

J. M. WHITALL.

Stopper for Fruit Jars.

No. 47,238.

Patented April 11, 1865.

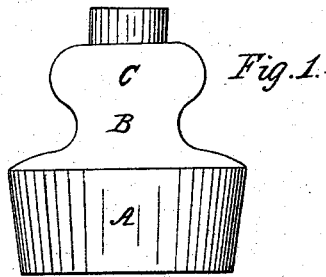


Fig. 1.

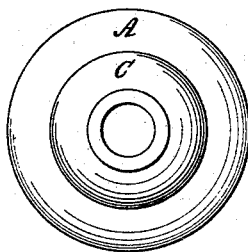


Fig. 2.

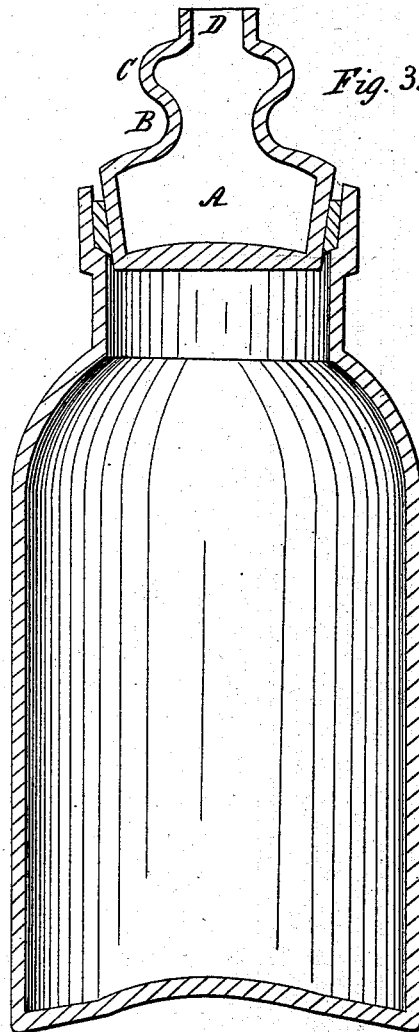


Fig. 3.

Witnesses:

Wm. H. Keadaway
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Inventor:

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By his Atty. J. Dennis Jr

UNITED STATES PATENT OFFICE.

JOHN M. WHITALL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED STOPPER FOR FRUIT-JARS.

Specification forming part of Letters Patent No. **47,238**, dated April 11, 1865.

To all whom it may concern:

Be it known that I, JOHN M. WHITALL, of the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Stoppers for Fruit-Jars and other Bottles; and I do hereby declare that the following specification and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

Heretofore, when preserve-jars have been filled with hot fruit and the stopper or cover applied, it has been found necessary to fasten the stopper in or the cover down by a metal strap or otherwise to prevent the steam from the heated contents of the jar from raising the stopper or cover during the process of cooling. To remedy this defect and avoid the necessity of a metal strap or similar device to hold the stopper in or cover down, I have made a hollow stopple with an opening in the top, and of sufficient capacity to hold cold water to keep the stopple cool after it is inserted, and condense the steam from the hot fruit while it is cooling, so that the pressure of the air on the outside of the stopper, when the contents of the jar contract by cooling and condensation, will hold the stopper in, so as to dispense with the metal strap or other devices heretofore required to hold in the stopper or hold on the cover.

Hence the nature of my invention consists in making a hollow stopper with an opening at the top, and with a cavity in it of sufficient capacity to hold cold water to condense the steam from the fruit while it is cooling.

In the accompanying drawings the same letters refer to like parts in each of the figures.

Figure 1 is an elevation of my improved stopple. Fig. 2 is a plan, and Fig. 3 a section showing the stopple in the mouth of a jar.

In these drawings, A is the stopple, which I make of blown glass by blowing it in a mold or otherwise, and for convenience in handling I make a neck, B, and bulb C, with an opening, D, at the top to admit the water which is to keep it cool. It may be made in the form shown, or in such other form as will answer the purpose, and it may be made of tin or other metal, with a cavity to hold the water to condense the steam from the fruit in the jar.

That part of the stopple that fills the mouth of the jar I make conical or tapering, so that after it is inserted and the fruit in the jar cools and forms a partial vacuum, the pressure of the atmosphere on the outside of the stopple will tend to hold it in and force it in tighter and compress the rubber packing E, which surrounds it, tighter.

F is the mouth of the jar, with the stopple A in it. This mouth may be made flaring to correspond or nearly correspond with the tapering form of the stopple, either with or without the jog or shoulder G, as the stopple can be used most as well without the shoulder as with it.

These stopples are adapted to large and small jars, and when used for very large jars a cork may be inserted in the opening at the top with two tubes in it—one to convey water into the stopple and the other to conduct it out, so as to change the water and keep the stopple cool while the great mass of fruit in the jar is cooling.

My stopples may be made open at the top so as to lay in a piece of ice to keep them cool.

What I claim as my invention is—

A hollow stopper with an opening at the top, and a cavity in it to hold ice or cold water, substantially as described, for the purpose specified.

JOHN M. WHITALL.

Witnesses:

EDWARD WILLIAMS,
CHAS. ROBERTS.