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J. L. CHASE.

ROOF BRACKET.

(Application filed Oct. 5, 1900. Renewed Aug. 2, 1901.)

(No Model.)

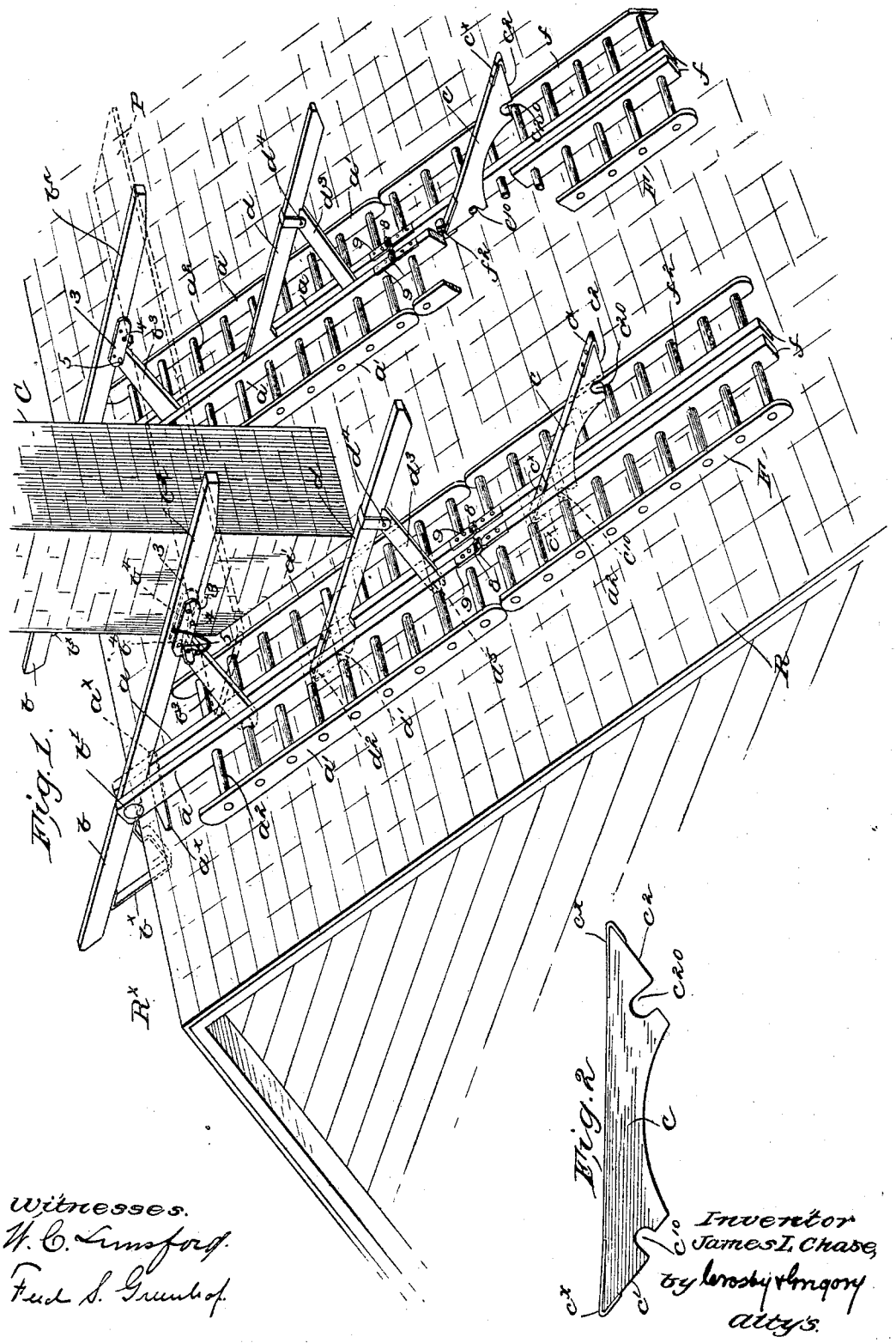


Fig. 1.

Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

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ROOF-BRACKET.

SPECIFICATION forming part of Letters Patent No. 681,649, dated August 27, 1901.

