

(No Model.)

L. L. SAGENDORPH.
METALLIC ROOFING CLEAT.

No. 405,605.

Patented June 18, 1889.

Fig. 1.

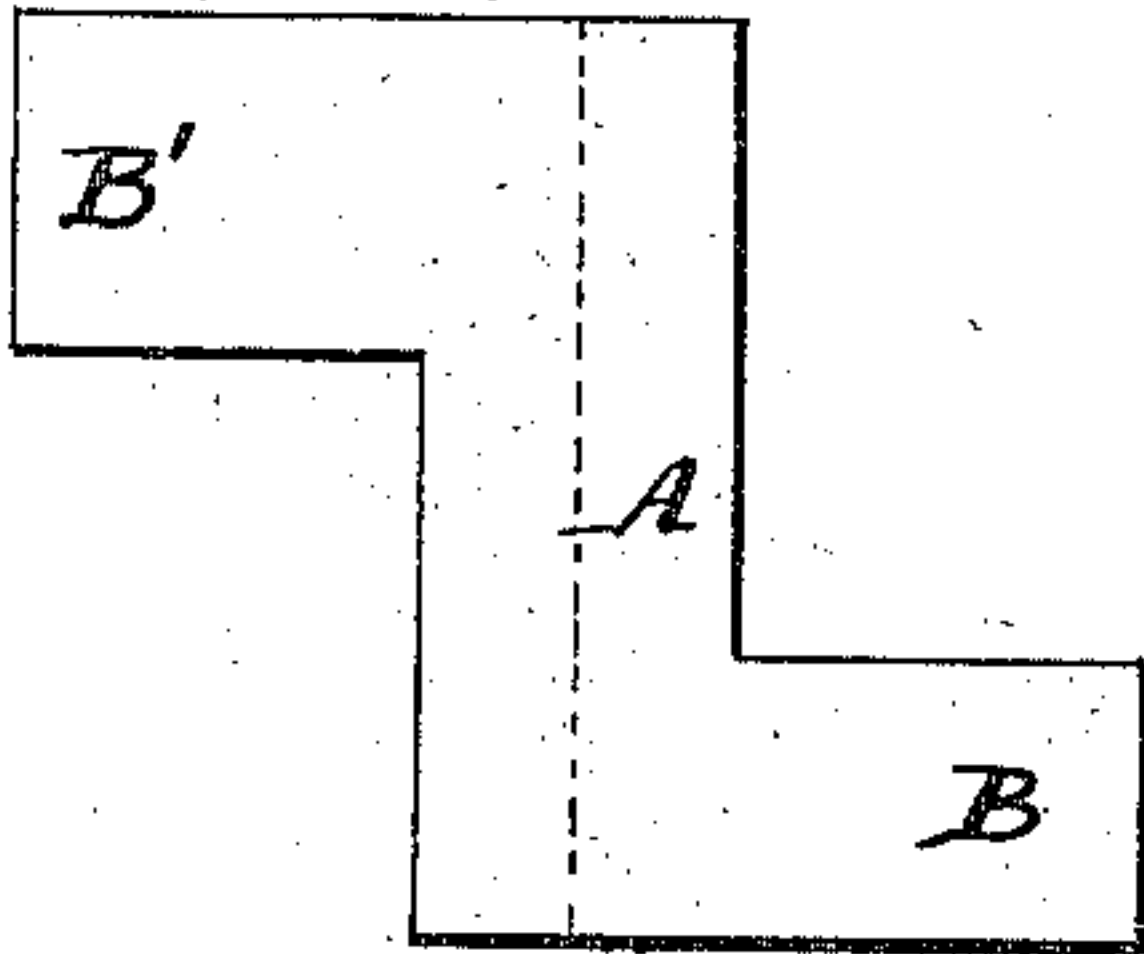


Fig. 2.

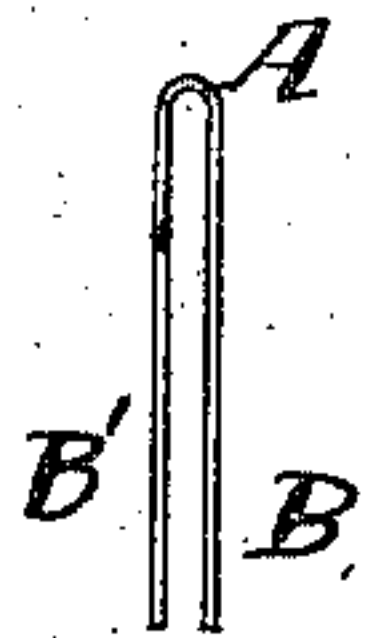


Fig. 3.

