W. A. WILCOX.

PORTABLE HOUSING STRUCTURE.

APPLICATION FILED AUG. 5, 1918.

1,305,576. Patented June 3, 1919.

Fig. 1.

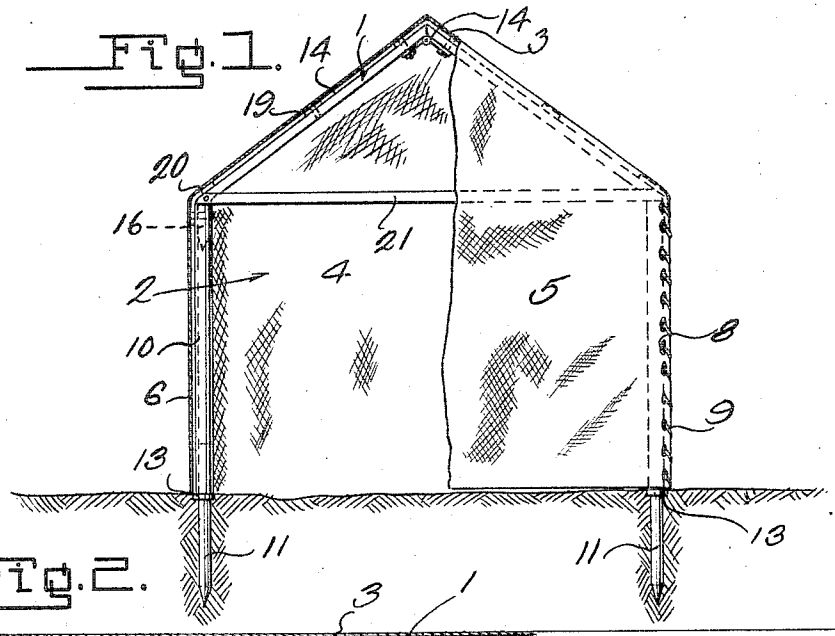


Fig. 2.

