(No Model.)

C. H. THOMAS.

MEANS FOR ELEVATING AND SUPPORTING THE ROOFS OF BARRACKS.

No. 392,764. Patented Nov. 13, 1888.

Fig. 1.

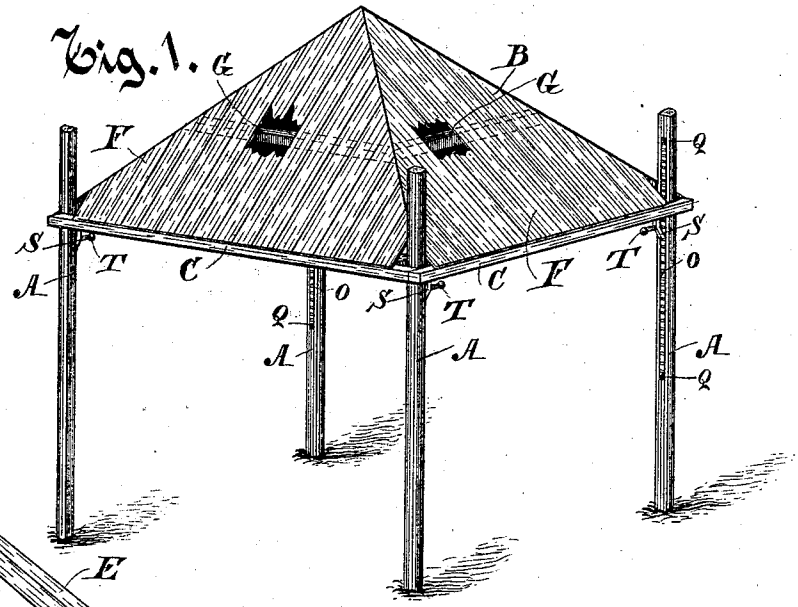


Fig. 2.

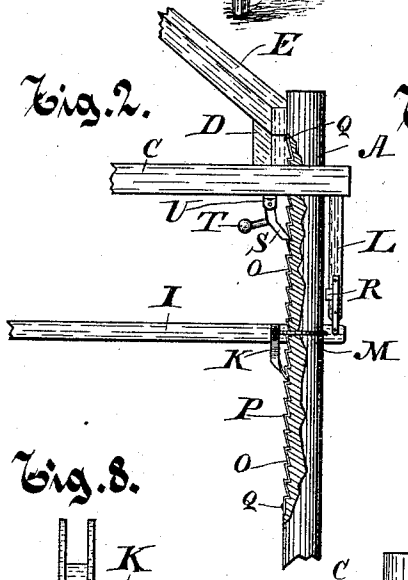


Fig. 3.

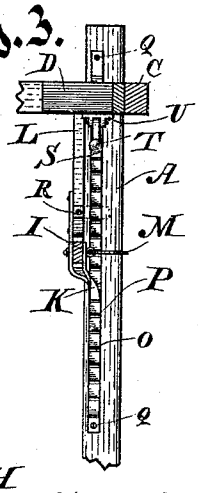


Fig. 4.

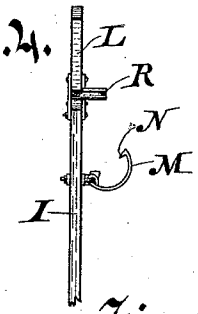


Fig. 5.

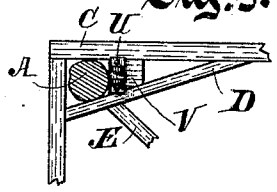


Fig. 8.

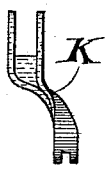


Fig. 7.

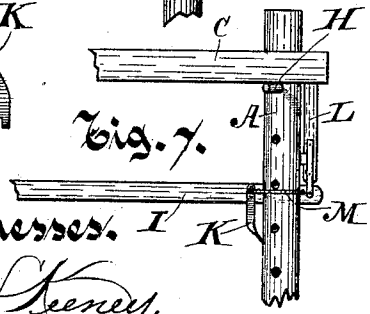
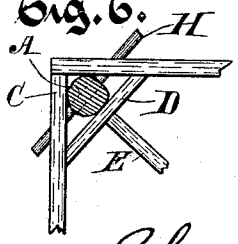


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES H. THOMAS, OF HANCOCK, WISCONSIN.

MEANS FOR ELEVATING AND SUPPORTING THE ROOFS OF BARRACKS.

SPECIFICATION forming part of Letters Patent No. 392,764, dated November 13, 1888.

Application filed August 9, 1888. Serial No. 282,318. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. THOMAS, of Hancock, in the county of Waushara and State of Wisconsin, have invented a new and useful Device for Elevating and Supporting the Roof of Barracks; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

The device which I have invented is adapted for raising and supporting the roof of a barracks, which is that kind of a temporary structure used by farmers for protecting hay or grain to a certain extent from the weather, and is usually constructed with four corner-posts and a movable roof, adapted to be raised and lowered on the posts as the inclosed space is being filled or deprived of hay or grain. Heretofore it has been common to raise the roof by a direct lift or by some temporary lever placed directly under the roof, and to support the roof by means of long pins thrust through the posts under the corners of the roof.

