(No Model.) 2 Sheets—Sheet 1.

T. C. SNYDER & T. C. BELDING.

SHEET METAL ROOFING.

No. 414,661. Patented Nov. 5, 1889.

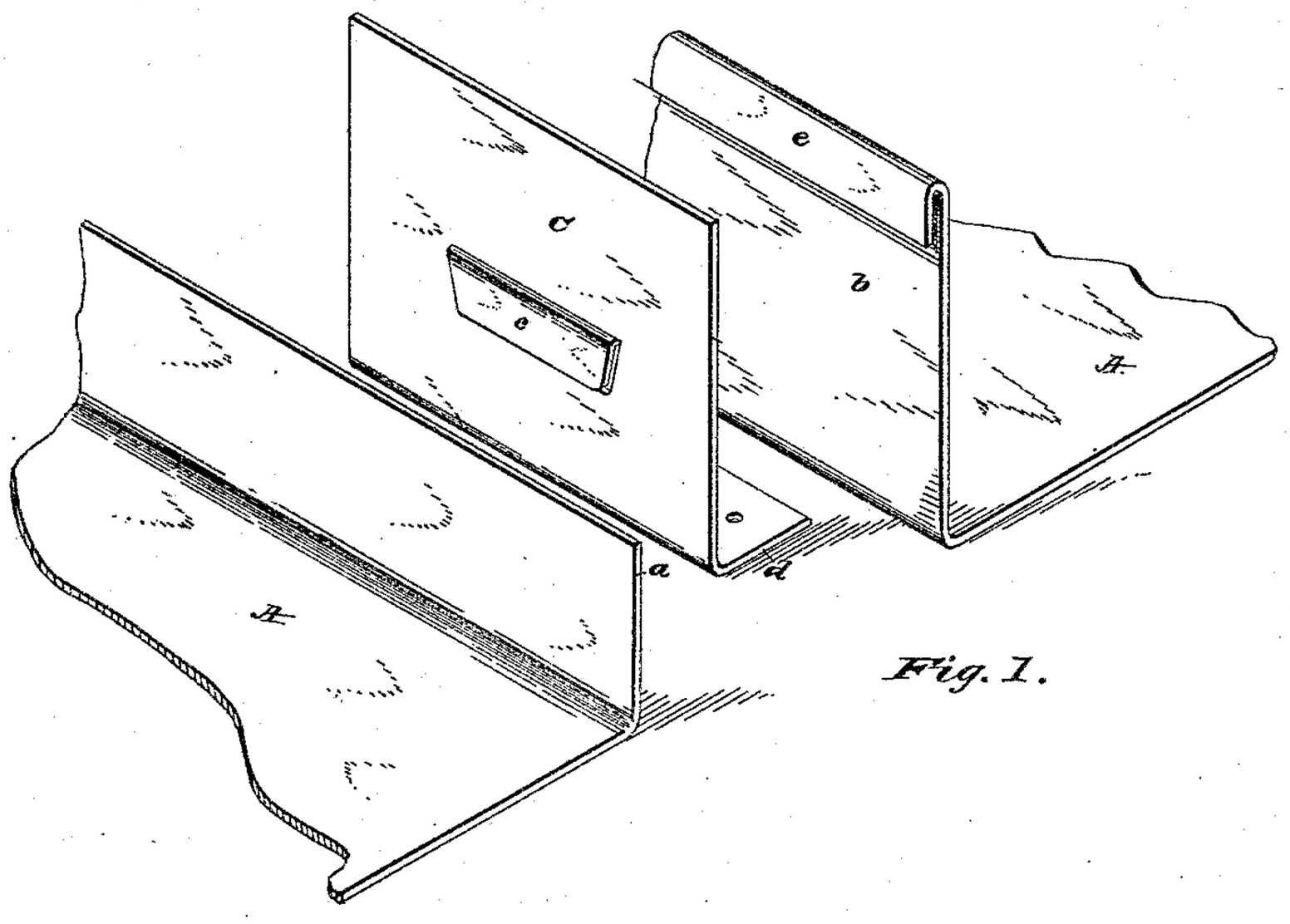

Fig. 1.

