(No Model.)

G. J. FRANKEN.

ANTIREFILLABLE BOTTLE.

No. 577,426. Patented Feb. 23, 1897.

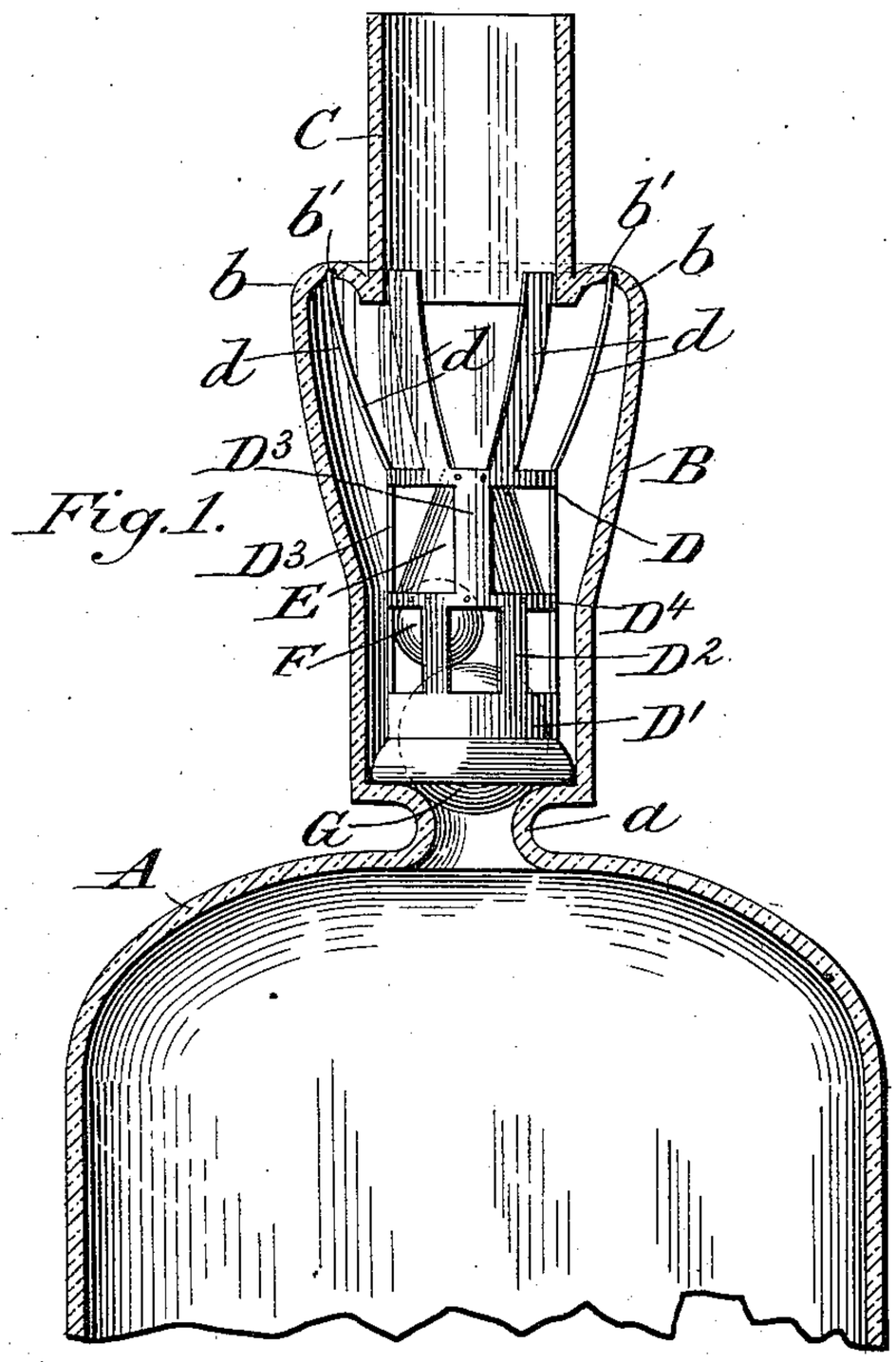

Fig. 1.

