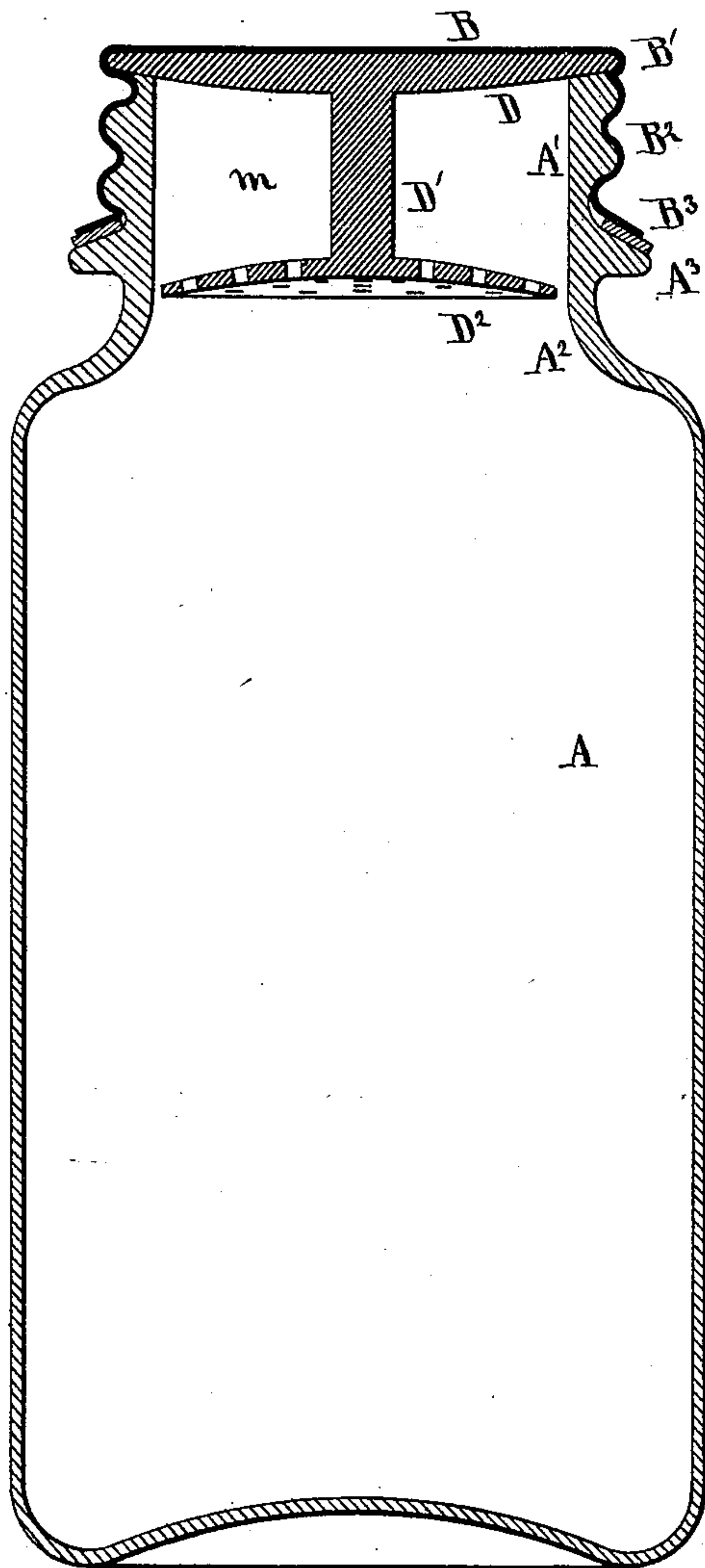


(No Model.)

W. E. ANDREW.
Cover for Vessels.

No. 234,842.

Patented Nov. 30, 1880.



WITNESSES—
J. J. Lynch.
Howard Keagle.

INVENTOR—
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UNITED STATES PATENT OFFICE.

WILLIAM E. ANDREW, OF JERSEY CITY, NEW JERSEY.

COVER FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 234,842, dated November 30, 1880.

Application filed September 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. ANDREW, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements relating to Cans and Analogous Vessels, of which the following is a specification.

The invention is intended to apply to sealing cans for preserving fruit and various other vessels. It may be used with advantage in any case where the contents of the vessel are partly fluid and partly solid, it being desirable to keep the solid contents immersed.

Many devices have been before proposed for overcoming the difficulty due to the floating of the fruit or the exposure of a portion of the fruit in consequence of the lowering of the fluid. When from either cause the fruit is exposed above the surface of the fluid it changes, either by the oxidation induced by the small quantity of air present in the partial vacuum or other cause, and becomes unpalatable.

