(No Model.)

J. W. ORMSBY.

LIME BIN.

No. 270,464. Patented Jan. 9, 1883.

Fig. 1.

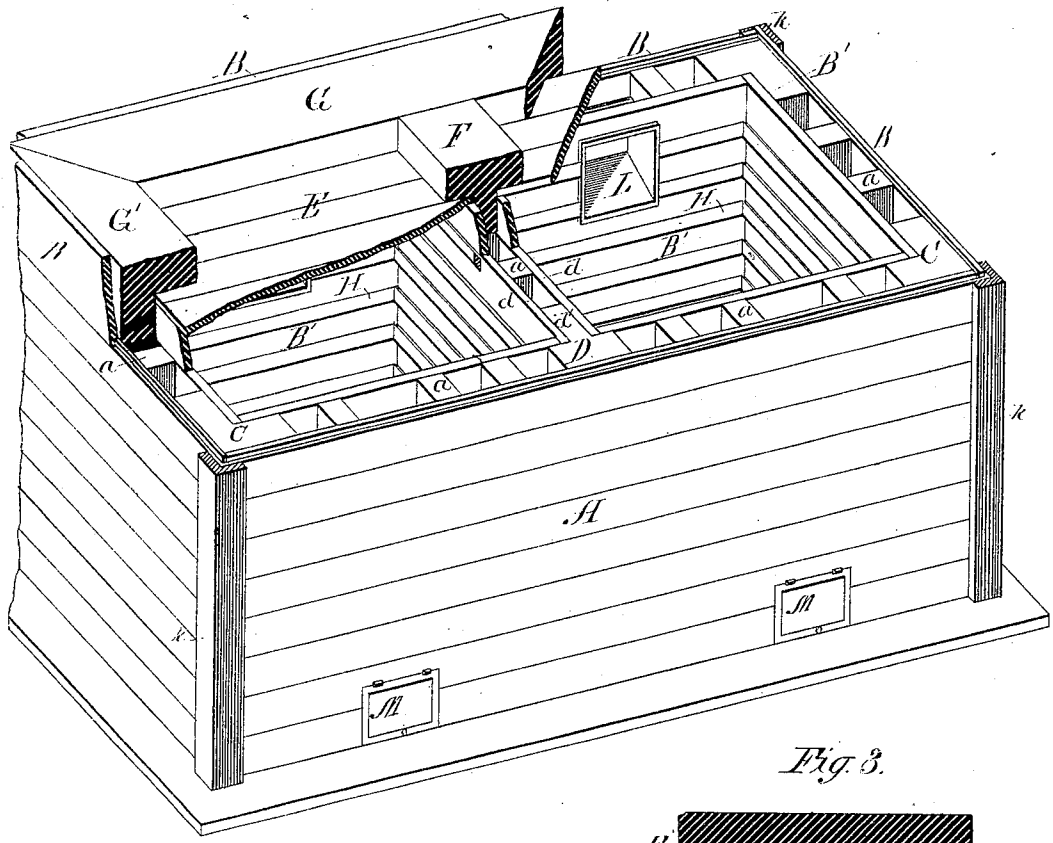


Fig. 2.

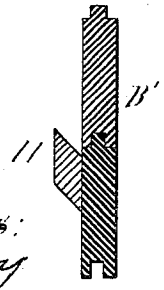
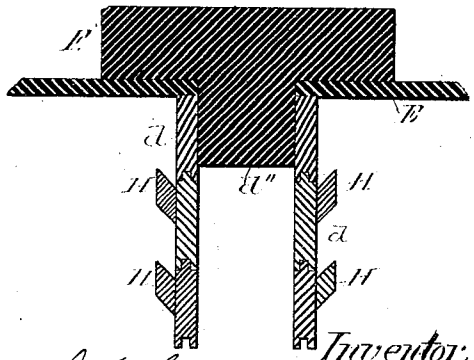


Fig. 3.



Witnesses:
C. B. Story
E. G. Bohn

Inventor:
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by Stuart & Vandenwood
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UNITED STATES PATENT OFFICE.

J. WHITNEY ORMSBY, OF MILWAUKEE, WISCONSIN.

LIME-BIN.

SPECIFICATION forming part of Letters Patent No. 270,464, dated January 9, 1883.

