(No Model.) 3 Sheets—Sheet 1.

T. R. CARSKADON.

PORTABLE BUILDING.

No. 435,112. Patented Aug. 26, 1890.

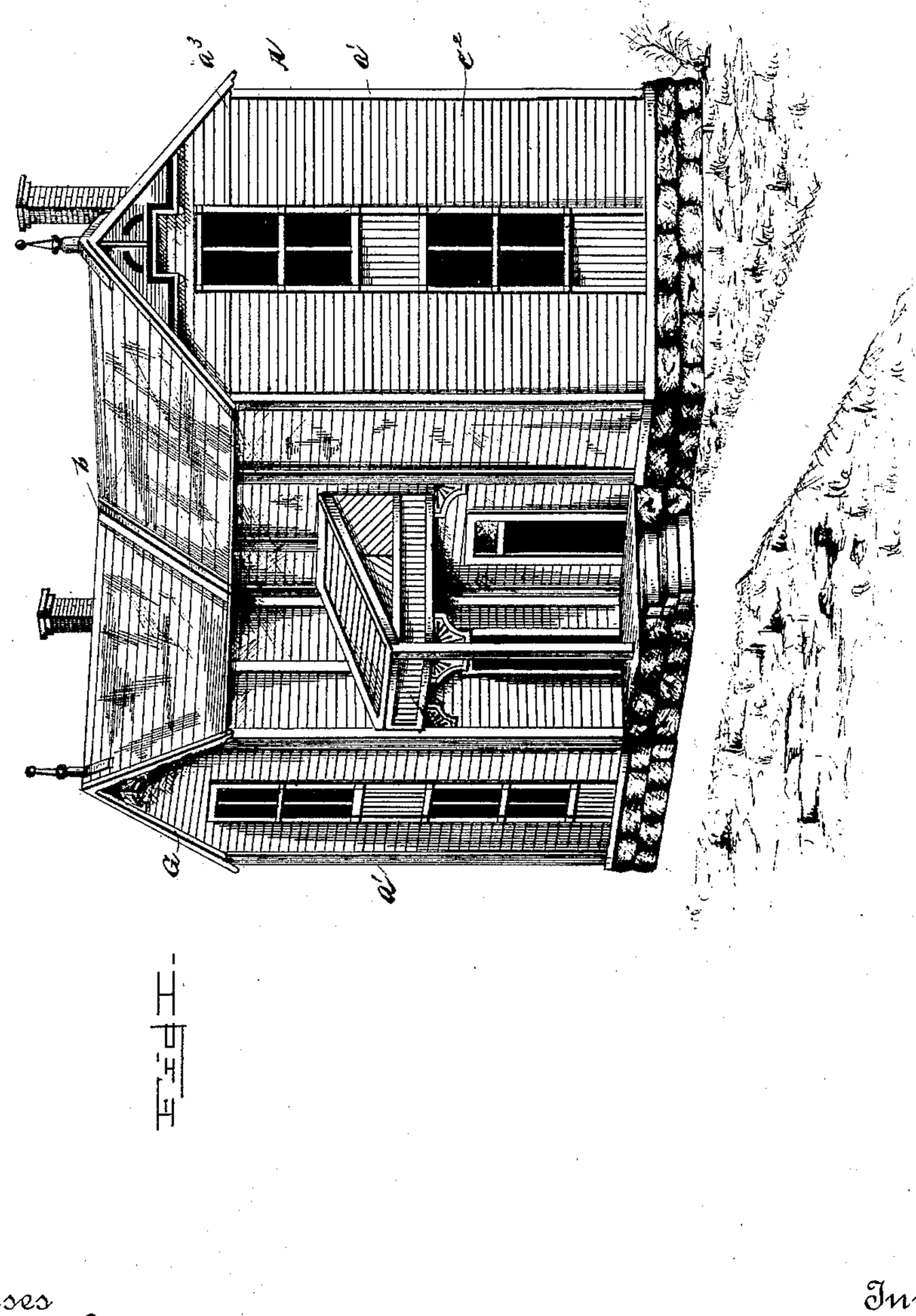

FIG. 1.

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3 Sheets—Sheet 2.

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Fig. 1.

