

J. Montgomery

Portable House.

N^o 86,572.

Patented Feb. 2, 1869.

Fig. 2.

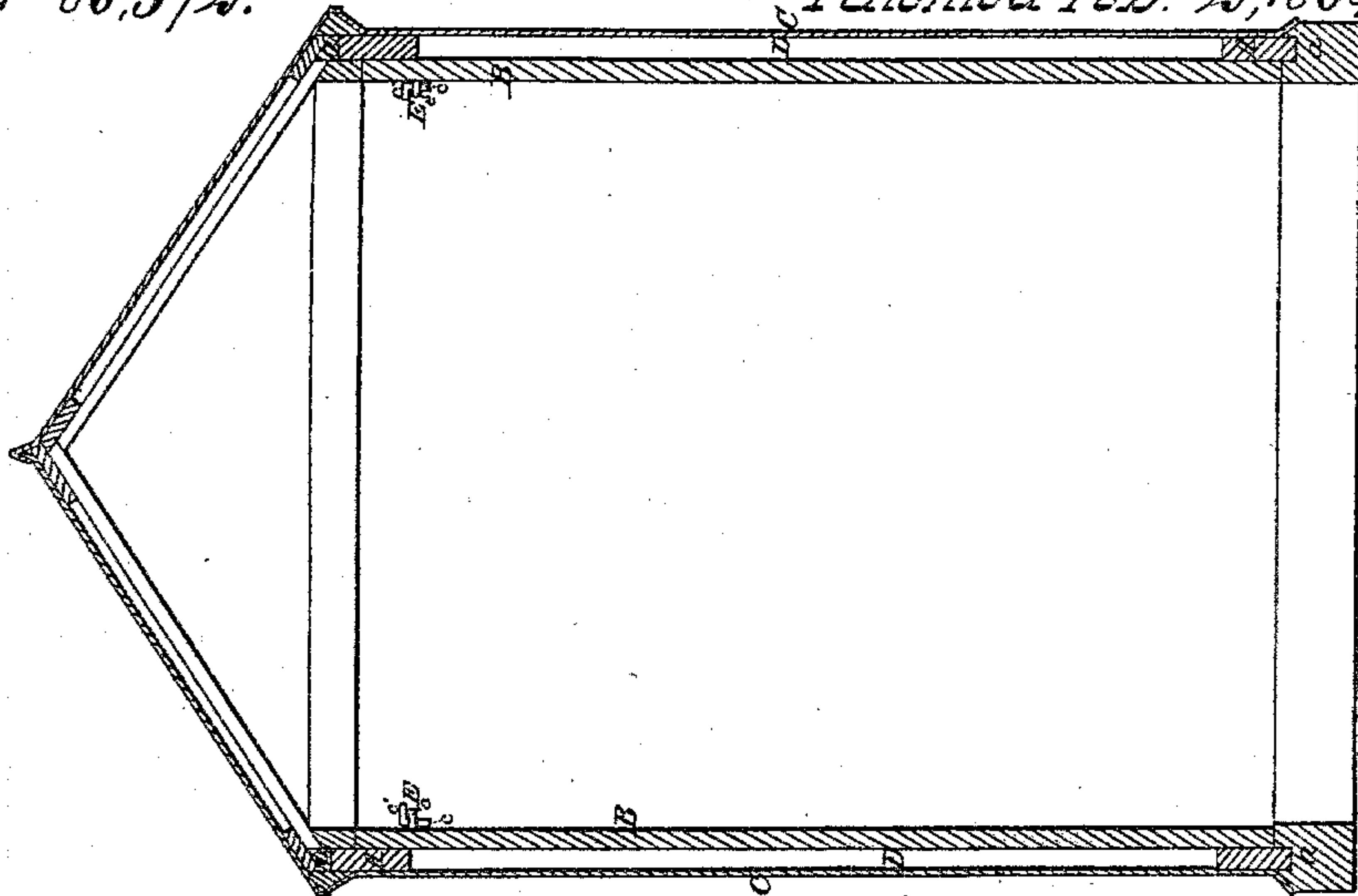
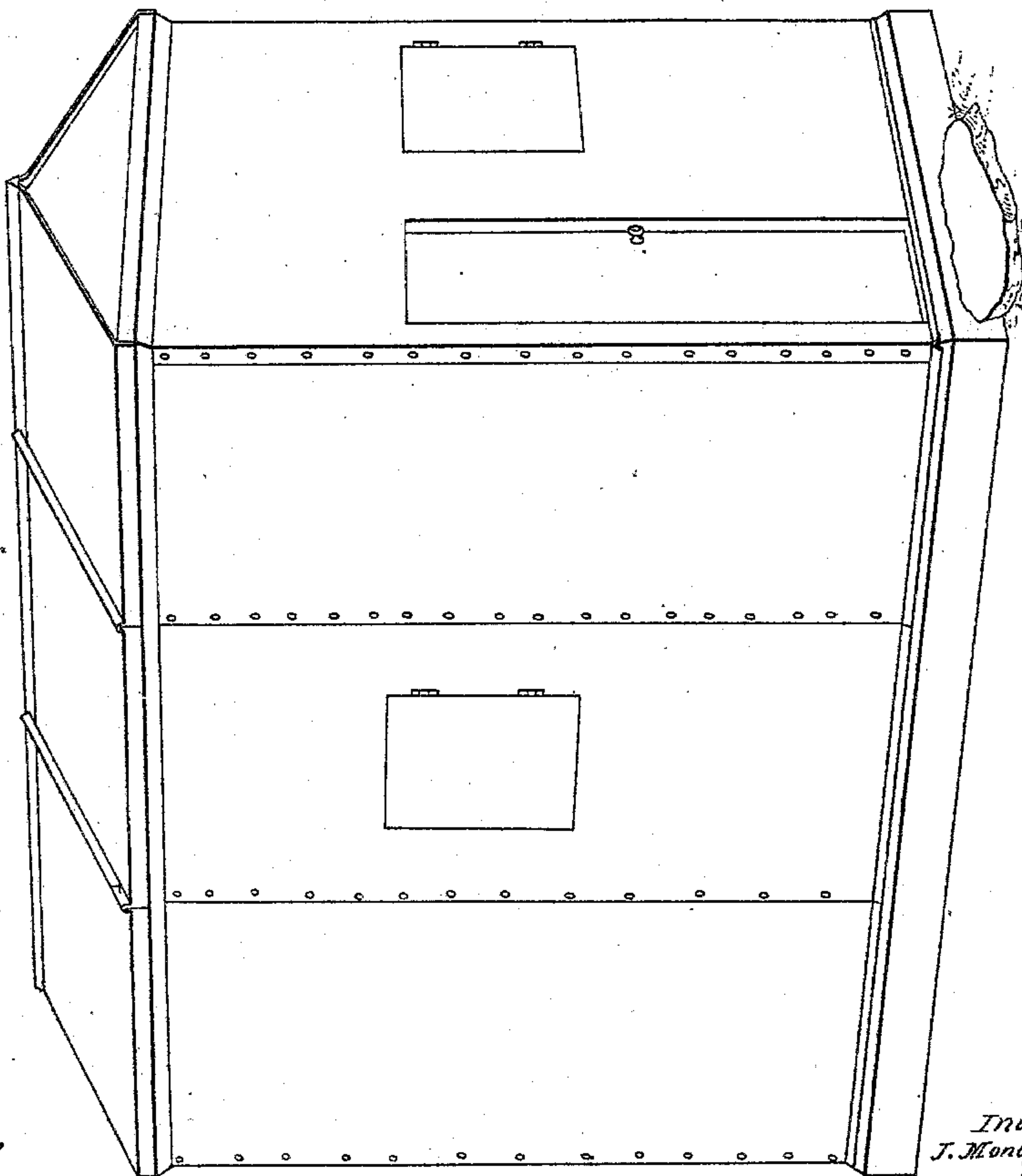


