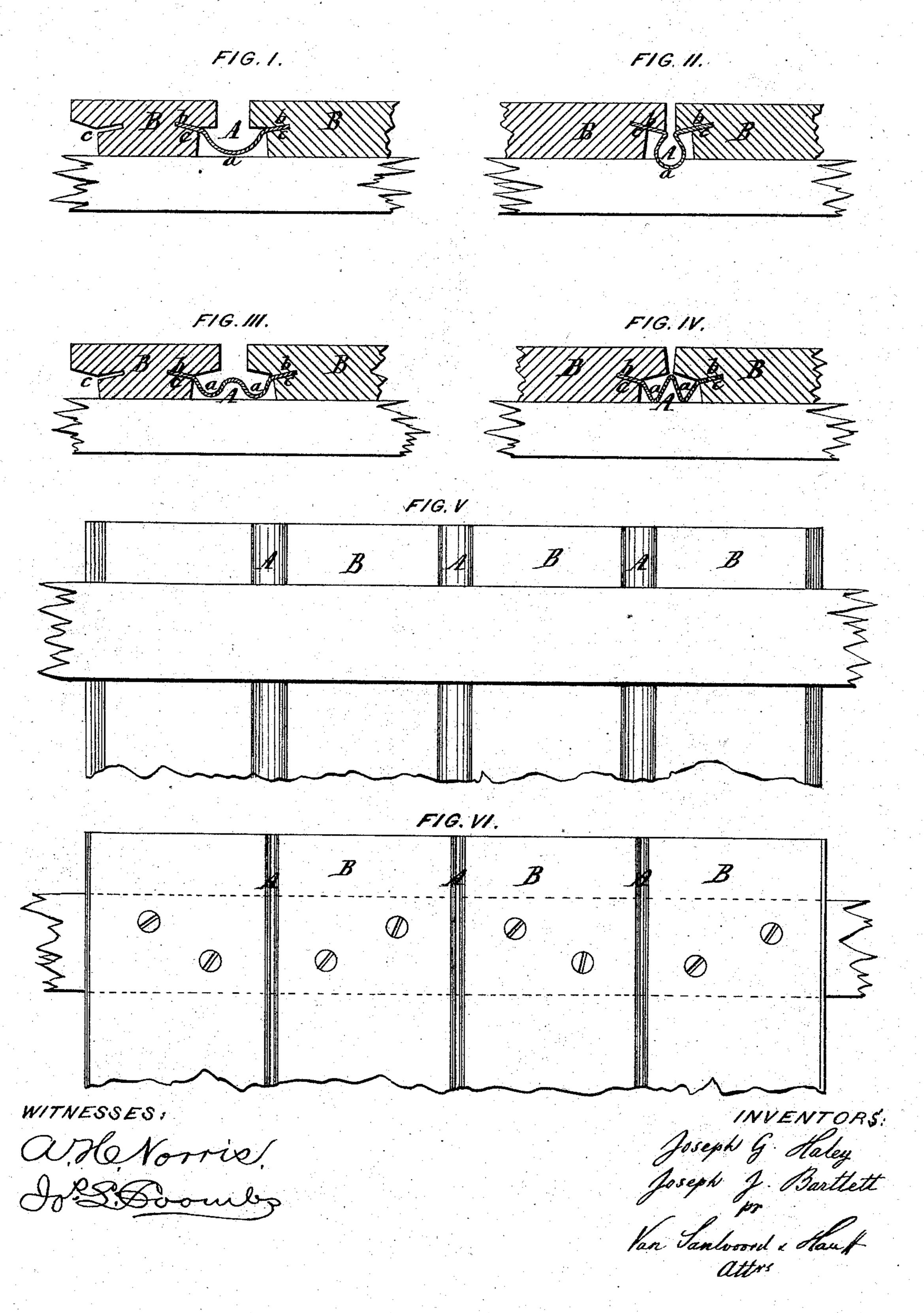
## J. G. HALEY & J. J. BARTLETT. Battenings.

No.156,789.

Patented Nov. 10, 1874



## UNITED STATES PATENT OFFICE.

JOSEPH G. HALEY AND JOSEPH J. BARTLETT, OF NEW YORK, N. Y.

## IMPROVEMENT IN BATTENINGS.

Specification forming part of Letters Patent No. 156,789, dated November 10, 1874; application filed September 21, 1874.

To all whom it may concern:

Be it known that we, Joseph G. Haley and Joseph J. Bartlett, both of the city, county, and State of New York, have invented a certain new and useful Improvement in Joints for Sheathing of Roofs and other Structures, of which the following is a

specification:

This invention relates to the construction of joints for roofs, roof-sheathing, and other structures where boards are to be jointed with each other, whether such joints are merely intended to connect adjoining parts or boards to each other, or to make tight water-proof or air-proof joints. Our invention consists in the combination, with the boards or adjoining portions of the structure, of adjustable tongue-andgutter pieces, which are made of sheet metal, with one or more gutters extending throughout the entire length of the boards, the outer elges of the gutter-pieces forming tongues extending from the edges of the gutter at angles of about one hundred and twenty degrees, more or less, in such a manner that when said tongues are placed into grooves produced in the edges of the adjoining boards for their reception, and the boards are forced toward each other, the gutter is partially closed up and the tongue-and-gutter piece is firmly retained in position by its own elasticity, while the boards can freely expand and shrink without producing a leak in the joints. The lower edges of the boards are cut away to permit the gutter portion to open and close freely and without obstruction.

This invention is illustrated in the accom-

panying drawing, in which—

Figures 1 and 3 represent transverse sections of our tongue-and-gutter piece combined with the boards before said boards are closed up. Figs. 2 and 4 are similar views of the same after the boards have been closed up. Fig. 5 is an inverted plan. Fig. 6 is a plan or top view.

Similar letters indicate like parts in all the

figures.

In the drawing, the letter A designates our tongue-and-gutter piece, which is constructed of sheet metal, its central part being bent to form one or more gutters, a, the edges of which extend out at angles of one hundred and twenty degrees, more or less, toward the sides of the gutter, so as to form tongues b. The boards B B, which are to be joined together, are provided with grooves c for the reception of the tongues, and after the tongues of one of the gutters have been inserted into these grooves, as shown at Figs. 1 and 3, the boards are forced together and the gutter assumes the form shown in Figs. 2 and 4. In order to allow the gutters to expand and contract freely the lower edges of the boards are cut away, so as to throw them out of contact with the sides of the gutters.

From this description it will be seen that, when the boards are forced together the tongues b are forced tightly into the grooves c of the boards by the elasticity of the gutters a, and if the boards shrink or expand, said tongues remain firmly in position, so that the joints are not disturbed by the changes in the temperature or in the atmosphere.

What we claim is—

A metallic tongue-and-gutter piece, A, bent to form a gutter, the edges of which extend at angles of one hundred and twenty degrees, more or less, from its sides, to form tongues which catch in grooves in the adjacent boards, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 18th day

of September, 1874.

JOS. G. HALEY.
JOS. J. BARTLETT.

Witnesses:

W. HAUFF, CHAS. WAHLERS.