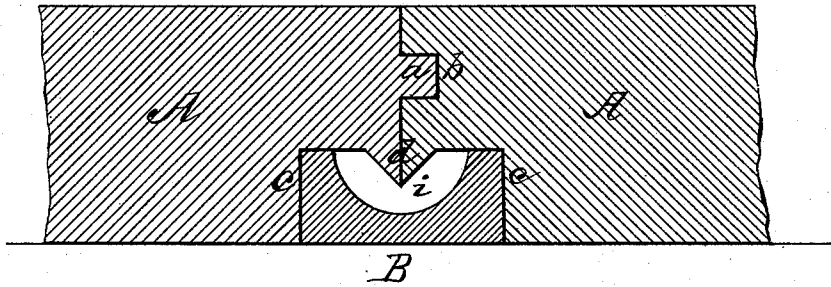


J. C. WANDS.  
Roof-Battening.

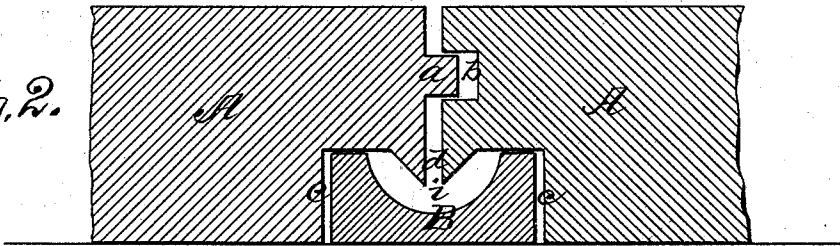
No. 209,310.

Patented Oct. 22, 1878.

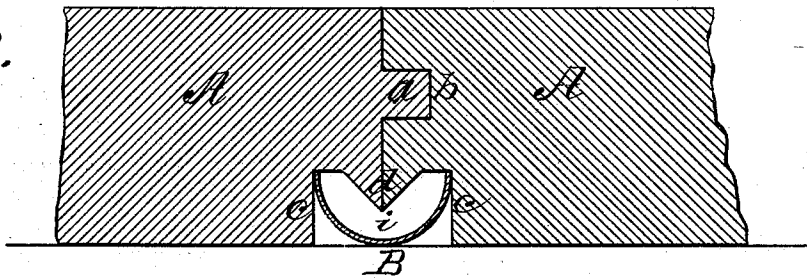
*Fig. 1.*



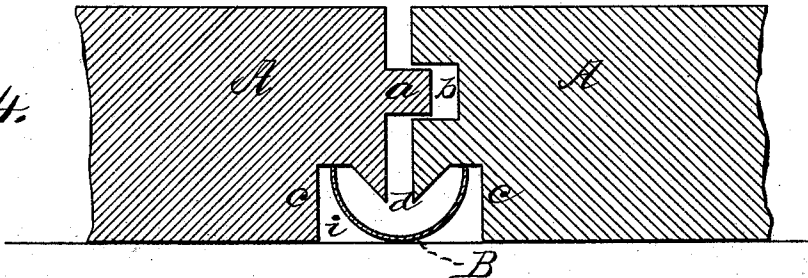
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES

*Mary S. Utley.*  
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INVENTOR

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ATTORNEY

# UNITED STATES PATENT OFFICE.

JOHN C. WANDS, OF NASHVILLE, TENNESSEE.

## IMPROVEMENT IN ROOF-BATTENING.

Specification forming part of Letters Patent No. **209,310**, dated October 22, 1878; application filed July 16, 1878.

### *To all whom it may concern:*

Be it known that I, JOHN C. WANDS, of Nashville, in the county of Davidson and State of Tennessee, have invented a new and valuable Improvement in Joints for Wooden Roofs; 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 cross-section of my improved roof-joint closed. Fig. 2 is a like view thereof open, and Figs. 3 and 4 are modifications.

This invention has relation to improvements in joints for car-roof boards; and the nature of the invention consists in combining with two adjoining roof-boards, tongued and grooved into each other, and rabbeted upon their lower contiguous edges to form a recess under their joint, and provided with drip-points, a gutter arranged in said recess, and out of contact with the drip-points, and receiving the drip, as will be hereinafter more fully described.

In the annexed drawings, the letter A designates two adjoining roof-boards of a car-roof. One of these boards is provided near its upper portion with a tongue, *a*, that is received into a groove, *b*, in a corresponding position in the other board, the object of which is to prevent the edges of said boards from getting out of line with each other, and to exclude cinders from the joint. The lower contiguous edges of these boards are rabbeted, as shown at *c*, forming a recess upon the under side of the board, the half of which is in one and the other half in the other of said boards. Upon the edges of these rabbets are angular projections extending downward into the recess aforesaid, and forming a drip-point, *d*. The inclined walls of this recess present obtuse angles with the top walls of the rabbets, for a purpose hereinafter explained.

B represents a trough or gutter of wood or

iron, or other suitable material, arranged in the recess *i* under the drip-point *d*. This gutter extends from side to side of the said recess, its upper end bearing against the top wall of the recess, and it allows the joint to open as either of the boards A contract without opposition, as shown in Fig. 4.

It will be seen that, the boards being inclined, as are also the gutters, the water passing through the joints will be received in the gutters, and be carried to the eaves of the roof and discharged.

The object of the drip-point in the recess *i* is to prevent drops of water from running along the tops of the recess, and passing outside of the trough into the interior of the car in ascending and descending grades. This occurrence is often seen during showers on telegraph-wires and other inclined objects, where drops of water run along their under sides a considerable distance, until, by uniting with other drops, they have acquired sufficient volume and weight to overcome the force of cohesion.

I am aware that gutters for the collection of drip have heretofore been employed at the intersection of the boards of roofs; but all such have been in contact with the drip-point. Therefore I do not claim, broadly, the combination of gutter with the boards of a roof.

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

The combination, in a wooden roof, of adjoining boards, tongued and grooved into each other, having a recess under their joint in their under sides, and an angular drip-point extending downward into said recess, and a trough or gutter fitting into said recess under the drip-point, out of contact therewith, substantially as set forth.

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

JOHN C. WANDS.

Witnesses:

W. C. BUTTERFIELD,  
THEO. PLUMMER.