## L. L. SAGENDORPH.

METALLIC ROOFING.

No. 396,605.

Patented Jan. 22, 1889.

Fig.1.

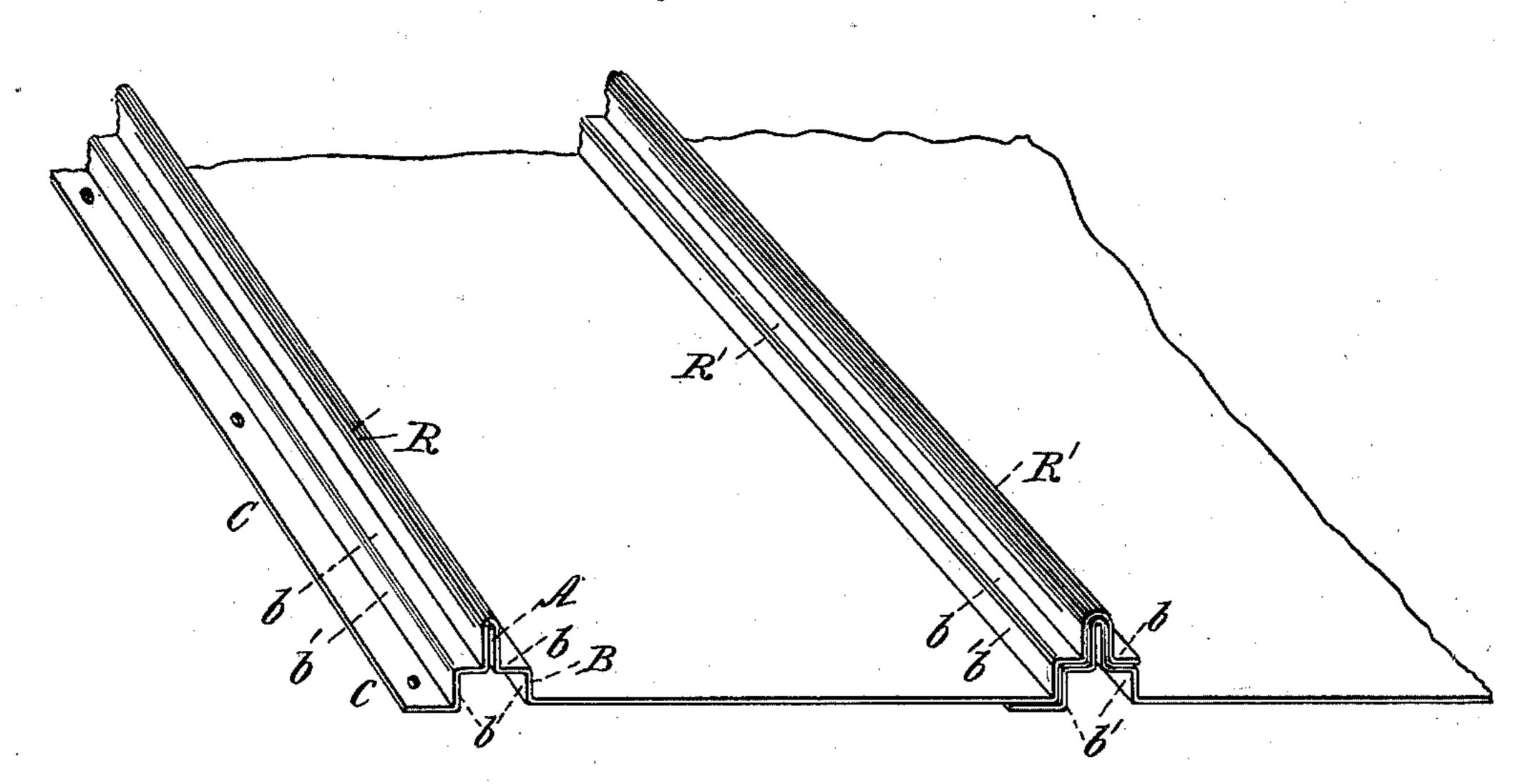
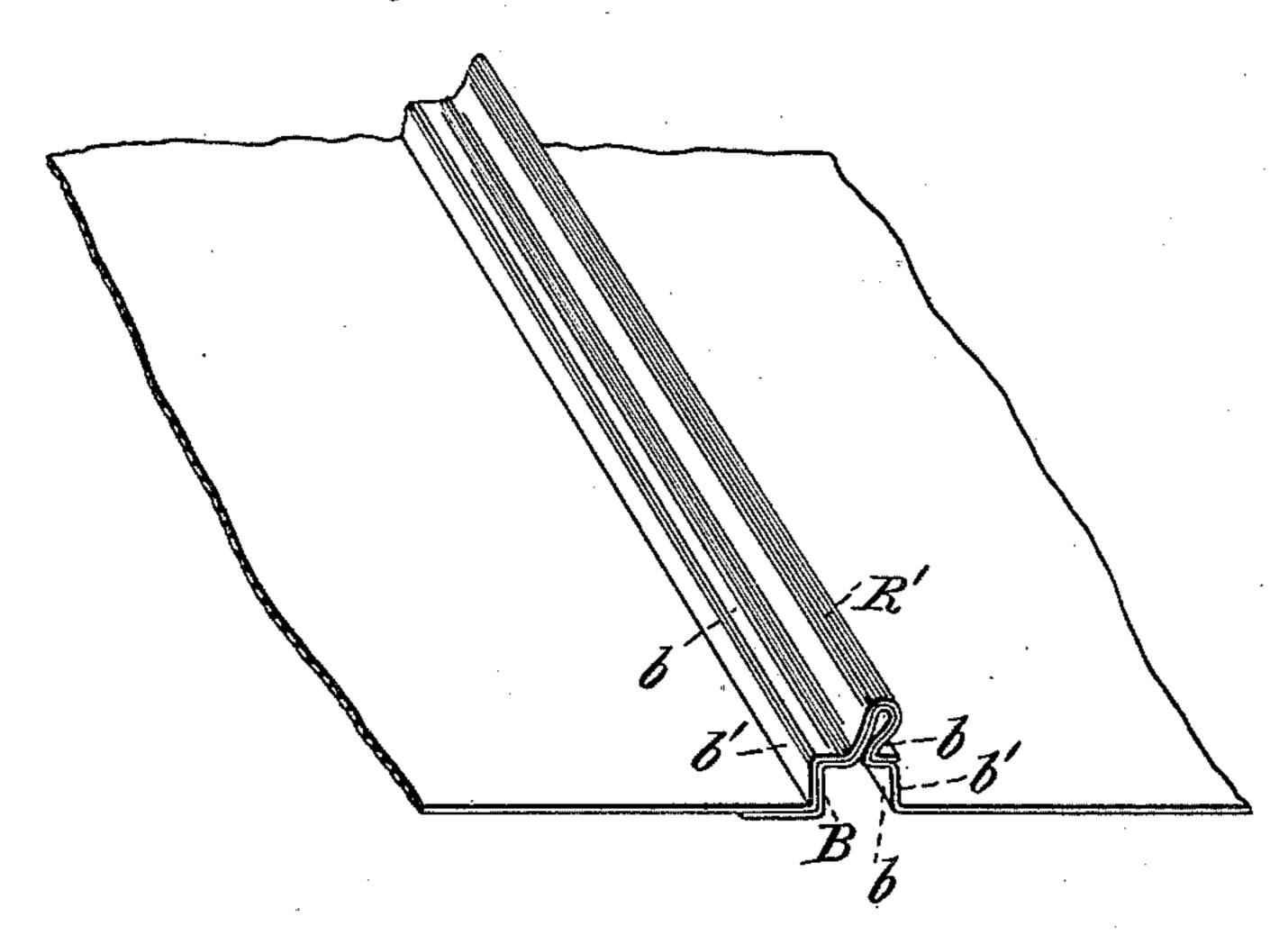


