valve. The cement is then placed between the neck of the bottle and cylinder A and the cap M fitted in place. The bottle is then securely sealed, and when it is desired to remove the contents the wire is pulled, drawing the plug upwardly and out of the tube, thus permitting the valve-stem to move upwardly whenever the bottle is tilted, and the valve is consequently unseated, and the liquid can be poured through the hollow stopper, the contents passing through the opening H^3. As soon as the bottle is turned back to its vertical position the spring N, surrounding the stem and bearing against the valve and the bottom of the tube I, will cause the said valve to be automatically seated upon the seat E. This valve prevents refilling the bottle, as it is obvious that no liquid can be forced past said valve while it is on its seat.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a bottle, of a cylindrical case arranged in the neck thereof, a valve seated in the cylindrical case, a stopper also arranged in the said cylindrical case and projecting above same, the upper portion of said stopper having an opening adjacent to

the top, the lower portion of the stopper having a tube arranged therein, a plug located in the tube, and the wire connected to the plug and passing out through the opening adjacent to the top of the stopper, substantially as described.

2. The combination with a bottle, of a cylindrical case arranged in the neck thereof, a valve seated within the case, a stopper located also within the case and projected above the same, said stopper having a tube adapted to receive the upper end of the valve-stem, a plug located in said tube and having a wire connected thereto, said wire passing out through an opening arranged adjacent to the top of the stopper, the upper portion of the stopper having a series of inclined ledges arranged upon the exterior thereof, and a cap fitted upon the neck of the bottle and having the depending fingers adapted to be embedded in cement contained between the neck of the bottle and the cylindrical case, substantially as and for the purpose described.

DANIEL A. FARRELL.
HERMAN E. KRESSE.

Witnesses:
FRED A. THOMAS,
FRANK MARTIN.