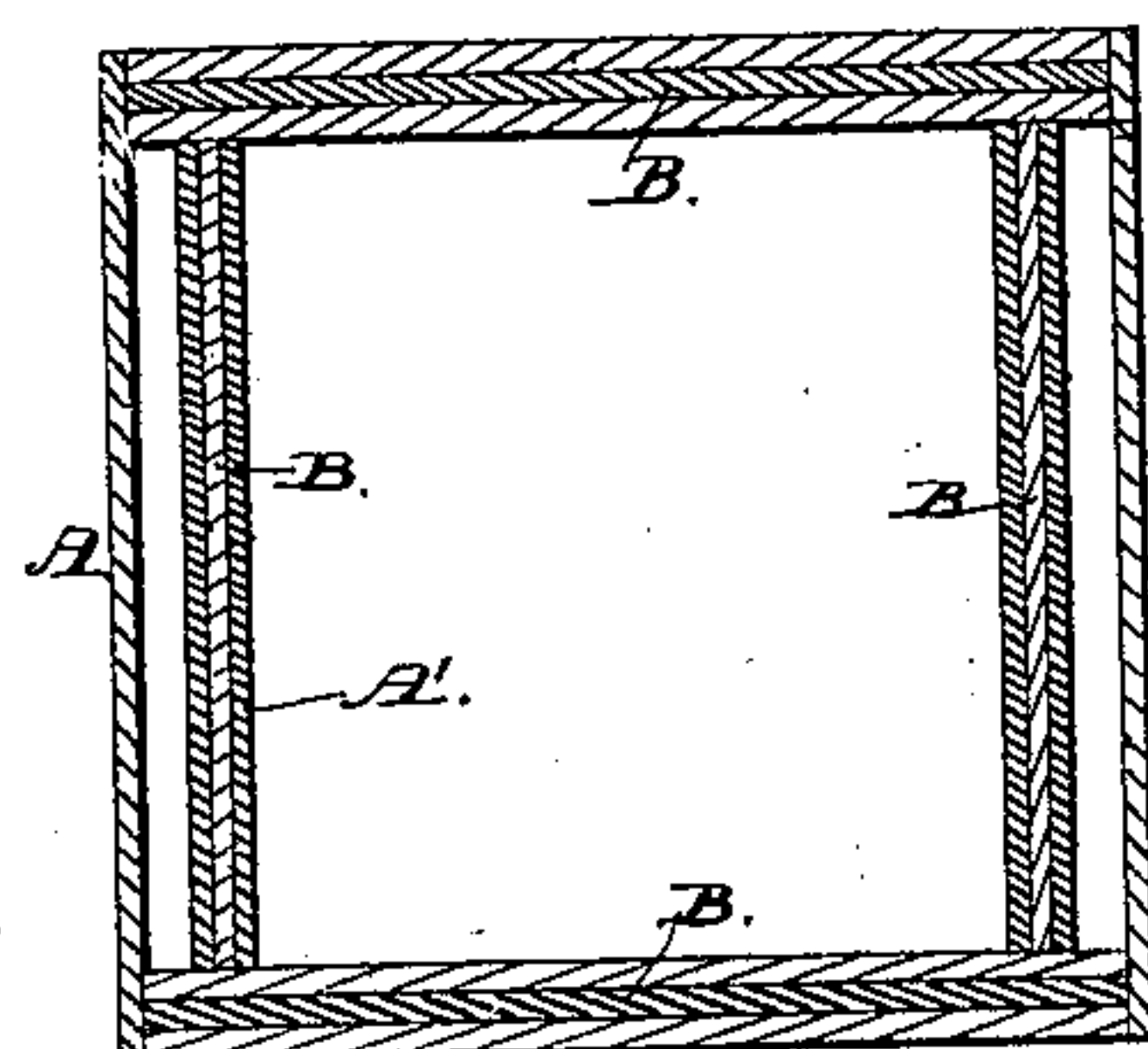
