(No Model.)

W. A. BOND.

STOPPER FOR BOTTLES.

No. 388,525.

Patented Aug. 28, 1888.

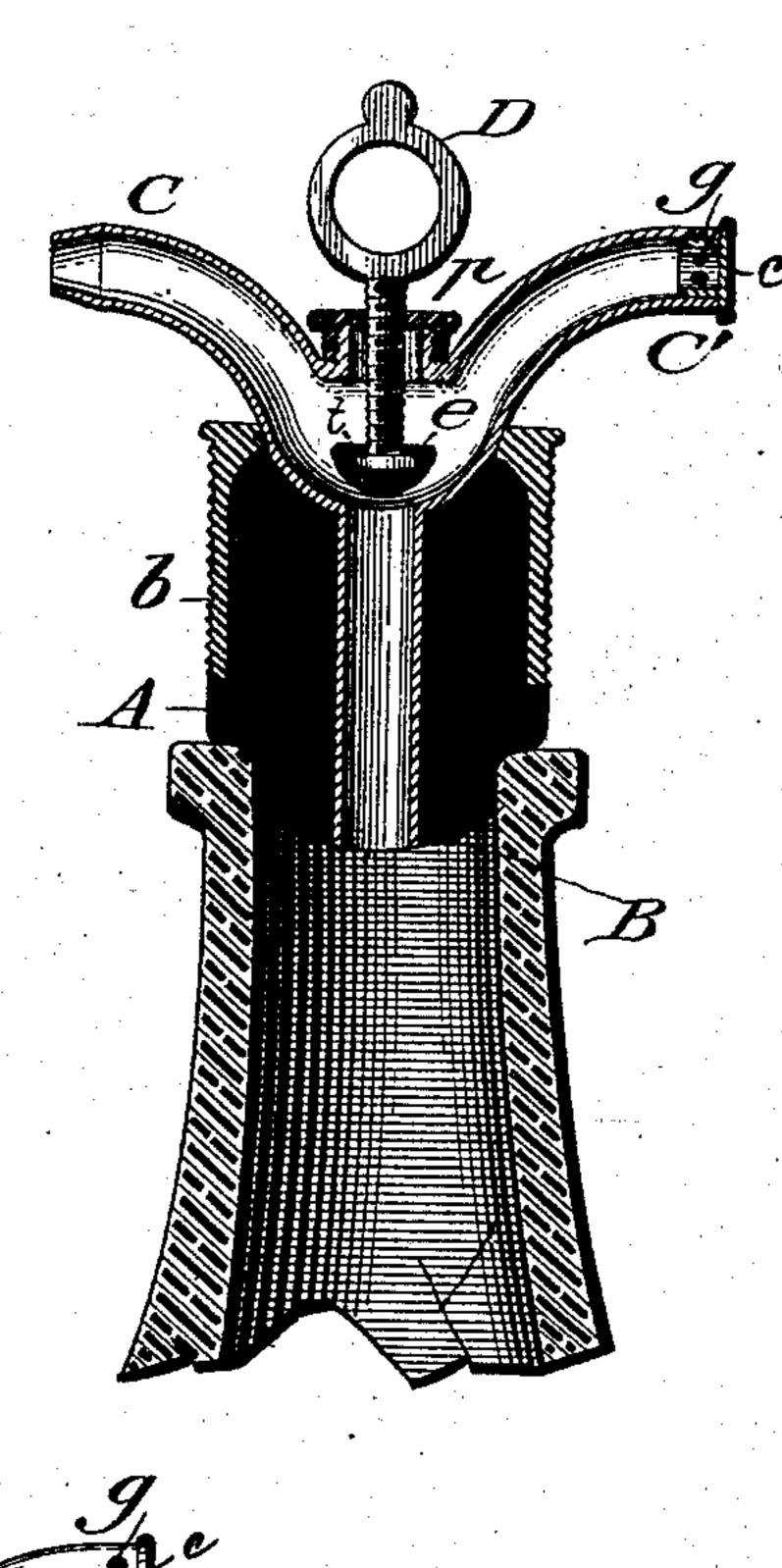


Fig. 3.

Fig. I.

