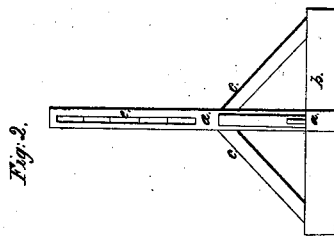
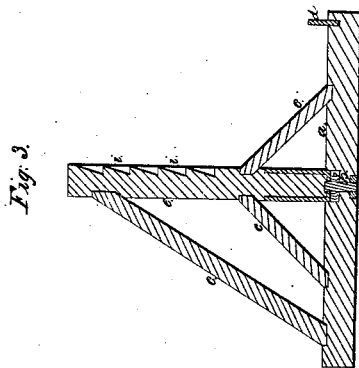
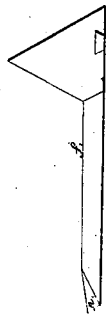
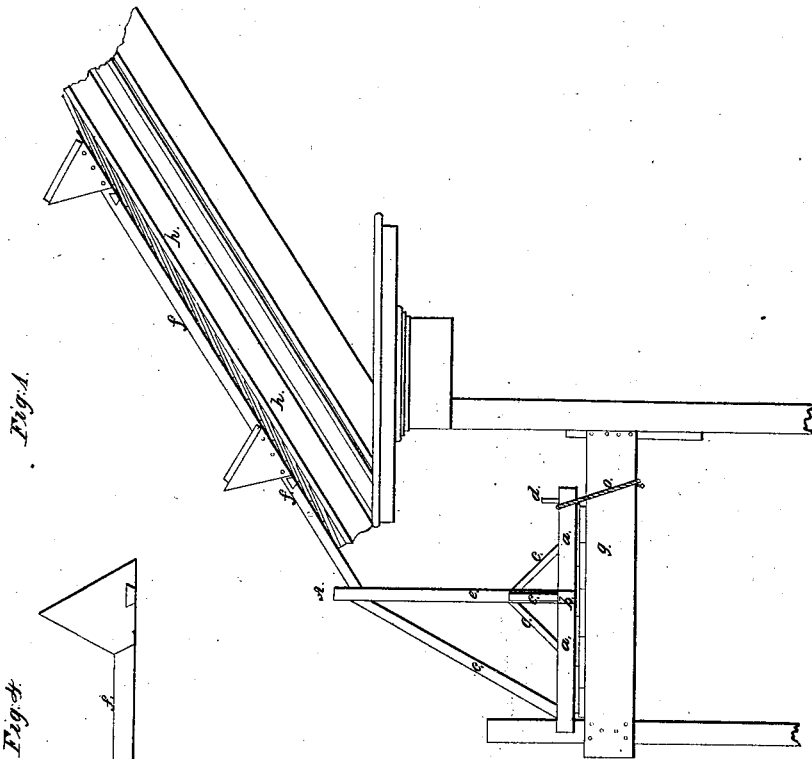


C. A. Kirkpatrick.

Shingling Bracket.

N^o 48818.

Patented Jul. 18, 1865.



Witnesses:

J. L. Newton
S. L. Foster

Inventor:

C. A. Kirkpatrick.

UNITED STATES PATENT OFFICE.

CHAS. A. KIRKPATRICK, OF SOMERVILLE, MASSACHUSETTS.

IMPROVED ROOFING-BRACKET.

Specification forming part of Letters Patent No. 48,818, dated July 18, 1865.

To all whom it may concern:

Be it known that I, CHARLES A. KIRKPATRICK, of Somerville, in the county of Middlesex and State of Massachusetts, have invented a new and useful machine called "Kirkpatrick's Roof Shingling or Slating Bracket," used in shingling or slating roofs of buildings; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and also the letters of reference marked thereon, in which—

Figure 1 is a representation of the invention applied to the roof. Fig. 2 is a front view of same. Fig. 3 is a vertical section of same. Fig. 4 is a side view of one of the roof brackets or studs.

A represents the whole machine; *a* and *b*, the bottom-frame timbers; *c c c c c*, the braces; *d*, the pin; *e*, the upright post of the frame; *f f*, the roof-brackets; *g*, the ordinary staging; *h*, the roof of a building; *i*, mortises for ends of studs of the roof-bracket; *n*, tenon for mortises *i*; *o*, rope for confining the bracket to the staging.