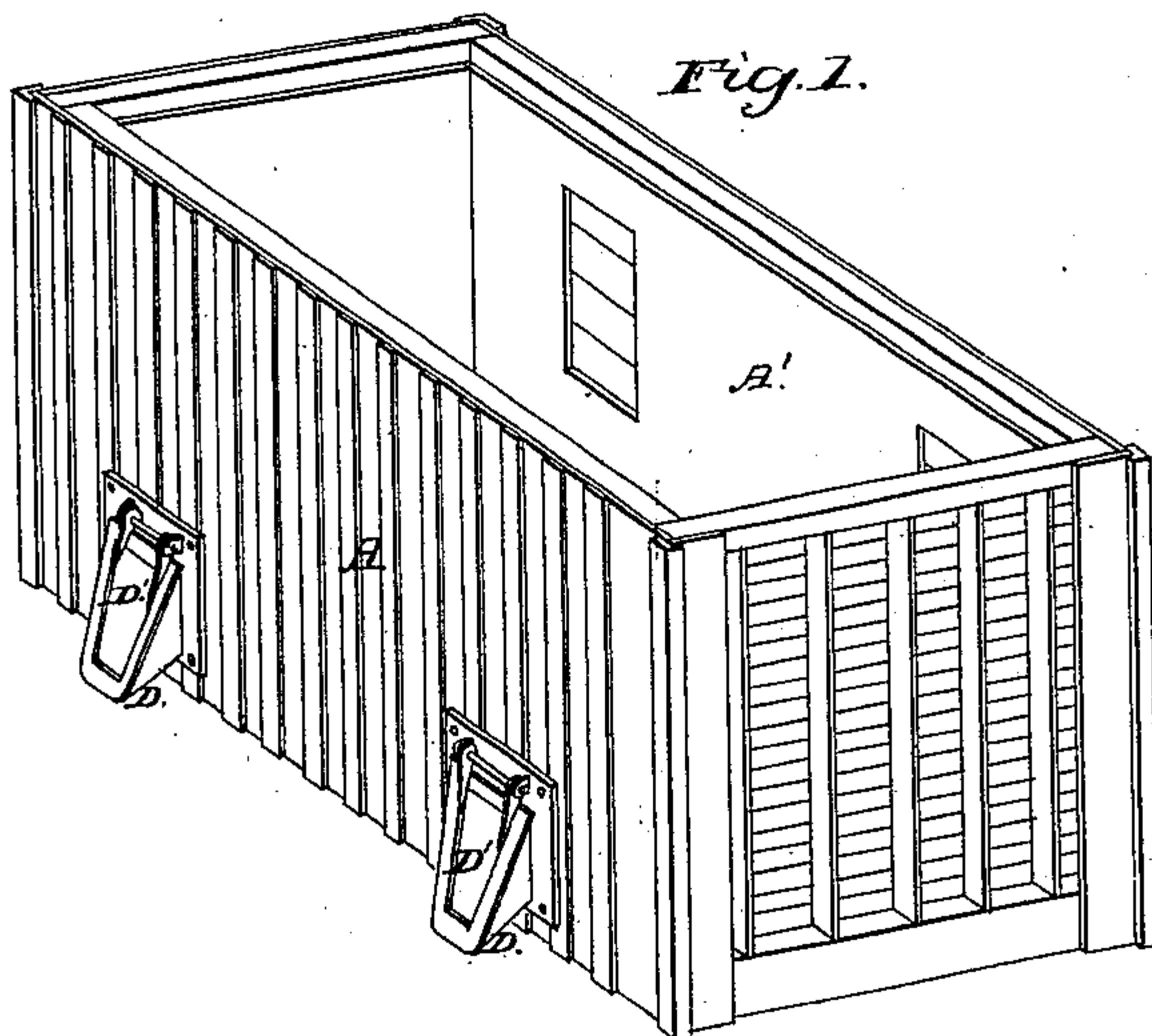
