(No Model.)

E. LEE.

PORTABLE HOUSE.

No. 290,991. Patented Dec. 25, 1883.

Fig. 1.

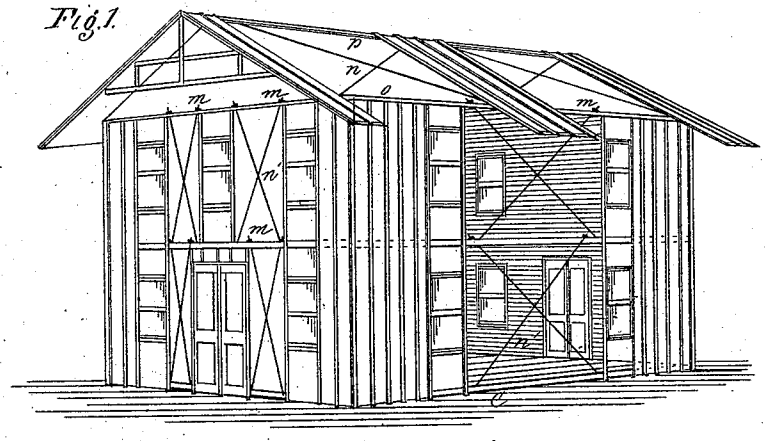


Fig. 3.

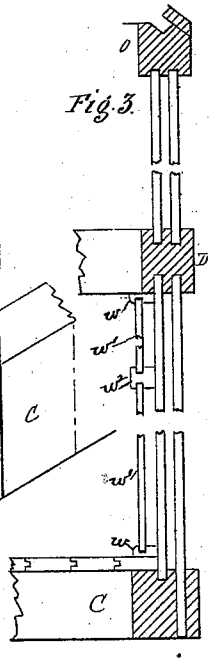


Fig. 4.

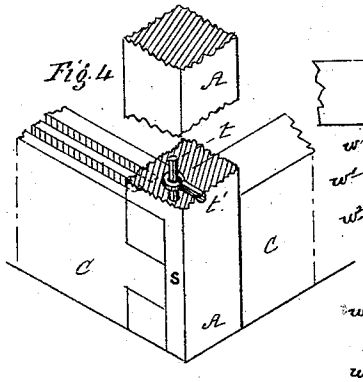


Fig. 5.

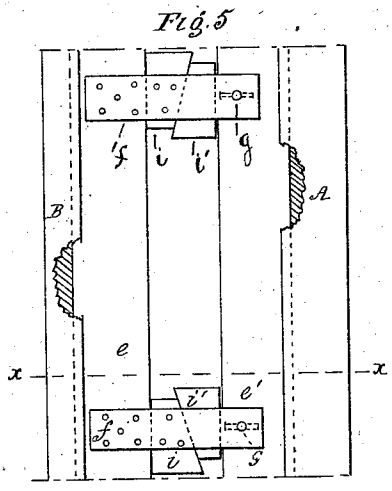


Fig. 6.

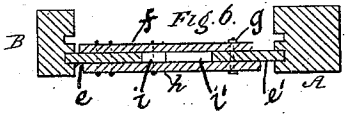


Fig. 7.

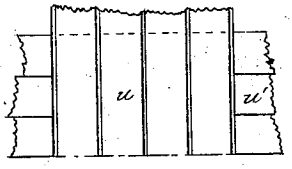


Fig. 8.

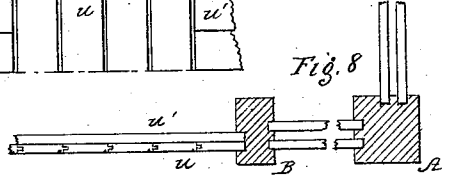


Fig. 2.

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UNITED STATES PATENT OFFICE.

EARL LEE, OF CORONA, NEW YORK.

PORTABLE HOUSE.

SPECIFICATION forming part of Letters Patent No. 290,991, dated December 25, 1883.

Application filed November 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, EARL LEE, a citizen of the United States, residing at Corona, in the county of Queens and State of New York, have invented certain new and useful Improvements in Portable Houses; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to improvements in portable houses, additional to those described in Letters Patent No. 231,593, granted to me August 24, 1880; and my present improvements consist in the construction and arrangement of parts, as will be hereinafter described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents a perspective view of a portable house constructed according to my invention, with portions broken away; Fig. 2, a horizontal section of a portion of the wall; Fig. 3, a vertical section of the same; Fig 4, a perspective view, showing the mode of connecting the corner-posts and the sills; Fig. 5, an elevation of a portion of the expanding-board; and Fig. 6, a horizontal section of the same on the line *x x;* Fig. 7, an elevation of part of the improved panel, and Fig. 8 a horizontal section of the same.