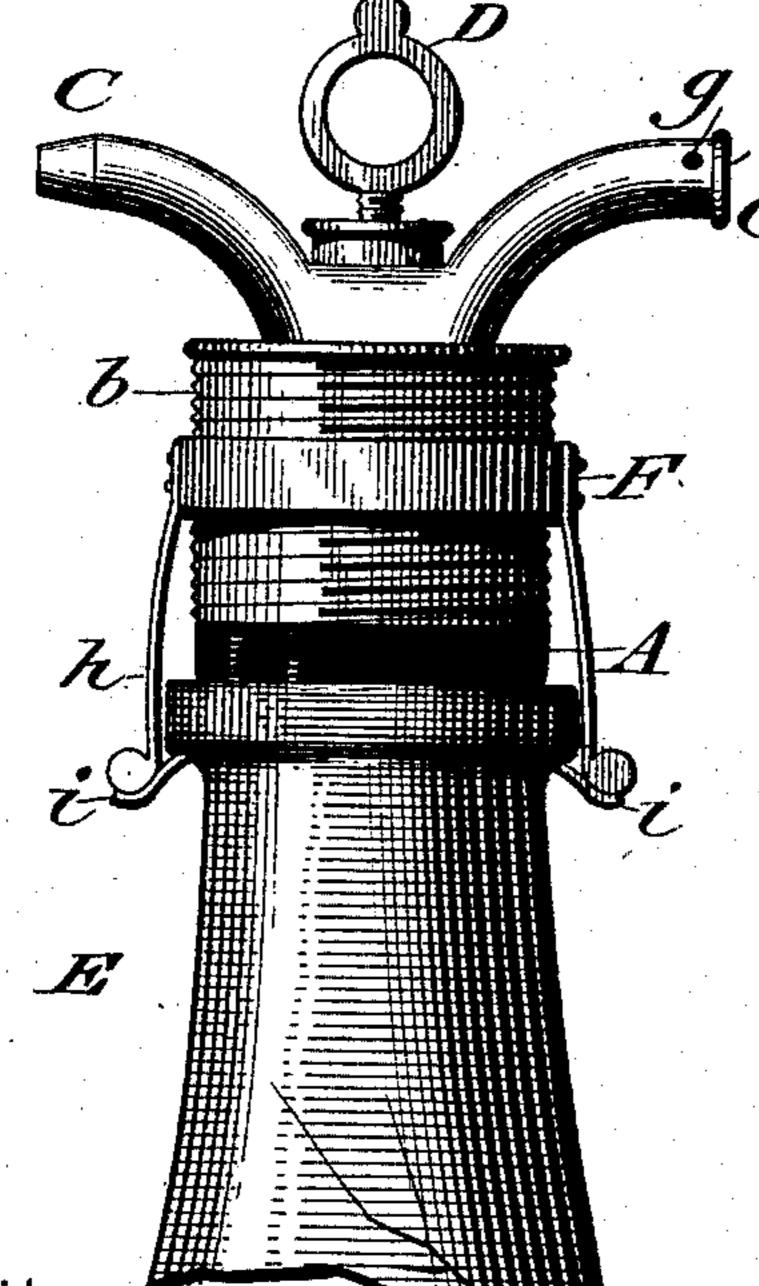
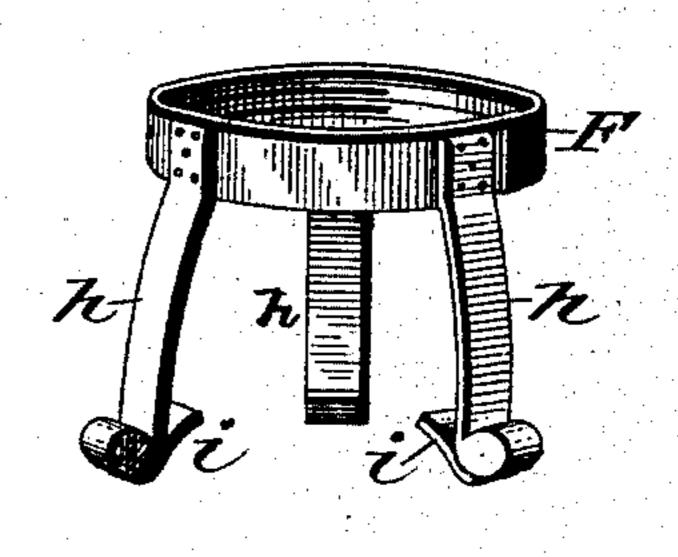


Fig. 2.