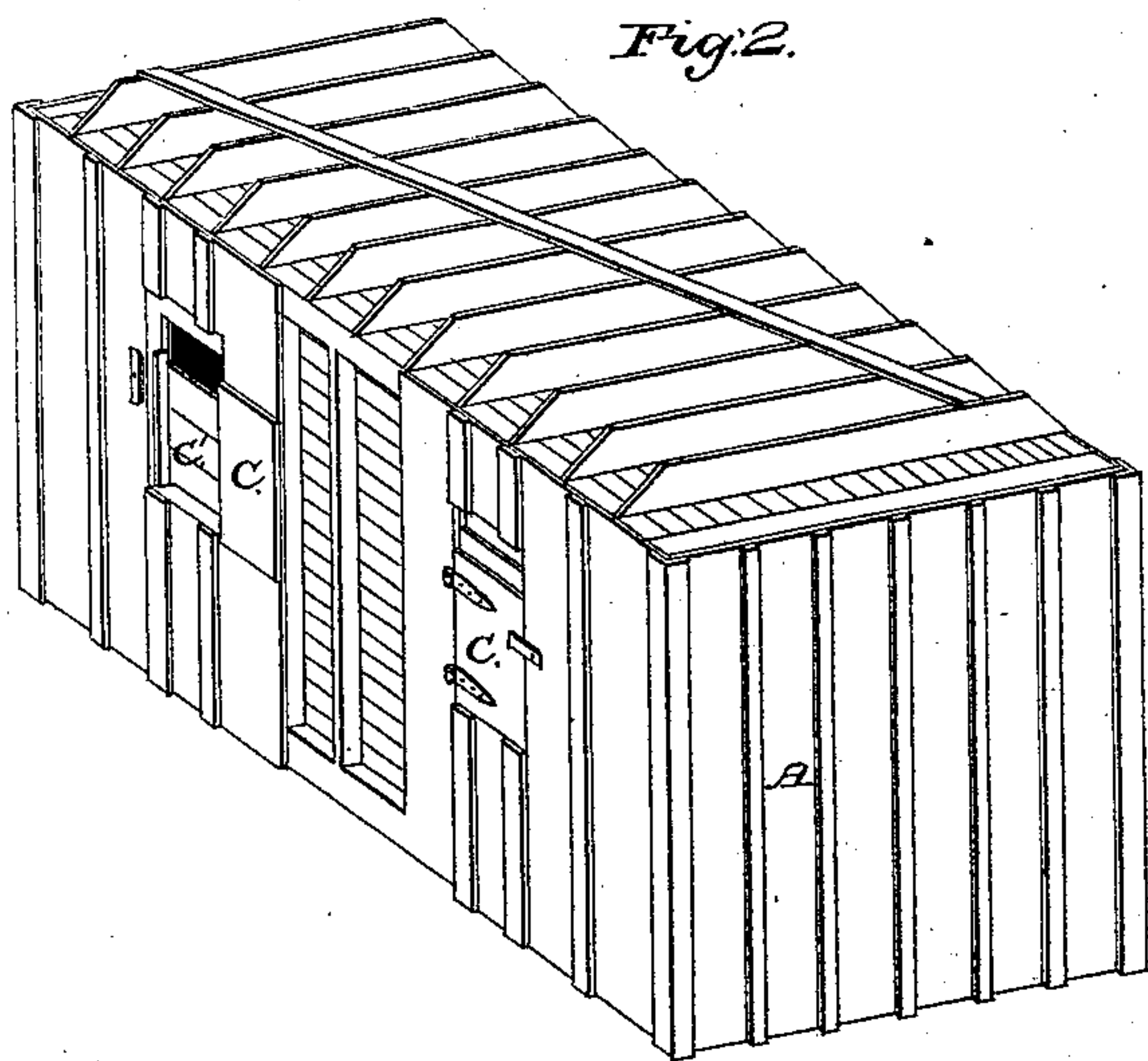