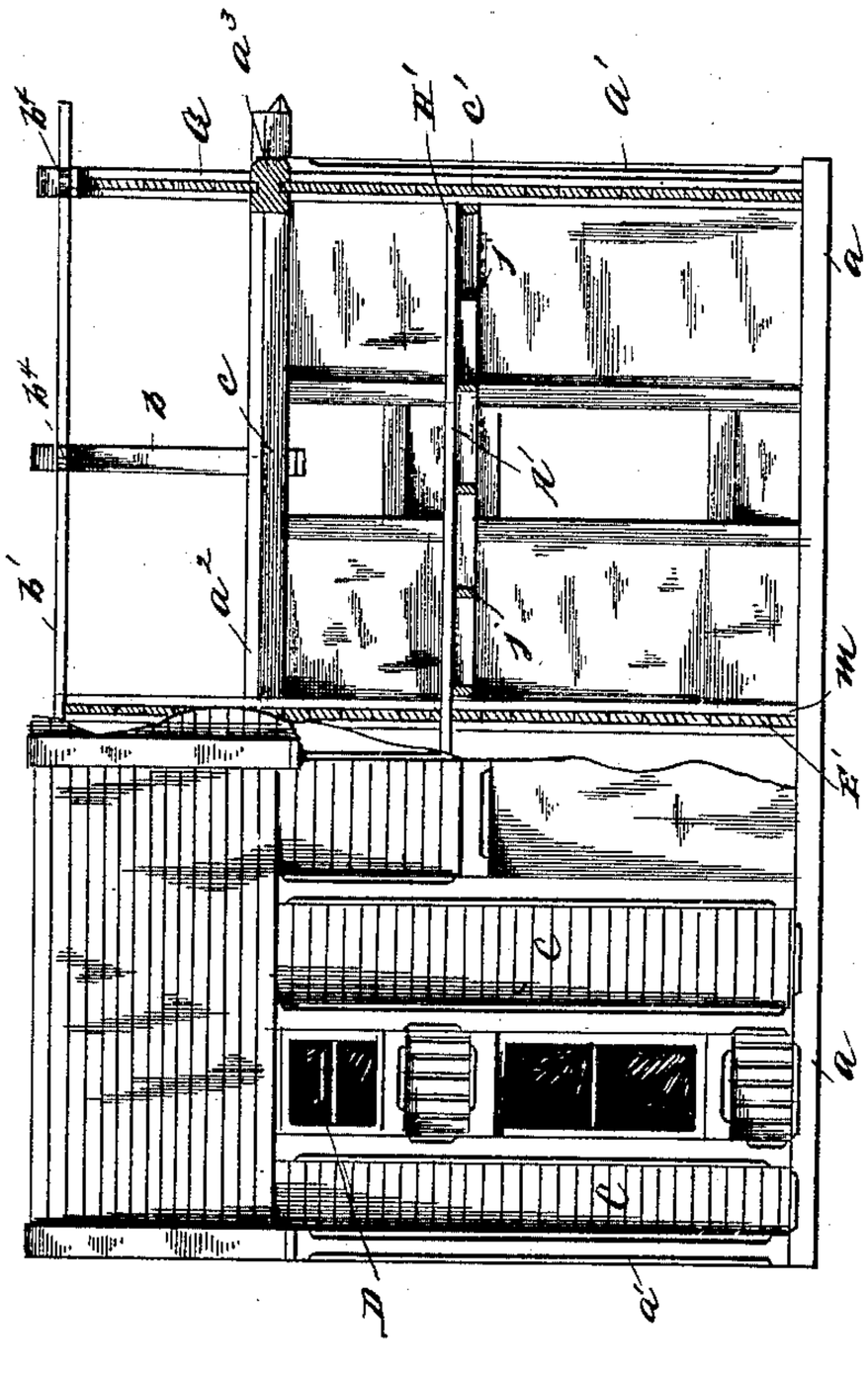


Fig. 2.