I avoid the loss and inconvenience by a peculiar construction of the can and of the cover, and I present a surface connected with the cover which sinks in the interior of the vessel below the lowest level to which the surface of the liquid is likely to be depressed.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawing forms a part of this specification, and is a central vertical section through a fruit-jar with my improved cover in place.

Referring to the figure, the several parts are indicated by letters.

My can is formed inside like ordinary cans of the bottle form, but with a longer or deeper neck. The contracted portion A' A^2 at the top, which I call the "neck," is considerably longer on the inside than it is practicable to make the depth of the screw-threaded portion of the cover. Below the neck the can enlarges rapidly, to give the proper increased diameter for the bottom and main body A . The bottom and main body A of the can may be of any ordinary or suitable pattern. The exterior of the neck is screw-threaded in the upper portion, A' , and is plain in the lower portion, A^2 .

At the junction of the screw-threaded and plane portions of the neck is a wide collar, A^3 , smooth on its upper surface, and of an extreme diameter about equal to that of the body below. The upper face of this collar forms the bearing to make the sealed joint with the flange B^3 of the cover. This joint may be formed by a washer of vulcanized rubber, properly wet with sirup, or by sealing with rosin, or by any other approved means.

B is a cover, B^2 the screw-threaded sides or part which gives the depth, and B^3 the flange or expansion at the base. It may be of sheet metal, spun or otherwise wrought into the shape, and is adapted to take a strong hold on the screw-threads produced on the exterior of the upper portion, A' , of the neck of the can.

B' is an internal groove or annular recess formed in the cover, by which it takes a slight but sufficient hold on the periphery of a plate, D , which extends continuously across under the body of the cover and performs the function of aiding to support the cover against the pressure of the atmosphere, there being understood to be a tolerable vacuum in the interior of the vessel.

Instead of making the part D a simple disk extending across plane, or nearly plane, on the lower face, I preserve that form over a large portion of the surface, but extend down a portion. (Indicated by D' .) This extension or stem D' is continued down for a sufficient space—say, two inches—and there expanded into a broad plate, D^2 . This plate D^2 lies parallel to the upper disk, D . It may be of circular outline, and as large as can be easily inserted through the neck.

The can is filled with fruit in the ordinary way, taking care not to fill it so full as to prevent the upper portions of the fruit from being depressed to the required extent by the plate D^2 . Then the can is very nearly filled with the sugar sirup in the ordinary manner, and the cover, composed of the sheet metal B B' B^2 B^3 , and also of the parts D D' D^2 , is applied. The plate D^2 rests on the uppermost layer of the fruit, and, being gently pressed downward, moves the mass of fruit downward, allowing the liquid contents of the can to flow over the plate D^2 and fill the liberal space m around

the stem D' , and between the lower plate, D^2 , and the upper plate or disk, D . The cover being meantime turned around by the action of screw-threads, the contents of the can are
5 tightly secured in the ordinary manner.

I can vary the form of the parts within wide limits. There may be three or other number of stems D' . The periphery of the plate D^2 may be scalloped or notched. For large fruits,
10 as peaches, it is not necessarily circular. I propose to fill the plate D^2 with holes, which holes may, for some fruits, be quite large. The plate D^2 , instead of being plane, may be more or less dome-shaped.

15 The depth to which the plate D^2 should be held—or, in other words, the amount of space m provided in the cover or in my attachment thereto—may be varied as experience shall indicate with any particular kind of material.
20 My peculiar form of the can allows this to be done within wide limits.

I propose to make the parts $D D' D^2$ of glass, porcelain, white or yellow crockery, metal or other material which will not exert an inju-
25 rious influence. The strength required is slight. I propose to try woods of various

kinds, either in their natural states, or boiled, or otherwise saturated with sugar or other desired material.

I do not claim the device irrespective of its 30 connection with the cover, nor do I claim a cover having a periphery with a groove adapted to receive a disk; such have been known before and are in common use; but

I claim as my invention and desire to se- 35 cure by Letters Patent—

The can-cover described, having the flange B^3 , screw-thread B^2 , and internal recess, B' , in combination with an inclosed piece, $D D' D^2$, adapted to perform the double functions of 40 sustaining the thin top metal B against the pressure of the atmosphere and of holding the fruit below the surface of the fluid, as herein specified.

In testimony whereof I have hereunto set my 45 hand, at New York city, N. Y., this 10th day of September, 1880, in the presence of two subscribing witnesses.

WILLIAM E. ANDREW.

Witnesses:

W. COLBORNE BROOKES,
M. F. BOYLE.