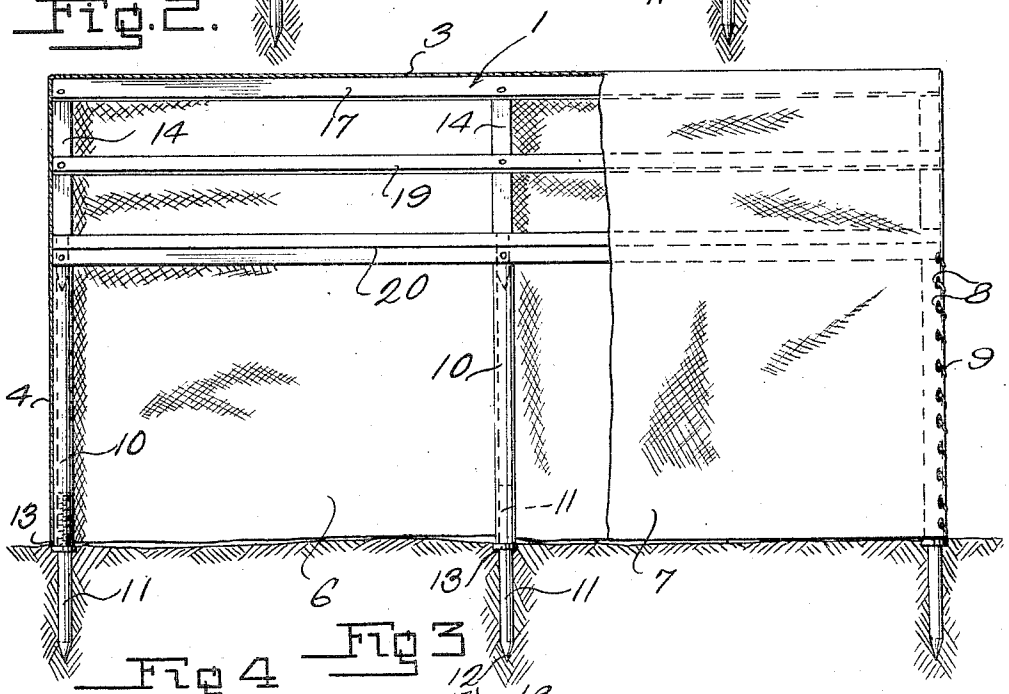


Fig 4

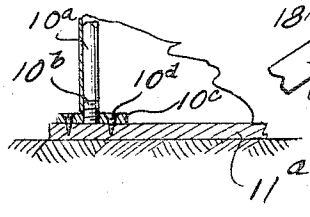
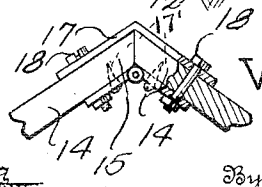


Fig 3



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UNITED STATES PATENT OFFICE.

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PORTABLE HOUSING STRUCTURE.

1,305,576. Specification of Letters Patent. Patented June 3, 1919.

Application filed August 5, 1918. Serial No. 248,403.

To all whom it may concern:

Be it known that I, WALTER A. WILCOX, a citizen of the United States, and a resident of Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Portable Housing Structures, of which the following is a specification.

This invention relates to a portable house or housing structure of the tent type, differing from tent structures in the provision of a rigid skeleton frame for supporting the canvas or covering, which frame is constructed so that it may be quickly and easily assembled and erected.

An object of the invention is to provide a housing device as specified, which is simple in construction, durable, and one which will provide a relatively substantial and rigid structure for housing farming implements, for use as a garage, for camp kitchens, sleeping tents, or for any of a number of similar uses to which a device of this construction could be utilized.

More specifically, the invention comprehends a device including a skeleton supporting structure comprising a roof section which may be folded into a compact state, a plurality of tubular standards, into the upper ends of which protruding or depending pins of the roof structure seat, and the anchoring stakes, the upper ends of which engage in the lower ends of the tubular standards for supporting these standards.

Other objects of the invention will appear in the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing:

Figure 1 is an end elevation of the improved portable housing structure showing parts thereof in section.

Fig. 2 is a side elevation of the portable housing structure showing a part of the canvas covering thereof in section.

Fig. 3 is a fragmentary view partially in section of the comb portion of the skeleton.

Fig. 4 is a fragmentary section of a modified form of the device.

Referring more particularly to the drawing, 1 generically indicates the skeleton supporting structure, while the covering is generically indicated by the numeral 2. The covering 2 may be made of canvas, or other suitable water-proof fabric, or if it is so desired it may be made of sheet metal, however, the fabric being preferred and it comprises the roof section 3, ends 4 and 5 and sides 6 and 7. The sides 6 and 7 and ends 4 and 5 are formed integrally with the roof section or covering portion 3, and they are provided, at their end portions with eyelets 8 through which ropes or cords are laced to securely connect the corner portions of the cover 2 and hold the cover fitting tightly about the skeleton supporting structure 1.

The skeleton supporting structure 1 includes a plurality of tubular standards 10 the lower ends of which receive the upper ends of the pegs or anchoring stakes 11. The lower ends of the pegs or anchoring stakes 11 are sharpened as shown at 12, to facilitate the driving of these members into the ground and the pegs have blocks, preferably of wood or other suitable material, as indicated at 13 positioned thereon intermediate their ends against which blocks the lower ends of the standards 10 abut. The blocks 13 are provided to prevent the lower ends of the standards 10 from sinking into the ground.

The skeleton frame structure 1 also includes the roof supporting construction, comprising the rafters 14, which are hingedly connected at their upper inner ends by suitable hinges 15. The rafters 14 have depending pins 16 formed upon their lower ends and extending vertically therefrom which pins seat in the upper ends of the tubular standards 10 when the skeleton structure 1 is assembled and the upper meeting ends of the rafters 14, are connected by the longitudinal ridge plate 17. The ridge plate 17 is bolted to the rafters 14 by suitable bolts 18 which also extend through the leaves of the hinges 15. The hinges are connected to the rafters by any suitable type of fastening means as shown at 17′ and when the bolts 18 are positioned through the hinge leaves, it locks the rafters and the hinges in adjusted position. The rafters 14 are also connected and braced by sheathing strips 19 and 20 which latter strips are angular in cross section to form the eave corners of the structure. Suitable transverse braces 21 are provided which extend across the ends of the skeleton structure 1 at the basis of the rafters 14.