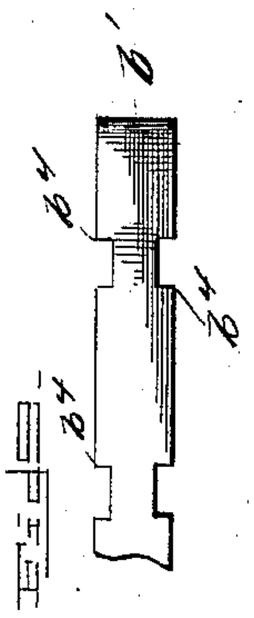


Fig. 3.

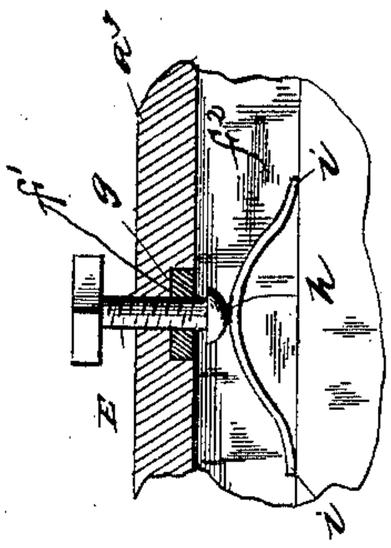


Fig. 4.

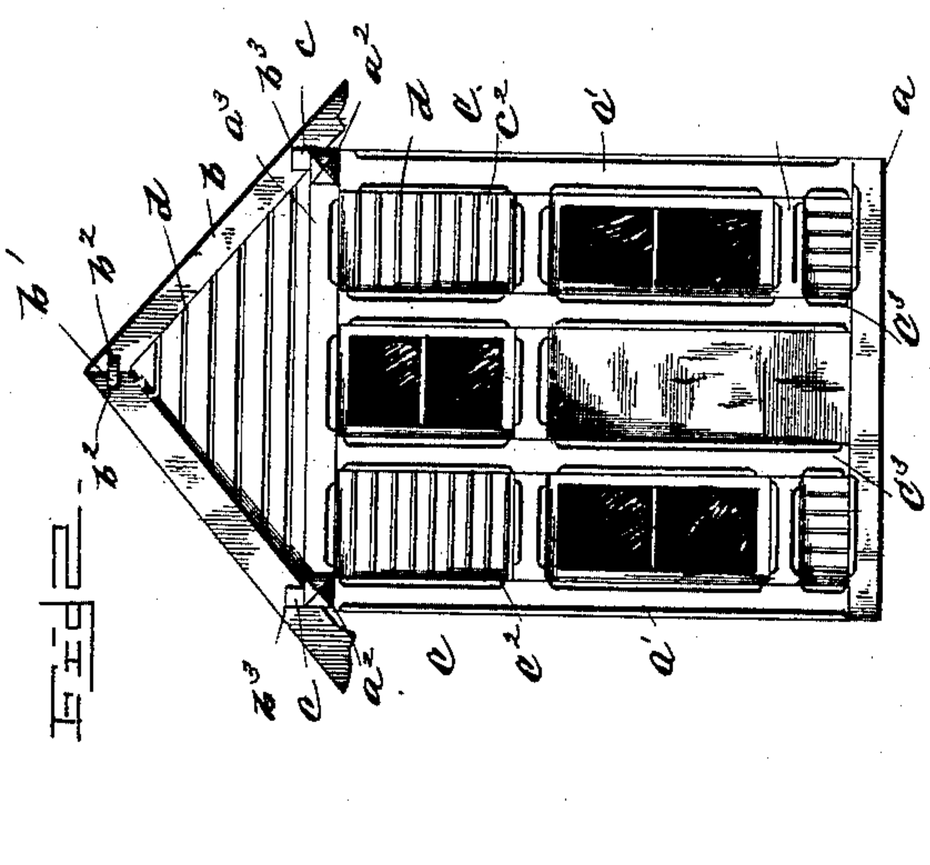
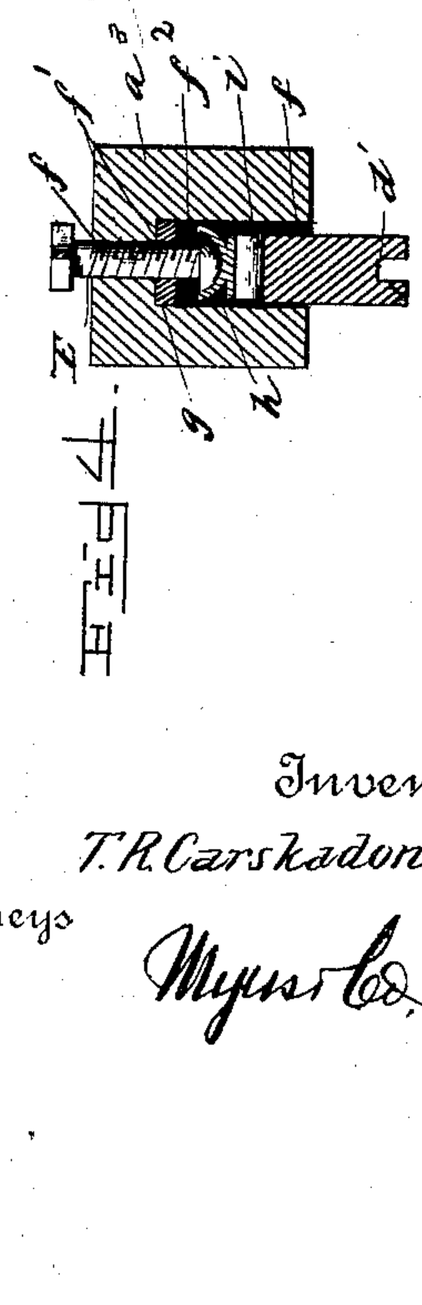


