

T. Carter,  
Metal Roofing.

No. 104,553.

Patented June 21, 1870.

Fig. 1.

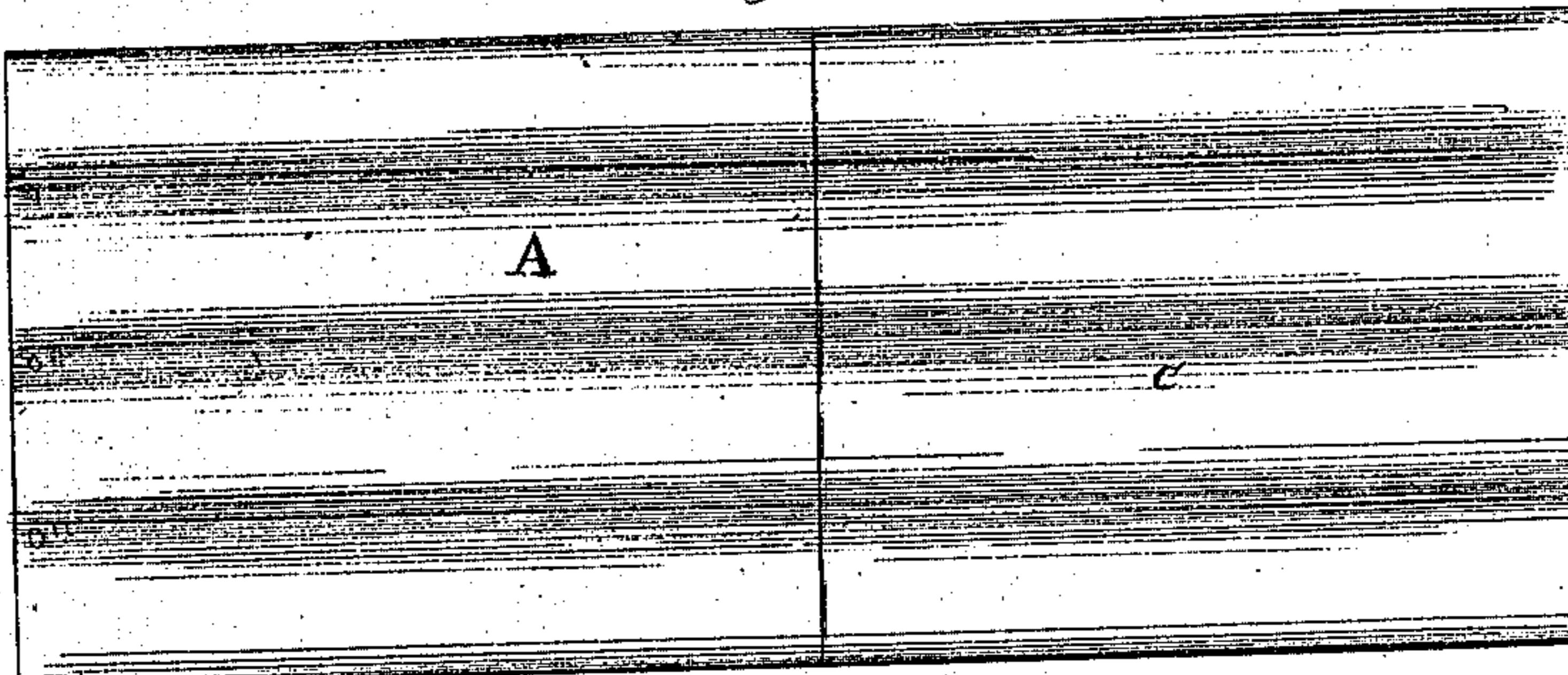


Fig. 2.