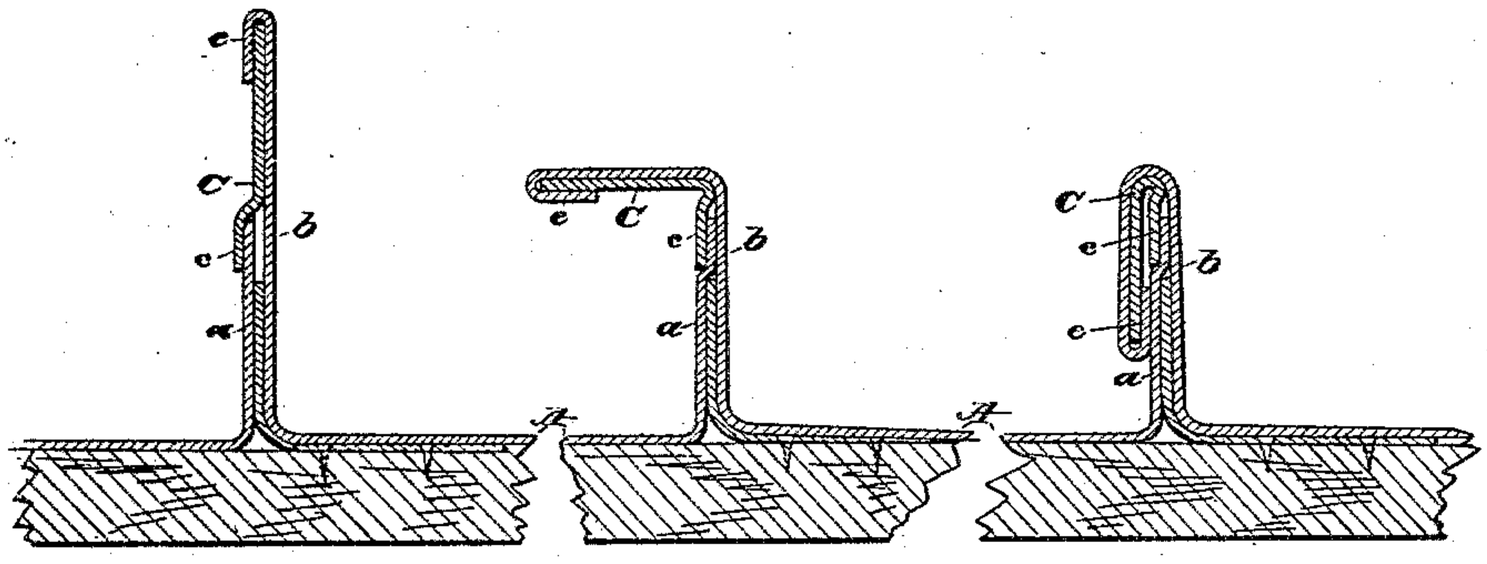

Fig. 2.

Fig. 3.

Fig. 4.

