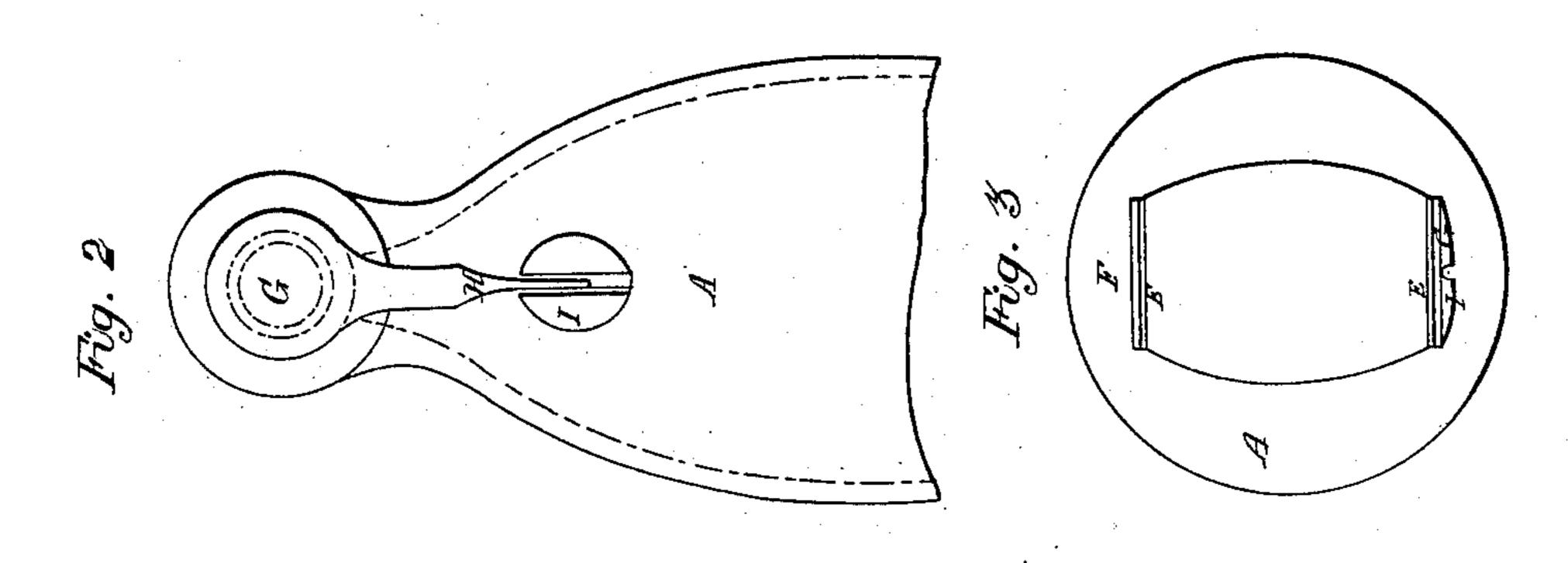
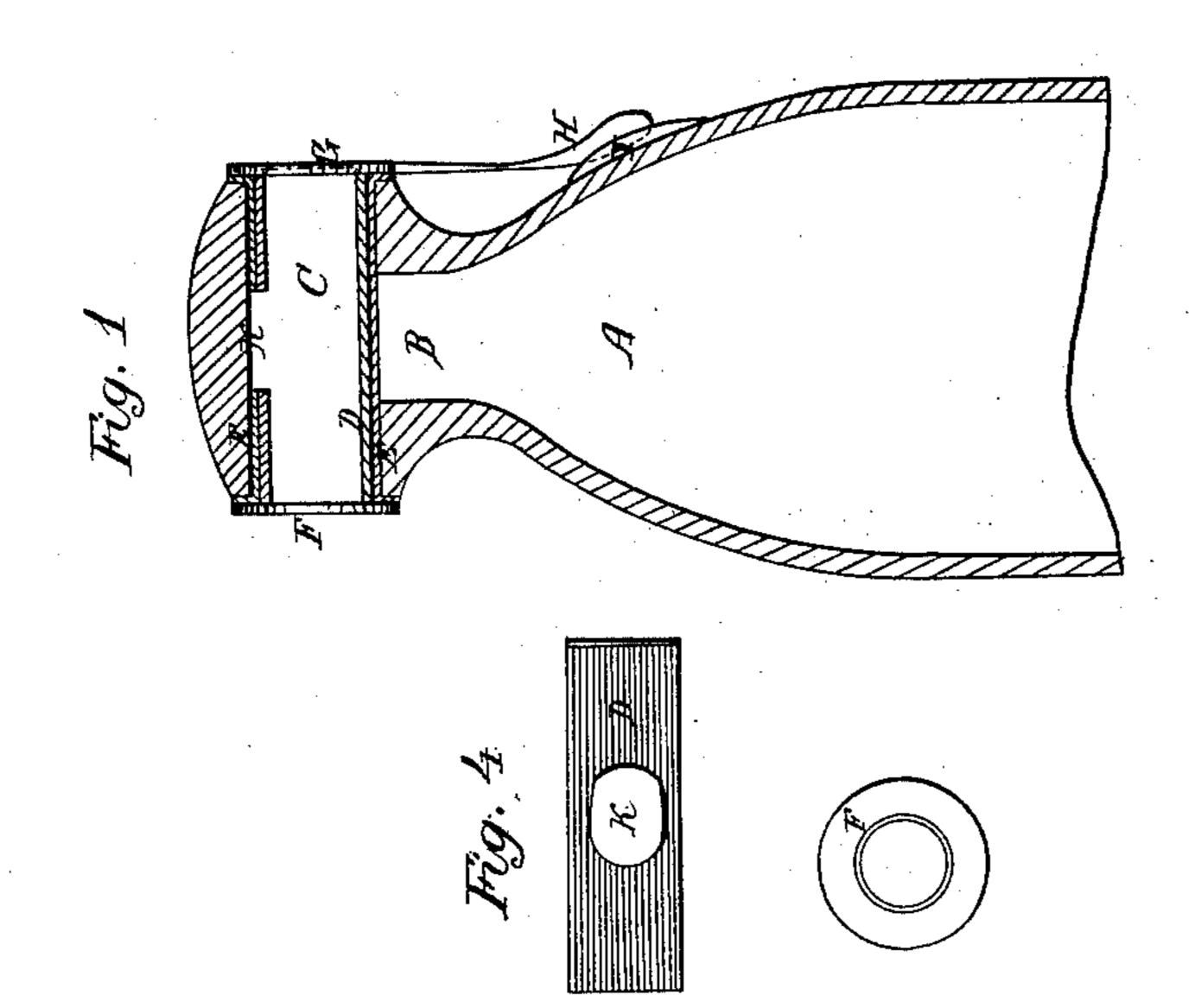
J. Moolarer,