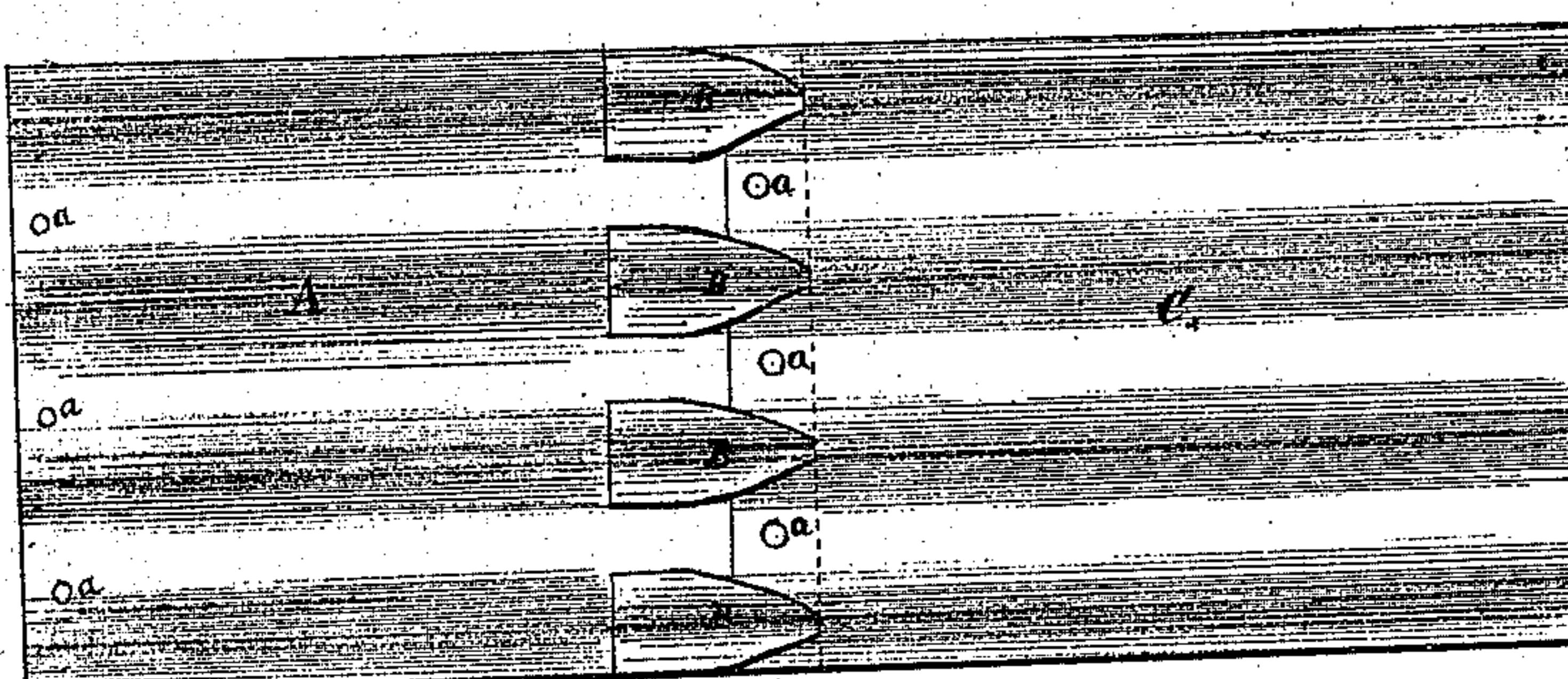


Fig. 3.



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THOMAS CARTER, OF NILES, OHIO.

*Letters Patent No. 104,553, dated June 21, 1870.*

## IMPROVEMENT IN METAL ROOFING.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, THOMAS CARTER, of Niles, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Metallic Roofing, of which the following is a specification.

Figure 1 is an upper side view of the roofing.

Figure 2, an under-side view.

Figure 3, an end view.

Like letters of reference refer to like parts in the different views.

The nature of this invention relates to the manner of laying metallic sheet roofing upon buildings, so that the overlap of the sheets shall be close, secure, and of easy construction, substantially as hereinafter set forth.

In the drawing, fig. 1—

A represents a corrugated sheet of metal, which may be of any particular size and shape.

At the end of each flute of the under side of said sheet is secured, by its base or wide end, a tongue, B, whereas the pointed end is free, leaving a space between it and the sheet, as shown in fig. 3.

The under side of the lower end of each sheet composing the roof is alike provided with a series of tongues, whereas the upper end is pierced with holes a.

The manner of laying the sheets is as follows:

Beginning at the lower part or eaves of the roof, a sheet, C, is first laid and nailed to the roof-boards by inserting the nails in the holes a, above referred to.

A second sheet, A, next in order above, is now laid by having the lower end thereof overlap the upper end of the sheet C, thereby covering the heads of the nails whereby it is secured to the roof-boards.

The lower end of the second sheet A is held in place, and in close contact with the first-laid sheet C, by means of the tongues B, the ends of which project into the corresponding flutes of the lower sheet, as shown in fig. 3, thereby holding the second sheet A

closely and securely down upon the upper end of the first sheet, and covering the nails, thereby protecting them from exposure to rain and consequent leakage.

The upper end of the second sheet A is nailed to the roof-boards in like manner as was the first one C.

A third sheet is now secured to the second in the same way, by inserting its lower edge between the upper end of the sheet and the tongues, and nailing the upper end to the boards, and so on to the extent of any number of sheets that may be required to cover the roof.

In this manner of laying the sheets provision is made for their contraction and expansion resulting from the variable temperature of the weather.

The sheets not being rigidly connected to each other, but simply attached by the tongues, allow of their separate and individual contraction and expansion, so that no extraordinary strain is exerted upon their fastenings, and consequent breaking away of the sheets therefrom, nor can they crinkle and warp out of place, for each sheet will slide upon the other at their junction, as they are closely but not rigidly connected.

Flat sheets of roofing may also be connected to each other by means of tongues, viz: by inserting the upper end of one sheet between the lower end and tongue of the next, in order as above described.

### Claim.

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

The tongue B, in combination with the sheet A, in the manner substantially as described, and for the purpose set forth.

THOMAS CARTER.

Witnesses:

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