## A. J. CONNER. Wooden-Roof.

No. 213,740.

Patented April 1, 1879.

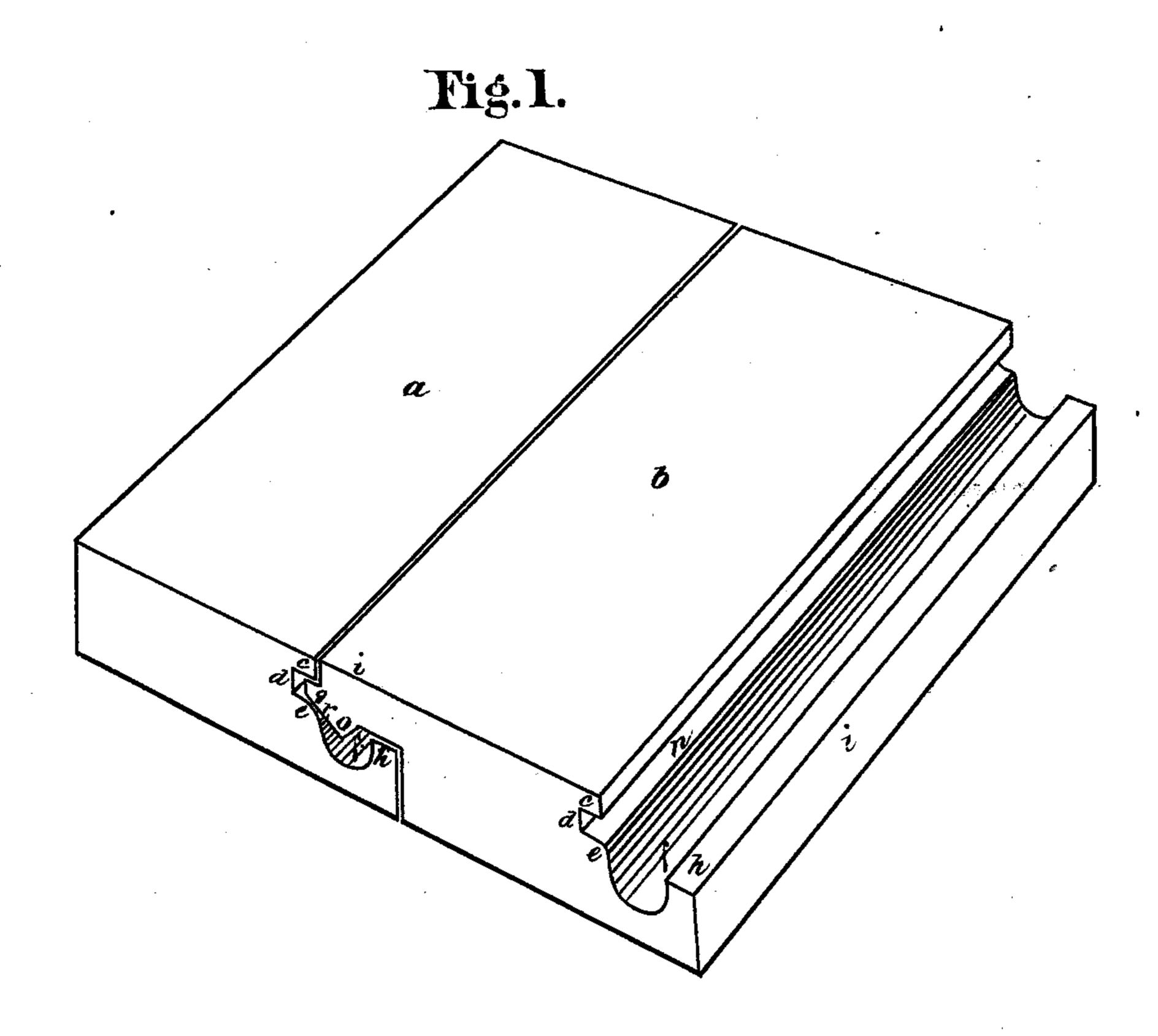


Fig. 2.

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N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

ANDREW J. CONNER, OF LOUISVILLE, KY., ASSIGNOR TO DAVID R. MUSSEL-MAN AND JAMES B. HAWS, OF SAME PLACE, ONE-THIRD TO EACH.

## IMPROVEMENT IN WOODEN ROOFS.

Specification forming part of Letters Patent No. 213,740, dated April 1, 1879; application filed February 17, 1879.

To all whom it may concern:

Be it known that I, Andrew Jackson Conner, of the city of Louisville, county of Jefferson, and State of Kentucky, have invented certain Improvements in Wooden Roofs, of which the following is a specification:

My invention relates, generally, to the construction of boards for the roofs of railroadcars and other structures in such a manner as to make tight joints in adjoining boards without lapping one board upon another, and to drain the joints between the boards to prevent leakage and decay; and, particularly, it relates to the forms given to the adjoining edges of the boards.

In the first place I provide one edge of a board with a straight edge on its upper side, and with a longitudinal groove under that straight edge, which inclines on its lower side, and terminates at one edge of a horizontal semicircular trough, cut out of the material of the board itself, on the outer side of which is cut a horizontal smooth shoulder. All these formations extend the entire length of the board.

In the second place I provide the other edge of the same board with an upper straight edge, to correspond with the one first described, and with a tongue to correspond with the groove in the other edge, or in the edge of any other board prepared in like manner. The tongue, on its lower side, is made to incline downward at an angle of about forty-five degrees to a certain distance, and then the material of the board is cut away beyond, so that it may incline in an upward direction at about the same angle, so as to form a sharp drip-edge, from which any water that may penetrate through from the top surface may fall into the middle of the trough above mentioned. Beyond that drip-edge a plain recess is made, to correspond with and fit upon the shoulder before mentioned as being made in the other edge of the board.

By means of these two formations, one up-

on one edge and the other upon the other edge of the board, it is ready for use. The lower and inclined side of the tongue leads any water that may pass through the surface-joint, between two adjoining boards correspondingly prepared, over the center of the trough, which thus conducts it out readily at the eaves of the roof, so that none will remain to produce decay.

In the accompanying drawings, Figure 1 represents a perspective of two boards placed together as in a roof, one of which has both its edges correspondingly prepared according to my invention, while the other has one edge prepared with one of the formations; and Fig. 2, a transverse section of the same.

c indicates the surface straight edge first above mentioned; d, the groove; e, the inclined under side of the groove; f, the trough; h, the shoulder in the edge first described, and i the upper straight edge; g, the tongue; r, its incline; o, the drip-edge, and s the recess for the shoulder h, as described, in the other edge of the board.

It will be obvious from the foregoing description that a board having its two edges correspondingly prepared, as described, is ready for sale and use, and that it will require little labor or expense to make a roof out of boards so prepared.

What I claim as new and as of my own invention, and desire to secure by Letters Patent, is—

Roofing-boards each having one edge formed with a straight edge, c, groove d, incline e, trough f, and the other formed with straight edge i, tongue g, and drip-edge o, adapted to match each other, and thus effectually drain themselves of any water that may penetrate through the upper surface-joints between them, substantially as described.

A. J. CONNER.

Witnesses:

J. J. FAULKNER, M. T. McKeldin.