Application filed October 5, 1900. Renewed August 2, 1901. Serial No. 70,679. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. CHASE, a citizen of the United States, and a resident of Ayer, county of Middlesex, and State of Massachusetts, have invented an Improvement in Roof-Brackets, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

My invention relates to pitched-roof brackets designed for use on pitch-roofs or other inclined planes; and it has for its object the production of a simple, strong, and durable bracket which can be instantly applied to or removed from a slate or shingle roof without the use of clamps, points, or other devices which enter the shingles or other roof-covering. The platform-support forming one member of the bracket is adjustable instantly and readily and extends horizontally, forming a strong support for the platform or staging, and the greater the weight thereupon the more securely will the bracket be held in place.

As will hereinafter appear, my invention is particularly adapted for chimney-work, no matter what may be the location of the chimney relative to the ridge, and I have provided means for quickly adjusting the bracket to the pitch of the roof.

Figure 1 is a perspective view of a portion of a pitch-roof with two brackets embodying my invention shown in connection therewith to illustrate the construction and operation of the same; and Fig. 2 is an enlarged detached view, in side elevation, of one form of platform-support forming a member of the roof-bracket.

In accordance with my invention the roof-bracket comprises, essentially, an elongated base adapted to rest firmly upon the roof or other inclined plane, a holder connected with the base and adapted to engage the ridge to hold the bracket in place, and a platform-support adjustably connected with the base.

In the present embodiment of my invention the bracket-base is shown as composed of two center bars a, arranged in parallelism and slightly separated, said bars being rigidly connected together and to laterally-separated side rails a' by a series of cross-bars or rungs a^3, the general structure of the base being ladder-like and combining strength and durability with lightness. The side and center bars rest upon the roof R, Fig. 1, and form a firm and wide support for the bracket, the upper end of the center bars being shown as extended beyond the side bars and having secured to them near their upper end laterally-extended braces $a^\times$, which rest upon the roof adjacent the ridge $R^\times$ to steady the center bars at that point.

The holder adapted to engage the ridge is herein shown as an arm b, pivotally connected at b' to and between the center bars a, at their upper end, the said bar having on its under side beyond the pivot a strong hook $b^\times$, projecting from its under side, said hook engaging the ridge at the opposite side of the roof from that upon which the base is supported. The arm b at its opposite end, as at b^2, is extended above the base and is held in locked position by a brace b^3, pivotally connected at one end to one of the cross-bars a^2, the upper end of the base entering one of a plurality of notches b^4 in the under side of the extension b^2. Plates 3 are secured to the sides of the extension b^2 opposite the notches and are provided with one or more holes, as 4, to receive a pin 5, adapted to be extended through the side plates and the upper beveled end of the brace b^3 when the latter is seated in one of the notches. When in operative position, the arm b b^2 is horizontal and the plurality of notches are provided to permit adjustment of the holding device to conform to different pitches.

In practice a pair of the brackets may be used, as shown in Fig. 1, and if the work to be done upon the roof is near the ridge the arms b or the extensions b^2 form platform-supports, upon which the planking P (shown in dotted lines in Fig. 1) can be mounted, affording a strong and stable platform for the workmen. Obviously the greater the weight upon the platform the more firmly will the bracket be held in place upon the roof, and it will be noted that I have entirely dispensed with the use of prongs or points to enter the material of the roof, so that my bracket is equally well adapted for use on shingled or slate roofs without in any way damaging the roof material. Furthermore, by making the base of the bracket long and

wide and providing the elongated bearing members or bars a a' the weight is distributed over a large number of slates or shingles, thus decreasing the load on any one.

I have shown separately in Fig. 2 a platform-support adapted to be connected at any point with the base and to extend horizontally therefrom, said support consisting of a ridid arm c, having beveled ends c' c^2, preferably protected or strengthened by metallic straps $c^\times$, and a locking-notch is made in each end of the arm extending inward from its end, as at c^{10} c^{20}. One of the notches, as c^{20}, is deeper than the other for a purpose to be described.

Referring to Fig. 1, one of the supports is shown in operative position, one of the notches thereof receiving one of the cross-bars or rungs of the base, and the adjacent end of the arm is extended beneath the next rung above, the arm being inserted between the center bars a of the base, which preferably are just far enough apart to admit of such insertion to thereby give some lateral support to the arm. The platform-support is thus fulcrumed at its inner end upon one rung and held in position by the rung next above.