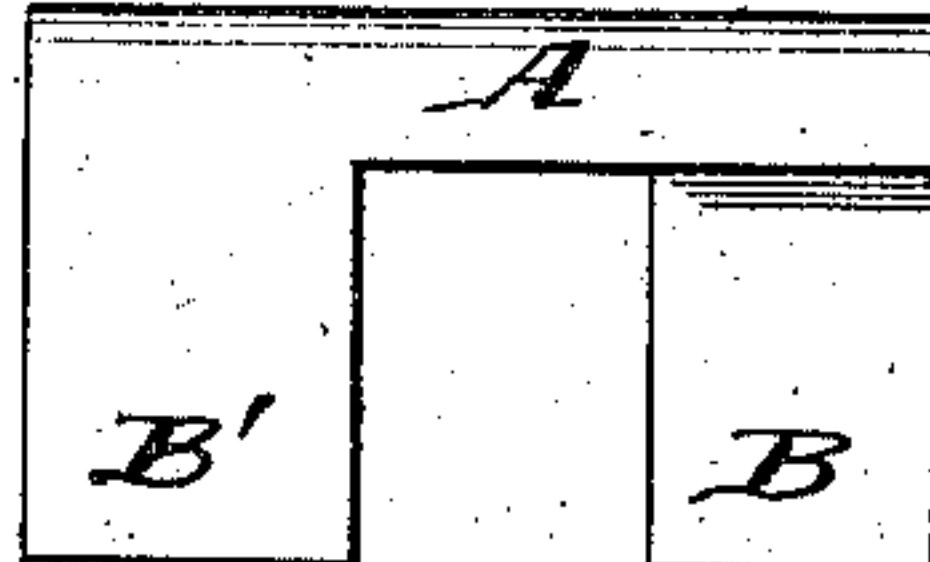


Fig. 4.



Fig. 5.

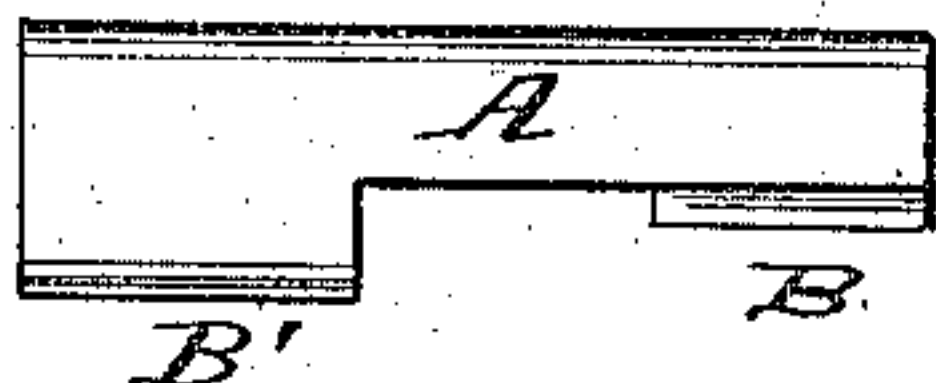


Fig. 6.

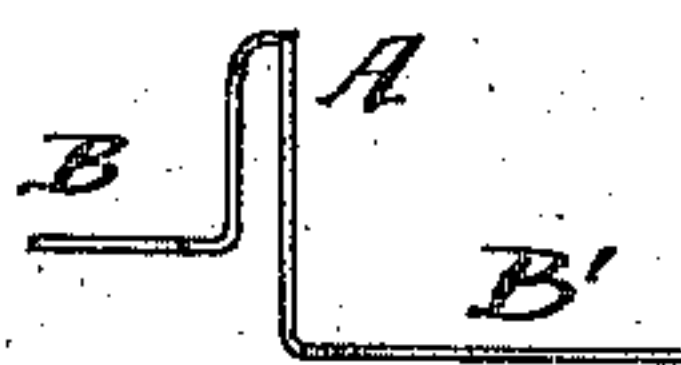


Fig. 7.



Fig. 8.

