

W. Pratt,

Butter Bucket.

No. 104,198.

Patented June 14, 1870.

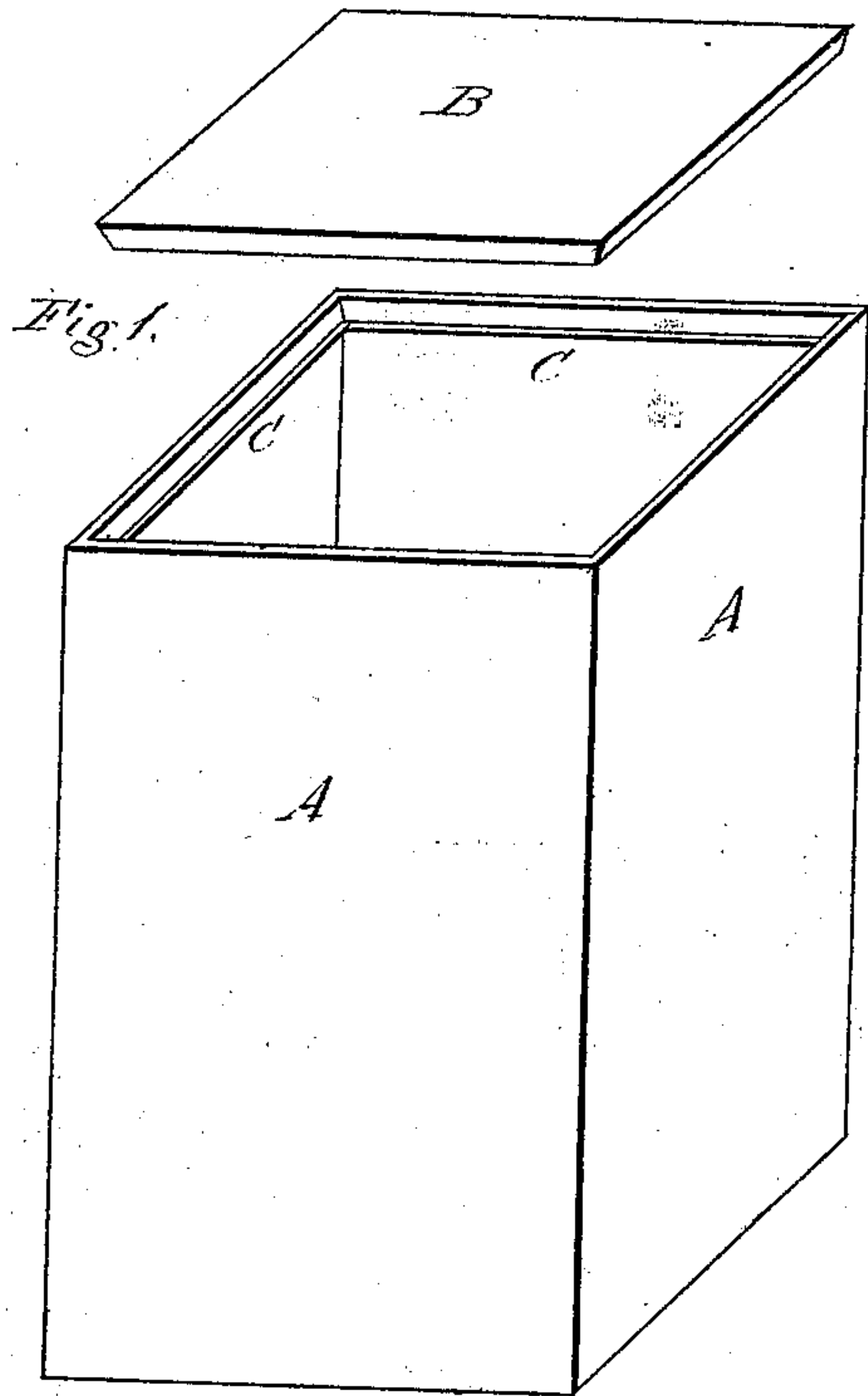


Fig. 2.

