(No Model.)

J. REILLY.

PORTABLE HOUSE.

No. 267,109. Patented Nov. 7, 1882.

Fig. 1.

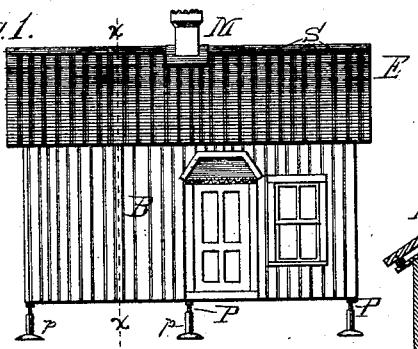


Fig. 2.

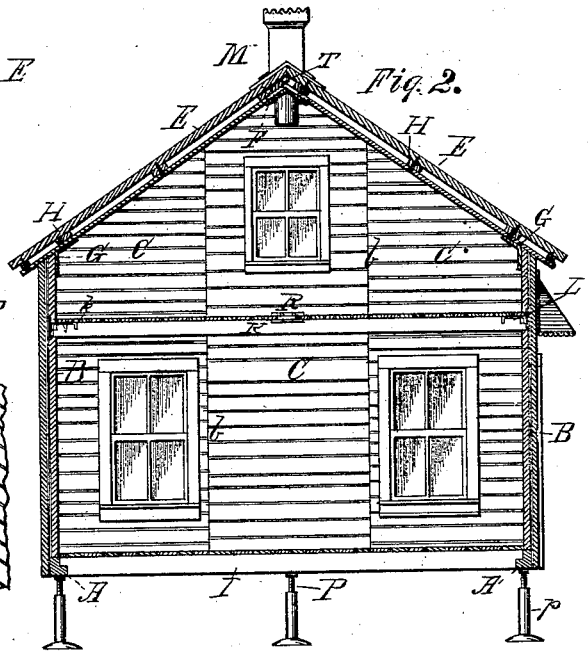


Fig. 3.

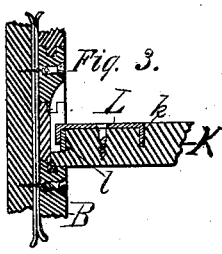


Fig. 4.

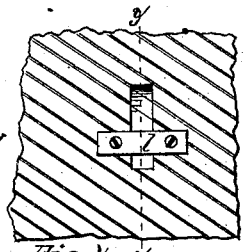


Fig. 5.

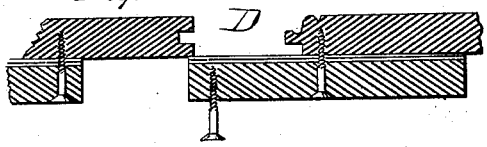


Fig. 6.

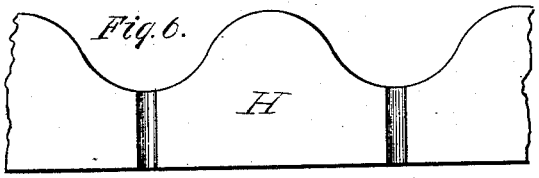


Fig. 8.

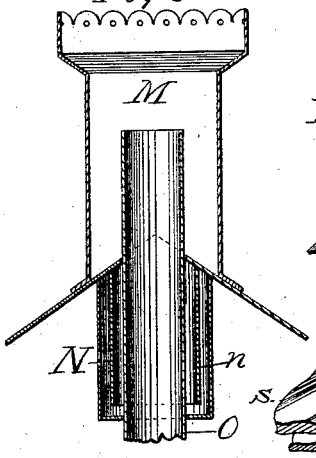


Fig. 9.

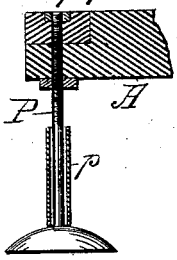


Fig. 7.

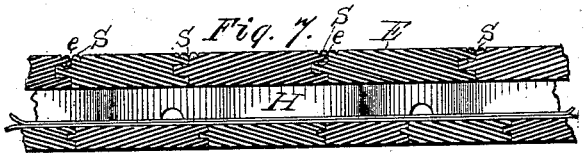


Fig. 11.

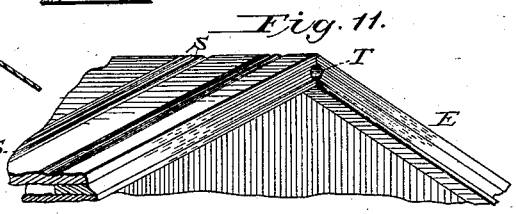
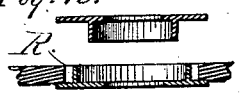


Fig. 10.



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UNITED STATES PATENT OFFICE.