By his attorney 1 Hornee Pettit.

United States Patent Office.

WILLIAM A. BOND, OF PHILADELPHIA, PENNSYLVANIA.

STOPPER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 388,525, dated August 28, 1888.

Application filed May 1, 1888. Serial No. 272,475. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. BOND, of the city of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Stoppers for Champagne and other Bottles; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

champagne - bottles and bottles containing other effervescent liquids, principally adapted to be adjusted to the bottle after the permanent cork has been removed, for the purpose of drawing the contents of the bottle as desired, at the same time keeping the remaining contents in a thorough state of preservation without allowing, as in the case of effervescent liq-

20 uids, the gases to escape. The invention consists in a stopper of cork, rubber, or other suitable material, the lower end of which, being rounded, inclined, or wedgeshaped, is adapted to fit tightly into the mouth 25 of the bottle, and is held firmly in position by means of a casing passing around it and secured thereto. The casing is provided with a screw-thread adapted to turn in an adjustable sleeve, also screw-threaded, which is secured 30 to the bottle by legs or fasteners having hooks at their lower extremities, which fit securely to and under the rim of the neck of the bottle. The stopper by being turned is thereby adjusted to the nozzle of the bottle to the extent 35 or tightness desired. Through the center of the stopper is a tube or orifice running longitudinally and branching into or connecting with, near its upper end, two nozzles of substantially the shape shown in the drawings, the 40 mouth of one of the said nozzles being pro-

vided with a vent - plug having apertures adapted to register with apertures in the nozzle C', by turning which vent-plug air is admitted as desired for the purpose hereinafter described. The other nozzle is adapted for the discharge of the contents. A thumb-screw is provided in the top between the two nozzles, and, passing down into the interior of the orifice, has provided on its lower end a cork or small stopper adapted when the thumb-screw is screwed down to fit tightly into the upper

end of the main orifice at the point of connection with the two nozzles, and thereby close tightly the said main longitudinal tube or orifice, and prevents the discharge of any of the 55 liquid contained in the bottle; or, in the case of effervescent liquid, prevents the escape of any of the gases.

The object of my invention is to produce a bottle-stopper that can be readily adjusted to 60 a champagne or other bottleafter the cork has been removed, so that the liquid can be easily drawn as desired, and without impairing the quality of that remaining in the bottle, the gases in the case of effervescent liquids being 65 prevented, as before stated, from escaping.

I am aware that bottle-stoppers of numerous descriptions have been invented, and some for the purpose of drawing champagne and other effervescent liquid from bottles, as desired. This I do not claim, broadly; but what I do claim is my particular invention, as hereinafter described.

In the accompanying drawings similar letters of reference refer to similar parts through- 75 out.

Figure 1 represents a sectional side elevation of the stopper. Fig. 2 shows in detail the device for adjusting the stopper to the bottle. Fig. 3 shows the stopper in position adjusted 80 to the bottle.

A is the stopper, composed of rubber other suitable material, having the lower end rounded or convex to fit the mouth of any size bottle.

b is a casing of metal or other suitable material fitted around and attached to the stopper A, having a screw-thread turned on its outer surface.

B is the tube or orifice running longitudi- 90 nally through the stopper A.

C'C' are the nozzles or spigots branching from or connected with the main tube B.

c is the rotary vent-plug provided in the nozzle C', adapted to open or close the vent- 95 holes g when rotated, as desired.

D is the thumb-screw to elevate or depress the cork e in the orifice B, in order to draw the contents of the bottle or not, as desired. The cap p, through which the thumb-screw D 100 passes, is adjusted by a screw-thread to the upper point of intersection of the nozzles C

C', so as to be removable to allow of the cork e

being renewed when necessary.