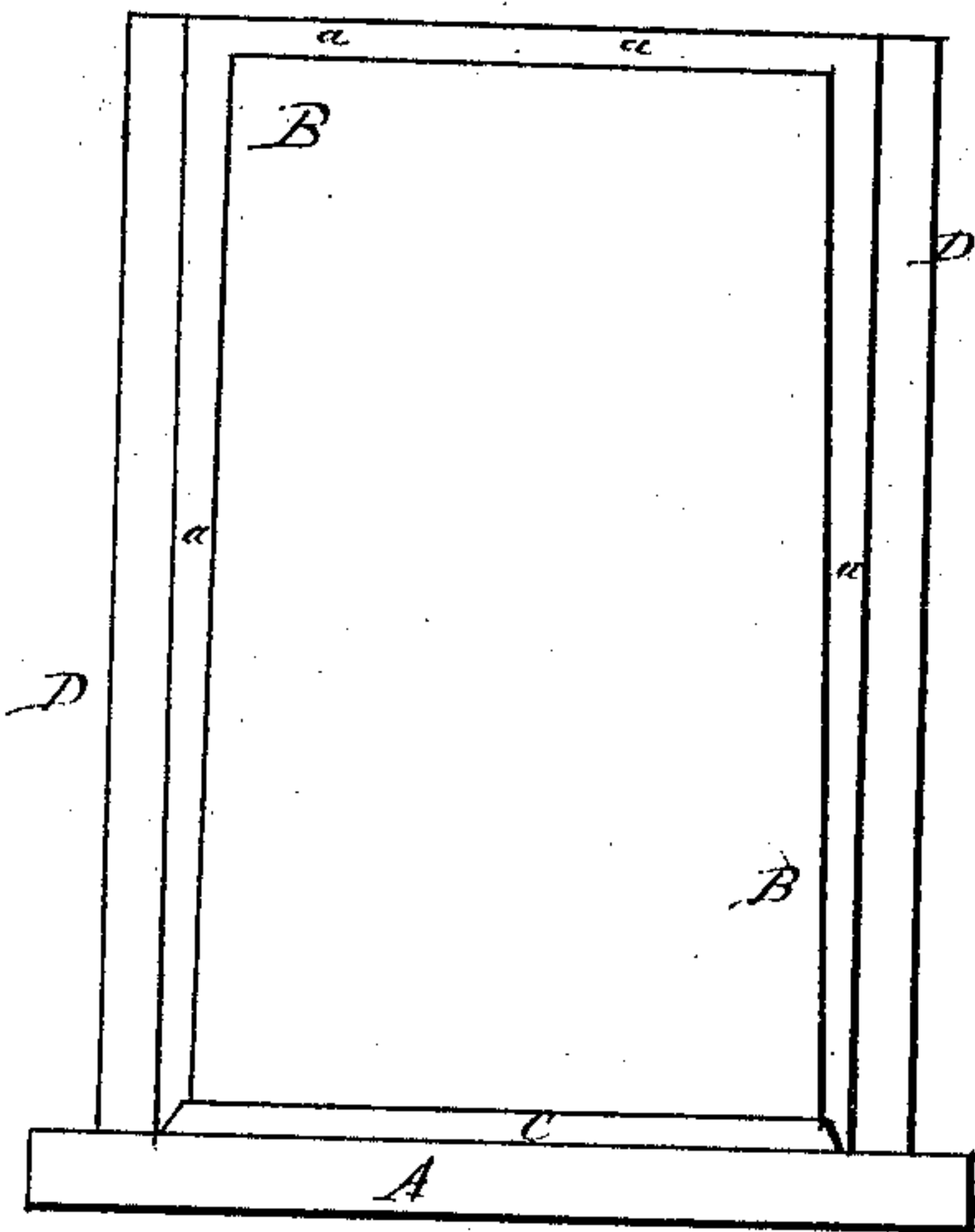
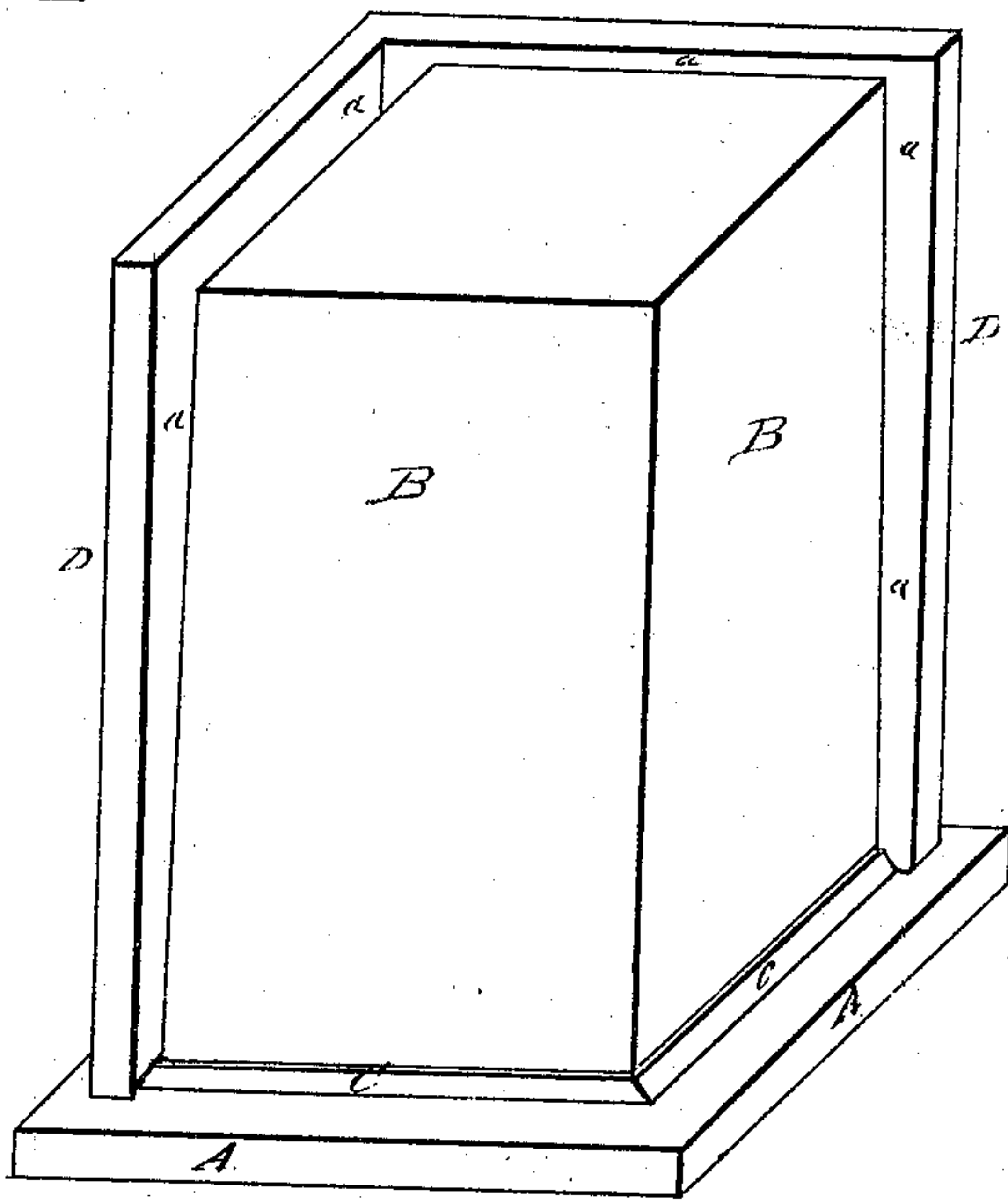