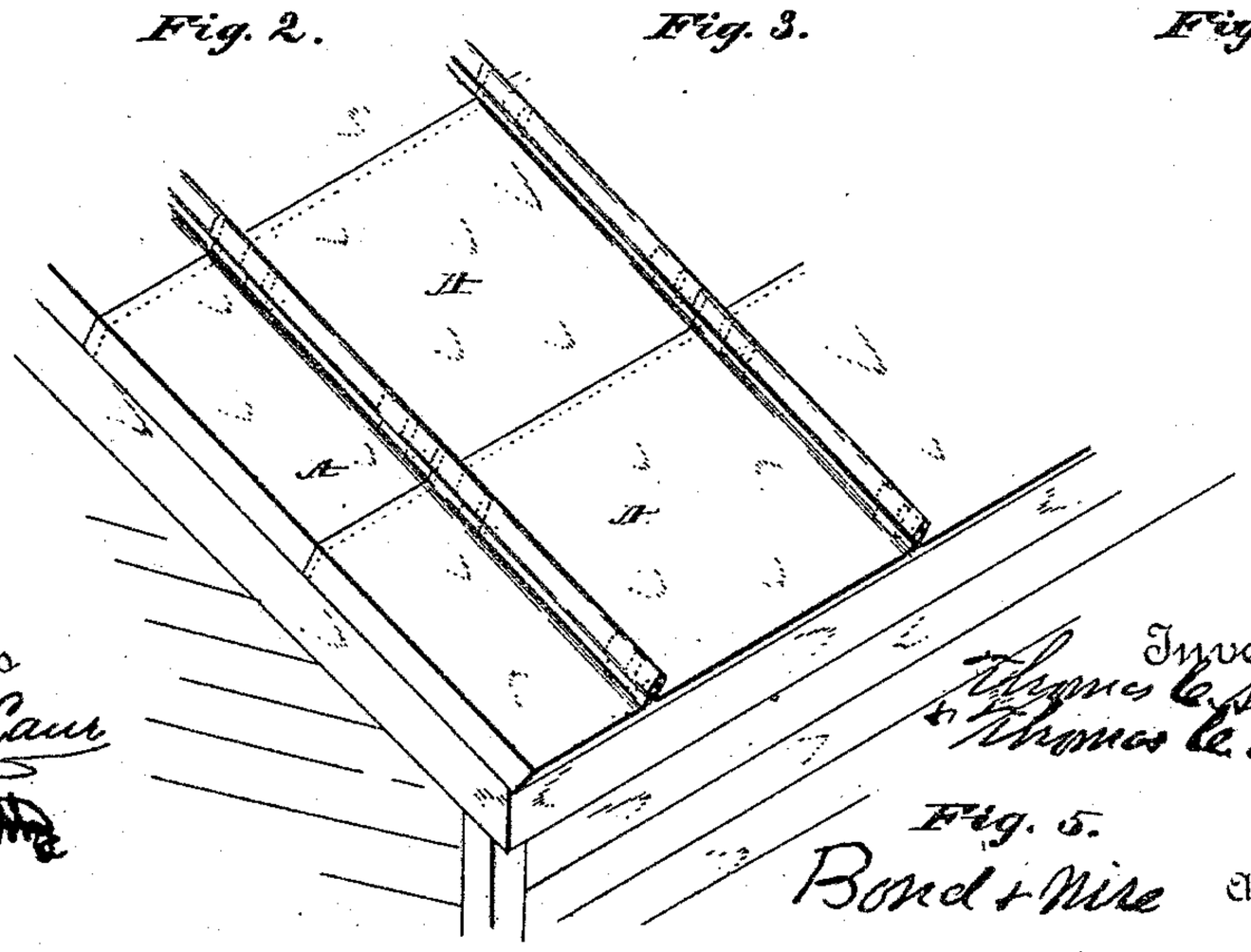

Fig. 5.

Witnesses
E. L. Law
C. A. Snow & Co.

Inventors
Thomas C. Snyder
& Thomas C. Belding
Bond & Bliss Attorneys

(No Model.) 2 Sheets—Sheet 2.

T. C. SNYDER & T. C. BELDING.

SHEET METAL ROOFING.

No. 414,661. Patented Nov. 5, 1889.

