

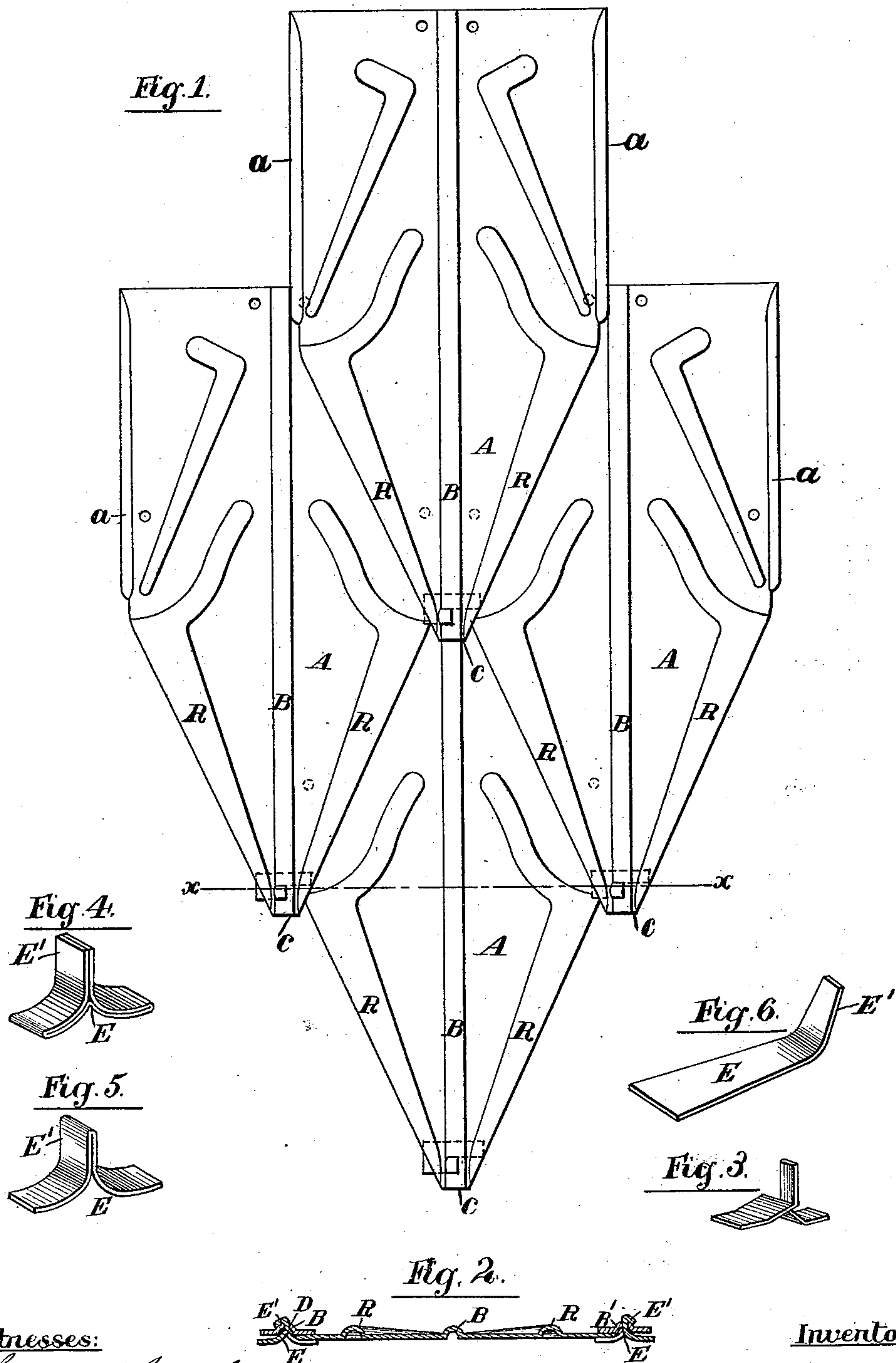
(No Model.)

J. MOTT.

METALLIC ROOFING SHINGLE.

No. 297,529.

Patented Apr. 22, 1884.



Witnesses:

Herbert Southwick
Arthur C. Webb

Inventor:

John Mott
By his Attorney
Ernest Webb

UNITED STATES PATENT OFFICE.

JOHN MOTT, OF NEW YORK, N. Y., ASSIGNOR TO THE ANGLO AMERICAN
ROOFING COMPANY, OF SAME PLACE.

METALLIC ROOFING-SHINGLE.

SPECIFICATION forming part of Letters Patent No. 297,529, dated April 22, 1884.

Application filed September 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN MOTT, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Metallic Roofing-Shingles, of which the following is a full, clear, and exact description.

This invention relates to improvements on the sheet-metal diamond-pointed shingles described and shown in United States Letters Patent No. 267,674, dated November 21, 1882, the object being to dispense with the hooks formed at the point of the shingle, providing instead a clasp adapted to be attached to the point of the upper shingle, and to fit under either one or both underlying shingles in the course next below, and thus lock the three together, as will hereinafter more fully appear.

