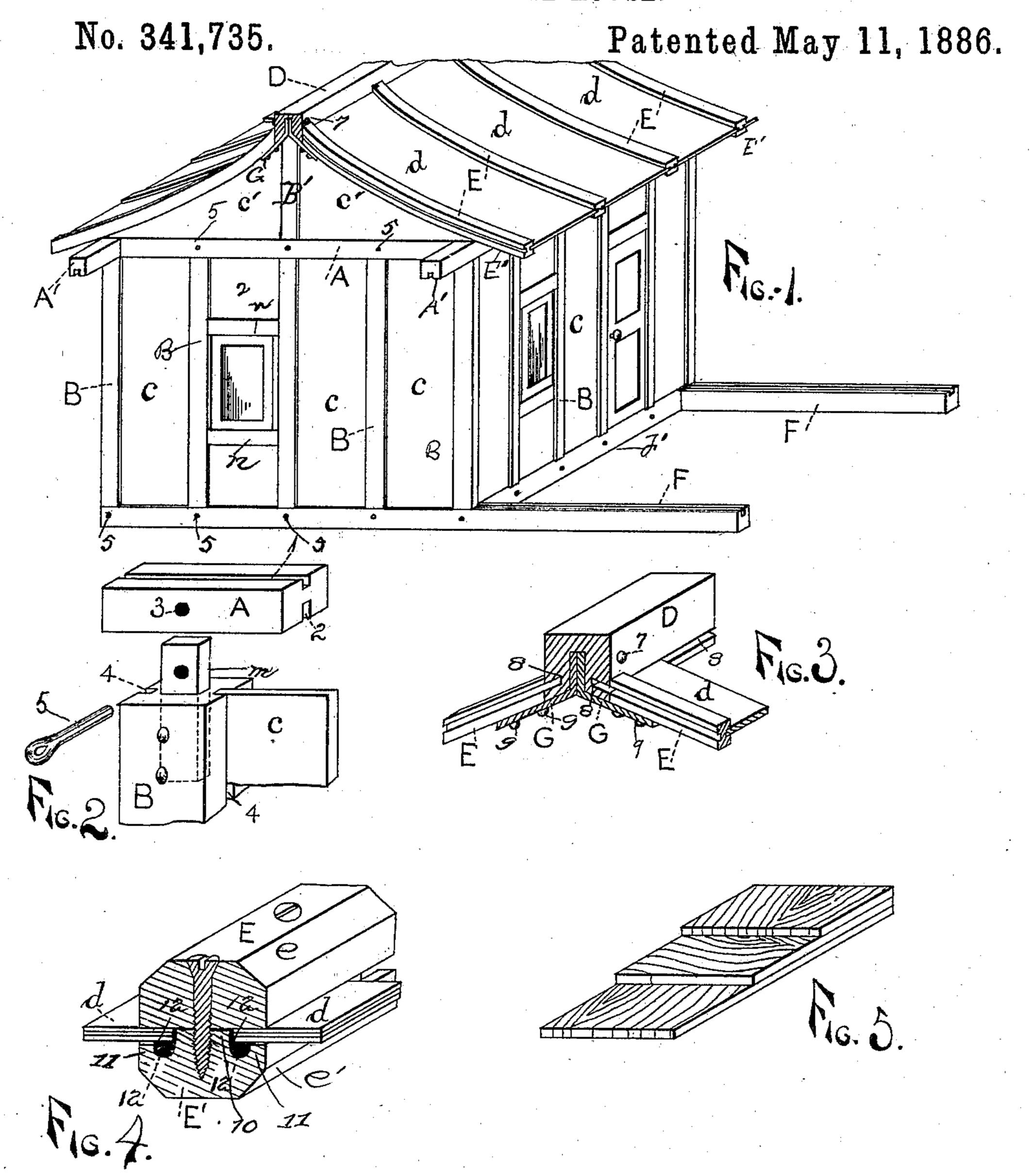
(No Model.)

E. DENSMORE.

PORTABLE HOUSE.



WITNESSES:

Edward Taggant Arthur C. Denison. Edwin Densmore INVENTOR

United States Patent Office.

EDWIN DENSMORE, OF GRAND RAPIDS, MICHIGAN.

PORTABLE HOUSE.

SFECIFICATION forming part of Letters Patent No. 341,735, dated May 11, 1886.

Application filed June 23, 1884. Serial No. 135,791. (No model.)

To all whom it may concern:

Be it known that I, EDWIN DENSMORE, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Portable House, of which the following is a specification.

My invention is an improved portable house the walls of which are constructed, mainly, of

10 veneers.

The invention consists of details of construction, the object of which is to provide for readily putting up and taking down the house; and in connection with this facility in taking in pieces and putting together I have sought to secure strength, stability, and the exclusion of water.