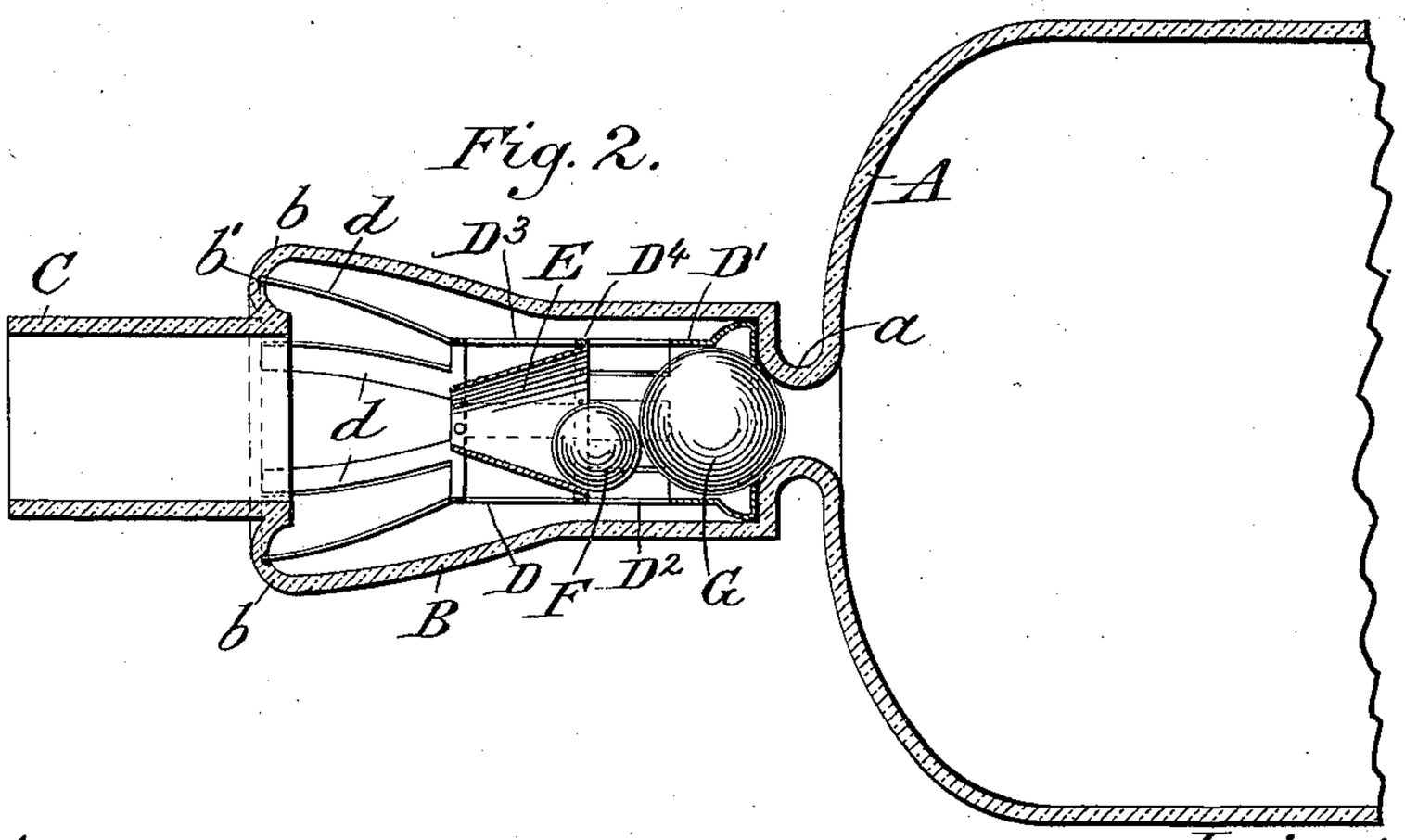

Fig. 2.

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UNITED STATES PATENT OFFICE.

GARRITT J. FRANKEN, OF SCHENECTADY, NEW YORK.

ANTIREFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 577,426, dated February 23, 1897.

Application filed February 29, 1896. Serial No. 581,236. (No model.)

To all whom it may concern:

Be it known that I, GARRITT J. FRANKEN, a citizen of the United States, residing at Schenectady, in the county of Schenectady and State of New York, have invented certain new and useful Improvements in Antirefillable Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in antirefillable bottles, the object thereof being to provide means for effectually preventing the refilling of a bottle with spurious or counterfeit contents after it has been emptied of its original genuine contents. It is a well-known fact that bottles containing the finest brands of whisky and other choice liquors are often refilled with cheap grades of liquor, which are sold at the same price as the finest grades, being presented to the customer in the same bottle as that which originally contained the finest grade, and thus the customer is imposed upon and deceived, the deception being accomplished by the use of the bottle bearing the trade-mark or other insignia of the original genuine article. By making it impossible to refill such bottles, and rendering them no longer fit for use after they are once emptied of their original contents, the fraud alluded to is effectually prevented.

