

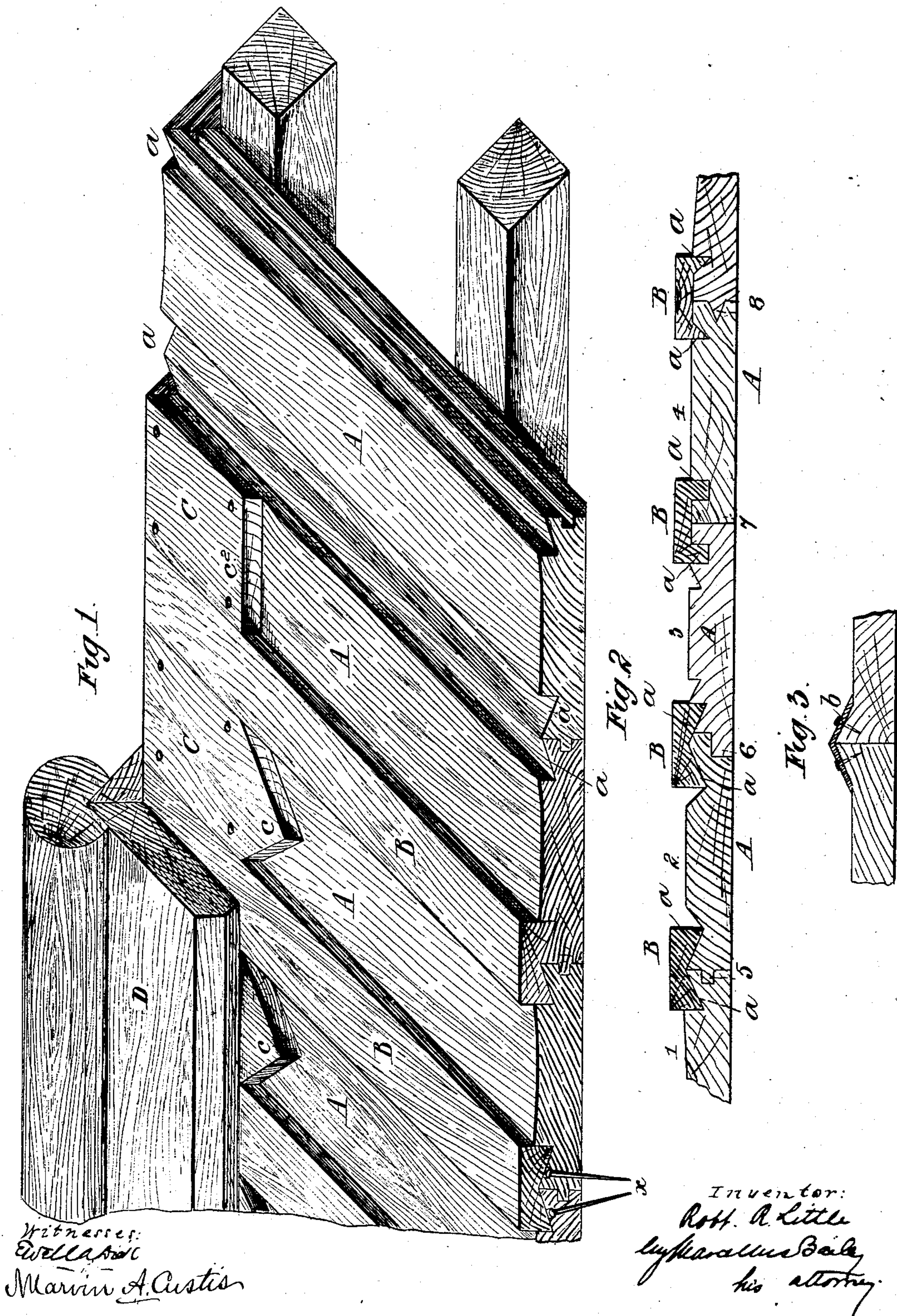
(No Model.)

R. R. LITTLE.

CONSTRUCTION OF TIMBER ROOFS.

No. 367,759.

Patented Aug. 2, 1887.



UNITED STATES PATENT OFFICE.

