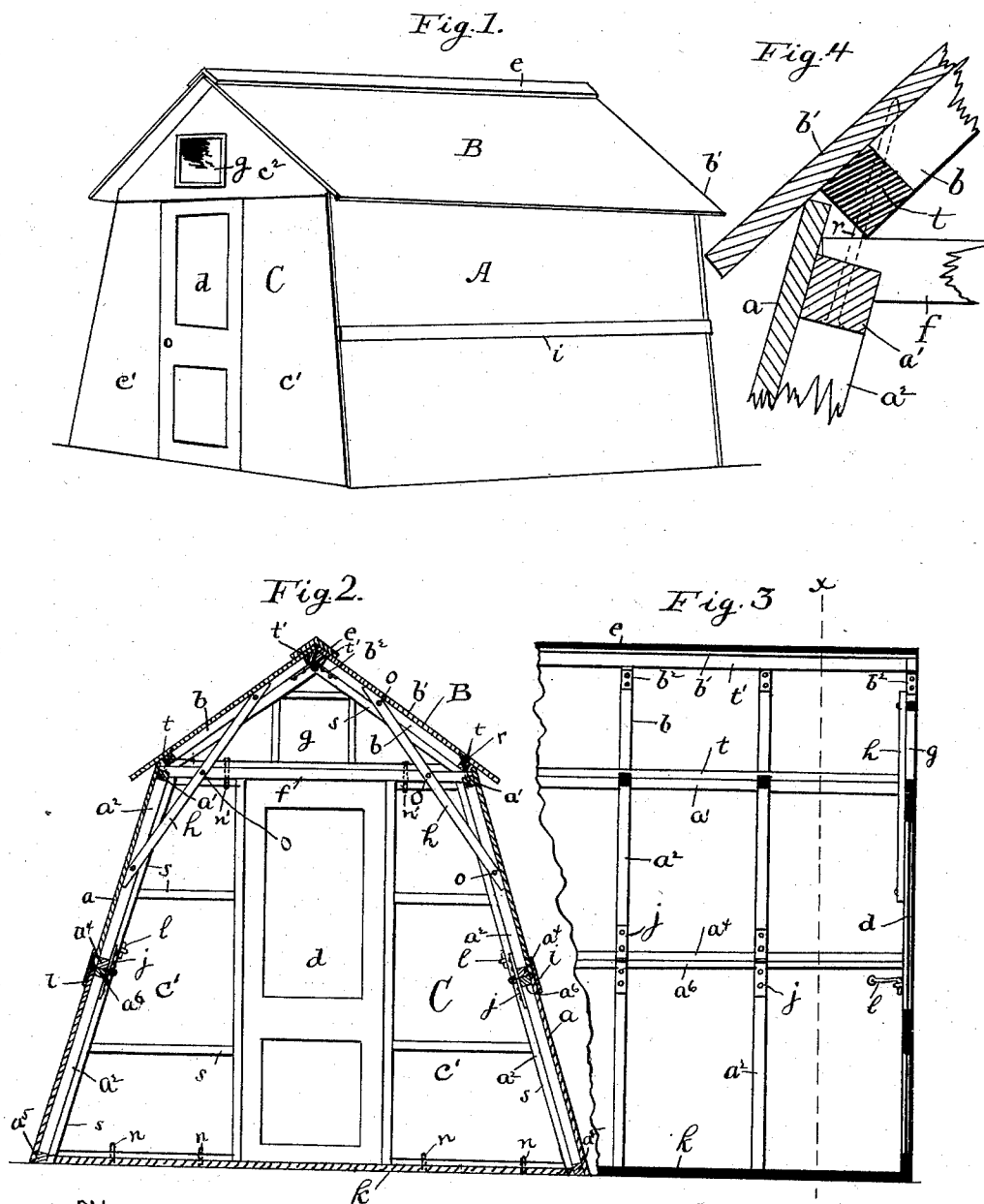


(No Model.)

O. P. HOWE.
PORTABLE HOUSE.

No. 477,757.

Patented June 28, 1892.



Witnesses:

D. A. Frohock,
B. B. Howe-

Orrin P. Howe x

Inventor:

UNITED STATES PATENT OFFICE.

ORRIN P. HOWE, OF AUGUSTA, MAINE.