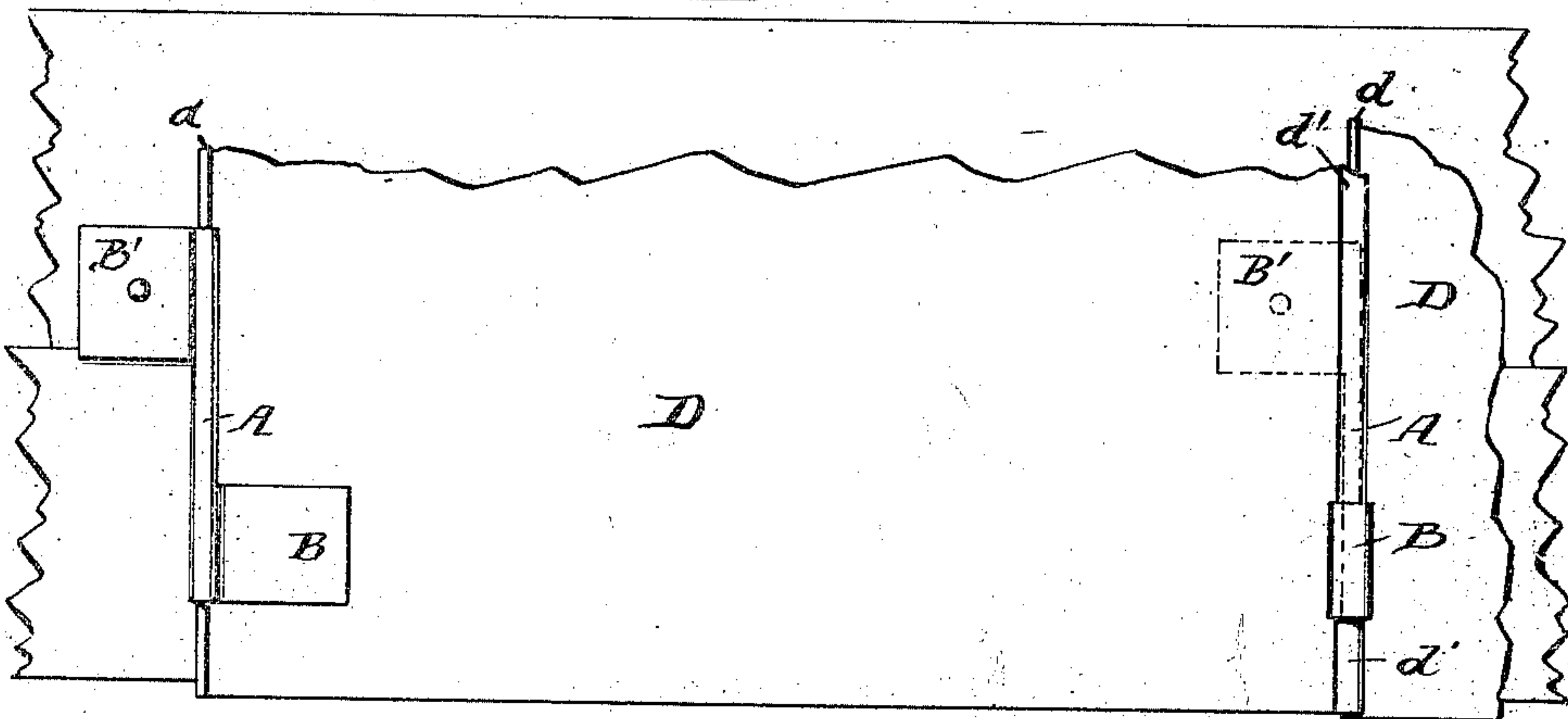
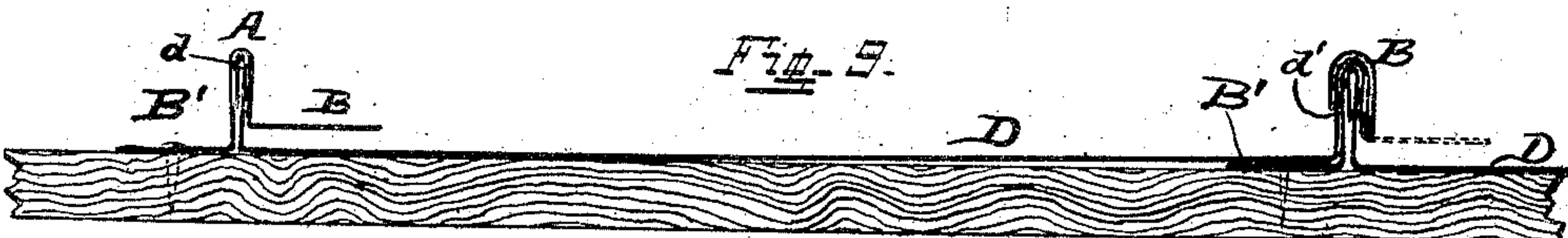


Fig. 9.



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LONGLEY LEWIS SAGENDORPH, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO CHARLES N. HARDER, OF PHILMONT, NEW YORK.

METALLIC ROOFING-CLEAT

SPECIFICATION forming part of Letters Patent No. 405,695, dated June 18, 1889.