Fig. 1.



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Fig. 5

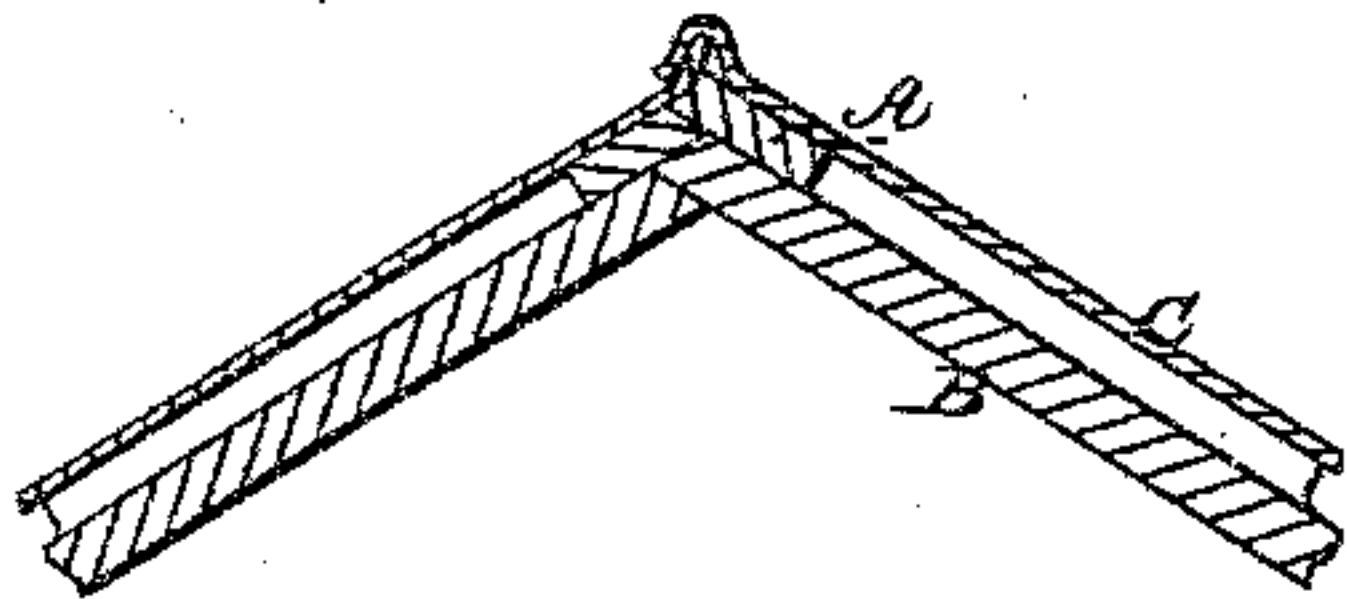


Fig. 4.