1950,867

Bottle Stopper,
Patented Nov.7, 1865.





Witnesses:

Inventor: John Wooland per Dewey Hes Ally

## United States Patent Office.

JOHN WOOLAVER, OF SUISUN, CALIFORNIA.

## IMPROVED BOTTLE-STOPPER.

Specification forming part of Letters Patent No. 50,867, dated November 7, 1865.

To all whom it may concern:

Be it known that I, John Woolaver, of the city of Suisun, county of Solano, State of California, have invented certain new and useful Improvements in Bottles for Holding Effervescent and other Liquids; and I do hereby declare that the following specification is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional elevation. Fig. 2 is an end view of stopper or tube. Fig. 3 is a top view of the same. Fig. 4 is a view of a tube, showing the discharge-opening and cor-

rugated surface.

The nature of my invention consists in constructing a bottle having its discharge horizontally or at right angles with the neck. Through this discharge-hole I place a metallic tube with a hole in it to correspond with that in the neck of the bottle, having one end closed by means of a disk or button and opened and shut by a lever kept in place by a groove formed on the side of the bottle.

To enable others skilled in the art make and use my invention, I will proceed to describe

its construction and operation.

My bottle is constructed of glass, in a manner well known to glass-blowers, of any pattern desired. The hole through which the stopper is placed I make horizontally or at right angles with the opening in the neck.

The stopper consists of a hollow metallic tube having a hole to correspond with that in the neck of the bottle, and over which it is placed in discharging. One end of this tube is closed by means of a button having a curved arm or lever attached to it, and extending downward to the side of the bottle, where it is kept in place by means of projections and a groove, and is entirely out of the way in case of packing for transportation.

Around the metallic tube I place a packing, consisting of leather, gum, or other material. Leather is preferable, as it is not liable to be affected by heat or by the acid in the wine or liquid with which the bottle is filled. A hole is made in the packing to correspond with that in the tube, so as to allow the liquid to escape

from the bottle into the metallic tube in case of discharging for use.

The operation is as follows: The bottle is filled by means of a tunnel having a curved pipe or tube. The metallic tube, with the packing around it, is pressed through the horizontal hole as far as the button will admit, leaving a small projection, when a tightly-fitting ring is placed upon the end, and the lever turned to its place and adjusted in the groove on the bottle, where it is held in place, and the bottle is hermetically sealed. In discharging the lever is raised and turned around until the hole in the tube is over the hole in the neck of the bottle, and the champagne or other liquid is discharged through the hole in the tube, and from thence into a vessel, until a sufficient quantity is obtained, when the lever is pressed downward to its place, and the bottle is again sealed, thus preventing the escape of the effervescence, as when the stopper is entirely withdrawn from the bottle.

In the accompanying drawings, Fig. 1, A represents the body of the bottle. B is the neck, to which is affixed an upper part, of glass or metal, G, at right angles to the neck. D is a metal tube, somewhat smaller than the opening C, and has a corrugated surface. K is an opening, which, when the tube is turned, corresponds with the opening in the neck B. At one end of the tube is the collar F, the hole through which admits the end of the tube D, which is firmly fastened there. At the other end is placed the disk or button G, (shown in Fig. 2,) stamped out of metal, and having the arm or lever H, which forms a spring to hold it in position by dropping into the groove I, which is a projection made on the side of the bottle. Around the tube D, and kept from slipping by means of the corrugations on it, is placed a covering of leather or other substance, which may be cemented or sewed, and fits closely to the inside of the opening C, and also turns upon the end on the collar F and disk or button G, to prevent leakage. When the spring H rests in the slot I the opening K is at the top and opposite to the neck B, when the liquid passes out through the tube at F.

Having thus described my invention so as to enable any person skilled in the art or science to which it most nearly appertains to make and use my bottle without further invention or experiment, I will now proceed to state what I claim and desire to secure by Letters Patent, to wit:

1. The method of sealing the bottle by means of the tube D or its equivalent, perforated to correspond with the hole B in the neck of the bottle, substantially as described, and for the purpose set forth.

2. The projection and groove I, in combination with the lever H, with the button or disk

G, and the rings E E, arranged and operating substantially as described, and for the purpose set forth.

In witness whereof I have hereunto set my hand and seal this 24th day of May, A. D. 1865.

JOHN WOOLAVER. [L. s.]

Witnesses:

R. M. CLARK, J. B. SPALDING.