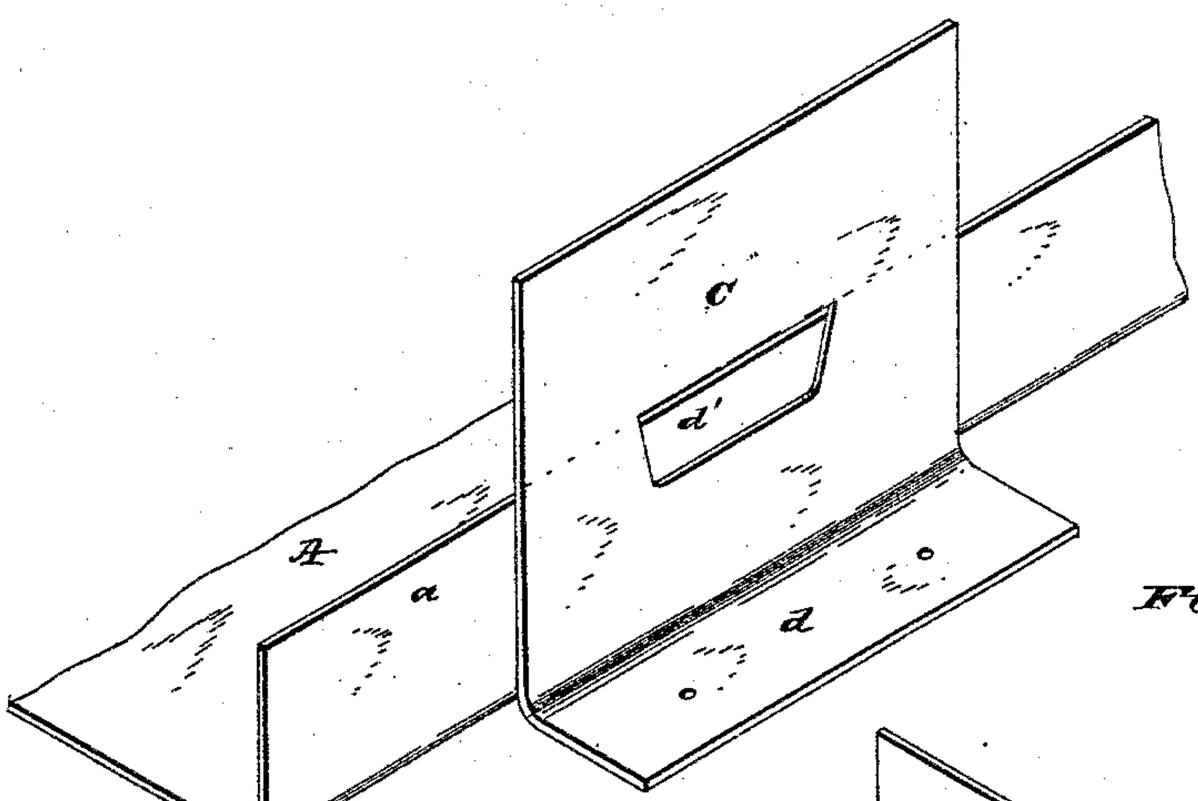

Fig. 6.

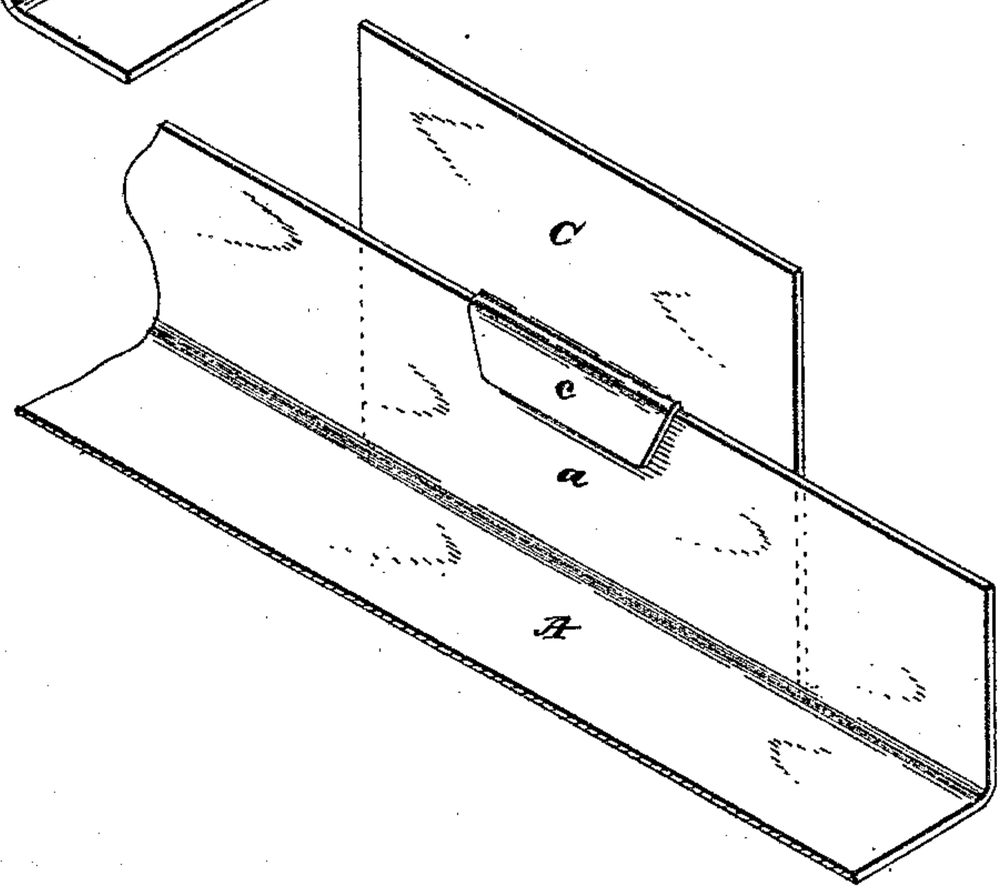

Fig. 7.