My invention therefore consists, essentially, in the construction, arrangement, and combination of the several parts of an antifillable device, substantially as will be hereinafter described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a sectional view of the mouth end of the bottle and showing my improved antirefilling means situated therein, said means being shown in elevation and the bottle itself being delineated in an upright position. Fig. 2 is a similar sectional view of the mouth end of the bottle, which is represented in a horizontal position, and the mechanism of my improved antirefilling means situated within the bottle-neck and represented for the most part in section.

Similar letters of reference designate corresponding parts in both figures.

A designates a bottle of any suitable kind, variety, and size adapted to contain the original contents of high grade. This bottle A has an elongated chamber B in its neck, said chamber B being connected with the main body of the bottle by a contracted neck *a*, which forms a seat for the ball-valve G. The outer end of the chamber B terminates in the cylindrical and cork-receiving projection C, of less diameter than the upper end of chamber B, the latter merging into the projection C through the rounded shoulder or offset *b*. The projection C is adapted to receive a closely-fitting cork or other stopper, which of course must first be withdrawn before access can be had to the interior of the bottle for removing the original contents of the latter.

Inside of chamber B is a skeleton valve-carrying frame, which is preferably made of some sort of spring-metal that is rustless or is made rustless after the making of the frame, and which, if desired, may be made wholly or in part of some other material, such as glass or porcelain or some other substance that is not acted upon readily by the liquid contents of the bottle. The spring-frame consists of a lower integral ring D′, which is seated upon the contracted neck *a*. The upper end of the spring-frame comprises a plurality of diverging or inclined spring-arms, which project beneath the shoulder or rounded flange *b* and preferably enter a groove *b*′, formed on the inside of said shoulder. These diverging arms *d* spring outwardly from the ring D. Between ring D and the bottom integral ring D′ is preferably an intermediate ring D^4. The rings D and D^4 are connected by the strips D^3, and the rings D^4 and D′ by the strips D^2, said springs D^2 preferably alternating in position with the strips D^3. Thus it will be seen that the spring-frame is of a skeleton form throughout, readily permitting the passage through it of the liquid contents of the bottle.

Inside of the spring-frame is an inverted conical part E, which is riveted between the rings D and D^4. This is clearly shown in section in Fig. 2. The conical part E is preferably open at each end. It serves to control the position of a ball F, which acts as a guide-ball or weight for keeping the ball G, which acts as a valve upon its seat upon the conical neck *a* whenever the bottle is in a vertical position, as shown in Fig. 1, or in a hori-

zontal position, as shown in Fig. 2. The ball G is preferably larger in size than the ball F.

The operation of the various parts of my improved antirefilling means will be obvious from the foregoing description of their arrangement and construction. When the bottle is inverted, it will be obvious that the ball F will fall into the small end of the conical part E, and the ball G will likewise drop into the cone E. While the parts are in this position the liquid contents of the bottle will easily be discharged from the open-work sides of the skeleton frame which is within the chamber B and will emerge through said chamber and between the arms *d* into the projection C and out of the end of the bottle. Whenever it is attempted to refill the bottle, it will be found impossible to do so. If, for instance, the bottle is in the upright position shown in Fig. 1, ball G will close the neck-opening at *a* and prevent the admission of liquid into the bottle. If in the operation of refilling the bottle is held on its side, as shown in Fig. 2, the valve G will still close the opening at *a*, because the ball F will gravitate upon the inclined inner face of the conical part E and will wedge against the valve G and keep it closed. Thus it will be found impossible to refill the bottle. The spring-frame is introduced into the chamber B through the hollow projection C, being compressed during the operation, which compression is easily permitted on account of its springy character, and when so introduced its arms *d* will expand into the position shown in Fig. 1, thus making the device absolutely non-withdrawable from the bottle-neck.

Numerous changes in the exact form and shape of the several parts of my invention may be made without departing from the legitimate scope of the same, and I reserve the liberty of varying the precise construction of the details as may be found necessary in actual practice.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In an antirefillable bottle, the combination with the bottle-neck having an elongated chamber connected with the main body of the bottle by a contracted neck, the outer end of said chamber terminating in a cylindrical cork-receiving projection, between which and the elongated chamber is a shoulder or offset of larger diameter than the cork-receiving projection, of a non-removable skeleton valve-carrying frame of spring metal located within the chamber and having at its upper end a plurality of diverging spring-arms which engage the aforesaid shoulder, and having likewise at its lower end an integral ring which rests on the contracted neck, and having also intermediate rings, the rings being connected by lateral strips, substantially as shown, a ball-valve adapted to be seated on the contracted neck, a central inverted cone secured in the spring-frame about midway of the length thereof, and a ball within said cone in contact with the ball-valve, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GARRITT J. FRANKEN.

Witnesses:

WILLIAM W. WEMPLE,

J. TELLER SCHOOLCRAFT.