It is supposed that the shallower notch c^{10} is in engagement with a rung in Fig. 1; but if the angle of the roof should be flatter then it would be necessary to reverse the arm c and to use the deeper notch c^{20} in order to maintain the arm horizontal for the different pitch. When the arm is once locked in place, as described, the greater the weight put upon it the more firmly will it be locked in position, and it will be manifest that the removal of the arm or adjustment of it upon the base at a new point may be readily and quickly effected.

I have also shown in Fig. 1 another form of platform-support consisting of an arm d, having at one end a notch, as d', to engage a cross-bar, the adjacent end d^2 of the arm extending beneath the next rung above; but in addition I provide a brace-bar d^3, pivotally connected at d^4 with the arm d, the lower end of the brace-bar being notched, as at d^5, (see dotted lines,) to straddle one of the rungs between the center bars a. If the platform is to be quite wide, such form of support is very convenient and strong.

From an inspection of Fig. 1 it will be manifest that no matter what the position of the chimney C relative to the ridge of the roof it can be readily reached by means of my novel roof-bracket, and a level and strongly-supported platform is available at any point between the ridge and the lower end of the base, the latter also providing a ladder-way for the convenience of the workmen in moving up and down during the progress of the work.

Should it be desired to extend the base, it may be done by means of a base extension F, constructed substantially like the base, with the center bars f and the side bars f' connected by cross-bars f^2, the center bars at their upper ends having hooks 8 to enter eye-pieces, secured to the lower ends of the center bars a of the base.

My invention is not restricted to the precise construction and arrangement herein shown, as the same may be modified or rearranged in various particulars without departing from the spirit and scope of my invention, I having shown one particular embodiment thereof without attempting to show the various mechanical changes which might be made by one skilled in the art.

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

1. A roof-bracket comprising an elongated base, having laterally-separated side bars to rest upon the roof and provided with a series of cross-bars, a hook-like ridge-holder connected with the base, and a platform-support consisting of a rigid arm adapted to coöperate at one of its ends with the under side of one and the top of the other of two adjacent cross-bars and be thereby locked in operative position.

2. A roof-bracket comprising an elongated base consisting of parallel center and side bars, to rest upon the roof, cross-bars connecting them, a holder adjustably mounted on the base to engage the ridge, and a platform-support having a locking-notch to receive a cross-bar, and be fulcrumed thereon, the adjacent end of the support extending beneath the next cross-bar above.

3. A roof-bracket comprising an elongated base consisting of parallel center and side bars, to rest upon the roof, cross-bars connecting them, a holder adjustably mounted on the base to engage the ridge, and a reversible platform-support adapted to be locked at either end on the base.

4. A roof-bracket comprising an elongated base consisting of parallel center and side bars, to rest upon the roof, cross-bars connecting them, a holder adjustably mounted on the base between the central bars, said holder being made as an arm pivoted on the upper end of the base and having a fixed and downturned rigid hook thereon beyond its pivot, and means between the base and the arm to lock the latter in horizontal position.

5. A roof-bracket comprising a base having laterally-separated side bars and a pair of adjacent central bars, cross-bars connecting them, an arm pivoted on the upper end of the base, having a ridge-hook on its lower side, means to retain the arm in horizontal position, and a detachable platform-support having a downturned notch to receive one of the cross-bars, and adapted to extend beneath the next one above, to lock said support in horizontal position extended from the base.

6. A roof-bracket comprising an elongated base adapted to rest on the roof, an adjustable holder on its upper end, to engage the ridge,

oppositely-extended braces projecting laterally from the base adjacent the holder, to steady the base at its upper end, and a platform-support detachably connected with the base and extended horizontally when in operative position.

7. A roof-bracket comprising a base composed of adjacent, parallel center bars and laterally-separated side bars, cross-bars secured thereto, an arm pivoted between the center bars at their upper ends and having a ridge-hook, means to retain said arm in horizontal position, and a detachable platform-support having a downturned notch at each end, to correspond to different roof-pitches, either notch engaging a cross-bar between the center bars of the base to fulcrum the support thereon, the adjacent end of the support extending beneath the next cross-bar above, to retain the support in position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES L. CHASE.

Witnesses:
CHARLES SHERWIN,
HENRY G. TURNER.