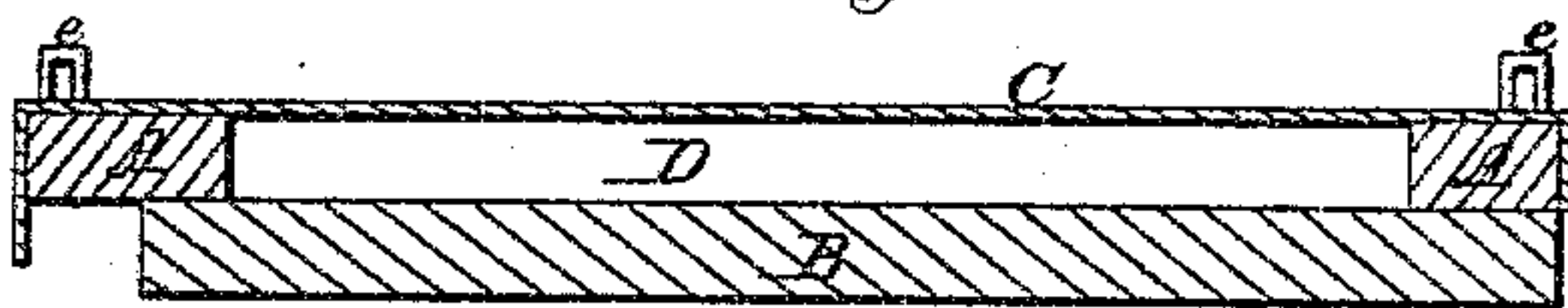
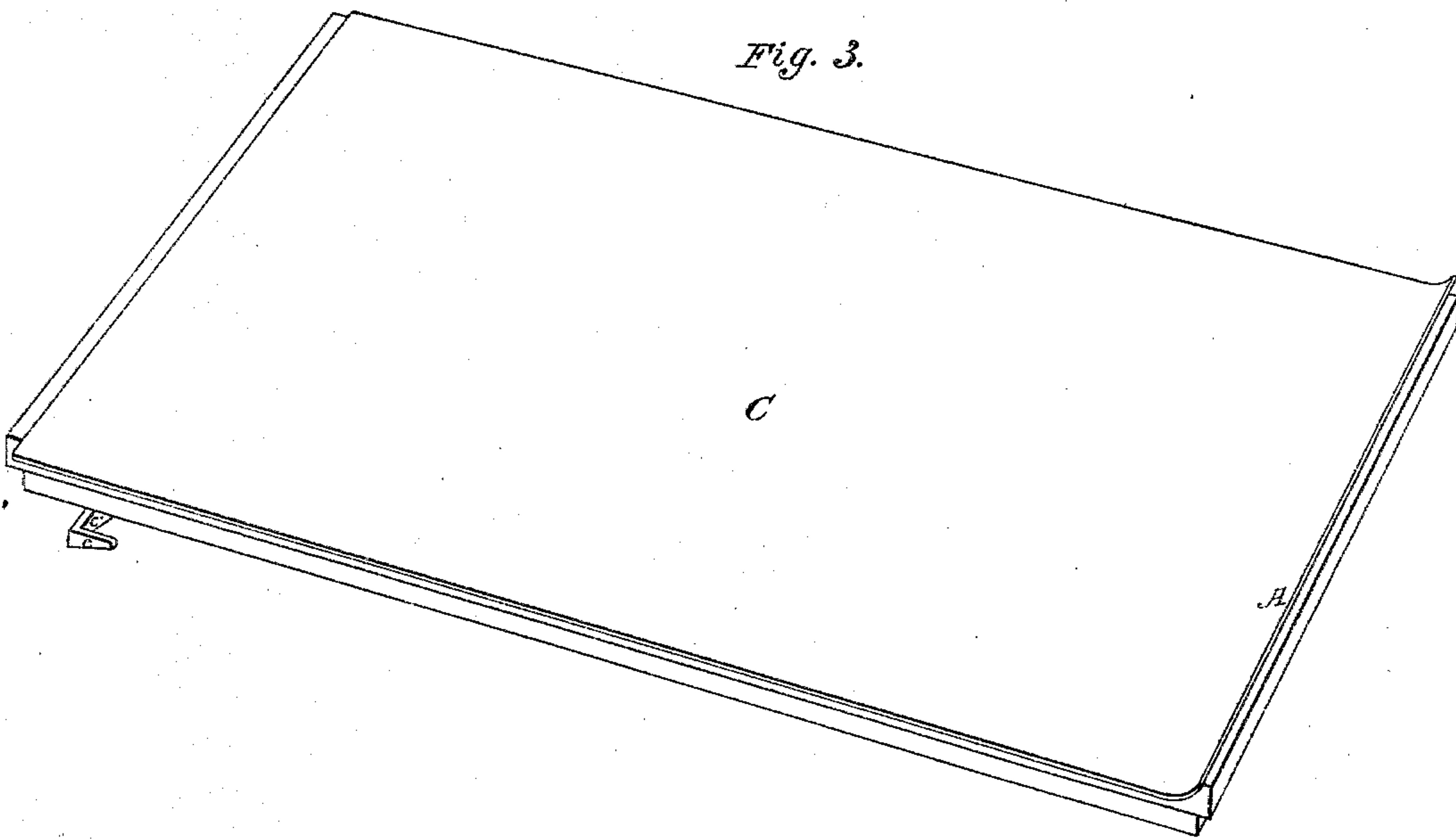


Fig. 3.



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JAMES MONTGOMERY, OF NEW YORK, N. Y.

Letters Patent No. 86,572, dated February 2, 1869.

IMPROVED PORTABLE SECTIONAL HOUSE.