Fig. 3.



Witnesses.
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WILLIAM PRATT, OF NEW YORK, N. Y.

Letters Patent No. 104,198, dated June 14, 1870.

IMPROVEMENT IN VESSELS FOR PACKING BUTTER AND OTHER ARTICLES.

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

To whom it may concern:

Be it known that I, WILLIAM PRATT, of the city, county and State of New York, have invented certain new and useful Improvements in Vessels for Packing Butter, Lard, Spices, Tobacco, and other articles liable to be injured by exposure to the high temperature of hot climates; and, in order that others skilled may understand the nature of my invention and method of manufacture, I give the following description thereof, illustrated by the accompanying drawing and referred to in this schedule by letters and figures marked thereon.

It is a well-known fact that butter, and lard, and articles of like nature, when packed in wooden vessels, or those made of a similar material, and shipped from temperate to hot climates, become rancid or spoiled, and that spices, tobacco, coffee, lose the best part of their peculiar aroma or flavor, especially where they are kept in bulk, or remain on hand any length of time before being used.

This difficulty I have thoroughly overcome by my invention, which consists in packing such commodities in cases, of the size desired, which cases are non-conducting and impermeable to the contents thereof and to the external air.

To effect this I make my case or vessel of plaster of Paris, not confining myself to any particular size or form; but I make them, preferably, of such sizes as shall contain definite quantities of such goods as are to be packed in them, and I prefer to make them of rectangular shape, to economize space in putting them into larger packages for transportation.

The method of casting is to have a core of the size and shape necessary for the interior of the case or vessel, this core being slightly tapering, the larger end being placed upon a base broad enough to support the other parts of the mold. At the larger end of the core (next the base) is a head or molding all around it, projecting from the sides thereof, and extending upward far enough to form the recess in the mouth of the vessel for receiving the cover. This molding or head is also to be slightly tapering, in order to allow it to be drawn easily from the plaster.

