

W. Ely,

Bottle Stopper.

No. 102669.

Patented May 3. 1870.

Fig: 1.

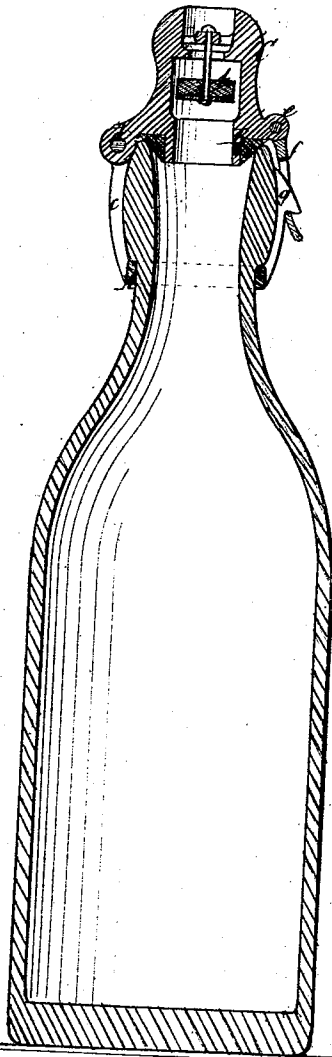
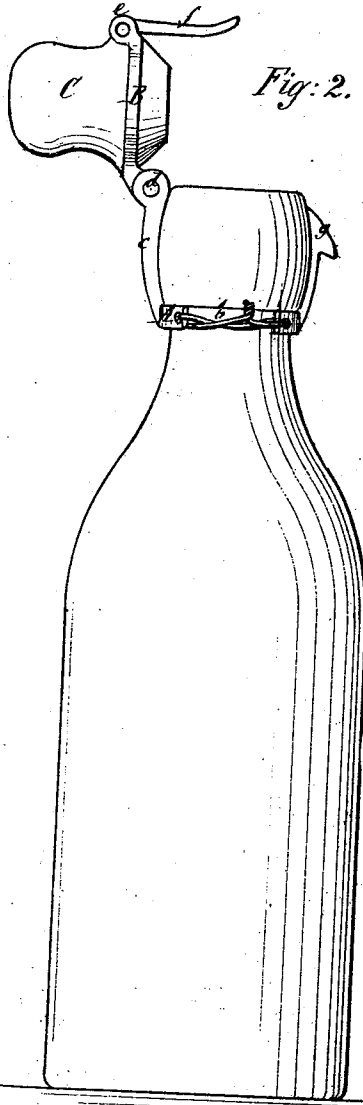


Fig: 2.



Witnesses.
C. F. Kastenhuber
C. Wahlers

Inventor.
William Ely
Per Geo. Wood & Co.
Atty

United States Patent Office.

WILLIAM ELY, OF NEW YORK, N. Y.

Letters Patent No. 102,669, dated May 3, 1870.

IMPROVEMENT IN BOTTLE-STOPPERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, WILLIAM ELY, of the city, county, and State of New York, have invented a new and improved Bottle-Stopper; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a vertical section of this invention.

Figure 2 is a side elevation of the same.

Similar letters indicate corresponding parts.

This invention relates to that class of bottle-stoppers composed of a closing-plate, with its latch, and a segmental holding-strap, united together by a wire, and cast in one piece with an arm and nose, adapted to be attached to the neck of a bottle, so that when the closing-plate is turned down and fastened by means of its latch, the bottle is hermetically sealed, and by releasing the latch the bottle is opened, and the liquid can be poured out in the usual manner.

In the drawing—

The letter A designates a segmental strap, cast or otherwise made of metal, or any other suitable material, and provided with holes in its ends, to receive a wire, *b*, by means of which it can be firmly secured to the neck of an ordinary bottle, as shown in the drawing.

From said strap extends an arm, *c*, to about the level of the top edge of the bottle, and the upper end of this arm forms the bearing for a pivot, *d*, which serves to connect the closing-plate B to the arm *c*, said closing-plate being provided with a lug which is provided with a recess, to receive the end of the arm, as shown.

From the opposite side of the closing-plate extends a lug, *e*, to which is hinged a latch, *f*, which, when turned down, catches over a nose, *g*, projecting from the strap A.

The closing surface of the plate B is protected by a

piece of India rubber, or other suitable packing, so that when said plate is turned down and secured by means of its latch, it forms a hermetic stopper for the bottle.

When made in this form, my stopper can be used with great advantage for effervescent beers or other liquids, which are filled into the bottle under the ordinary atmospheric pressure.

When I want to use my stopper for such liquids, which are introduced into the bottle under high pressure, I provide the closing-plate with a rising spout, C, bored out and formed in such a manner that it can readily be introduced into a bottling-machine.

In the interior of this spout I place a valve, *h*, which opens downward, so that when the closing-plate is fastened down by means of its latch, and the spout is placed under the bottling-machine, the liquid will readily flow in from the top, and as soon as the flow of the liquid is stopped, the internal pressure will close the valve, and the bottle is hermetically closed.

When it is desired to pour out some of the contents of the bottle, the valve is pressed back, and the liquid flows out, and as soon as the pressure on the valve ceases, it is again closed automatically.

When it is desired to clean the bottle, the closing-plate is turned back to the position shown in fig. 2, and the operation of washing can be performed without difficulty.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with the closing-plate B and its latch *f*, of the segmental holding-strap A, united by a wire, *b*, and having cast with it in one piece the arms *c* and nose *g*, the whole substantially as and for the purpose described.

This specification signed by me this 4th day of February, 1870.

WILLIAM ELY.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.