In assembling the structure, the stakes 11 are first driven into the ground in proper positions, after which the tubular standards 10 are mounted upon the upper ends of these pegs or stakes. The roof structure is then

assembled, and mounted upon the standards 10, being connected thereto by the depending pins 16. After the skeleton frame 1 has been assembled and erected, the fabric covering 2 is mounted thereover and laced, at the corners, providing a neat and substantially weather-proof housing for any article within the structure. If it is so desired the roof structure may first be assembled upon the ground, using the depending pin 16 to mark the positions or places at which the stakes 11 should be driven, and the canvas covering may be then mounted or placed upon the roof structure and after the uprights have been properly positioned, the entire roof structure and covering may be lifted and mounted thereon.

In Fig. 4 a slight modification of the structure is shown and in this view, the standards 10^a are shown as having their lower ends threaded as at 10^b and collars 10^c are mounted upon these lower threaded ends. The collars 10^c are relatively flat and provide flanges on the lower ends of the standards through which screws or analogous fastening devices 10^d extend for attaching the standards 10^a to the flooring indicated at 11^a.

Changes in details may be resorted to without departing from the spirit of this invention; but,

I claim:

1. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure including a plurality of rafters hingedly connected in pairs, depending pins formed at the lower ends of said rafters and adapted for insertion into the upper ends of said tubular standards for connecting the roof supporting structure to the standards, and bracing strips connecting said pairs of rafters.

2. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure, said roof structure including a plurality of rafters hingedly connected in pairs, a ridge plate attached to the upper ends of said rafters, and bolts extending through said ridge plate and rafters for connecting the ridge plate to the rafters.

3. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure, said roof structure including a plurality of rafters hingedly connected in pairs, a ridge plate attached to the upper ends of said rafters, bolts extending through said ridge plate and rafters, for connecting the ridge plate to the rafters, longitudinally extending sheathing or bracing strips connecting the pairs of said rafters, and depending pins formed upon the lower ends of the rafters and adapted for insertion into the upper ends of said tubular standards.

4. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure, said roof structure including a plurality of rafters hingedly connected in pairs, a ridge plate attached to the upper ends of said rafters, bolts extending through said ridge plate and rafters for connecting the ridge plate to the rafters, longitudinally extending sheathing or bracing strips connecting the pairs of said rafters, depending pins formed upon the lower ends of the rafters and adapted for insertion into the upper ends of said tubular standards, anchoring stakes having their upper ends inserted into the lower ends of said tubular standards, and blocks mounted upon said anchoring stakes and engaging the lower ends of said tubular standards for preventing the standards from burrowing into the ground.

5. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure including a plurality of rafters connected in pairs, a ridge plate attached to the upper ends of said rafters, depending pins formed upon the lower ends of the rafters and adapted for insertion into the upper ends of said tubular standards, anchoring stakes having their upper ends inserted into the lower ends of said tubular standards, and blocks mounted upon said anchoring stakes and engaging the lower ends of said tubular standards for preventing the standards from burrowing into the ground.

6. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure including a plurality of rafters connected in pairs, depending pins formed upon the lower ends of the rafters and adapted for insertion into the upper ends of said tubular standards, anchoring stakes having their upper ends inserted into the lower ends of said tubular standards, and blocks mounted upon said anchoring stakes and engaging the lower ends of said tubular standards for preventing the standards from burrowing into the ground.

7. In a device as set forth, the combination, of a plurality of tubular standards, a collapsible roof structure including a plurality of rafters, depending pins carried at the lower ends of the rafters and adapted for insertion into the upper ends of said tubular standards, and means for anchoring said tubular standards.

WALTER A. WILCOX.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."