JAMES REILLY, OF SHERBROOKE, QUEBEC, CANADA.

PORTABLE HOUSE.

SPECIFICATION forming part of Letters Patent No. 267,109, dated November 7, 1882.

Application filed April 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES REILLY, a citizen of the Dominion of Canada, residing at Sherbrooke, in the county of Sherbrooke and Province of Quebec, have invented certain new and useful Improvements in Portable Houses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in portable houses, the purpose of which is to enable houses to be constructed in localities where material is to be readily and cheaply obtained and then taken apart in sections, so as to be easily transported and expeditiously put together.

To these ends my invention consists primarily of a frameless house built in sections easily detached from one another and of portable dimensions for transportation.

My invention further consists of improvements in the details of construction, as herein clearly described, and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a front elevation of my improved portable house. Fig. 2 is a transverse vertical section on line *x x* of Fig. 1. Figs. 3 and 4 are details showing the manner of locking the floor-beams to the sides of the building. Fig. 5 is a sectional detail, showing the compound joint in the double walls for joining two sections together. Fig. 6 is a detail inverted plan of part of one of the roof-cleats, showing the upper wave-line surface and the grooves meeting the lowest points of said wave-line. Fig. 7 is a sectional detail, showing the arrangement of a cleat in the double roof, with its grooves or openings. Fig. 8 is a sectional elevation of the metallic chimney. Fig. 9 is an elevation, partly in section, of one of my improved anchor-posts; and Fig. 10 is an enlarged detail of the safe, as described; Fig. 11, a perspective view of the end of the roof, showing opening T, which opens into the air-space of the roof. A similar opening is formed in the opposite end of the house.

Corresponding parts in the several figures are denoted by similar letters of reference.

In the annexed drawings, A marks the foundation-sills, detachably joined together to form preferably a rectangular frame. Secured with screws to these sills, and partly resting thereon, are the sides B and ends C of the building, which in turn are attached to one another in the same manner. The sides and ends are of two thicknesses, known generally as "double walls," having one or more intermediate layers of paper, the whole firmly fastened together with screws from the inside. As shown in the drawings, the inner wall of a side or end rests on the sills while the outer wall extends to the bottom of the sill and is secured thereto with screws. Further, the sides and ends are made up of sections *b*, of suitable size, and joined by means of the compound joint D, wherein one of the contiguous surfaces of the outer wall overlaps the joint in the inner wall, and the two ends of said outer wall are fitted together by means of the "tongue-and-groove joint," as clearly shown in Fig. 5 of the drawings. The boards of the inner wall of the sides B are laid diagonally across those of the outer wall, while the boards of the inner wall of the ends C are disposed at right angles to those composing the outer wall thereof. This is done to break joints, so as to more thoroughly prevent the entrance of cold or wind through said walls, and, further, to brace and strengthen the parts.

E marks the roof, resting upon the sides and ends of the building, and secured thereto in the manner to be presently described. This roof is of two thicknesses, provided with an intermediate air-space, and having a layer of felt paper and another of tarred or water-proof paper, respectively, next the inner boards of the roof. The roof is divided longitudinally along the crown or ridge into halves, which in turn are subdivided transversely into sections fitting together by means of the compound joint described hereinbefore. The two sections or halves of the roof are held together with the angle-irons F, fastened to the roof with screws, and the roof, as a whole, is held to the sides of the building by means of the angle-irons G, as clearly shown in Fig. 2. The "tongue" of the tongue-and-groove joint is grooved at the point where the sections meet,

as shown at *e*, Fig. 7, the purpose of which is to prevent leakage through the roof at said joint. Leakage is also prevented at the ridge where the roof is joined by means of a metal "saddle-board." Should there be a leakage through the outer thickness of the roof, the water will drop onto the tarred paper mentioned heretofore and flow to the eaves. To permit of this the cleats H are cut into wave-lines on their higher side, or that side nearest the ridge, and are provided with grooves on the bottom next the tarred paper, and meeting the lowest points of the wave-lines, so that, as stated, the water will freely flow to the eaves, as shown in Figs. 6 and 7.

The floor-joists I rest in notches made in the sills and support the bottom floor, constructed in sections and the boards of each section held together with cleats. When the building is put together for occupancy the joists may be firmly held to the sills with staples, if desired.

The upper floor-beams, K, rest each in a mortise made in the sides B, and are held therein by a lock, L, one end of which engages with the plate *l*, secured to the side B, and extending across the mortise, and the other end inserted in the notch *k*, made in the floor-beam. The lock may be held in place on the floor-beam with a screw. By this construction the parts are securely held together, the sides prevented from bulging outward, and the whole firmly braced. The upper floor may be constructed in sections.

