T. H. SHAHAN.
Air-Tight Vessels.

No. 209,297. Patented Oct. 22, 1878.

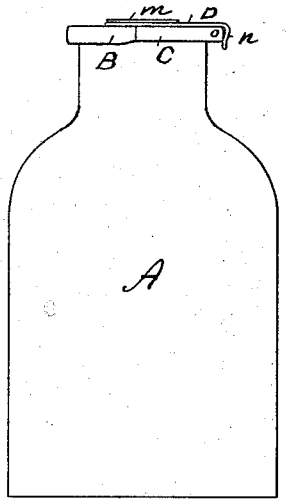

Fig:1.

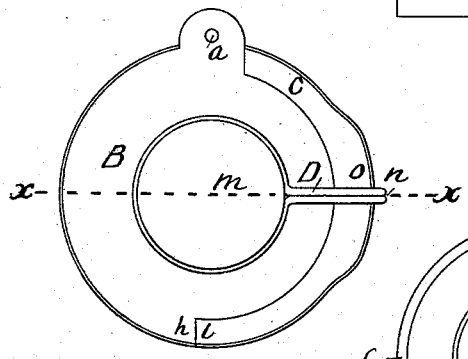

Fig:2.

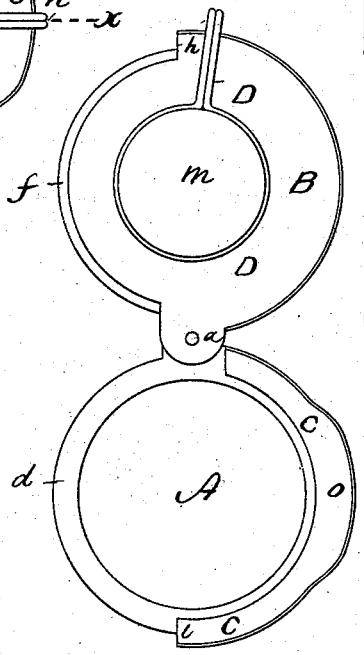

Fig:3.

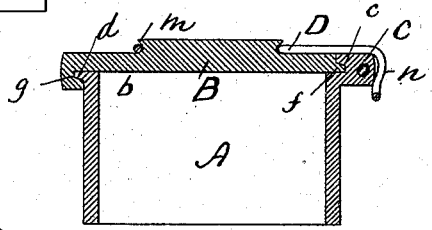

Fig:4.

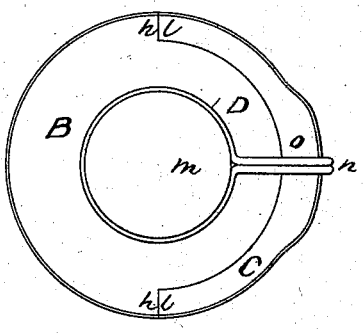

Fig:5.

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UNITED STATES PATENT OFFICE.

THOMAS H. SHAHAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN AIR-TIGHT VESSELS.

Specification forming part of Letters Patent No. **209,297**, dated October 22, 1878; application filed September 11, 1878.

To all whom it may concern:

Be it known that I, THOMAS H. SHAHAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Hermetically Sealing Jars, Cans, &c., of which the following is a full, clear, and exact description.

This invention relates to a novel mode of hermetically sealing jars, cans, bottles, &c., in which articles of food, &c., are to be placed for preservation; and it consists substantially as will be hereinafter fully described.

In the accompanying plate of drawings my invention is illustrated, Figure 1 being a view, in elevation, of a jar, &c., with my hermetically-sealing attachment applied thereto; Figs. 2 and 3, plan views, showing it as closed and opened, respectively; Fig. 4, a vertical cross-section on line *x x*, Fig. 2.

In the drawings, A represents, in side view, a jar, &c., which can be made of glass or any suitable material; B, a cover, connected by a pivot, *a*, to the top *b* of jar A, and arranged to swing horizontally over and on the top of the jar and to close its mouth. This cover can also be made of glass or any suitable material.

On upper edge, at the mouth of the jar, &c., is a flange, C, having an internal groove, *c*, which flange, with its groove *c*, extends half around, or thereabout, the circumference of the mouth of the jar, &c., the remaining part thereof having a tongue, *d*. In this groove *c*, and over the tongue *d* of the jar, &c., a corresponding tongue, *f*, and groove *g* on the periphery of the cover B are adapted to fit and thereby make a close joint.

When the cover B is placed in its position on the jar, &c., to close its opening, as above described, a shoulder, *h*, of cover abuts against a corresponding shoulder, *l*, on the flange C of jar, &c.

D is a hook attached to cover B. This hook, by one end, is hung and swings on the shoulder or raised circular portion *m* of cover B. The end *n* of hook is beyond the edge of cover, bending downward, and when the cover is in place on the jar, &c., to close its opening the end *n* of hook can be swung around toward and over the enlarged part *o* of flange C, where the hook will wedge and bind, and thus firmly draw and hold the cover to its seat, and tightly and hermetically seal the jar, &c.

To remove the cover, unfasten the hook by moving it back from its interlock with the enlarged part *o*, when the cover will be free to be removed by swinging or sliding it out of its tongue-and-groove seat, leaving the opening of the jar, &c., free and clear for the putting into it of anything desired, when the cover can be closed again and secured, as before described.

Although the cover B is herein described as pivoted to the jar, &c., it need not be so connected, as it can be entirely separate and independent thereof, which might be preferable in use, and it is not intended to limit the invention to such connection.

In Fig. 5 is shown a plan view similar to Fig. 2, but with the cover B arranged to be independent of the jar, &c., so that it can be removed entirely.

The cover B, with its raised circular part *m*, is made all of one piece.

There are many advantages in this mode of hermetically sealing jars, cans, &c.—as, for instance, it is simple, cheap, easily adjusted, and when closed is readily secured, and also by the tongue-and-groove joint any pressure exerted on the cover will tend to increase the closeness of its joint, thus insuring its hermetically sealing.

If desired the joints can be packed with rubber, &c., or the contiguous surfaces thereof prepared so as to insure a close fit.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A vessel having its mouth constructed with a segmental grooved flange, C, in combination with a cover, B, having a segmental tongue, *f*, adapted to the groove in the flange C, and a device for holding the cover in place, substantially as described.

2. The vessel A, having one side of its mouth constructed with a segmental flange, C, having an internal groove, *c*, and the other side of the mouth with a segmental tongue, *d*, in combination with a cover, B, having the

segmental tongue *f* and groove *g* adapted respectively to the groove *c* and tongue *d*, substantially as and for the purpose described.

3. The combination of the vessel A, having its mouth constructed with the grooved flange C and tongue *d*, the cover B, having the tongue *f* and groove *g* adapted to the groove and tongue of the mouth of the vessel, and a hook, D, embracing a circular shoulder on the cover, and having the end *n* adapted to catch over the flange C, substantially as and for the purpose described.

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