Fig. 5.



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PORTABLE BUILDING.

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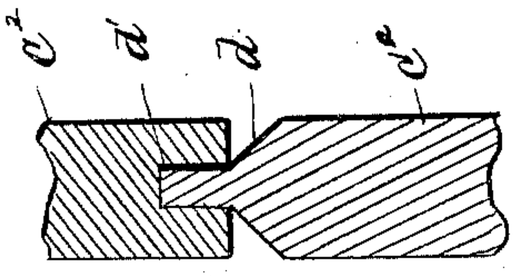

FIG. 11.

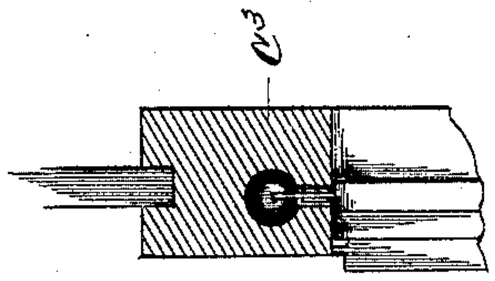

FIG. 8.

FIG. 10.

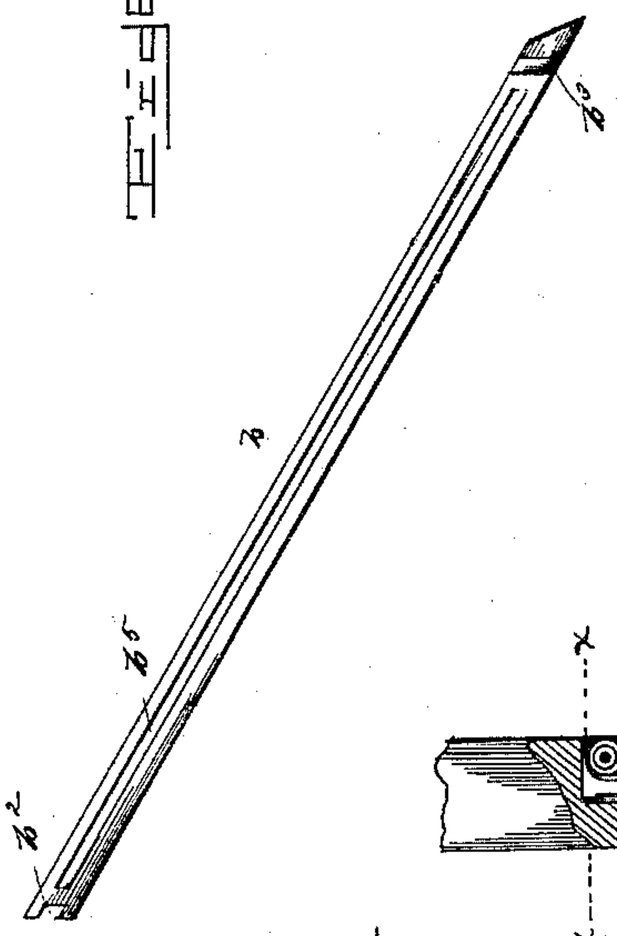

FIG. 9.

