

(No Model.)

D. O. BRUNNER & J. L. SHOUGH.  
BOTTLE.

No. 571,826.

Patented Nov. 24, 1896.

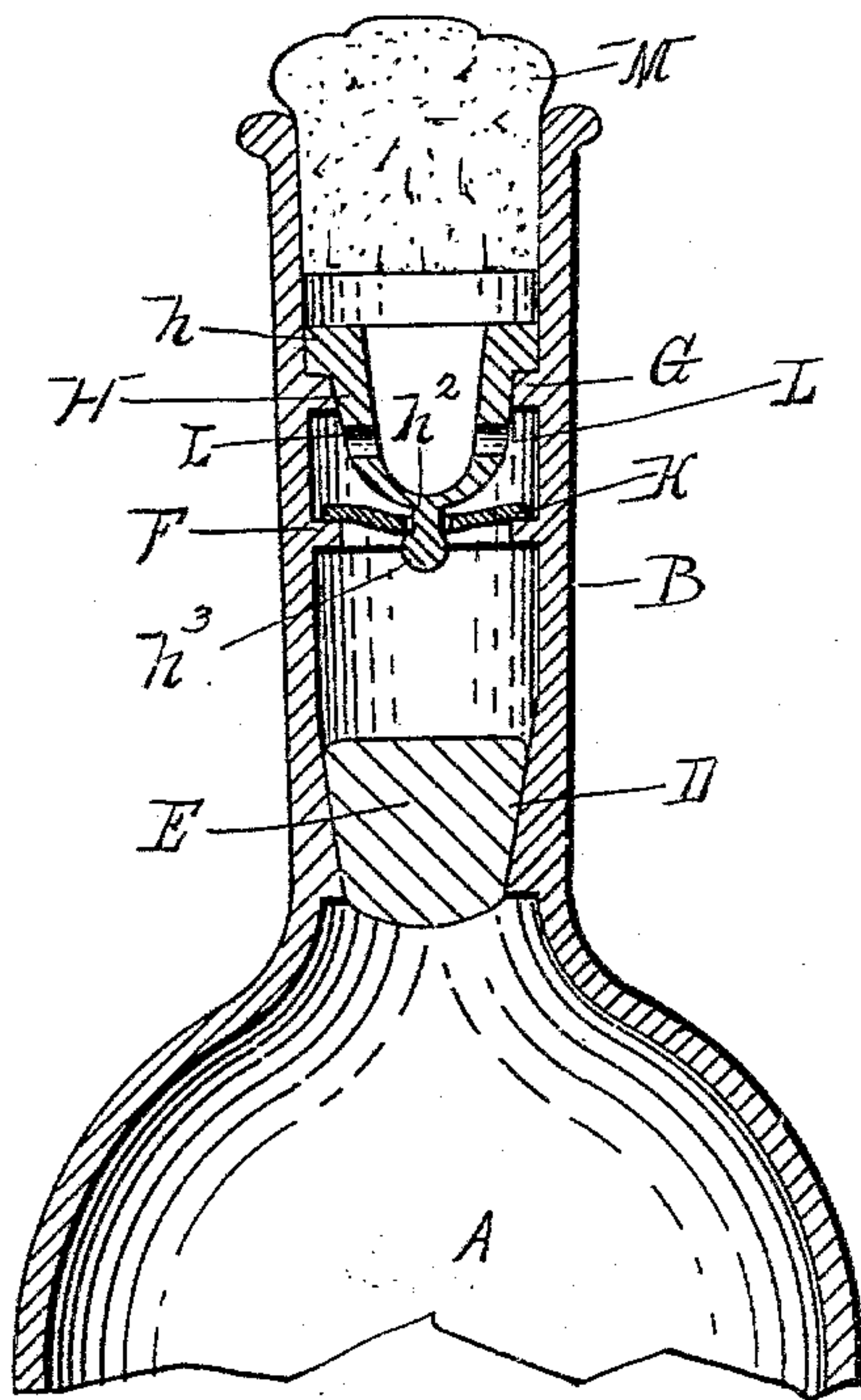


FIG. 1

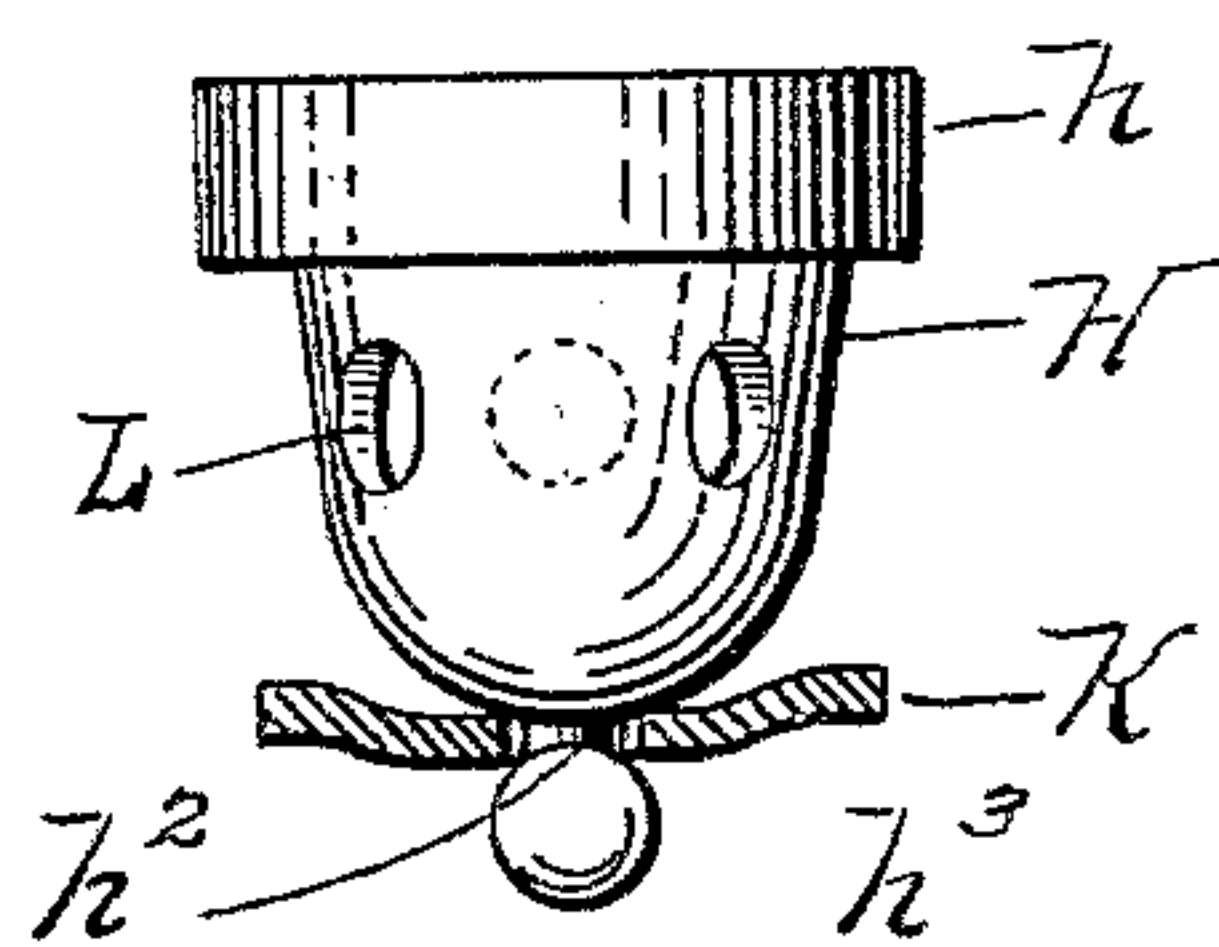


FIG. 2.

WITNESSES:

S. M. Holden.

C. Ernst.

INVENTORS.

Danton O. Brunner &

Jacob L. Shough.

BY

Edgar Saterlee

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

DANTON O. BRUNNER AND JACOB L. SHOUGH, OF SOMERSET, OHIO.

## BOTTLE.

SPECIFICATION forming part of Letters Patent No. 571,826, dated November 24, 1896.

Application filed December 23, 1895. Serial No. 573,148. (No model.)

