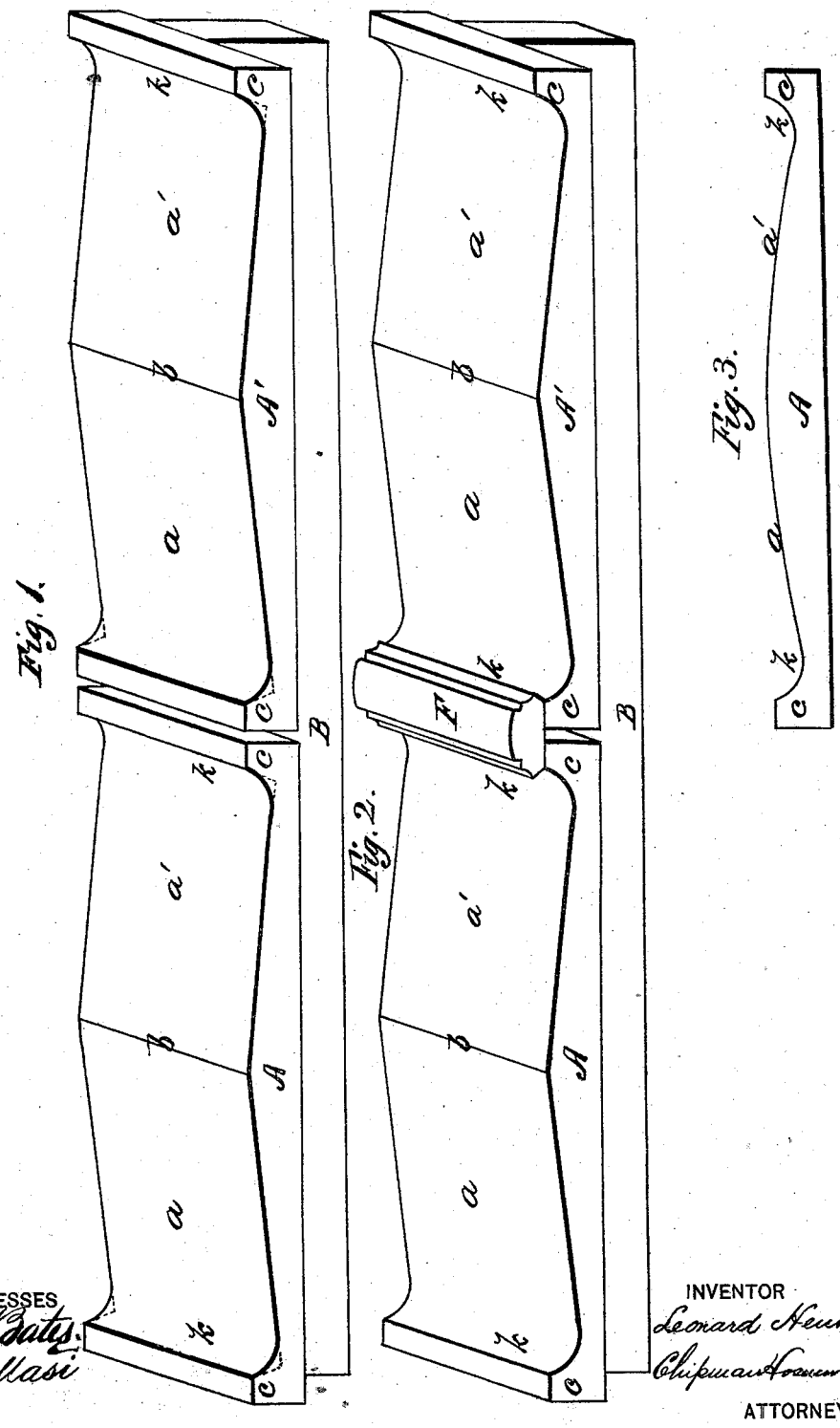
L. HENKLE.

Wooden Roof.

No. 163,375. Patented May 18, 1875.



WITNESSES

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UNITED STATES PATENT OFFICE.

LEONARD HENKLE, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN WOODEN ROOFS.

Specification forming part of Letters Patent No. **163,375**, dated May 18, 1875; application filed January 16, 1875.

To all whom it may concern:

Be it known that I, LEONARD HENKLE, of Rochester, in the county of Monroe and State of New York, have invented a new and valuable Improvement in Wood 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.

Figures 1 and 2 are plan views of my improved roof. Fig. 3 is a detail view.

This invention has relation to improvements in wooden roofing. The object of the invention is to so construct a roof that the several boards composing the same shall be rendered incapable of becoming warped; that they will be allowed to expand and contract freely under varying degrees of moisture of the atmosphere; and will be held against relative displacement longitudinally. To this end the nature of the invention consists in a board having its upper surface doubly inclined from the center toward its lateral edges, whereby a double water-shed is provided, and the center of the board is rendered thicker than its edges, thereby preventing the same from warping upwardly under the influence of heat. It also consists in combining with a board of a wooden roofing, having a double inclined upper surface, a flange formed upon the lateral edges of the same and extending upward above the said edges to the level of the apex of the said double incline, whereby a channel or gutter is formed at the lower part of the inclines of each board for carrying off water.

In the annexed drawings, A A′ designate two boards, arranged side by side upon the purlin B, of an inclined roof-frame, with a slight interval between their contiguous edges, as shown in Figs. 1 and 2. The upper surfaces of these boards have double inclines *a a′*, the direction of the incline being from the center line *b* of each board downward, thereby causing the thickness of the said boards to be greater at the center than at their edges, thereby effectually preventing them from guttering or warping upward under the influence of the heat of the sun. The lateral edges of each of the boards A A′ are provided with a flange, *c*, extending upward therefrom to a point level with the apex of the double inclines *a a′*. I may sometimes use a wooden molding, F, arranged over the space between boards A A′, upon the upper plane surfaces *d* of flanges *c*, thereby effectually closing the joint of the said boards, as shown in Fig. 4, and preventing the penetration of rain through it into the interior. Flanges *c* upon the lateral edges of boards A A′, and the doubly inclined surfaces *a′ a′* of the same, form gutters *k* at the point of junction of the said inclines and flanges, into which water flowing down the former will be received and directed by the inclination of the roof downwardly into a gutter arranged at its eaves.

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

1. In a wood roof, composed of boards arranged side by side, the boards A A′, having doubly inclined upper surfaces *a a′*, substantially as specified.

2. The combination, with a board, A, having a double inclined upper surface, of the flanges *c*, arranged and erected upon the lateral edges of the said board for the purpose of forming gutters *k*, substantially as specified.

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

LEONARD HENKLE.

Witnesses:

DYER C. SOUTHWICK,

PETER LORKIE.