M represents the metal chimney, ornamented, if desired, having preferably a squared portion extending upward from the ridge and secured thereto by means of the flange shown.

N marks the depending reduced portion or pipe, its lower end partly closed and having an inclosed pipe, *n*, providing an intermediate air-space. The smoke-pipe O enters the bottom opening of the pipe N, and, extending through said pipe, projects some distance into the squared portion, as clearly shown in Fig. 8. Thus, by this arrangement of parts, all danger of fire from heated pipes is obviated.

R marks the "safe," secured to the upper and under surfaces of the upper floor, so as to protect said floor from the heat of the smoke-pipe, the said safe consisting of two parts fitting one within the other, as indicated in Fig. 10 of the drawings.

The building is anchored firmly to the ground by means of the anchor-posts P, composed of the heavy extended base, and the screw-rod passing through the sills and held thereto by the nuts, as shown in Fig. 9. The screw-rods permit the raising or lowering of the building, as may be desired, to overcome any inequalities in the ground. A short piece of pipe, *p*, is placed on each of the rods where the anchor-posts are planted in the ground and the earth tamped thereon, whereby the building will be firmly anchored. The object in encircling the rods a part of their length with loose pipe is to cause the upward or heaving action of the ground through the agency of frost to be exerted on said pipes, and not upon the rods themselves.

S marks the double bead made in the boards of the roof at the joints, the purpose of which is to prevent the flow of water from the surface of the roof into the joints, to more thoroughly prevent leakage.

Suitable openings are cut into the sides and ends of the building and window-sash arranged therein, a door or doors are provided, and an awning or porch may be arranged over the door.

While I have described and shown the house as provided with double walls and lined with felt, tarred, or other paper, to completely provide against cold, and while it is evident that the house constructed as described is especially adapted for cold climates, I do not wish to be understood as limiting myself to a building so provided; but, on the contrary, the gist of my invention will be preserved in the construction of a building devoid of these particulars. Again, the construction of the various parts can be considerably modified, other fastening devices than screws may be used, and the building itself be changed in many particulars without departing from the spirit of my invention.

It will be noticed that the double walls are secured together from the inside with screws, whereby a smooth unbroken outer surface is obtained, and the otherwise injurious action of frost on the wood, through the conductivity of the screws, if fastened from the outside, is prevented.

The outer of the floor-beams K may be fastened to the ends of the building with screws to give additional strength thereto.

If desired, openings T may be made in the end of the roof, immediately under the ridge, so as to permit in warm weather a free circulation of air in the air-space of the double roof.

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

1. An improved portable frameless house or dwelling, having its sides, ends, and roof detachably joined to one another, and said sides, ends, and roof composed each of sections detachably joined together and constructed of two thicknesses of boards, substantially as shown and described.

2. In an improved portable house, the sections *b*, composed of two thicknesses of boards, said sections detachably held together by means of the compound joint D, substantially as set forth.

3. An improved house or building, having its sides and ends made of two walls or thicknesses and divided into sections, said sections detachably joined together by means of the compound joint, as described, and for the purpose set forth.

4. In a portable house or building, the roof formed of sections detachably joined together, said sections composed of two thicknesses of boards secured to the intermediate transverse cleats, H, the latter provided with the openings,

as shown and described, and for the purpose set forth.

5. An improved house or building, having its roof divided into halves, said halves detachably held together with the angle-irons F, the halves constructed of sections joined together, and the whole detachably secured to the sides of the building by means of the angle-irons G, as set forth.

6. An improved house or building, having a double roof provided with an intermediate air-space, and divided into halves detachably held together with the angle-irons F, said halves constructed of sections joined together, and the whole detachably secured to the sides of the building by means of the angle-irons G, substantially as set forth.

7. The sectional roof provided at its joints with the double bead S, and the tongue provided with a groove, *e*, as shown, and for the purpose set forth.

8. The double roof having the intermediate air-space and layer or layers of water-proof material, and the cleats having each a wave-line surface and provided with grooves meeting the lowest points of said wave-line surface, as shown, and for the purpose set forth.

9. In a portable house, a gable-roof provided with the openings T and divided along its ridge into halves, said halves connected together and formed of sections detachably joined together and composed of two layers of boards secured to the intermediate transverse cleats, H, provided with the openings, as shown and described, and for the purpose set forth.

10. The combination, with the sides B, having the mortises and plates *l*, arranged as described, of the notched floor-beams K *k*, provided with locks L, as shown and described, and for the purpose set forth.

11. The herein-described anchor-post, composed of the extended base and the screw-rod having a nut or nuts, and provided with a loose pipe encircling said screw-rod a part of its length, as shown and described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES REILLY.

Witnesses:
GUSTAVUS LUCKE,
L. R. HALL.