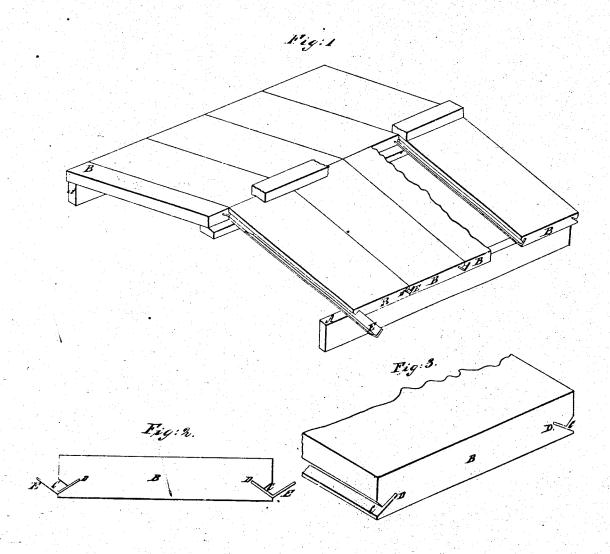
## J.Mc Vay.

## Metallic Roofing.

Nº 53,162.

Patented Mar. 13, 1866.



Hitnesses: James H. Layman Gr. A. Nicholon Som Sicleng By Hughton

## UNITED STATES PATENT OFFICE.

JOHN MCVAY, OF COLUMBIA, OHIO.

## IMPROVEMENT IN ROOFING.

Specification forming part of Letters Patent No. 53,162, dated March 13, 1866.

To all whom it may concern:

Be it known that I, JOHN MCVAY, of Columbia, Hamilton county, Ohio, have invented a new and useful Improvement in Board Roofs; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to the class of roofs which consist of a series of boards whose joints or interstices are closed by metallic tongues or strips, which serve also to conduct off whatever water may enter the interstices; and my invention consists in a more simple, effective, and enduring mode of constructing such roofs.

Figure 1 represents a portion of a car or other roof embodying my invention. Fig. 2 is an end view of a board with the tongue inserted. Fig. 3 is a perspective representation of the end of a board prepared to receive the tongue.

A represents a portion of the body-timbers of a railroad-car. B are boards, in whose edges are formed grooves C and kerfs D, which penetrate the substance of the board obliquely upward, and receive angle-strips, tongues, or gutters E, of sheet metal which has been previously bent to an angle slightly more acute than the angles of the kerfs D. These gutters, being inserted in the act of putting up the roof and the boards being driven snugly to-

gether, the whole forms, as it were, a single

compact sheathing, the gutters operating as

tongues to hold the boards immovably to one

plane, whether against an upward or downward disturbing force, and by their elastic nature preserving a perfectly-tight joint, however much the boards may shrink or swell. The angular form, moreover, besides affording the required elasticity, presents, in conjunction with the grooves in the boards, the most advantageous shape for a water way or channel. On the other hand, the gutter-pieces, being wholly inclosed in the substance of the timber, require no other support, and cannot sag away from the boards, and is thus free from a defect incident to previous devices of this class, which, although specially supported at intervals by wooden or other purlins, yet, in time, sag down between their points of support and become useless.

My gutter pieces may be made of any suitable sheet metal, such as tin plate, galvanized iron, or copper.

The groove C may be made of any size or

shape or omitted altogether.

I claim herein as new and of my invention—
The combination of the V-shaped troughs
E with grooves C and kerfs D in the edges of
the boards B, all constructed and arranged in
the manner and for the purposes set forth.

In testimony of which invention I hereunto set my hand.

JOHN McVAY.

Witnesses: GEO. H. KNIGHT, JAMES H. LAYMAN.