Similar letters of reference indicate the same parts in all the several figures.

The dimensions or weight of the posts and studs will, of course, depend on the dimensions of the building, but the details represented in the drawings are drawn to a scale of two inches to the foot, supposing the building to be of about the character and style of that shown in Fig. 1. The outer siding, *b*, is let into grooves *a*, formed in the corner-posts A, studs B, and sills C, as in the said patent above mentioned, and the inner siding, *b'*, is arranged in a similar manner, being let into the grooves *a'*, so that the outer siding, *b*, and inner siding, *b'*, shall be parallel. Cleats *c* are interposed at intervals, running across the grain of the siding, to prevent warping, which may be nailed to the outer siding, *b*, or to both that and the inner siding, *b'*.

In putting up the sides, after the corner-posts have been placed in position, the siding and the studs B are put in alternately from one corner to the other, and it has been found difficult to properly fit the last piece of siding. By means of this device this difficulty is obviated.

e e' are two detached pieces, which form the siding.

On the inner side of the piece *e* cleats *f f* are nailed at suitable intervals, and to each of these cleats a wedge, *i*, (of board about the same thickness as the pieces *e e'*,) is nailed. The other ends of the cleats *f* extend over the piece *e'* about two-thirds of its width, and a bolt or pin, *g*, is passed through the same at a short distance from said ends, and also through a cap-piece, *h*, on the outer side of the wedges *i i'*, being firmly secured in said cap-piece and said cleats. The piece *e'* is slotted, as shown, to slide back and forth on the pins *g*, and a loose wedge, *i'*, is inserted between its inner edge and the wedge *i*, and between the cleat and the cap-piece *h*. In placing this board in position the wedges are tightened up after its edges are inserted into the grooves in the post and stud, and it is thus held firmly in place. I dispense with the turn-buckles heretofore employed, and use nuts and screws *m* in lieu thereof. The positions of the brace-rods are shown in Fig. 1. Two or more rods, *n*, crossing each other, and secured at their ends to the plate *o* and ridge *p*, and extending close under the rafters, serve to brace the roof, and similar rods, *n'*, crossing each other and secured at their ends to the plate *o* and sills C, serve to brace the ends and sides, and in connection with these braces *n'*, I use the following devices for securing the corner-posts to the sills, viz: At the lower end of the post A, I form a tongue, *s*, to fit over a mortise in the ends of the sills, and insert an upwardly-extending metal pin, *t*, through the latter, which fits into a ring or staple, *t'*, secured in the lower end of the post. By these means the posts are fitted and held in proper position. The corner-posts for each succeeding story are similarly fitted to the corners of the girts D, and are braced in the same manner as just described in respect to the sides and ends. I form the panel to be fitted under the window-sill of tongued and grooved narrow strips, the

outer strips, w, running vertically, and the inner strips, w', running horizontally, (or vice versa,) and the two sets being nailed together and fitted into grooves in the posts or studs, in the same manner as the siding, as previously described. Felt or sheathing-paper may be interposed, if desired. A grooved strip, w, is nailed to the floor along the line of the inner surfaces of the studs, and a similar strip at the ceiling, and between these strips the lining-pieces w' are slid, and may be provided with tongue-and-groove joints, if desired. Preferably these lining-pieces are put up in two or more lengths, grooved strips or rails w^2 being placed horizontally along the walls, into which the pieces are fitted. By means of these several improvements the house is improved both in comfort and appearance, and is also rendered stronger and more durable without in any degree interfering with its being put up and taken down with facility.

I may state, in conclusion, that the roofing is constructed in the same manner as the siding, and is thereby made water-tight, as the inner boards catch any rain that may find its way through the joints of the outer boards, and conduct it to the outside; also, that the panel herein described may be used in place of the siding throughout the building, if desired.

What I claim as my invention is—

1. The expanding-board herein described, consisting of the pieces e e', cleats f, wedges i i', and cap-pieces h, said pieces e' being slotted, and the whole arranged as shown and described, for the purpose set forth.

2. In a portable house, the inner lining, w', fitted between the strips w and w^2, in combination with the posts A and studs B, as and for the purpose set forth.

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