When it is desired to renew the cork e, or to remove the thumb-screw D for any purpose, the 5 cap p, which is adjusted, preferably, by means of screw-threads to the stopper, or, rather, directly to the upper portion of the nozzles C C', as shown in the drawings, it is unscrewed and lifted off, and thereby the entire thumb-10 screw D, with the cork e, is removed from its connection with the stopper proper. The threads of the thumb screw D work in the female threads provided in the top of the cap p. When the thumb screw D is screwed down, the 15 cork e, secured on its lower extremity, is forced into the orifice of the tube B at the point of intersection of the nozzles CC, and the discharge of the liquids or gas thereby prevented, the tube B being tightly closed. The cork e 20 is held on the lower extremity of the thumbscrew D by the flange t, fitted in a cavity in the cork e, as shown in the drawings.

F is the band provided on the inside with a screw-thread, in which the threaded casing b

25 of the stopper is designed to turn.

h h h are the legs or fasteners by which the sleeve F is firmly held and secured to the bottle-neck E. The hooks i, provided at the extremity of the legs h, are adapted to adjust 30 themselves under the rim of the neck of the bottle, being held in position by the spring of

the legs h.

When it is desired to employ the stopper, the sleeve F being screwed to the stopper at about 35 the desired position, the bottle having previously had its permanent cork drawn, the legs or fasteners are passed over the neck of the bottle until the hooks i adjust themselves firmly underneath the rim of the neck of the 40 bottle, the fasteners h having an elasticity inward which holds the hooks i firmly in place. The stopper is then screwed down through the sleeve F until the lower end of the stopper B is firmly adjusted to the orifice of the 45 bottle water-tight and air-tight. The stopper being thus securely attached to the bottle is in readiness then to be operated.

When the stopper is adjusted to a champagne-bottle and it is desired to draw the con-50 tents or a portion thereof, the vent-plug c is closed, and the glass being placed in proximity with the bottle, which is also held at the proper angle, the thumb-screw D is turned, releasing the cork e, and the effervescent liquid pours 55 out. When a sufficient quantity is drawn, the thumb-screw D is turned to its original position, and the remaining contents are as tightly corked and the gases as securely prevented

from escaping as when corked with the original corking. When it is desired to attach the 60 stopper to a bottle containing non-effervescent liquids, in order to allow of the admission of the necessary amount of air, the vent-plug c is turned so as to admit the air through the orifices g, without the admission of which air, as 65is well known, the contents would not freely flow. The thumb screw D is then turned to the required extent and readjusted, as in the former instance. The pipe or nozzle C', as shown in the drawings, is a convenient form 70 of connection for the rotary vent-plug c with the tube B.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, 1S---

1. In a bottle-stopper, the cork A, the screwthreaded casing b, the tube B, the nozzles C C', the thumb screw D, fitted through the adjustable cap p and having secured on the end thereof the cork e, and the vent-plug c, in com-80 bination with the adjustable sleeve F, a screwthread provided on the interior of the sleeve F, adjustable on the screw-thread of the casing b, the legs h, fastened to the sleeve F, and hooks i on the extremity of legs h, in the man-85 ner and for the purposes hereinbefore substantially set forth and described.

2. A bottle stopper having a metal casing around the same or the upper part thereof, said casing provided with screw-threads, a 90 tube extending longitudinally through the stopper, connected at its upper end with two nozzles and provided with a thumb-screw having a cork of rubber or other suitable material secured on the lower end thereof for the 95 purpose of drawing or stopping the flow of the liquid passing down about midway between the two nozzles to the point of connection between the main tube or orifice with the two nozzles, the mouth of one of the nozzles pro- 100 vided with a vent regulated by a thumb-screw to admit air or not, as desired, the mouth of the other nozzle being open, in combination with an adjustable sleeve provided with screwthreads on the interior thereof, fitted or to be 105 fitted on the screw-thread around the stopper, said sleeve being provided with fasteners having hook projections at their extremities adapted to catch under the rim of the neck of the bottle. ·IIO

In witness whereof I have hereunto set my hand this 28th day of April, A. D. 1888. WILLIAM A. BOND.

Witnesses:

HORACE PETTIT, S. E. MAIRES.