(No Model.)

L. L. SAGENDORPH.

METALLIC ROOFING.

No. 422,319. Patented Feb. 25, 1890.

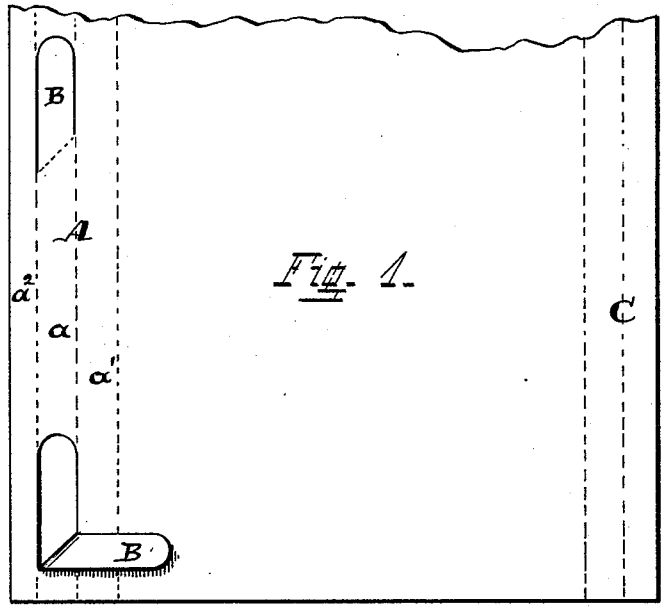


Fig. 1.

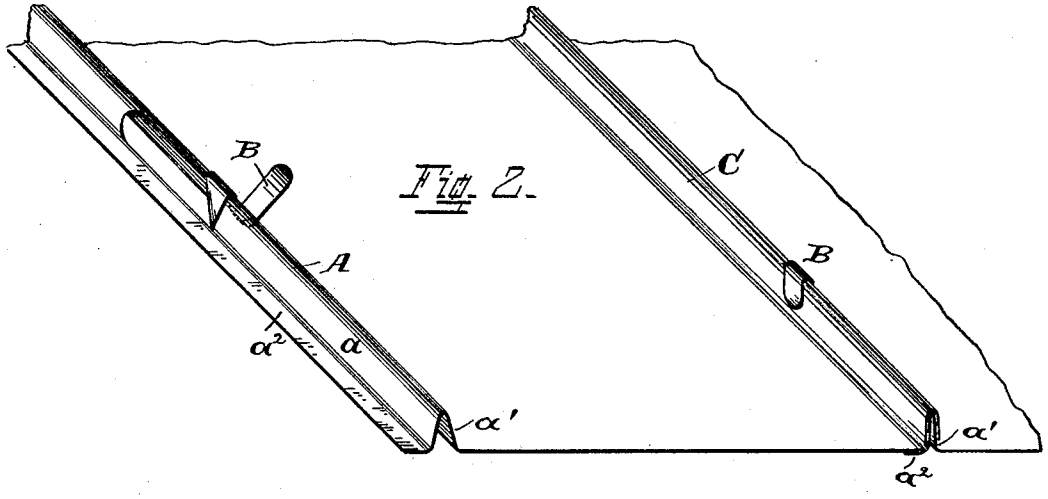


Fig. 2.

Fig. 3.

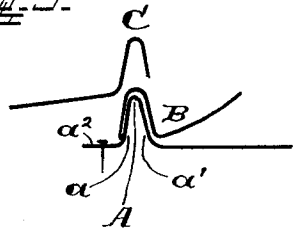
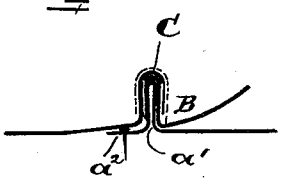


Fig. 4.



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UNITED STATES PATENT OFFICE.

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

METALLIC ROOFING.

SPECIFICATION forming part of Letters Patent No. 422,319, dated February 25, 1890.

Application filed December 9, 1889. Serial No. 333,044. (No specimens.)

To all whom it may concern:

Be it known that I, LONGLEY LEWIS SAGENDORPH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Metallic Roofing, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to the means or method hereinafter set forth for connecting and locking together the sides of metallic roofing-plates, and is applicable to any plain or "crown-tip" standing-seam joint.

In the accompanying drawings, Figure 1 represents a portion of a roofing-sheet with the locking-cleats cut before the side flanges are bent to position. The dotted lines indicate where the metal is bent to form said flanges. Fig. 2 is a perspective view of a portion of two sheets, showing a portion of one standing seam complete, the left-hand side showing my improved method of forming the locking-cleat from one side of the standing seam. Fig. 3 is a cross-section showing one side of a sheet nailed to position with the cleat bent back and the overlapping flange of the adjacent sheet ready to be put to place. Fig. 4 is a cross-section of the standing seam complete before the cleat is locked to place, the dotted line indicating the position of said cleat when so locked, as shown in Fig. 2.

My invention consists in cutting from the roofing-sheet at one side of one of the standing flanges a a locking or anchor cleat B, the upper cut which forms this cleat being shorter than the lower cut, so that when the cleat is bent back over the flange it will lie at substantially right angles thereto, as shown in Figs. 1 and 2. It will be seen that the cap A, of which flange a is a part, and from which the cleats B are cut, is formed inward from the outer nailing-flange, and the cleats B, being cut and formed entirely from one side a of cap A, do not in any way weaken the nailing-flange a^2, as no portion of the cleats is taken from said latter flange.

The metallic roof provided with my improved method for locking the sheets is applied as follows: Having properly secured the first row of sheets along the right-hand outer edge of the roof, (when the sheets are formed as shown,) the overlapping flange C of the adjacent sheet is placed over the cap A, formed by the two portions a and a', and also over the cleats B, after which the cleats B are bent back over the cap C, thus securely locking them together. It will be seen that the first row of sheets are nailed to the sheeting through the flange a^2 before the adjacent flange C is locked to place, and after being locked by means of the cleats, as aforedescribed, the roofing-sheets are securely anchored to the sheeting. The cleats B are preferably cut (but not bent to position) before the side flanges A and C are bent. The said flanges are next formed, when the sheets are ready for shipment. The cleats B, having been previously cut, need not be bent to position until desired to apply the sheets to the roof, thus permitting the sheets to be perfectly "nested" when shipped.

The advantages of my invention are apparent. The cleat, being cut from one side of the cap A, does not injure or weaken the standing seam, and affords a secure means for locking the sheets. The metal usually employed for separable cleats is saved, lessening the cost of manufacture. The roofing-sheets may be packed in a compact body for shipment and the cleats bent to place after arriving at their destination.

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

1. A roofing-sheet having at one side a continuous nailing-flange and a standing-seam cap with a cleat cut wholly from one side of said cap and integral therewith, the other side of said sheet having an overlapping-seam cap, substantially as set forth.

2. A roof made up of metallic sheets, each sheet having at one side the continuous nailing-flange a^2, and seam-cap A, made up of integral portions a and a', and cleat B, cut and formed wholly from the portion a, integral therewith, in combination with the overlapping-seam cap C of the adjacent sheet, said

cleat being bent back and over said latter cap, substantially as described.

3. The means herein shown and described for connecting metallic roofing-plates, consisting of a cleat cut and formed wholly from one side of the standing-seam cap of one sheet and integral therewith, said cap being formed inward from the continuous outer nailing-flange, the said cleat being adapted to overlap the seam-cap of the adjacent sheet, substantially as and for the purposes set forth.

LONGLEY LEWIS SAGENDORPH.

Witnesses:
C. S. BENEDICT,
P. M. HARDER.