

*I. Winslow,
Bottle Stopper.*

N^o 6,963.

Patented Dec. 18, 1849.

Fig. 1.

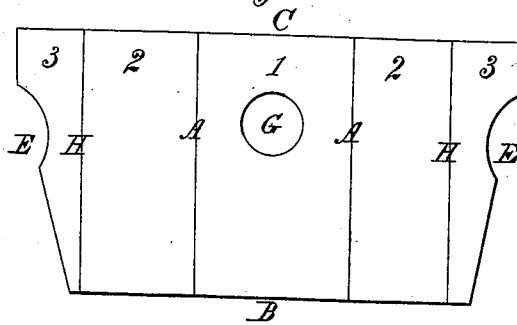


Fig. 2.

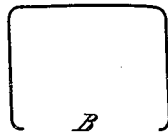


Fig. 3.



Fig. 4.

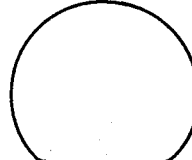


Fig. 5.

Fig. 6.

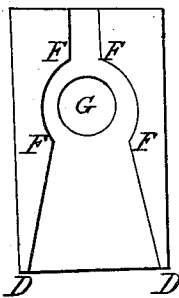


Fig. 7.

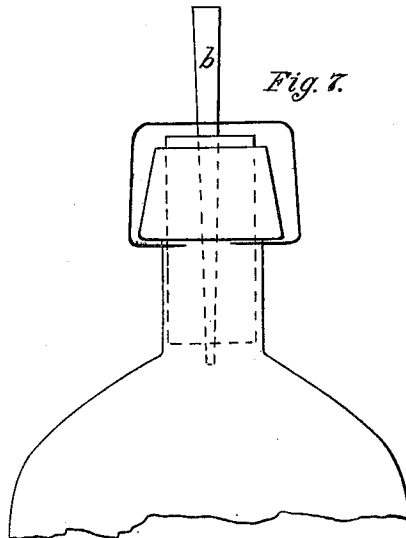


Fig. 8.



UNITED STATES PATENT OFFICE.

ISAAC WINSLOW, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BOTTLE-FASTENERS.

Specification forming part of Letters Patent No. 6,963, dated December 18, 1849.

To all whom it may concern:

Be it known that I, ISAAC WINSLOW, in the county and city of Philadelphia, and State of Pennsylvania, have invented an improved and new method of preventing bottles from bursting and corks from being forced out of bottles by boiling or by fermentation, which improvement is applicable to putting up animal, vegetable, and liquid substances in bottles, which require to be boiled when full and corked, or to such as are liable to fermentation, which method is as follows:

A piece of very thick tin-plate, sheet-iron, steel, or other suitable elastic substance is to be cut in the form seen at the exterior lines, Figure 1 of the annexed drawings, letters C B E E, with a hole half an inch in diameter, (seen at G,) the center of which is on a line with the centers of the curves E E. The divisions 2 3 and 3 2 are to be turned up, so as to be perpendicular to the division 1. Then turn the divisions 3 3 so as to be perpendicular or at right angles to the division 2 2 and parallel to division 1, Fig. 1. Thus the sides C B, Fig. 1, will be seen in their bended form at C B, Figs. 2 and 3; or the piece of tin, Fig. 1, may be turned with any convenient form or curve, as seen at Fig. 4 and 5, forming the open ends of the cap, and may be made larger or smaller, as required, to adapt it to the necks of bottles of different sizes; but where much difference in the size of the necks exist, a larger or smaller cap will be required of the same form. Fig. 6 gives a view of the side of the cap which embraces the neck of the bottle just below the lip or projection which forms the outside of its mouth. The opening from D to D, Fig. 6, receives the neck of the bottle, which being pressed into it, the sides spring open and allow the neck to slide into the curves, (seen at F F F F, Fig. 6,) which curves close upon the neck as soon as it enters them, and the cap is kept in its place by the under part of the lip of the bottle coming in contact with the metal which forms the curves F F F F, Fig. 6, of the cap, and by its elastic pressure upon the neck of the bottle, an end view of which may be seen at Fig. 7. Should there be any space between the cork and the top of the cap, a small wooden wedge thick enough to fill it should be at hand and put in, if found necessary; or the space may be left, and the cork will swell out and fill it up, but will never force the cap off, nor leak, if well put in.

In the first part of the process of boiling preserves of all kinds in bottles much steam and gas are generated, and liable to burst the bottles, to prevent which I pierce the corks in the center from end to end with a tapering sharp-pointed awl, one-eighth of an inch in diameter at its largest part; and when the cap is put on, a tapering tube (seen at Fig. 8) is inserted through the hole G, Fig. 6, in the cap, and follows the hole previously made in the cork quite through, and prevents the hole in the cork from closing by being compressed, and allows the gas and steam to escape. This tube is made of tin or other metal. The hole at the small end is about the size of No. 18 wire-gage. The tube is about an inch longer than the cork, that the bottle may be covered with water without having it to run into the bottle through the tube. After boiling as long as required with the tube in, through which the gas and steam escape, the tube is withdrawn and a wooden spigot made large enough to stop the hole tight is inserted, having been previously made water-proof by boiling in bees-wax or some other water-proof substance. After boiling ten minutes with spigot in and the water at 212° Fahrenheit, the preserves may be considered sufficiently boiled, and when cool the caps may be taken off and the corks shaved off even with the mouth of the bottle, to admit of which the spigot must be driven a little below the top, and not be disturbed after boiling till the preserves are wanted for use.

The caps and tubes may be used for years and remain good. The caps may be used without the spigot or tubes for many purposes, and then require no hole in the top. When the caps are to be used for bottles having necks of various sizes, a curve at the lines A A, Fig. 1, will answer better than a right angle; but the lines H H must always be bent in right angles, or nearly so, (to make them hold well on the lip of the bottle,) or in such form as will make them hold best.

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

The combination of the metallic caps with the tube *b*, constructed and used in the manner and for the purposes set forth.

ISAAC WINSLOW.

Witnesses:

JOHN D. BEERS,
ISAAC BEERS.