PORTABLE HOUSE.

SPECIFICATION forming part of Letters Patent No. 477,757, dated June 28, 1892.

Application filed November 30, 1891. Serial No. 413,484. (No model.)

To all whom it may concern:

Be it known that I, ORRIN P. HOWE, a citizen of the United States, residing at Augusta, in the county of Kennebec and State of Maine, 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.

My invention relates to a portable structure to be used for a house or tent for camping, gunning, fishing, &c. In such structures it is necessary and desirable to so construct them that they may be readily taken down and put up, and so that they may have the greatest possible strength and stiffness and the greatest possible capacity in proportion to the weight. It is to these ends that my invention is directed, the important features of which will be hereinafter set forth and claimed.

In the accompanying drawings I have illustrated a portable house built according to my invention.

In the drawings, Figure 1 is a perspective view of the house as put together and set up. Fig. 2 is a section on *x x* of Fig. 3, which is a central longitudinal section. Fig. 4 is a detail showing the manner of joining the sides and roof.

The sides *A* are each constructed in two parts hinged together by hinges *j*, making a horizontal joint which is covered by the weather-strip *i*. The sides are made of the studs *a*², covered with thin sheathing *a*. Each upper section of the sides has a horizontal strip or plate *a*¹ on the top and a like strip *a*⁴ on the bottom, against which the studs rest and to which they are secured. The lower sections have like strips *a*⁶ *a*⁵.

The roof is made with its two sides hinged together at the ridge-pole line by means of the hinges *b*³, so that they shut inward. *b b* are the rafters, and *b'* the covering-boards or sheathing. Each end of the rafters abut against horizontal pieces *tt'*, forming a framework similar to that of the side sections. A cap-piece *c* rests on the top angle of the roof when the same is in position. The sides of the roof are preferably of the same width as half the side walls, so that they may pack to-

gether closely. In both the sides and roof the studs fold against each other, leaving the space between the sheathing for storing articles of various kinds, such as camp-bedding, &c. The roof is secured in place by means of pins *r*, which are driven upward through the plate *a*¹ from the under side. Cross-beams *f* rest on the plate and extend from one side to the other, and the pins *r* extend up through the cross-beams and hold them in place. The pins also enter holes in the ends of the rafters and hold them in place on the ends of the cross-beams *f*. A brace *h* is applied at each corner, the two ends being secured to the rafter and to the stud and its middle to the cross-piece *h* by means of pins *o*. These braces stiffen the whole structure and give it great strength.

Another element of strength is the fact that my house is narrower at the eaves than at the ground, thus giving it a broad base and a slope to the sides, which braces it laterally.

k represents the floor, which is laid down before the house is put together. The ends *C* are constructed of a frame-work *s*, covered with sheathing the same as the sides. In one end is a door *d* and a window *g*. The end containing the door is made in three sections beside the door—two sections *c' c'*, one of which fits each side of the door, and a gable section *c*². (See Fig. 1.) In the opposite end is a central section of the same size as the door. The sections *c' c'* are secured in place to the sides and to the gable-section by pins *n n*, which project through the floor, and by pins *n'*, which pass through the frame of the gable-sections, through the cross-beam *f*, and into the top of the section *c*. Hooks *l* are also provided to secure the sections *c'* to the sides.

It will readily be seen that my portable house can be taken down and put up with great facility and that it constitutes a structure of great strength.

As before pointed out, the sides and roof when folded together contain space enough for the packing of such articles as camp-bedding, &c.

To illustrate the economy of space and material in houses constructed according to my invention, I will say that a house eight and

one-half by nine and one-fourth feet weighs but three hundred pounds.

These houses are useful for camping, fishing, lumbering, mining settlements, and many other locations.

I claim—

A portable house consisting of the folding sides formed of studs and plates and covered with sheathing, a pitch-roof formed of rafters and sheathing, said roof being adapted to fold on the ridge-pole line, cross-pieces, the ends of which rest on the plates and extend from one side to the other, the connection of

the side and roof being made by pins passing through the plates, the lower end of the rafters, and the end of the cross-pieces, and braces secured by pins at their middle points to said cross-pieces and by their ends to the studs and rafters, substantially as described.

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

ORRIN P. HOWE.

Witnesses:

D. R. FROHOCK,
B. B. HOWE.