The construction and object of my invention will be clearly understood by the following description.

In the drawings, Figure 1 is a perspective view of a barracks with which may be seen a part of my newly-invented device. Fig. 2 is a view of one post and a part of the frame of the barracks with my improved device in connection therewith. Fig. 3 is a view of the same device and parts of the barracks, as shown in Fig. 2, but at right angles thereto. Fig. 4 is a plan of the elevating part of my device. Fig. 5 is a horizontal cross-section of one post and a corner of the frame of the barracks on the under side, showing the method of attaching my gravity-latch to the frame. Fig. 6 is a form in cross-section of the post and frame with a suppporting-pin, as commonly used. Fig. 7 is a view of the elevating part of my device attached to the post, showing the method of its use in connection with a supporting-pin. Fig. 8 is a modified form of the clutch or pawl.

The same letters refer to like parts in all the views.

The barracks are commonly constructed of four upright posts, A A, set in the ground at the four corners of a square or rectangular space, upon which posts a roof, B, is supported, and so built about the posts at its corners as to be movable up and down on the posts. The supporting frame or sills of the roof are four strips of timber, C C, fastened together at their ends, forming a corner at and outside of the posts A A, and are stiffened and braced by the cross pieces or braces D D, secured at each end to the sills C C across the corner on the inside of the post. Upon these sills and braces are supported the rafters E and the roof-boards F F. Cross-beams G G are also commonly used for strengthening the roof.

It has been common heretofore to raise the roof and support it on the posts by means of pins H H thrust diagonally through holes therefor in the posts underneath the corners of the roof.

In my improved device I is a lever pivoted in the bifurcate end of a pawl, K, and provided at one end with a thereto pivoted arm, L. A grappling-hook, M, is hinged or looped at its inner end to the bolt that passes through the lever I and pawl K, which serves to pivot the lever on the pawl. At its outer end this hook is provided with a spur, N, adapted to enter the wood of which the post is constructed, whereby the lever and pawl are clasped to the post and held in position. The lower free end of the pawl K is adapted to engage in a notch, O, in the post A, a series of which notches are provided on the side of each post, and for durability these notches are preferably lined with or constructed of a strip of iron, P, which is secured to the post by bolts or screws Q Q. The arm L is provided with a rigid laterally-projecting bracket, R, which is adapted to bear against the outer face of the post and resist any horizontally-inward movement of the lever I. A gravity-latch, S, provided with a weighted handle or knob, T, is pivoted at its upper end in a bracket, U, secured to the under side of a brace, D, or preferably to a block, V, which block is inserted between the brace D and sill C, and rigidly secured thereto. This latch is pendent from the bracket U, in which it is pivoted, and is so constructed and attached to the under side of the roof that by gravity its free end engages in the notches O O. It may be readily

released from these notches when the roof is lifted by taking hold of the weight-knob T.

It will be understood that by putting the free end of the pawl K in one of the notches O and bringing the grappling-hook M about the post, so as to engage with it, and turning the arm L upward against the under side of the sill C, as shown in Fig. 2, by bearing down on the free outer end of the lever I the roof will be raised somewhat and the latch S will engage with a higher notch, and that then by releasing the grapple M and raising the pawl K into a higher notch, and again bearing down on the lever, the roof will be still farther raised, which process being repeated the roof can be raised as high as desired. This process should be proceeded with at each corner of the roof in rotation about the barracks, so as to raise the roof as regularly as possible, if only one lever device is used. Fig. 8 shows a modified form of pawl, the lower end of which is constructed so as to act as a spur to enter or engage with the post when no notches O O are provided for supporting the pawl, and this part of the device so constructed can be used in connection with a post having no notches and for raising a roof which is to be supported when raised by the old-fashioned pins H H. The lower end of this pawl is sharp and may have two or three spurs or ends, as desired. As the grapple M and bracket R are both intended, to a certain extent, to hold the lever I and arm L up to their work, and as they both, to a certain extent, accomplish the same result, the device may be used without one or the other of them; but I preferably use both.

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

1. The combination, in a device for elevating and supporting the roof of a barracks, of a lever, I, pawl K, on which the lever is pivoted, a grappling-hook, M, connected to the lever I, and an arm, L, pivoted to the lever I, substantially as described.

2. The combination of a lever, I, and pawl K with an arm, L, and bracket R, substantially as described.

3. The combination of a lever, I, pawl K, grappling-hook M, and arm L with a post, A, provided with a series of notches, O O, substantially as described.

4. The combination of a lever, I, pawl K, on which the lever I is pivoted, and a swinging arm, L, with the roof of a barracks, having a gravity-latch, S, hinged thereto and pendent therefrom, and a barracks post, A, provided with a series of notches, O O, substantially as described.

5. A lever, I, pawl K, on which the lever I is pivoted, grappling-hook M, secured to the lever I, and swinging arm L, in combination with the roof of a barracks, a gravity-latch, S, hinged to and pendent from said roof, and barracks-post A, provided with a series of notches, O O, substantially as described.

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

CHARLES H. THOMAS.

Witnesses:
H. E. HIRST,
FRED RAWSON.