*To all whom it may concern:*

Be it known that we, DANTON O. BRUNNER and JACOB L. SHOUGH, citizens of the United States, and residents of Somerset, in the county of Perry and State of Ohio, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to bottles, jugs, jars, and similar vessels; and the object thereof is to provide a vessel of this class with a neck attachment which is so constructed that when the bottle has been filled and the neck attachment applied the vessel may be emptied of its contents but cannot be refilled or re-used.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a central vertical section of the upper part of a bottle and the neck provided with our improvement, and Fig. 2 a side view of one of the parts of the neck attachment.

In the practice of our invention we provide a bottle A, having a neck B, the inner walls of which are contracted at the lower end thereof, so as to form a conical valve-seat D, and we also provide a conical valve E, which is adapted to be seated thereon and to close the port or opening through the lower end of the neck. There is also formed within the neck above the valve-seat B an annular inwardly-directed shoulder F, and above the annular shoulder F and at a predetermined distance therefrom is another annular shoulder, G; but it will be understood that lugs or projections may be substituted for the annular shoulders F and G, if desired. We also employ a hollow conical attachment H, the base of which is directed upwardly and provided with an annular flange  $h$ , which is adapted to rest upon the annular shoulder G and the apex of which is directed downwardly and provided with a shank  $h^2$ , on which is formed a head  $h^3$ , which projects below the annular shoulder F, and mounted on the shank  $h^2$  is a valve K, which is preferably composed of flexible material, such as rubber, asbestos, or any other material which may be found

suitable, and the lower end of the tubular attachment H is provided with side ports or openings L, which communicate with the interior thereof and with the body portion of the neck or the central passage therethrough.

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings. The parts may be so adjusted in size and otherwise that the valve D may be inserted through the neck of the bottle in the usual manner, or the neck of the bottle may be composed of two pieces, as is frequently the case in this class of devices, and the attachment H is then inserted in place, and, if desired, it may be secured in position in any desired manner. It will be understood, however, that in this class of devices the bottle or other vessel must first be filled before the neck attachments are applied, and this having been done the neck attachments are applied as hereinbefore described, after which the neck or nozzle may be closed by a cork or stopper M in the usual manner. It will also be understood that the valve E and the conical attachment H may be made of any desired material, glass being preferred, and, the bottle having been filled and closed, as hereinbefore described, if it is desired to empty the same or discharge a portion of its contents, the cork or stopper M is first removed in the usual manner and the bottle inverted or tilted, when the valve E will leave its seat under the action of gravity and the pressure of the liquids within the bottle, and said liquids will flow out around said valve through the side ports or openings L in the conical attachment and through said attachment and out at the end of the neck or nozzle, and this operation may be continued or repeated until the bottle is entirely empty.

If an attempt be made to refill the bottle by pouring liquids therein, the valve E will at once be seated, as will also the valve K, and no liquids can enter the bottle, and this operation of the valve K will also be the same if an attempt be made to force liquids therein, and, if desired, the valve E may be made so as to operate as a float-valve, in which event it would also serve to prevent the filling of the bottle by forcing liquids therein.



Our invention is not limited to the exact form, construction, combination, and arrangement of parts herein described, and we therefore reserve the right to make all such alterations therein and modifications thereof as fairly come within the scope of the invention.

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

The combination with a bottle, the neck of which is contracted near the lower portion thereof forming an inclined valve-seat, and above which are formed inwardly-directed annular shoulders or flanges, of a frusto-conical valve adapted to close the opening in the lower portion of the bottle-neck, and a hollow conical attachment, the base of which is directed upwardly, and provided with an annular outwardly-directed flange adapted

to rest upon the upper flange of the bottle-neck, the lower portion of said attachment being provided with a headed extension upon the shank of which is mounted a disk-valve adapted to rest upon the lower shoulder formed in the bottle-neck, said conical portion being provided with lateral ports or openings between said shoulders on the bottle-neck, and a superimposed cork or stopper M to close the mouth of the bottle, substantially as described.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of the subscribing witnesses, this 2d day of December, 1895.

DANTON O. BRUNNER.  
JACOB L. SHOUGH.

Witnesses:

A. A. FINCK,  
J. R. FUNDABERG.