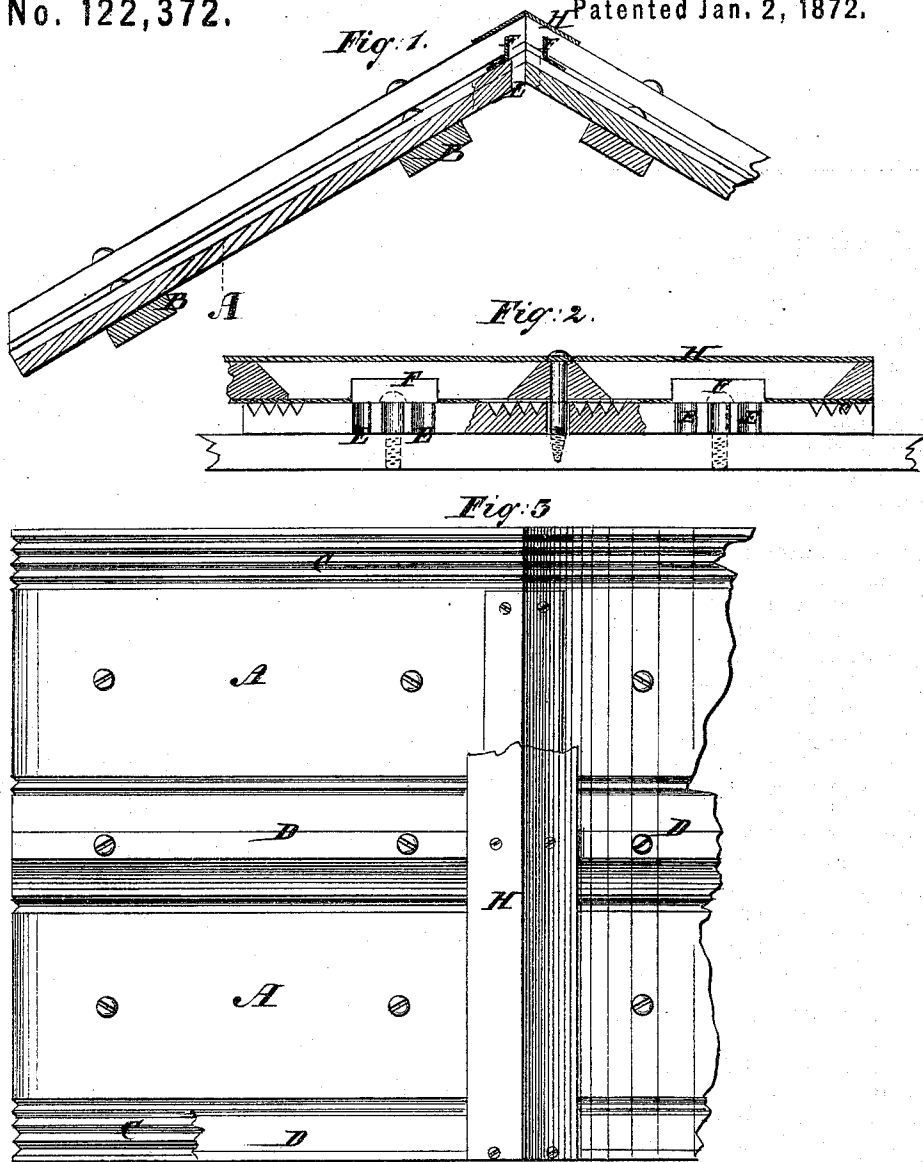


M. J. Earl, Roofing.

No. 122,372.

Patented Jan. 2, 1872.



Witnesses:

C. Raettig.
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UNITED STATES PATENT OFFICE.

MELVIN J. EARL, OF MANNSVILLE, ASSIGNOR TO POLLY M. EARL, OF ELLISBURG, NEW YORK.

IMPROVEMENT IN ROOFING.

Specification forming part of Letters Patent No. 122,372, dated January 2, 1872; antedated December 23, 1871.

To all whom it may concern:

Be it known that I, MELVIN J. EARL, of Mannsville, in the county of Jefferson and State of New York, have invented a new and Improved Roofing; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in roofing; and it consists in a novel arrangement of covering and protecting devices for ventilating passages at the peak of a slanting roof made of boards and cleats, running from eaves to peak, and having grooves in the boards near the edges under the cleats for conveying the water away; the said ventilation being required to prevent the water from settling back in the grooves by the melting of snow at the peak in consequence of the accumulation of heat thereat when not allowed to escape, while it freezes at the eaves and sets back, all as hereinafter more fully specified.

Figure 1 is a sectional elevation of a part of a roof constructed according to my improvements. Fig. 2 is a section along the ridge, and Fig. 3 is a top view.

Similar letters of reference indicate corresponding parts.

The roofing-boards A are placed side by side from the eaves to the ridge on joists B, stretching from one to another of the rafters, the said board being placed so that the edges do not quite meet to allow for expansion, and the upper ends a short distance apart to allow air to pass from the grooves and cracks to the escape-passage E, and being grooved near the edges, as shown at C, to prevent the water from running to the joints under the cleats D, which cover the joints between the boards. The boards are fastened at the center only, and the

screws or nails which fasten the cleats pass down through the cracks between the boards so as to leave them free to expand and contract without hindrance from the fastenings, which would cause them to crack and split if applied to them at the edges. This kind of roof is desirable on account of the ventilation afforded. Air is fully admitted in the grooves and openings under the cleats, and carries off all dampness arising from damp or wet weather, which makes this combination durable. Without ventilation at the top in cold weather the snow would melt thereat, owing to the heat inside rising to the highest point, while the water running down to the eaves would freeze and set back in the grooves so as to run through the roof into the house. I therefore propose to make escape-passages E in the upper ends, between the cleats, for the escape of the heated air, and place the vertical plates F below them and the metal angle-plates H over them, the angle-plates being to prevent the rain and snow from falling into the passages and the plates F being to prevent beating up to the passages under the angle-plates by the wind. By thus ventilating these roofs at the ridge the danger of leakage by back-water is avoided and they are made capable of giving satisfactory results.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The roof-boards A fastened in the center only, having the grooves near the edges, and the latter covered by the cleats D, and also having in connection therewith the ventilating passages E at the upper ends, and the cover H and plates F, all arranged substantially as specified.

MELVIN J. EARL.

Witnesses:

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