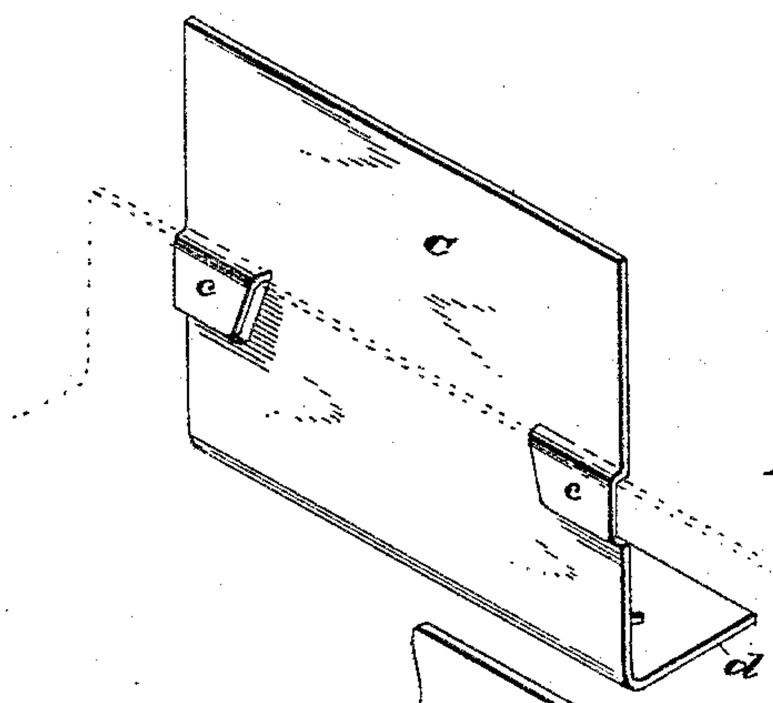

Fig. 8.

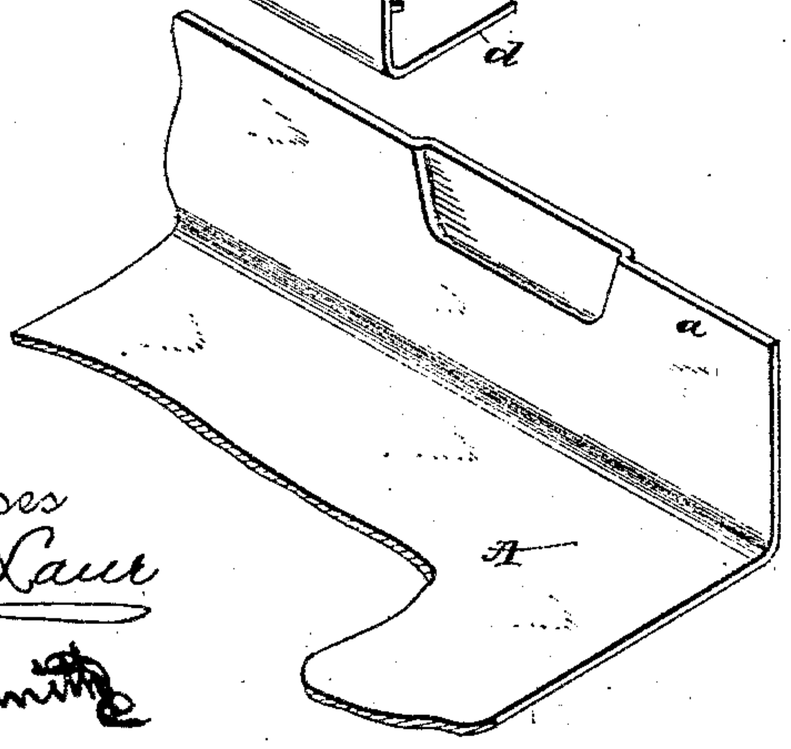

Fig. 9.

Witnesses
E. H. Lane
E. A. Hesmith

Inventors
Thomas C. Snyder
& Thomas C. Belding
By Bond & Wise
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS C. SNYDER AND THOMAS C. BELDING, OF CANTON, OHIO, ASSIGNORS TO THE CANTON STEEL ROOFING COMPANY, OF SAME PLACE.

SHEET-METAL ROOFING.

SPECIFICATION forming part of Letters Patent No. 414,661, dated November 5, 1889.

Application filed June 13, 1889. Serial No. 314,182. (No model.)

