S. M. DALZELL.

Metallic Roofing.

No. 211,973. Patented Feb. 4, 1879.

Fig. 1.

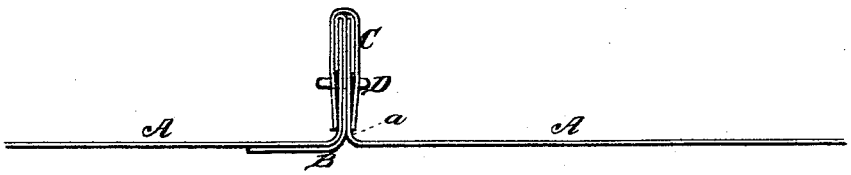
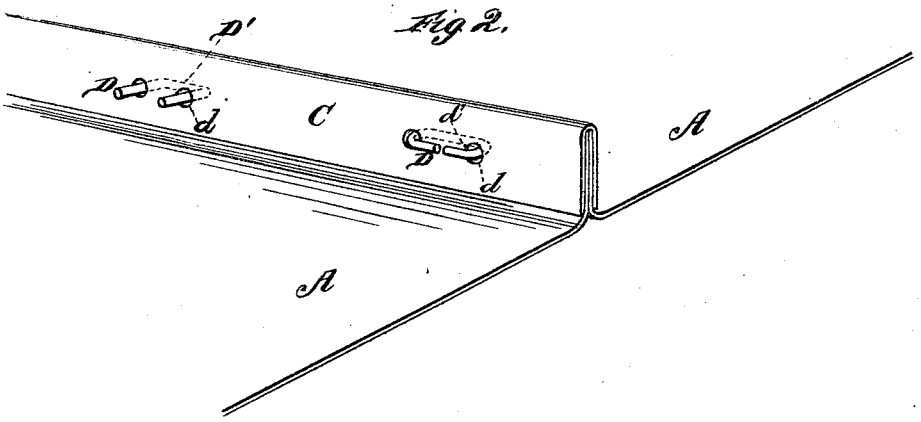


Fig 2.



WITNESSES

Robt Everett

H. Clay Smith.

INVENTOR.

Samuel M. Dalzell.

By Gilmore, Swift & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

SAMUEL M. DALZELL, OF SHARON, PENNSYLVANIA, ASSIGNOR OF ONE-HA LF HIS RIGHT TO THE WHEELER IRON COMPANY, OF SAME PLACE.

IMPROVEMENT IN METALLIC ROOFING.

Specification forming part of Letters Patent No. **211,973**, dated February 4, 1879; application filed October 19, 1878.

To all whom it may concern:

Be it known that I, SAMUEL M. DALZELL, of Sharon, in the county of Mercer and State of Pennsylvania, have invented a new and valuable Improvement in Metallic Roofing; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation 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.

Figure 1 of the drawings is a representation of an edge of my metallic roofing, and Fig. 2 is a perspective view of the same.

My invention relates to sheet-metal roofing formed of blocks, the ends of which are secured together in the usual manner, and the longitudinal edges are bent upward and adapted to be keyed or anchored together, a saddle placed over the junction, and the whole secured together by a device which pierces them laterally.

As heretofore constructed, the rivets, eyelets, &c., ordinarily employed are liable to break or tear out from expansion and contraction, or from other cause, and this evil is due to the small bearing-surface which the securing device occupies—generally but a small edge-surface, and that ragged. In such case the saddle becomes displaced and inconvenience, damage, and expense result.

To avoid this and other evil results my invention is designed, the object of which is to furnish a fastening device which will afford a large bearing-surface, and to adapt the same to accommodate itself to the contraction and expansion consequent upon changes of temperature.

To this effect I pierce the ridge and saddle at proper distances with holes slightly larger than the diameter of the arms of a staple which they receive. The arms of the staple are bent inward on the opposite side, and the curvatures in the ends of the loops thus made allow a longitudinal play, as desired.

It will thus be seen that by my device I secure a bearing-surface equal to the length of the body of the staple, and at the same time allow for unequal expansion.

It is obvious that my device is much cheaper of itself than the rivet or eyelet, and that it can be more cheaply and readily applied.

Referring to the drawings, A represents the roof-block, bent as at *a;* B, the anchor, and C the saddle. These are of ordinary construction, are applied in the usual manner, and nothing therein is sought to be covered in this application. *d d* represent holes which pierce the ridge, and they are larger than the diameter of the arms D of the staple. The arms D of the staple are projected through the holes *d d*, and, being bent down inward upon the side opposite to the body D′ of the staple, form a curvature, *d′*, in each end of the staple, which allows a longitudinal play.

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

As a fastening for the standing seams of metal roofs, the staples D D′, adapted to serve in connection with holes *d d* through said seam, said holes being larger than the diameter of the staple-arms D, which are bent down on the side of the seam opposite the body D′, so as to leave curvatures *d′* for longitudinal play, as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

SAMUEL M. DALZELL.

Witnesses:

THEO. MUNGEN,

JAMES J. SHEEHY.