Around this core is a dissected box, with both ends open, the space between this box and core being that which determines the thickness of the plaster vessel, this outer box being as much higher than the core as will form the bottom of the vessel when the plaster is poured flush with it. It will be seen, from the above, that the case is cast mouth downward, and that the sides, bottom, and the recess for the cover, are all formed at the time of casting the vessel. There may be a covering for the upper end of the outer box, with a hole through it for pouring in the plaster, but I have found it better, in practice, to leave this entirely open,

because a slight jarring of the mold while the plaster is thin, and before it sets, will relieve the cast from air-bubbles.

As soon as the plaster has sufficiently set in the mold to be firm, the mold is detached from the base, and the piece which forms the recess for the cover is withdrawn. The core is next taken from the inside, and then the outer casing of the mold detached, the bottom of the case or vessel being evened off by any convenient means, and, the cover having been cast in a mold of the same size and shape as the recess for it in the mouth of the vessel, they are now to be exposed to a sufficient degree of heat to drive off any moisture that is in the plaster. This may be done by exposure to the heat of a room or chamber of from 90° to 100° Fahrenheit. The next process is to render the vessel impermeable both to the contents of the box and the external air. When butter, lard, or spices are to be packed, any of the varnishes, as shellac or sandurac, may be used, and these, when dried, will render the vessel impermeable to oils, air, or moisture.

Another method is to dust the vessel with finely-pulverized resin, and then expose it to a sufficiently-high temperature to liquefy it; and still another method is to mix a small quantity of resin, in a very finely-pulverized state, with the plaster, before the water is mixed with it, and to dust it afterward with pulverized resin, this latter process not only making a good proofing, but is a good basis for making the spirit varnishes, first named, adhere closely to the surface of the vessel.

After the vessel is filled with whatever article it is desired to pack in it, the cover, which has also been treated in like manner, is then cemented into its recess by means of any convenient cement or varnish, and the entire package may then be covered with paper or cloth, and labeled so as to indicate its contents.

Description of Drawing.

Figure 1 represents, in perspective, a square case or box, made of plaster of Paris, as above described, the sides, cover, and bottom thereof being about three-eighths of an inch in thickness, this being sufficient for vessels of from three to five pounds capacity, larger vessels, of course, being made rather thicker.

A A is the box;

B, the cover;

C, the tapering recess to receive the cover, which is about the same thickness as the sides of the box.

Figure 2 is a sectional view of the mold.

A A is the base, to which the other parts of the mold are attached;

B is the tapering core, to form the inside of the case; and

C is the head or projection for forming the tapering recess for the cover.

D D are the sides of the outer part of the mold.
 a a a show the plaster occupying the space between the core and outer casing of the mold.

Figure 3 shows the mold, in perspective, with two of the sides of the outer casing taken off.

A, the base.

B, the core.

C, the bead for forming the mouth.

D D, the sides of the outer casing.

a a a, the space for the plaster.

I would here state that, before fastening the different parts of the mold together, which may be done by means of clamps or dowels, it is necessary to oil or grease such of the surfaces as will come in contact with the plaster, in order that they will not adhere to it. The molds may be made of either wood or metal, as may be deemed desirable.

I would also state that, where pulverized resinous substance is mixed with the dry plaster, the proportion of resin should be about one ounce to the pound of plaster. This quantity may be varied within moderate limits, but too much will render the substance of the vessel weaker than pure plaster, while, when used in the proportions indicated, it will be stronger than without it.

I am aware that cases of wood, pasteboard, and paper, for packing butter and lard, and coated with glue, gum Arabic, and paraffine, and other like substances, have been used.

I am aware, also, that shellac and other varnishes are well known to and used by dentists for protecting their plaster casts. Therefore, I lay no claim to these; but that which I do claim as novel and useful is—

1. A new article of manufacture, to wit: A box or case, made of plaster of Paris, for packing such articles of merchandise as are liable to be spoiled by exposure to high temperatures.

2. The mixing of small quantities of fusible gum resin with the plaster used in making the same.

3. Making vessels for holding articles of merchandise impermeable to their contents, to the external air and moisture, by dusting them with any of the fusible gum resins, finely pulverized, and exposing the same to a sufficient degree of heat to liquefy them, and thus form a continuous proof coating, all made and operating substantially as described, or their equivalents.

WM. PRATT.

Witnesses:

J. E. STEVENSON,

J. F. POPE.