W. H. KERSHAW.

Roof-Covering and Sheathing.

No. 204,899. Patented June 18, 1878.

Fig 1

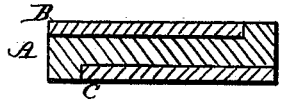


Fig 6

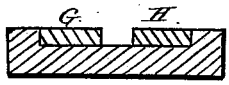


Fig 4

Fig 2

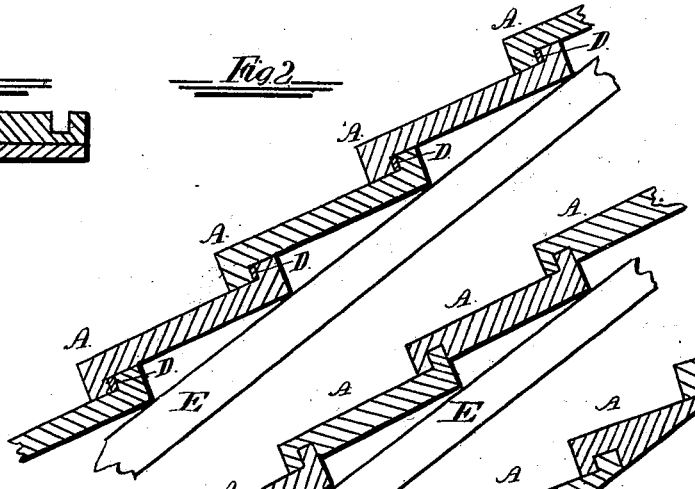


Fig 5

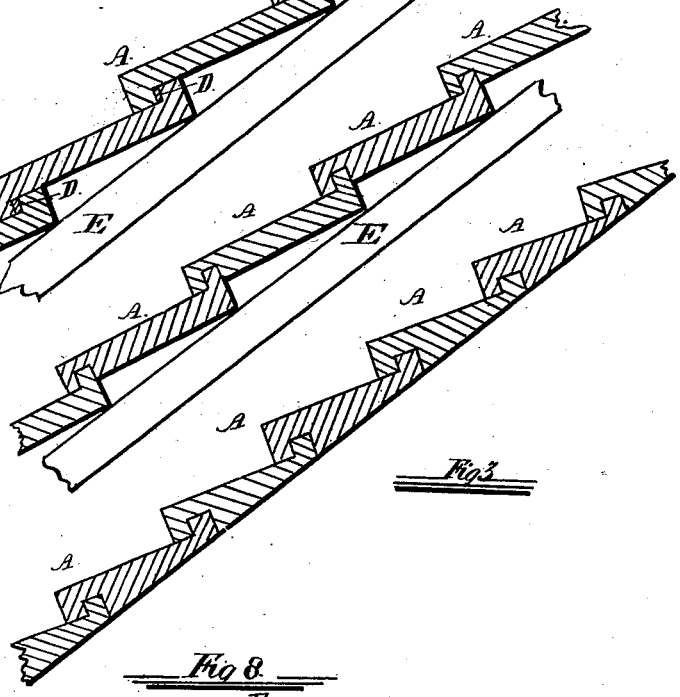


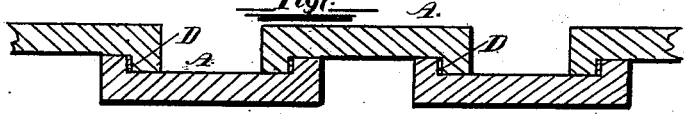
Fig 3

Fig 8

Fig 9

Fig 10

Fig 7



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM H. KERSHAW, OF WIDNES, ENGLAND.

IMPROVEMENT IN ROOF COVERING AND SHEATHING.

Specification forming part of Letters Patent No. **204,899**, dated June 18, 1878; application filed April 23, 1878.

To all whom it may concern:

Be it known that I, WILLIAM HENRY KERSHAW, of Widnes, in the county of Lancaster, in the Kingdom of England, timber-merchant, have invented certain new and useful Improvements in Roof Covering and Sheathing, of which the following is a specification:

My invention relates to roof-coverings of wood, sawed or cut into peculiar forms, so as to form a lapping arrangement.

Figures 1 and 2 show the simplest form, in which Fig. 1 shows a three-inch plank sawed so as to cut out the roofing-board without waste, the two spare pieces of B and C being available as inch boarding for other purposes.

Fig. 2 shows it as placed in position. In this A A are the roofing-boards; D, longitudinal piece of hoop-iron, useful, but not absolutely necessary; E, the rafter below, into which the roofing-boards can be notched, if desirable; but I prefer it as shown.

Fig. 3 shows a slight modification, of rather stronger form, and capable of lying neatly on the rafter or the purlin, forming a smooth ceiling for the room below. The groove in this case is planed out.

Other forms slightly varying can be used without departing from the principle of my invention, which consists in each board overlapping the one below it, and forming a catch for the one above, and a vertical stop, to prevent the chance of water running up by capillary attraction, or the force of wind, and leaking in over the edges of the boards.

Figs. 4 and 5 show another slight variation in form.

This form of joint can also be applied in the direction of the pitch or inclination of the roof. This is shown in Figs. 6 and 7. In these, Fig. 7 shows a section of roofing in which the slabs are either planed out to shape or cut by a saw-mill of my own invention, in which case two pieces of wood are sawed, as shown in Fig. 6, G H. D D in Fig. 7 are pieces of hoop-iron, and can be inserted or not, as found desirable. The strips D, inserted as shown, give the joints additional security against the entrance of moisture, especially at the points where the ends of the boards abut against each other, and in the event of the boards warping or cracking at the edges.

Figs. 8, 9, 10 show different ways of covering the joints formed at the abutting ends of the roof-boards. The joints represented in Figs. 2, 3, and 5 are used between the edges of the boards, but, being inapplicable at the ends of the same, the other joint shown is necessary at those points to render the roof complete. I prefer the plan shown at Fig. 10, where a piece of sheet-iron, F, fits into grooves in the ends of the planks, and the whole joint is then run in with the asphalt G^2. Figs. 8 and 9, however, show a layer of asphalt or other composition covering the joint, and a covering of sheet-lead or other suitable material nailed on over all.

I am aware that roofing-boards intended to extend lengthwise up and down the roof have been hitherto provided with overlapping lips, the form of which was such that the boards could not be used transversely on the roof without retaining water in the joints.

It will be observed, on referring to Figs. 2, 3, and 5 of my drawings, that the boards therein represented are specially adapted to be used transversely on the roof, directly across the rafters, without allowing water to enter at the joints.

I am also aware that it is old to cover the joints between roofing-boards with sheet-metal strips; but I am not aware that any one has hitherto employed the metallic strips D between the overlapping and interlocking edges of the boards in the manner shown.

I claim as my invention—

1. A wooden roof consisting of a series of transverse boards, having overlapping interlocking edges, substantially as described, and shown in Figs. 2, 3, and 5, whereby moisture is prevented from lodging in the joints.

2. The overlapping and interlocking boards of a tapering form in cross-section, as represented in Fig. 3, adapted to present a continuous smooth under surface or ceiling when laid transversely on the roof, as shown.

3. In a wooden roof, the combination of boards having overlapping interlocking edges with metal strips D inserted between and concealed by said edges, substantially as shown.

W. H. KERSHAW.

Witnesses:
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