Fig. 2.



Witnesses: A. Smith Of Man

All Rover.

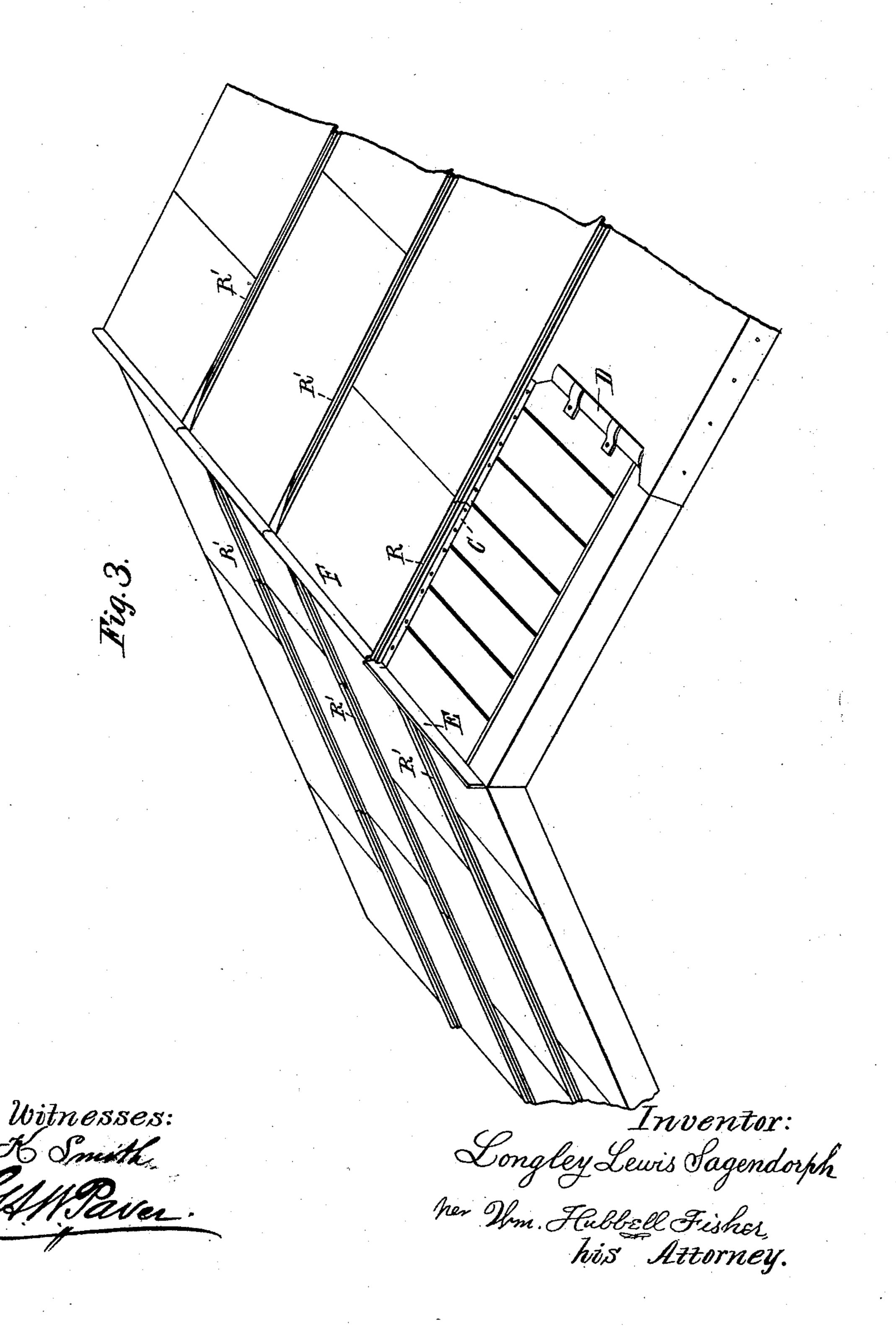
Inventor: Longley Lewis Sagendorph her Um. Hubbell Fisher, his Attorney.

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## United States Patent Office.

LONGLEY LEWIS SAGENDORPH, OF CINCINNATI, OHIO.

## METALLIC ROOFING.

SPECIFICATION forming part of Letters Patent No. 396,605, dated January 22, 1889.

Application filed June 1, 1888. Serial No. 275,737. (No model.)