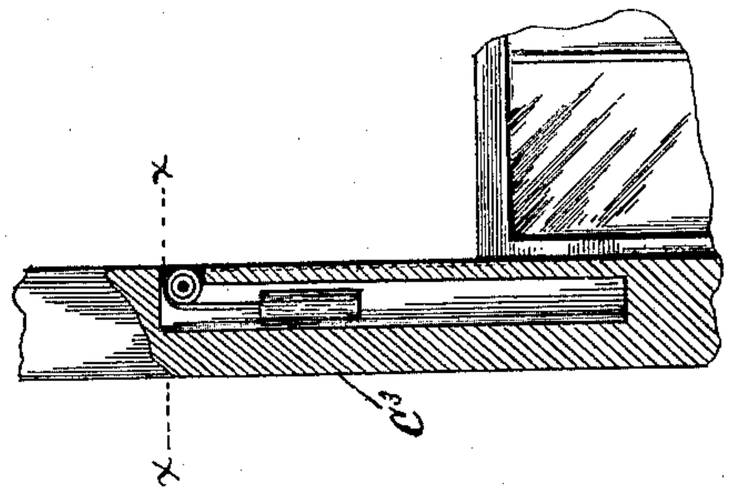

FIG. 7.

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UNITED STATES PATENT OFFICE.

THOMAS R. CARSKADON, OF KEYSER, WEST VIRGINIA.

PORTABLE BUILDING.

SPECIFICATION forming part of Letters Patent No. 435,112, dated August 26, 1890.

Application filed January 14, 1889. Serial No. 296,359. (No model.)

To all whom it may concern:

Be it known that I, THOMAS R. CARSKADON, a citizen of the United States of America, residing at Keyser, in the county of Mineral and State of West Virginia, have invented certain new and useful Improvements in Portable Buildings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain improvements in the construction of frame or wooden houses; and it consists of the novel combination and arrangement of parts, as will appear from the following description and accompanying illustrations, in which—

Figure 1 is a perspective view of one of my houses complete. Fig. 2 is a front elevation of a house. Fig. 3 is a part side elevation and part sectional view thereof. Fig. 4 is a cross-sectional section of a detail part thereof. Fig. 5 is a sectional elevation thereof. Fig. 6 is a side elevation of one of the rafters. Fig. 7 is a detail vertical section of the hollow studding for reception of the sash weight and cord. Fig. 8 is a cross-section of the same, taken through the line x x on Fig. 7. Fig. 9 is a detail plan view of the mortised ridge-pole. Fig. 10 is a detail plan view of the connection between the rafters b and the strip c. Fig. 11 is a cross-sectional view of the tongue-and-groove connection of the clapboards.

In the embodiment of my invention I provide the framing A, which comprises the sills a a, the uprights a', and the upper horizontal frame or side and end pieces a^2 a^3. Upon the side pieces a^2 a^2 rest the rafters b of the roof B at their lower ends, the upper ends converging and resting upon the ridge strip or bar b'. These rafters are gained or mortised, as at b^3 b^3, near their lower ends, as also at their upper ends, to receive and fit them to the corner edges of the ridge strip or bar b', and to receive the lower ends of each a series of strips c is fastened upon the side pieces a^2 a^2. The gains or mortises b^2 at the upper ends of the rafters b, it will be seen, are made in their side edges, while the gains or mortises b^3 thereof near their lower ends are in one side edge of each rafter; also, in the ridge strip or bar b' are made mortises b^4, indenting the upper corner edges of said strip or bar, and into these mortises are received the upper portions of the rafters directly opposite the gains or mortises b^2, thus effecting a halving and halving connection between them at their points of contact, permitting the meeting of the upper converging ends of said rafters.

