Feb. 27, 1923. 1,446,455.

A. C. FISCHER.

ROOFING CLEAT.

ORIGINAL FILED DEC. 12, 1919.

Fig. 1.

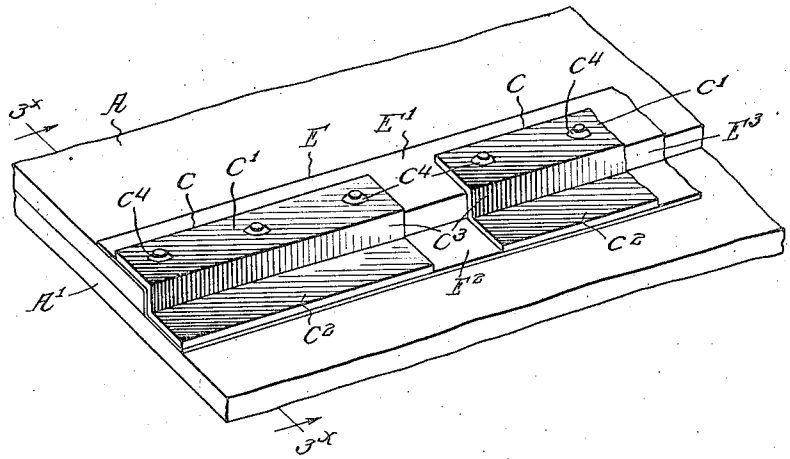


Fig. 2.

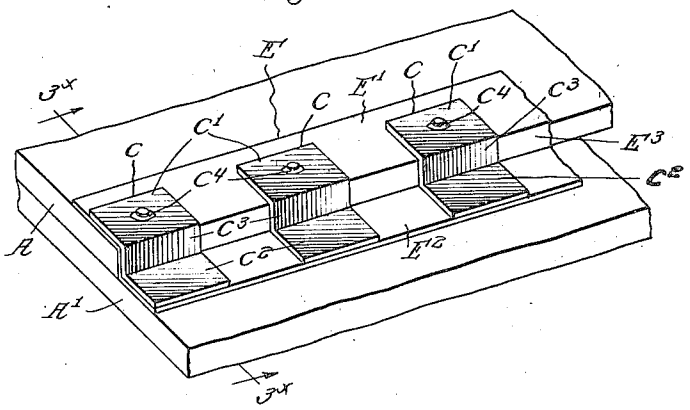
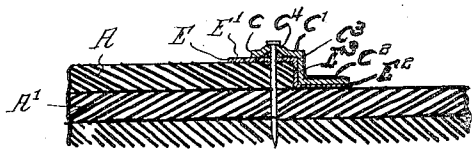


Fig. 3.



Witness:
G. Buckhardt

Inventor:
Albert C. Fischer,
By Wilkinson, Huxley, Byron & Knight,
Attys.

Patented Feb. 27, 1923. 1,446,455

UNITED STATES PATENT OFFICE.

ALBERT C. FISCHER, OF CHICAGO, ILLINOIS.

ROOFING CLEAT.

Original application filed December 12, 1919, Serial No. 344,322. Divided and this application filed March 7, 1921. Serial No. 450,253.

To all whom it may concern:

Be it known that I, ALBERT C. FISCHER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Roofing Cleats, of which the following is a specification.

This application is a division of application Serial No. 344,322, filed December 12th, 1919.

The object of the invention is to provide a cheap and efficient roofing cleat adapted for securing and weather-proofing or fireproofing the union between a roofing surface and the marginal portion of a roofing member superposed thereon, and particularly a composite cleat formed in part by a weatherproofing material, for instance, fibrous sheet material, that is adapted to receive a cementing medium upon its faces through which it contacts with the roofing members that make up the joint to be proofed, and in part by more substantial material, for instance, sheet metal, overlying and preferably cemented to the fibrous material in position to sustain the latter against the securing nails, if used, and preferably also maintaining the shape, for instance, the offset between the different faces of the fibrous material; a feature of the preferred embodiment of the invention consisting in having the fibrous weatherproofing material continuous to an extent that adapts it to cover an extended length of roofing joint, and the metal reinforcing and sustaining portion subdivided into relatively short units spaced apart lengthwise of and distributed over the continuous fibrous portion only in such numbers as may be necessary to insure efficiency in the performance of the described functions.

