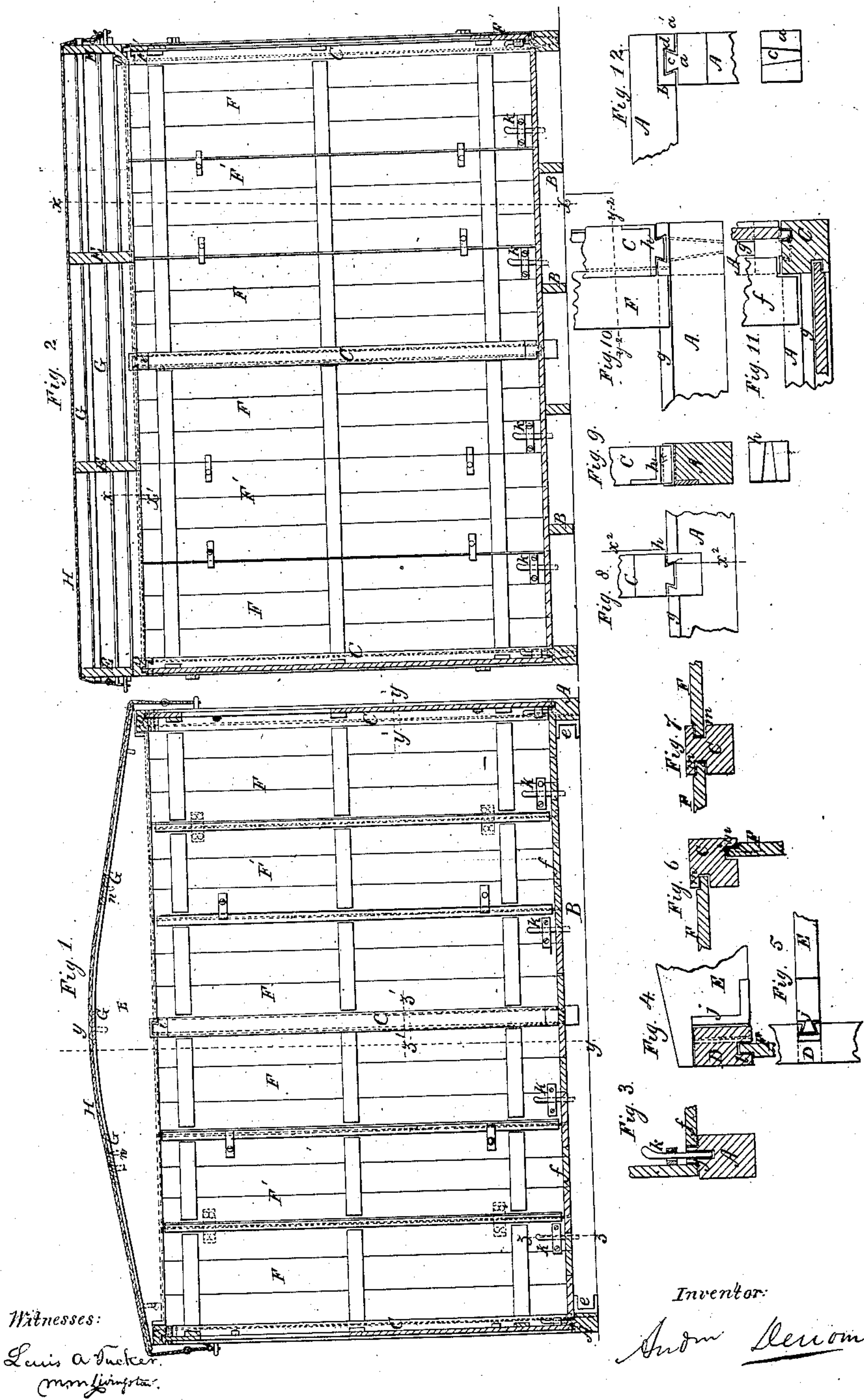


A. Derron.

Portable House.

No.
32,757.

Patented Jul. 9, 1861.



Witnesses:

Louis A. Tucker.
Inventor.

Inventor:

Andrew Derron

UNITED STATES PATENT OFFICE.

ANDREW DERROM, OF PATERSON, NEW JERSEY.

PORTABLE HUT.

Specification forming part of Letters Patent No. 32,757, dated July 9, 1861; Reissued August 23, 1864, No. 1,742.