In the accompanying drawings, Figure 1 is a perspective view of the house, and Figs. 2,

20 3, 4, and 5 are like views of details.

In Fig. 1 F represents the cross-sills; F', the lengthwise sills. These are plain scantling, except that they are grooved on the upper surface to receive the panels, studding, and the 25 corner-posts. The cross-sills may be connected to the lengthwise sills in any suitable manner, as, for example, by the means shown hereinafter for connecting the rafters to the ridge-pole. In the drawings, the sills F F' 30 are shown extended to the front to support a veranda-roof. (Not shown) The plates are shown at A A', the former being the cross-plates and the latter the longitudinal plates. These are plain scantling grooved 35 on their under surfaces, and on upper also, and are connected at the corners in any suitable manner. The panels are represented at c, being plain veneered boards or boards formed of veneers with the grains run-40 ning in opposite directions. The studdings are shown at B. The corner-posts have tenons m, preferably set into the posts, as shown in Fig. 2. The tenons have holes for the admission of metal pins 5. The studdings have 15 grooves 4 4 on opposite sides to receive the edges of the panels. The posts at the corners. are the same as the studdings, except that the grooves 44, instead of being on opposite sides, are on contiguous sides. It will be understood 50 from this construction that in putting up the house the sills are to be laid first and prop-

erly connected; then a corner-post is set up

with its tenon in the groove of the sill, fastened by its pin 5, and the plate corresponding to the sill is placed upon the post with the 55 upper tenon in the end groove of the plate, and first panel, c, is slipped into the grooves in the plate and sill until it enters the groove in the side of the post. Then the next stud, B, is slipped in in the same way until it matches 60 with the panel, when it is pinned by pins 5. Then another panel, or the parts of a panel and window, are added in the same way. The window is shown in panel No. 2. The sash fits in the grooves of the posts and has grooved 65 frames n, one above and the other below, both fitting into the grooves in the studding, and being grooved to receive the sash and the panel-sections above and below. The panels and studding are added in this way until the 70 other side of the house is reached, when another corner-post is set up and pinned in place, when the addition of panels and studding is continued in the same way. The doors are of course fitted in rabbets instead of grooves, and 75 are hinged to one of the studs. This completes the house up to and including the plates. On top of the plate is set at each end a stud, B', which serves as a king-post to sustain the ridge-pole D. On this ridge-pole is supported 80 the rafters E. They are connected to the ridgepole by angle-irons G, which are held in the ridge-pole by pins 7 and to the rafters by bolts or screws 9. The rafters have lateral grooves for receiving the roof-panels d. The 85 upper ends of these roof-panels enter grooves 8 in the sides of the ridge-pole. The lower edge of the roof thus formed rests on the side plate. Before the end rafters are put in place the end panels, c', are inserted. Their edges 90 rest in grooves in the under side of the rafters, at the ends, if desired. The lower edge of the roof may be held down in any suitable manner. The rafters are of special construction, as shown in Fig. 4. The upper part, e, is a 95 plain piece of board or scantling, preferably beveled on its upper edges. The lower piece, e', is rabbeted on its sides, leaving a central higher part, 10, and a lower edge, 11, in which are longitudinal grooves 12. When the upper 100 part is screwed to the lower, as shown in Fig. 4, this construction leaves two lateral recesses adapted to receive the side edges of the roofpanels d, and these edges being over the

grooves 12 in the bottom of the rabbet allow any water entering the recesses to run down and escape. As the edges of the roof-panels are adapted to be readily put into or removed 5 from the recesses, the water is liable to enter.

Fig. 5 represents a section of the panels, showing the grain in the outer and middle

layers.

I am aware that portable houses with grooved 10 sills and plates with tenon and mortise corner-posts have been heretofore known, and that grooved recesses in the rafters combined with metal clamps have been heretoforeshown, 15 heretofore stated.

I claim as my invention—

1. In a portable house, and in combination, the sills F F', grooved on their upper surfaces, the plates A', grooved on their under surfaces, 20 the posts and scantlings having tenons adapted to fit the grooves in the sills and plates and

grooved to receive the panels, the panels adapted to the grooves in the posts, studding, plates, and sills, and pins for holding the parts together, all substantially as described.

2. In a portable house, and in combination, the sills F F', the plates A, grooved on their upper and under surfaces, the plates A', grooved on their under surfaces, the posts, studding, and panels fitted to each other and 30 to the grooves in plates and sills, and the panels c c', king-post B', and the roof supported thereon, all substantially as described.

3. In combination with the grooved rafters and I limit my claims to the precise details | E, panels d, and ridge pole D, and the angle-35 irons G, attached to the roof, all substantially

as described.

EDWIN DENSMORE.

Witnesses: ARTHUR C. DENISON,

EDWARD TAGGART.