Now, in order that others may better understand the nature and use of my invention, I will proceed to explain its several parts, the mode of putting them together, and its practical use.

Fig. 1 in the accompanying drawings represents the whole machine with the roof-brackets as applied to the roof.

Now, the machine as seen in Figs. 2 and 3 consists of the several parts, to wit: the braces, (marked *c*), four of which are of equal length, and enter the bottom frame equidistant from the vertical post *E*, and enter mortises in same, and one larger brace entering near the top of the post and near the end of the bottom frame, all of which is clearly seen in Fig. 3; the bottom frame, consisting of two pieces of timber, *a* and *b*, crossing each other at right angles and at the center of each, *a* being the longer piece and the upright post *E*. The manner in which this post is made is seen in Fig. 3. It will also be noticed that there is a bolt projecting from its lower end, and a screw and nut, and that its sides at right angles to the bottom piece, *a*, and the end through which the bolt passes are protected by a metal plate to give it strength;

but a piece of iron or metal connected with the screw in one piece and fastened to the end may be used. The wood or material of which the bottom pieces are made is cut into or mortised, so that the nut and screw do not project below the bottom of the pieces. Now, then, to put this together I put the bottom pieces together, put the upright post with its bolt through them, and the braces in position. I then turn the nut upon the screw and all the parts are brought tightly together. So, also, after the machine has been used and I wish to take it apart, so that I may have it in convenient compass for transportation, I have only to turn the nut from the screw, take the upright post at the upper end and lift it up, and it falls apart at once. These pieces of timber of which the machine is composed may be made of any convenient size, so that it shall be of sufficient strength. The upright post and the bottom pieces should be of greater strength than the braces. Common spruce studs or joists are of sufficient size for convenience and strength; but any wood or material which will answer the purpose intended may be used. It will be further noticed in this upright post that there are mortises, as at *i*, made so as to admit a tenon.

Fig. 4 also consists of a simple joist of the size of the braces, or any convenient size. At one end it has the tenon *n* to fit a mortise, as at *i*. At the other end it has a wing of a triangular shape, fitted into the joist by screws or nails. There is also fitted into this end by a dovetail mortise, which will allow it to be taken out at pleasure, a short brace, the purpose of which is to give steadiness to the bracket as it lies on the roof of the building. Upon this ring also rests the board for the staging, as will be seen in Fig. 1.

When the machine is to be used, place it, as seen in Fig. 1, upon the staging beside the building. To prevent its slipping or being pushed over I have driven a pin, *d*, into the bottom piece, *a*, near the end, as seen in Fig. 1, next to the building. I also drive a nail into the under side of the ordinary staging *g*, and fasten by a rope or chain, *o*. After a few courses of shingles or slates are laid on the roof, or a sufficient number to need a new staging, I adjust the machine as seen at Fig. 1, using one at each post of the ordinary staging. I then take the roof-bracket *f* and fit it into the mortise *i*

in the upright post, and it will adjust itself to the slant of the roof, and upon this I place the board or plank for a staging, and I use an additional one, each above the other, as long as a staging shall be required.

The disadvantages of the ordinary staging upon the roofs of buildings are by this method avoided. In the first place, I do not use or drive any nails into the roof, which, on drawing out when the staging is to be removed, is very likely to render the roof leaky by leaving holes, or by splitting or otherwise injuring the shingles or other roofing materials. My invention does not require new lumber every time a roof is to be covered. These brackets, well made, will last a long time. After the roof is covered they can very easily and quickly be taken down,

while the old or ordinary mode requires much time. By being made in this way the machine may be taken apart readily and easily transported. Indeed machines or brackets sufficient for covering the roof of any building may be carried in a common wheelbarrow. So that I claim by using my invention the roofer may economize time, labor, materials, and safety.

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

A bracket or machine constructed substantially as above described, and for the purpose set forth.

C. A. KIRKPATRICK.

Witnesses:

J. L. NEWTON,
G. L. VESTY.