Application filed March 25, 1889. Serial No. 304,707. (No model.)

To all whom it may concern:

Be it known that I, LONGLEY LEWIS SAGENDORPH, a citizen of the United States, residing at Cincinnati, in the county of Hamilton, State of Ohio, have invented certain Improvements in Metallic Roofing-Cleats, of which the following is a specification, reference being had to the accompanying drawings, in which—

10 Figure 1 is a plan view of the blank from which the cleat is formed. Fig. 2 is an end elevation of the cleat bent as shown in Fig. 3. Fig. 3 is a side elevation of the cleat doubled on itself at the dotted line shown in Fig. 1. Fig. 4 is an end view of the cleat with the tongue portions bent to position, and Fig. 5 is a side elevation of cleat shown in Fig. 4. Figs. 6 and 7 are end and side views, respectively, of a slight modification
20 of my improved cleat, the main or body portion of the cleat not being doubled, as shown in the preceding figures. Figs. 8 and 9 are top and side views, respectively, showing the application of my improved cleat to a standing-seamed roof, the left-hand side showing the cleat in position over one of the standing side flanges of the roofing-sheet before the overlapping flange of the adjacent sheet is put to place over the body portion of the cleat,
30 and the right-hand side of said views showing the two sheets connected by my cleat.

The cleat, as preferably constructed, is stamped from suitable metal in substantially the form shown in Fig. 1, and having a body
35 portion A, with the tongue-extensions B and B' extending from opposite sides of the body portion A at an angle thereto, but in a different plane when placed in a vertical position, the whole when stamped out and before
40 being bent forming a Z-shaped figure.

As shown in the drawings, (excepting Figs. 6 and 7,) the body portion A is bent or doubled on itself, said doubled portion being adapted to fit over and engage the standing flange *d* of the roofing-sheet D, as shown
45 at left hand in Figs. 8 and 9. The cleat being folded or doubled, as shown in Figs. 2 and 3, the tongue portions B and B' are next bent outward, as shown in Figs. 4 and 5,
50 when the cleat is ready to be applied to the

roof. This application is made by placing the roofing-sheet D on the sheeting, and then placing the cleat over the standing flange *d*, as shown in Figs. 8 and 9, when the tongue portion B' is nailed to the sheeting. This
55 serves to retain the roofing-sheet fast to the sheeting. Having secured the cleat to place over the standing flange *d*, the overlapping flange *d'* of the adjacent sheet is placed over the flange *d* and body portion A of the cleat,
60 after which the tongue B is bent up and over the flange *d'*, as shown at right hand in Figs. 8 and 9, and pressed tightly to place with suitable tongs. In this manner the top roofing-sheet is securely locked to the lower one,
65 which in turn is attached to the sheeting in the manner afore described.

In Figs. 6 and 7 I have shown a cleat slightly modified from that just described, and consists in bending the tongue portions
70 out from the sides of the body portion A on a line with its outer edges, in which case the body portion is not doubled.

It is preferred to bend the overlapping tongue B out at an angle above the plane of
75 the other tongue B', as shown in Figs. 4, 6, and 9, in which case the lower edge of the overlapping flange *d'* of sheet D will extend down only about two-thirds the height of the standing seam, as shown at right hand in Fig. 9.
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The advantages of my improved roofing-cleat consist: First, it avoids a doubling of the metal on a line with the fastening-tongue, and thus does away with the capillary attraction, which would otherwise draw moisture
85 down around the fastening-tongue B' and decompose the sheeting to which it is connected, which in course of time will cause the roof to become loose; second, it affords a convenient means for connecting sheets where a
90 joint is formed at ends thereof, as the body portion A may be placed over the joint, thus dispensing with an extra cleat, and third, the cleats may be shipped in a compact form and bent after arriving at destination.
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What I claim as new, and desire to secure by Letters Patent, is—

1. A metallic roofing-cleat consisting of a body portion A and tongues B and B', the latter extending out from opposite sides of
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said body portion and in different planes, substantially as shown and set forth.

2. A metallic roofing-cleat having a body portion A, doubled on itself, and tongues B and B', extending out from opposite sides of said body portion, and in different planes, substantially as set forth.

3. In combination with the roofing-plates having the standing flange *d* and overlapping flange *d'*, a cleat having a body portion

A and tongues B and B', said body portion of the cleat resting over the flange *d*, and flange *d'* overlapping the body portion of the cleat, the tongue B overlapping and engaging the flange *d'* in a horizontal plane differing from tongue B', substantially as set forth. 15

LONGLEY LEWIS SAGENDORPH.

Witnesses:

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W. NICKMEIER.