The Schedule referred to in these Letters Patent and making part of the same.

To all to whom these presents shall come:

Be it known that I, JAMES MONTGOMERY, of the city, county, and State of New York, have invented certain new and useful Improvements in the Construction of Portable Sectional Houses, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of this specification, and in which—

Figure 1 is a view, in perspective, of a house constructed on my improved plan;

Figure 2 is a transverse section of said house;

Figure 3 is a view, in perspective, of one of the portable panels of which the walls are made, detached from the house;

Figure 4 is a transverse section through said panel; and

Figure 5 is a transverse section of a fragment of the ridge of the roof, showing the manner in which the opposite sides are locked together.

My invention and improvement consist in making the walls and roof of portable houses, of hollow sections or panels, made proof against ordinary external fires, and so adapted and connected that a comfortable house can be set up or taken down with a degree of facility almost equal to that with which a tent can be pitched and struck.

The hollowness of the section renders them bad conductors of heat, so that a house constructed of them will not have its interior temperature rapidly affected by changes of the external temperature, in that respect resembling the more costly but unportable structures built of brick and stone.

In constructing a house upon my improved plan, sill and plate-timbers are first framed together, of a size corresponding to that of the walls.

The upper sides of the plates have grooves formed near their outer edges, to receive tongues on the lower and upper edges of the panels, respectively.

The outer under corners of the plate, and the outer upper corners of the sills are chamfered off, as is clearly shown in the drawing, fig. 2, in which figure may likewise be seen the two grooves, which receive and hold the feet of the roof-panels.

Each panel or section of the sides and roof is composed of an open frame, A, covered on the inner side by boards B, and on the outer side by sheet-metal C, leaving a hollow space, D, in the middle.

The end-pieces of the frame project beyond the lining a sufficient distance to form a tongue to enter the grooves *a*, in the sills and plates, respectively. These tongues keep the panels firmly in place.

The sheet-metal covering projects beyond the sides of the frame on one side, and at the bottom and top.

The projections at the top and bottom are bent to conform to the chamfered surfaces of the sills and

plates. These form weather-strips, and should be nailed to the plate, to bind the sills and plates firmly to the panels and to each other, besides rendering the sill and plate proof against external fire.

The overlapping edge of the sheet-metal, at the side of the panel, projects over the edge of the adjacent panel, to which it is secured by tacks.

At the corners of the building this projecting edge is bent round, and laps over the edge of the corner-panel of the adjacent end or side of the building, thus connecting these corner-panels firmly with each other.

The overlapping edges of the sheet-metal may be bent up, as represented in fig. 5, so that when two adjacent edges are locked together, they shall form a water-tight joint, and shall connect the adjacent panels firmly together.

Where windows and doors are required, they may be placed in apertures formed in the central portions of the panels, as shown in fig. 1.

On the inside of the building the panels are connected by clamp-irons, E, of a peculiar shape.

These each consist of two wedges, connected by a cross-bar, *c*, which is made in one piece with the wedges.

The wedges are inserted in a pair of staples, *e*, secured to the adjacent sides of two adjoining panels.

The cross-bar connecting the wedges projects on one side, so as to form a convenient ledge for the upper floor to rest on, but this floor may be otherwise supported, as may be deemed most convenient and suitable.

The lower floor may be made in any of the usual modes, or it may be formed of hollow sections, constructed and connected in the same manner as those of which the walls and roof are made.

A house thus constructed is proof against any external fire to which houses are ordinarily liable, which, in view of the many conflagrations which have resulted from the exclusive use of inflammable materials in the construction of portable houses, is a very important improvement, especially when these fire-proof qualities are combined with a wooden surface for the interior of the structure, which is as little liable to condense vapor formed within the building as are the walls of ordinary wooden buildings.

What I claim as my invention, and desire to secure by Letters Patent, is—

Constructing the roofs and walls of portable sectional houses of hollow portable panels, easily connected and disconnected, substantially as herein set forth.

In testimony whereof, I have hereunto subscribed my name.

JAMES MONTGOMERY.

Witnesses:

JOHN L. SMITH,

GEO. C. THOMAS.