W. S. GRAFTON.

Sheet-Metal Roofing.

No. 205,186. Patented June 25, 1878

Fig 1

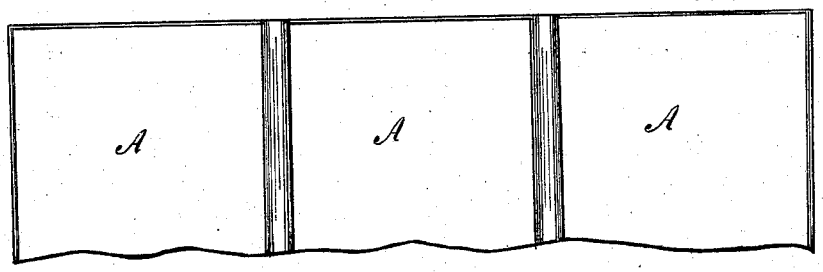


Fig. 2.

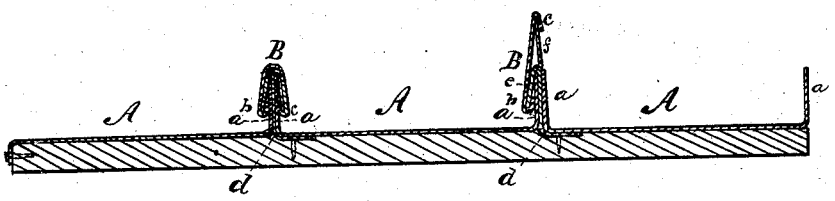


Fig. 3.

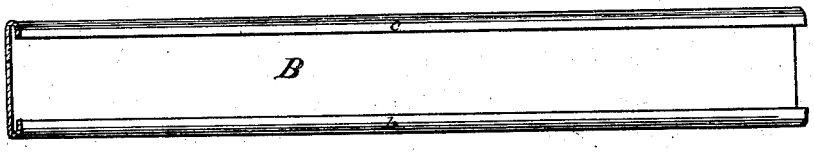
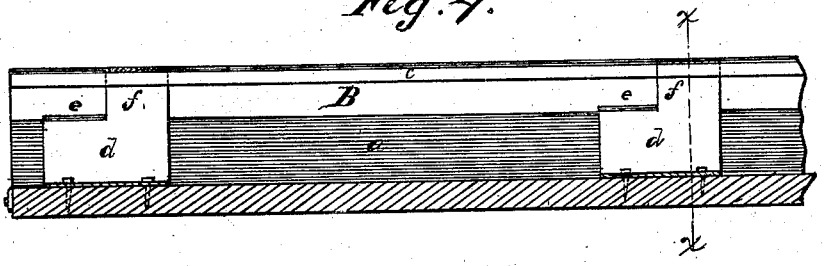


Fig. 4.



Attest

K. M. Priest

E. J. Foster

Inventor

W. S. Grafton

UNITED STATES PATENT OFFICE.

WILLIAM S. GRAFTON, OF STEUBENVILLE, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO ALEXANDER HANVEY, OF SAME PLACE.

IMPROVEMENT IN SHEET-METAL ROOFING.

Specification forming part of Letters Patent No. **205,186**, dated June 25, 1878; application filed December 31, 1877.

To all whom it may concern:

Be it known that I, WILLIAM S. GRAFTON, of Steubenville, county of Jefferson, and State of Ohio, have invented a new and useful Improvement in Sheet-Metal Roofing, of which the following is a specification:

The object of my invention is to furnish a device for sheet-metal roofing that will combine the advantages of binding the different parts together in a simple and effective manner; that will conceal all raw edges, preventing, in a measure, the oxidization of the iron; that will allow for the expansion and contraction of the sheets; that will provide for fastening the the sheets to the roof-boards without perforating them, and that will be cheap and simple in its construction and application.

In the drawing, Figure 1 is a face view of the roof as it lies on the building. Fig. 2 is a transverse section on line *x x* in Fig. 4. Fig. 3 is a perspective view of a cap or covering for the seams, which, in the further description, will be designated B. Fig. 4 is a side elevation of a portion of one of the seams, all of which will be described more minutely by letters of reference to the different parts.

A A, &c., are sheets of metal, forming the covering for the roof, with the edges turned up at right angles, forming flanges *a* of uniform width. B is a cap for covering the seams, with the edges *b c* turned in, forming hooks for the anchor and hems for the raw edges.

In applying the roof, one of the sheets A is placed in position. The anchor *d*, formed of the same material, and divided centrally from its upper edge down to the flange *a*, forming the parts *e f*, is then placed in position. The part *e*, being already bent, is hooked over the flange *a* into the hem *b* of the cap B, while the part *f* enters the hem *c*, when the anchor is nailed to the roof-boards. Another sheet is now placed in position with one of its flanges in contact with the flange of the former sheet, when the hem *c*, with half the cap B and the part *f* of the anchor, are bent down over the two flanges that are in contact, thus locking the whole together, fastened to the roof, as shown in Fig. 2, and so on, consecutively, until the roof is finished.

I claim as my invention—

In sheet-metal roofing, the combination of the metal sheets A with the cap B, having its edges *b c* turned in, and the anchor *d*, all arranged in the manner and for the purpose substantially as described.

WM. S. GRAFTON.

Witnesses:

H. M. PRIEST,

E. J. FOSTER.