To all whom it may concern:

Be it known that we, THOMAS C. SNYDER and THOMAS C. BELDING, citizens of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Sheet-Metal Roofing; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a view showing portions of two sheets properly tongued up and the hem formed upon one of the tongued-up portions together with the anchor. Fig. 2 is a transverse section of the sheets, showing their position together with the position of the anchor when the hem is formed. Fig. 3 is a similar view showing the first bend of the tongued-up portion of one of the sheets. Fig. 4 is a similar view showing the seam properly formed. Fig. 5 is an isometrical view showing the seam properly formed. Fig. 6 is a view showing the anchor properly located upon the roofing-sheet. Fig. 7 is a similar view of the opposite side from that shown in Fig. 6. Fig. 8 is a view showing a modified form of anchor. Fig. 9 is a view illustrating the indentation formed by the apron or lip of the anchor when the seam is properly made.

The present invention has relation to sheet-metal roofing; and it consists in the different parts and combinations of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the sheets, which may be formed of any desired length, or the sheets may be formed in sections and the sections united together by cross-seams. One edge of the sheets A is provided with the tongued-up portion *a*, and the opposite edge of the sheets is provided with the tongued-up portion *b*, said tongued-up portions *a* and *b* being of unequal height, as illustrated in the drawings.

The anchor C is provided with the apron or lip *c*, which is cut or formed in said anchor, substantially as illustrated in Fig. 1. The top or upper portion of the apron or lip *c* is left integral with the anchor C. This apron or lip *c* is for the purpose of embracing the top or upper part of the tongued-up portion *a*. This apron or lip *c* is so adjusted in the anchor C that the foot *d* will come in line with the bottom of the tongued-up portions *a* and *b*. It will be seen that by our peculiar construction of the anchor C said anchor can be easily and quickly placed in proper position, and that said anchor will always remain in the position placed, the foot *d* conforming to any irregularities of the sheeting, thereby leaving the portion of the anchor C above the tongued-up portion *a* always the same.

In use one of the sheets A is placed upon the roof proper and the tongued-up portion *a* formed, when a sufficient number of anchors C are placed in the position shown in Figs. 6 and 7, and said anchors nailed or otherwise secured to the sheeting through the foot *d*, at which time a sheet provided with the tongued-up portion *b* is placed against the anchor C and the tongued-up portion *a* of the adjacent sheet, at which time the hem or fold *e* is formed, which hem or fold embraces the top or upper ends of the anchors C. The tongued-up portion *b*, which extends above the top of the tongued-up portion *a*, is then bent or folded down and over the tongued-up portion *a*, at which time the portion of the anchor C which extends above the tongued-up portion *a* is carried with the tongued-up portion *b*. It will be seen that as the anchor C is pressed down the apron or lip *c* will hug the tongued-up portion *a*, thereby causing the sheet to be securely held down to the sheeting. It will be seen that in properly forming the seams the apron or lip *c* will be indented into the tongued-up portion *a*, as illustrated in Fig. 9, thereby forming a smooth and even joint or seam.

In Fig. 8 a modified form of anchor is shown, which consists in forming the aprons or lips at the ends of the anchors C.

It will also be seen that by our peculiar

construction of the anchor the apron or lip *c* requires no bending over the tongued-up portion *a*, but maintains the same position during the formation of the seam. The part of the tongued-up portion *a* opposite the apron or lip *c* is countersunk into the opening *d'*, thereby reducing the thickness of the seam equal to one thickness of the metal used, thereby making the joint thinner, more compact, and water-tight. It will also be seen that by the apron or lip *c* of the anchors C being formed to project downward, so as to embrace the tongued-up portion *a*, the operation of thumbing or bending said apron or lip *c* over the tongued-up portion *a* is avoided, as it retains its original position during the formation and in the finished seam.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the sheets A, provided with the tongued-up portion *a* and the tongued-up portion *b*, provided with the hem *e*, the anchor C, provided with the apron or lip *c*, formed integral at its top with said anchor, and its bottom or lower end left free to embrace the tongued-up portion *a* of the sheets A without changing the original downwardly-projecting position of said apron or lip *c*, substantially as and for the purpose specified.

2. The combination of the sheets A, provided with the tongued-up portions *a* and *b*, the anchor C, provided with the apron or lip *c*, said apron or lip being integral with the anchor C at its top, and the tongued-up portion *b* and anchor C folded over the tongued-up portion *a*, and the apron or lip *c* indented into the tongued-up portion *a*, substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

THOMAS C. SNYDER.
THOMAS C. BELDING.

Witnesses:
CHAS. M. BALL,
F. W. BOND.