In the accompanying drawing—

Figure 1 is a perspective view of one embodiment of the invention.

Figure 2 is a similar view of a modified form; and

Figure 3 is a section on the line $3^{\times}$—$3^{\times}$ of Figures 1 and 2.

A, A′ represent two overlapping roofing members to be sealed at their joint against wind, water, and fire. E represents a sealing strip having laps E′, E^2 connected by offset E^3 which corresponds to the thickness of a roofing member in a manner to adapt the laps to lie upon and enter into adhering contact with the marginal areas adjacent the seam between two overlapped roofing members. Adhesion between the sealing strip and the roofing members may extend over the surfaces of the laps alone or over the offset as well, and may be brought about by the application of roofing cement or other adhesive in situ to either the roofing members or the sealing strip; or, as is preferred, the adhesive quality may be incorporated in or upon the sealing strip at the place of production and be of a character that will insure its adhesiveness at the time of use, as fully explained in the application of which this is a division.

In order to reinforce the sealing strip in its laps as well as in its given form of offsetting and union between its laps, plates C of more durable material, preferably metal, are applied over the sealing strips, with upper and lower flanges C′, C^2 and a connecting offset C^3. The plates C may or may not be coextensive with the strips E transversely; they are not coextensive therewith longitudinally but merely extend over such longitudinal portions thereof as may be necessary to receive anchoring nails, maintain the form of the strip, and hold down the portions of the roofing members concerned with the joint. They are repeated in numbers and laid thereon with spacing between them as may be found desirable. The reinforcing plates will preferably be constructed with nailing bosses C^4 providing inverted cups, as shown in Figure 3, in which cement may accumulate to provide a packing around the intersecting nail.

The construction above described constitutes a composite joint proofing and securing cleat that is relatively cheap to produce and is very convenient and economical in its application, and particularly as a means of insuring proper application and distribution of nail-receiving members in roofing.

The composite cleats will generally be shipped in such lengths as may be handled without inconvenience and without injury to the cleats. When made with embodied adhesive, their adhering faces may be protected by placing two cleats back to back. If when in this position reinforcing plates on one member bridge the spaces between reinforcing plates on the other member, a very rigid shipping package is insured.

I claim:

1. A composite roofing cleat comprising a

strip of fibrous material fashioned to conform to two relatively offset roof surfaces, and reinforcing plates of more substantial material secured to and spaced apart upon said strip.

2. A composite roofing cleat comprising a strip of fibrous material fashioned to conform to two relatively offset roof surfaces, and reinforcing plates of more substantial material secured to and spaced apart upon said strip; said plates being fashioned to conform to said strip.

3. A composite roofing cleat comprising a strip of fibrous material composed of two laps lying in different planes with a connecting offset web between them, and a series of plates of more substantial material conforming to the section of and secured to said strip and overlying both its laps.

4. In roofing, a joint proofing and securing cleat comprising a strip of fibrous material constructed with a plurality of laps with an intervening connecting web offsetting the one from the other, and metal reinforcing plates distributed over the surface of said strip and having flanges and connecting web conforming to the laps and connecting web of the strip and, respectively, adhered thereto.

5. In roofing, the combination of two overlapped roofing members presenting surfaces offset by the thickness of a roofing member, and a composite cleat comprising a strip of fibrous material having laps overlying marginal portions of the respective roofing members adjacent their seam, together with a connecting web which overlies the edge of one of said members, and a series of reinforcing plates each comprising flanges adhering to the respective laps of the strip and an offsetting web overlying the offsetting web of the strip; said plates being secured to said strip in spaced relation to each other.

6. A composite roofing cleat comprising a strip of fibrous material, and plates conforming to the shape of said strip of fibrous material and cemented thereto; the opposite side of said fibrous strip carrying an adhesive or sticky mastic.

7. In combination, a fibrous strip of material and a series of roofing cleats arranged thereon in position to serve as securing means for overlapping sheets of roofing; said cleats having depending flanges adapting them to reach from the surface of an overlapped sheet to the surface of an underlapped sheet of roofing.

Signed at Chicago, Illinois, this 17th day of February, 1921.

ALBERT C. FISCHER.