Application filed August 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, J. WHITNEY ORMSBY, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Lime-Bins; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to bins for storing lime; and it consists in certain peculiarities of construction by which the bins are rendered impervious to air, as will be fully described hereinafter.

In the drawings, Figure 1 is a perspective view of my improved bin with the top of the same partly broken away, and Figs. 2 and 3 are details.

A is my improved bin, which is oblong in shape, and has double walls, B being the outer and B′ the inner walls.

C are corner-pieces, L-shaped in cross-section, and D are intermediate posts for strengthening the outer walls and supporting partitions *d*, that divide the inner walls into two chambers. The posts D are plane on their outer sides, but are rabbeted out on their inner sides to leave a tongue, *d′*, which forms corners to receive the ends of the partition-boards when they are joined to the side boards of the inner walls, and thus make a perfectly-protected joint. Intermediate between the corner-pieces C, and between the posts D and corner-pieces C, I provide uprights *a* for bracing the walls apart.

The cover or lid E is designed to rest upon the edges of the upper boards of the inner wall, and this lid is divided, so that the boards that compose it will abut against the tongue of a rabbeted timber, F, similar in every respect except position to the posts D, and this timber F rests on the lid E, just over the partition-walls *d*, its ends being clamped between the long top corner-pieces, G, that are counterparts of the corner-pieces C, and are mitered at their ends to end pieces, G′. A tongue, *d″*, projects down below the lid to receive the top boards of the partitions and form corners, such as are formed by the posts D.

The corner-pieces C and intermediate posts, D, extend from the bottom of the structure up as high as indicated in Fig. 1 of the drawings, and upon these posts and uprights *a*, I lay horizontal corner-pieces G G′, (in every respect except in position similar to corner-pieces C,) the edge of one flange resting on the upper ends of two of the posts C and the intermediate uprights and the other flange extending in on a horizontal line. I then extend the outer walls, B, up to a level with the top of the horizontal corner-pieces G G′, and the inner walls up to within the thickness of the lid E of the horizontal flange of said horizontal pieces, securing the parts together preferably by blind nails.

H are strips, which are diamond-shaped in cross-section, and which I design to secure beneath the joints, between the edges of the boards that compose the inner walls of the structure, as shown in section in Figs. 2 and 3.

The object of these strips is to form pockets for lime-dust or air-slaked lime to lodge in, so that as fast as the edges of the boards separate on account of shrinkage, or for any other cause, the lime will be guided into the openings thus made and will fill them up, and thus prevent any access of air through into the bin.

The object of my invention is to produce a bin that will be perfectly air-tight, and which will not lose its character, even though the planking of which it is composed should warp or shrink, and this I am led to believe I have accomplished by a practical test of my bin.

It might be well to unite the ends of the boards that compose the bin by miter-joints, but I hardly think this will be necessary.

Of course the parts that compose my bin will all be secured together by nails or screws.

After the bin has been put up I propose to nail a strip, *k*, to each vertical corner to hide the joint, as well as to protect the corners from injury by the contact of cart-wheels and other heavy bodies.

By dividing my bin into two compartments I am enabled to keep one compartment filled all the time and perfectly sealed while the other is being drawn upon, and therefore the dealer who uses my bin does not have to wait until his entire stock is exhausted before ordering more lime.

L are the openings through which I fill my bin, and these openings may be closed by any suitable doors.

M are the doors through which the lime is taken from the bins. I propose to cover the top of my bins with a layer of slaked lime, and then to place over that a movable roof; but this latter forms no part of my invention, and therefore I do not show any covering at all in my drawings.

What I claim as my invention is—

1. In a lime-bin, the interior and exterior end and side boards that compose the walls, in combination with corner-pieces C, as set forth.

2. The combination of corner-pieces C, intermediate posts, D, and the boards that compose the interior and exterior walls, as set forth.

3. The combination of the inner walls, partitioned as described, with the cover E, timber F, and top corner-pieces, G G′, as set forth.

4. The combination, in a lime-bin, of the L-shaped corner-pieces, rabbeted posts D, and timber F, with the boards that compose the interior and exterior walls of the structure, as set forth.

5. The combination of inner walls, B′, diamond-shaped strips H, corner-pieces C, and posts D, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand on this 28th day of July, 1882, in the presence of two witnesses.

J. WHITNEY ORMSBY.

Witnesses:
S. S. STOUT,
HAROLD G. UNDERWOOD.