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CONSTRUCTION OF TIMBER ROOFS.

SPECIFICATION forming part of Letters Patent No. 367,759, dated August 2, 1887.

Application filed March 22, 1887. Serial No. 231,949. (No model.) Patented in England February 17, 1887, No. 2,513.

To all whom it may concern:

Be it known that I, ROBERT ROBSON LITTLE, timber agent, a subject of the Queen of Great Britain and Ireland, and residing at 3 Meldon Terrace, Westoe, South Shields, in the county of Durham, England, have invented certain new and useful Improvements in the Construction of Timber Roofs, (for which I and John Hall have applied for a patent in Great Britain on the 17th of February, 1887, No. 2,513,) of which the following is a specification.

This invention has for its object to so construct timber roofs that they are perfectly water-tight at the joints. The boards forming the body of the roof are made to join each other at the sides by means of simply abutting against each other, or by a tongue and groove or any other suitable or ordinary joint. Along the face of each board, at or near to the side edges, are made grooves or projections, which are inclining downward from the joint toward the central longitudinal line of the boards, so as to form a water-shed away from the joints. In these grooves or over these projections are fitted covering-strips made on the under side to engage with the grooves or projections in the sides of each two adjacent boards, so that the strip covers the joint between the two boards and fits securely into the grooves or over the projections. The main parts of the boards at the outer surface (the parts between the grooves or projections) may be concave or flat or of any suitable figure in cross-section to permit the ready running off of rain. At the apex of the roof the boards on either side are covered for a short distance downward by saddle-pieces, filling the space between the strips covering the joints or the projections at the joints and forming continuous seating for the ridge.

I will describe with reference to the accompanying drawings ways in which the invention may be carried into practical effect.

Figure 1 shows a part of a roof constructed according to this invention. The boards A are shown as being joined at their abutting edges with a tongue-and-groove-like match-boarding; but any other form of joint, or a simple butt-joint, may be used. On the upper surface and at or near the edges at each side

of each board is made a longitudinal groove, *a*, inclined downward away from the joints. B are strips with their under sides made to fit into the grooves *a* of adjacent boards. The grooves *a* and the under sides of the strips B need not be of the precise form shown; but that form is the one I prefer. At the apex of the roof and between the strips B are saddle-pieces C, forming a continuous surface for the ridge D, which may be pointed, as shown at *c*, or straight, as shown at *c*².

Fig. 2 shows various forms of the exposed upper surfaces of the boards A and of the grooves *a*, and the corresponding under sides of the strips B and of the joints between the boards A. At 1 the exposed surfaces of the boards are curved or slightly troughed. At 2 and 3 there are grooves near each edge of the strip B, the grooves at 2 being made continuous with the grooves *a*, and at 3 being made as separate grooves. At 4 the exposed surfaces of the boards are made flat. The grooves *a* and the under side of the strips B and the joint between the boards are shown at 5 like the example Fig. 1. At 6 is shown a rabbeted joint between the boards. At 7 there is a simple butt-joint between the boards, and the grooves *a* are simply right-angled recesses, and the strips B are correspondingly shaped, while at 8 is shown another form of the grooves *a*, strip B, and joint between the boards.

The strips B may be dispensed with, especially in cases where the timber is to be covered by slates or the like, the joint then presenting the advantage of an incline on each side of the joint to shed the water away therefrom and prevent it entering thereinto. In this case the grooves may be replaced by projecting ribs inclined downward in cross-section away from the joint, as shown in Fig. 3.

The joints may be covered by a strip of india-rubber or lead or other water-proof material, as shown at *b*, and these may also be used in conjunction with the strips B.

The nails by which the boards are fastened to the rafters are preferably inserted as shown at *x*, so that when the covering strips are used they are protected thereby.

The roofs constructed according to this invention may be made of much less pitch than is necessary with other constructions of roofs.

The wood may be creosoted, painted, or otherwise prepared or treated, as may be desired.

Having now particularly described and as-
5 certain the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In timber roofs, the combination of the
boards A, with grooves *a* therein, the engag-
10 ing and joint-covering strips B, and the saddle-pieces C, substantially as described and illustrated.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT ROBSON LITTLE.

Witnesses.

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