C. A. LAWTON.  
Lime Bins.

No. 200,618.

Patented Feb. 26, 1878.



Attest:  
O. W. Chubb  
L. Solleberg

Inventor:

C. A. Lawton



# UNITED STATES PATENT OFFICE.

CHARLES A. LAWTON, OF DE PERE, WISCONSIN.

## IMPROVEMENT IN LIME-BINS.

Specification forming part of Letters Patent No. **200,618**, dated February 26, 1878; application filed June 18, 1877.

*To all whom it may concern:*

Be it known that I, CHARLES A. LAWTON, of De Pere, in the county of Brown and State of Wisconsin, have invented a new and useful Improvement in Lime-Bins; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of my improved lime-bin, taken from the side, showing the discharging-spouts. Fig. 2 is a perspective view, showing the filling-in door; and Fig. 3 is a vertical sectional view, showing the manner of constructing and interlaying with paper.

Similar letters of reference denote corresponding parts in all the figures.

The object of the invention is to provide an air-tight, or nearly air-tight, receptacle, for storing newly-burned lime, that shall be easy of access for filling and emptying purposes, and so constructed that the contents shall not be affected by the surrounding atmosphere, as it is a well-known fact that lime rapidly deteriorates in value by being exposed to the air, and soon becomes worthless for use as a cement.

To obviate this difficulty, and preserve for an indefinite period the qualities found in the newly-burned lime, the invention has been made, which consists of a hollow or double-walled bin, having the inner wall double-surfaced, and interlaid with paper-board, or other atmospheric non-conducting material. It is also further provided with side doors, through which the lime is conducted into the bin, and also having discharging spouts, by means of which the lime is withdrawn, when the same is to be used, which will hereinafter be more fully explained.

In the drawing, A represents the outer wall; A', the inner double-thickened wall; and B, the paper-board, placed between the two surfaces constituting the inner wall. The walls A and A' are made with a space between, for dead air; or the said space may be filled with any material that may be a non-conductor of heat and moisture.

The inner wall is preferably made of two

thicknesses of matched flooring; but so made that an interlaying of the paper may be interposed between the two thicknesses.

This manner of applying the paper is important, as it will be readily seen that by having the said paper placed between the two flat surfaces, and firmly securing all the parts together, an air-tight wall is made, (which is necessary for the preservation of the adhesive qualities of the lime,) while the same could not be done were one of the sides of the paper exposed to the atmospheric changes, which acts upon the paper, causing it to contract and expand, with a consequent displacement, and leaving openings for the admission of air.

C are the receiving-doors, by means of which the bin can be filled. These doors are hinged to the outer surface at a point near the top of the wall, and are made to swing outward, and to leave a vacant space between the inner face of the door and the inside sectional doorway-wall, which is designated C'. (See Fig. 2.) This wall C' is made in sections for the convenience of filling, as it will be observed the pieces or sections are made to fit within a vertically-made groove, with a place at the top for the insertion from the outside of one at a time, so that, as the bin is filled up to the lower part of the opening, a piece can be placed in position, and slid down, so as to close a portion of the opening; and as the bin is filled up, the operation is repeated until the whole vacant space is utilized, when the part between the door and inner boarding can, through the opening above the door, be filled with straw, chaff, shavings, or other non-conducting material.

D are discharging-spouts, placed upon the outside of one of the walls, in an inclined position, and through which the material can be removed when the same is to be used. D' are hinged lids or covers, tightly fitting over the apertures made in the spouts, which may be locked in any well-known manner, to prevent displacement or waste of the material within the inclosed line, all of which will be understood without further description.

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

1. In a lime-storing receptacle or bin, the combination of the outer wall, made of one thickness of boards, the inner wall, made with two or more thicknesses of boards, having paper boards inserted between the said inner boards, and the inclined discharging-spouts, carrying the hinged covers, substantially as described.

2. In a lime-storing receptacle or bin, the combination of the outer wall, the double inner wall, composed of two thicknesses of boards,

with paper inserted between the inclined discharging-spouts, the receiving-doors, and the doorway-inclosing boards, designated C', all arranged as specified.

This specification signed and witnessed this 31st day of March, 1877.

CHAS. A. LAWTON.

Witnesses:

E. W. GRUDT,

L. NOLLEBERGH.