In the sides of the rafters b are longitudinal grooves or mortises b^5 to receive the ends of the sheathing, in practice sandwiched between said rafters as it is put in position to form the roof. It will be observed that the strips c are interspaced, as at c'', in order to receive between their ends the rafters, while, as before noted, one end of each of said strips is received into the side of the rafter.

C C is the clap or weather boarding, which, it will be seen, is in short pieces C^2 C^2, which at their ends are let into vertical gains or mortises in upright partition-like strips or studding C^3 C^3, distributed and secured by mortise and tenon and pegs or pins at regular intervals or spaces throughout the sides, as also in the ends of the structure. These weather or clap boarding pieces or boards C^2 are, it will be observed, reduced in the direction of their lengths at their upper edges, as at d, which edges are received into gains or mortises d' in their lower edges, said pieces or boards thus having a tongue-and-groove like connection with each other. The studding or partition C^3 at each side of the windows is hollow to provide for the reception of sash cords and weights used for the windows. Upper-story windows D, of smaller dimensions than the lower ones, may be provided, or windows of the same or approximate dimensions may be put in, if desired.

The floor A′ consists of planks tongued and grooved together in the usual way of laying floors in houses, the edges of the boards next to the studding being gained or notched to fit the same to the studding.

In the upper side and end pieces or timbers a^3 a^3 are series of vertical openings or apertures f, which terminate into enlargements f' opening through the lower side of the said pieces or timbers, and in the under side of said timbers are longitudinal mortises or channels f^2, which receive the upper edges of the top boards or pieces C^3 of the weather-boarding.

E E are bolts having nuts applied to their upper ends and inserted in the openings or apertures *f f* of the timbers or pieces C^3 and passed through nuts *g*, seated or let into the enlargements *f'* of the said apertures or openings *f*. These bolts, which are convex or rounded on their lower ends, bear at said ends in cups *h*, secured at their bottoms upon the upper convex surfaces of semi-elliptic springs *i*, bearing at their ends upon the upper edges of the top boards or pieces C^2. This arrangement, it will be seen, permits the expansion and contraction of the board under the action of the sun and weather to prevent the bulging or warping of the boards, which would consequently distort them (the boards) out of shape. The gable ends of the structure are also similarly boarded up as the sides and ends proper, as at G G.

Secured to the inner side of the studding at an elevated point are longitudinal edgewise-disposed pieces or supports *j*, upon the upper edges of which are supported planks H, which form the flooring of the upper story.

In the inner sides of opposite studding are vertical gains or mortises *m*, which are designed to receive the vertical edges or ends of boarding forming the partition-wall E' between and dividing the house into rooms.

From the foregoing it will be observed that all the various parts are put together, and the details of construction or erecting the house are carried out without the use of nails or like fastenings, also without requiring great care in the adjustment or fitting of the same, as well as rendering the house highly portable.

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

1. The portable house having the upper edge of its top clapboard fitting in a mortised or gained timber of the framing, in combination with the holding-bolts inserted in an opening in said timber and having a yielding or flexible bearing upon said clapboard, substantially as shown and described.

2. In a portable house, the combination, with the clapboarding and the timber or piece having a gain or mortise receiving the upper edge of said clapboarding, of the semi-elliptic spring having its ends resting upon said edge of the clapboarding and connected at its upper central part to a cup, and the bolt inserted into an opening or aperture of said timber and bearing in said cup at its convex or rounded lower end, substantially as shown and described.

3. The portable house having the roof timbers or rafters provided with gains or mortises in the under side near their upper ends facing mortises or gains in the ridge strip or bar, said rafters also having in one side near their lower ends mortises or gains which receive one end of interspaced bars or strips secured to the upper side pieces or bars on the framing and between which rest said rafters, substantially as shown and described.

4. The portable house comprising the framing, the clap or weather boarding having a spring-bearing and bolt-connection with the upper side and end pieces of said framing, the opposite studding having vertical mortises or gains for the partition-wall between the rooms, the ridge strip or bar having mortises or gains in its corner edges, the interspaced bars secured upon said framing, and the rafters having in their lower sides near the upper and lower ends mortises or gains and in one side mortises or gains, substantially as shown and described.

Signed this 14th day of January, 1888.

THOMAS R. CARSKADON.

Witnesses:
EDGAR H. DAVIS,
FANNIE L. TIMMONS.