To all whom it may concern:

Be it known that I, Longley Lewis Sag-ENDORPH, a citizen of the United States, and a resident of the city of Cincinnati, in the 5 county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Metallic Roofing, of which the following is a specification.

The several features of my invention and 10 the advantages arising from their use conjointly or otherwise will be apparent from the

following description.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a sheet of metallic roofing embodying my invention and in proper position for joining with an adjacent sheet, (partly shown,) the junction of the two sheets being effected. Fig. 2 shows the joint between two sheets with the standing seam crimped and closed. Fig. 3 represents a roof |

partly supplied with my device.

Near one edge of each sheet there is folded a compound ridge, R, composed of an upper 25 web, A, and a base, B. The sides of the web A are continuous with the top flanges, b, of the base, and these latter with the vertical walls b'. The edge of the sheet terminates in the flange C, through which the nails are 30 driven to secure the sheet in place. The other edge of the sheet is also provided with a compound ridge, R', similar to the ridge R, and adapted to fit over the ridge R of the adjacent sheet. In the ridges R' the 35 outer wall, b', of the base B is preferably omitted, as shown in the drawings.

In joining two sheets the ridge R' of the one is fitted over the ridge R of the other, as shown in Fig. 1. The top webs, A, are 40 then, as shown in Fig. 2, crimped by pinching or bringing them together at their base, leaving them still in the form of a loop at the top. In this way the tops of the webs are prevented from being broken at the top, 45 as they are liable to be when the folds are too tightly compressed at the top into a sharp edge. At the same time the webs are bent at an angle of forty degrees or more, thereby forming the loops into a hook. This effect-

50 ually binds the two sheets together, and the flange C of the undermost compound ridge being nailed to the sheeting of the roof, the

operation of fastening the sheets to the roof and to each other is completed in an effectual and advantageous manner. The joint so 55 formed is very tight, and even if some moisture should find entrance between the tops bof the ridges R R' it would meet with an insurmountable obstacle in the tight and turnedover webs A.

In applying these sheets to a roof they may be secured in any desirable manner together and to the roof at the edges not provided with the compound ridges R and R'. One mode of securing them at these blank edges 65 is shown in Fig. 3, and is as follows, viz: The upper sheet, overlapping the next lower, is held by the usual cleat, D. At the ridgepole the edges of the adjacent sheets are turned up, forming the flanges E, and the 70 flange E of one of these sheets is turned over the flange of the other sheet, forming the ridge-pole; or the flanges E, after being turned up, are covered by a separate cone or overlapping piece, forming the ridge-pole. 75 The seams formed by the ridges R R' are knocked over and flattened, as indicated in Fig. 3, so as to accommodate the forming and presence of the cone or ridge-pole.

What I claim as new, and desire to secure by 80

Letters Patent, is—

1. A metallic roofing-sheet provided with a compound ridge, R, having web A, and base B, consisting of the flanges b and vertical sides b', flange C, and compound ridge R', 85 having web A, base consisting of top flanges, b, and one vertical side b', substantially as and for the purposes specified.

2. The combination of two sheets, each provided with compound ridges, substantially as 90 described, of which the webs A are pinched together or approximated at their bases and bent at an angle from the vertical, substantially as and for the purposes specified.

3. In a sheet-metal roof, the combination of 95 roofing-plates provided with flanges E, and the cone F, and compound ridges R, having web A and base B, and compound ridges R', substantially as and for the purposes specified.

LONGLEY LEWIS SAGENDORPH.

Attest:

A. S. Ludlow, G. A. W. PAVER. It is hereby certified that Letters Patent No. 396,605, granted January 22, 1889, upon the application of Longley Lewis Sagendorph, of Cincinnati, Ohio, for an improvement in "Metallic-Roofing," was erroneously issued to said Sagendorph as owner of the entire interest in said invention; that said Letters Patent should have been issued to said Longley Lewis Sagendorph, and Charles N. Harder, of Philmont, New York, jointly; said Harder being owner of one-half interest therein as shown by the record of assignments in this Office; and that said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and scaled this 19th day of March, A. D. 1889.

[SEAL.]

H. L. MULDROW,

First Assistant Secretary of the Interior.

Countersigned:

BENTON J. HALL,

Commissioner of Patents.