To all whom it may concern:

Be it known that I, ANDREW DERROM, of Paterson, in the county of Passaic and State of New Jersey, have invented a new and Improved Portable Hut or House; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a vertical section of my invention, taken in the line x, x , Fig. 2; Fig. 2, a vertical section of the same, taken in the line y, y , Fig. 1; Fig. 3, a section of the same, taken in the line z, z , Fig. 1; Fig. 4, a section of the same, taken in the line x', x' , Fig. 2; Fig. 5, an inverted plan of Fig. 4; Fig. 6, a horizontal section, taken in the line y', y' , Fig. 1; Fig. 7, a horizontal section, taken in the line z', z' , Fig. 1; Fig. 8, an enlarged section of the lower part of one of the central or intermediate studs; Fig. 9, a section of Fig. 8, taken in the line x^2, x^2 ; Fig. 10, a detached view of one of the lower corner studs; Fig. 11, a section of Fig. 10, taken in the line y^2, y^2 ; Fig. 12, a plan or top view of Fig. 11, with a detached view of one of the tongues of the fastening.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a portable hut or house which may be cheaply constructed, readily put up and taken down, and be made to serve in all cases where temporary shelter is required, and to supersede the use of tents and the imperfect barracks now used for troops, and also to supersede the temporary houses or huts used in tropical climates.

The invention consists in a novel way of securing the studs, sills, plates, rafters and flooring timbers together as hereinafter described, whereby said parts as well as the siding are all firmly secured together and in such a way as to admit of being readily taken down when required.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents the sills of a quadrilateral house. These sills are of wood and at their ends metal plates a, b , are secured, the plate a , being provided with a dovetail tongue c , which fits into a dovetail groove d , of plate b , see Fig. 12. The dovetail tongue c , as

well as the grooves d , is of taper form to prevent one sill settling below the other, and when the tongues c , are fitted in the grooves d , of the ends of the sills will be connected together at right angles as shown clearly in Fig. 12, forming a fastening designated by a' . The metal plates a, b , may be secured to the sills A, by screws or nails.

B, represents the flooring timbers which are secured to the side sills A, by the same dovetail fastenings as shown at e , in Fig. 1. These dovetail fastenings effectually prevent the spreading of the side sills A, A, and the flooring plank or boards f are simply laid on the timbers B, the sills A, being each provided at its upper surface with a central longitudinal rib g , which forms a rabbet at each side, the inner rabbet receiving the edges of the planks or boards f , see Fig. 3.

C, represents vertical studs which may be of any suitable length. These studs are connected at their lower ends to the sills A, by dovetail fastenings h , which are constructed precisely like those previously described, the taper of the tongues and grooves preventing the studs being shoved out laterally from the sills, see Figs. 8 and 9. The upper ends of the studs C, are connected to the plates D, and to the end rafters E, by the same fastenings i , and the rafters E, are also connected to the plates D, by the same fastenings j , see Figs. 4 and 5. The tongues of all the fastenings are allowed to work freely in their grooves.

The siding is formed of vertical boards each panel between the studs C, being composed of three or more sections F, F, F', fitting at top in longitudinal grooves l in the under sides of the plates D, and of the end rafters E, and resting at bottom against the outer side of the ribs g . The right and left side sections F, are first inserted in the plates or rafters and set in against the ribs g , and being then slid home against the studs C, their edges are received in grooves m, m , therein as shown in Figs. 6, and 7, and the lower corners secured by bolts k . The center section F', is then inserted at top and set in at bottom, fitting the space between the side sections, to which it is secured by buttons as shown in Fig. 2. To constitute doors and afford greater facility for ventilation one or more of the center sections F', in each house is connected at one edge to the

side section by hinges as shown in Fig. 1, and buttoned at the other edge, a rabbet being substituted for the central part of the groove *l*, or the door cut shorter to allow it to swing.

The rafters *E*, have laths *G*, fitted on them and are secured by means of pins *n*, at suitable distance apart, and over the laths *G*, a painted canvas *H*, or other suitable material is spread and secured by cords *o*.

These huts may be joined together and extended indefinitely to accommodate any number of troops and they may be placed in a continuous line, or arranged in the form of a hollow square or in a cruciform manner. It is designed to have all the parts of any number of huts made to correspond, so that a stud, flooring beam, or rafter, of one hut will answer for any of the others.

The invention will admit of ornamental designs being used, and buildings may be erected having two or more stories. Doors and windows may be arranged in the usual way.

The siding *F*, by being fitted in the grooves in the studs and in the under sides of the plates and end rafters operate in connection with the dovetail tenons and mortises in the post plates and sills to stiffen the frame and effectually retain all its parts in proper position. The siding may if pre-

ferred be constructed of metal or of wooden or metallic frames with canvas stretched over them.

I would remark that the dovetail fastenings may, when the timbers are of requisite size, be of wood instead of metal.

The whole structure is so firmly interlocked by the combination of fastenings above described that it cannot possibly be blown over, racked out of plumb, or disjointed without first removing the shutters *F*.

I do not claim novelty in the dovetail fastenings or in the tongue and groove joints separately considered, but

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

The combination of the sills *A*, flooring timbers *B*, studs *C*, plates *D*, and rafters *E*, connected by wedge shaped dovetail joints; and the divided panels *F*, *F*, *F'*, secured to the former by grooves *l*, ribs *g*, and bolts *k*, the whole being constructed and arranged substantially as herein shown and explained and for the purposes set forth.

AND. DERROM.

Witnesses:

LEWIS A. TUCKER,
J. W. COOMBS.