It has been found in practice that the hooks formed at the point of the shingle, as described in the patent above referred to, were more or less liable to break or become fractured during the operation of drawing them under the corners of the two underlying shingles, thus permitting the point to spring up. By my invention I seek to prevent this by providing a sure and reliable fastening for the points.

To this end my invention consists, first, in forming a small longitudinal slit in the central rib, at about the termination of the lower ends of the hollow ribs, which extend along the inclined edges; and, secondly, in a clasp having a lip projecting upwardly from its body, and adapted to be inserted through the slit in the point, and bent over on the upper side of the point, the body of said clasp being adapted to fit under either one or both of the two shingles in the course next below.

In the accompanying drawings, in the several figures of which like parts are designated by similar letters of reference, Figure 1 is a plan view of four shingles in position as applied to a roof. Fig. 2 is a cross-section taken on the line *x x*, Fig. 1; and Figs. 3, 4, 5, and 6 are detail views, showing different forms of clasps that can be employed.

Each shingle *A* is provided with a central longitudinal hollow rib, *B*, and has its parallel edges *a a* turned upward, so that the ad-

joining parallel edges *a a* of two shingles will enter the under side of the rib *B* of the overlapping shingle. Hollow ribs *R R* are formed along the inclined edges of each shingle, terminating at their lower ends a short distance above the point *C* of the shingle. The upper ends of these ribs *R R* curve inwardly, forming slightly-smaller hollow ribs.

D designates a longitudinal slit made through the center of the rib *B* at about the termination of the lower ends of the ribs *R R*; and *E* designates the body of my improved clasp, having an upwardly-projecting lip, *E'*, adapted to pass through the slit *D* from the under side, and to be turned over onto the shingle, thus closing the slit and firmly attaching the body *E* of the clasp to the under side. As shown in Fig. 3, this clasp consists of a flat piece of metal, having its body slightly arched centrally to conform to the shape of the rib *B*, and having the metal on one side slit laterally, and a portion of it of a width sufficient to enter the slit *D*, turned up to form the lip *E'*.

The clasp shown in Fig. 4 is formed by taking a strip of metal of the requisite size, bending the ends over to form the body *E*, and then upwardly to form the lip *E'*. The clasp shown in Fig. 5 is formed by bending the ends of a strip of metal downwardly to form the lip *E'*, and then in opposite directions to form the body *E*. These clasps are all applied in the same way—that is to say, by placing the body *E* under the adjoining corners of the two underlying shingles in the course next below, as shown by dotted lines in Fig. 1, then pressing the point *C* of the overlapping shingle down until the lip *E'* enters and passes through the slit *D*, and finally bending the lip *E'* over onto the shingle.

The clasp shown in Fig. 6 differs from those described in that its body *E* is only adapted to pass under one of the two underlying shingles, but the object is the same in every case—that is to say, to provide an independent clasp, by means of which the point can be held down without requiring nailing, which must necessarily pass through the under as well as the upper shingles, and without requiring the formation of catches or hooks out of the body of the metal at the point of the shingle itself,

which from its peculiar construction must necessarily be always liable to become broken or fractured, and permit the point to spring out of place, thus rendering leakage possible during heavy driving rain or snow-storms.

5 It will be seen that when my clasps are employed, and the shingles nailed to the roof, (the nail-holes *i i* of one shingle being covered by the overlapping shingle, as shown by
10 dotted lines in Fig. 1,) the points will be firmly held down and cannot spring out of place. I propose to make these clasps out of tough pliable calaminated steel, which will neither rust nor break by ordinary use.

15 I am aware that cleats have heretofore been employed in metal roofing having standing seams to connect the adjoining edges of two sheets by passing one end of the cleat under the overlapping flange of the standing seam,
20 through a vertical slot in the overlapped flange, and thence under one of the sheets, while the other end of the cleat is bent up and over the top of the standing seam, and the whole compressed together; but this differs
25 radically from my invention, and I make no claim to such construction.

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

1. A metallic shingle of substantially the construction described, having a longitudinal slit in its point adapted to pass over the upwardly-projecting lip of an attaching-clasp, as set forth. 30

2. The combination, with metallic shingles each having a longitudinal slit in its point, of attaching-clasps E, each having an upwardly-projecting lip, E', as and for the purpose described. 35

3. Metallic shingles of substantially the construction described, having a longitudinal slit in the points, in combination with clasps having a body adapted to fit under either one or both underlying shingles, and an upwardly-projecting lip adapted to pass through said longitudinal slit and be bent over on the shingle, whereby the point of the shingle is
45 securely held in place, as set forth.

In testimony whereof I have hereunto set my hand this 17th day of September, A. D. 1883.

JOHN MOTT.

Witnesses:

ERNEST C. WEBB,
HERBERT SOUTHWICK.