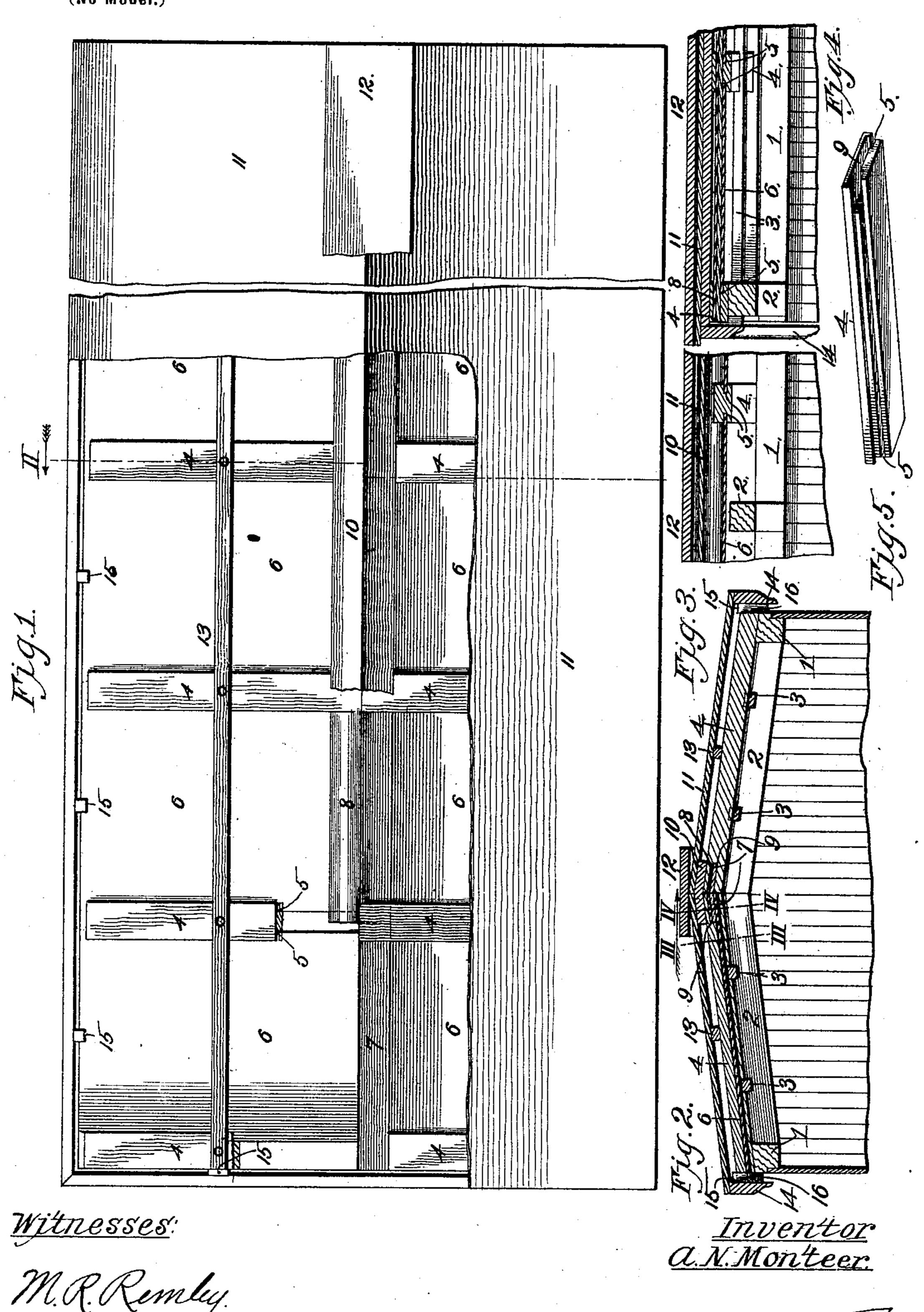
## A. N. MONTEER. CAR ROOF.

(Application filed June 27, 1898.)

(No Model.)



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## United States Patent Office.

ALEXANDER N. MONTEER, OF SPRINGFIELD, MISSOURI.

## CAR-ROOF.

SPECIFICATION forming part of Letters Patent No. 620,162, dated February 28, 1899.

Application filed June 27, 1898. Serial No. 684, 556. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER N. Mon-TEER, of Springfield, Greene county, Missouri, have invented certain new and useful Im-5 provements in Car-Roofs, of which the follow-

ing is a specification.

My invention relates to car-roofs, and is designed more particularly as an improvement on what is known as the "Chicago" car-roof 10 patented by Hiram Aldridge on November 1, 1881, and numbered 248,905, the object in this connection being to produce a roof embodying the best features of said Chicago roof, together with additions to that particu-15 lar roof which eliminate all chance of water obtaining access to the interior of the car through the ridge-line.

With this object in view the invention consists in certain novel and peculiar features of 20 construction and combinations of parts, as will be hereinafter described and claimed, and in order that the invention may be fully understood I will proceed to describe it with reference to the accompanying drawings, in

25 which—

Figure 1 represents a top plan view of a car provided with a roof embodying my invention. Fig. 2 is a cross-section taken on the line II of Fig. 1. Fig. 3 represents a longitudinal 30 section taken on the line III III of Fig. 2. Fig. 4 represents a longitudinal section taken on the line IV IV of Fig. 2. Fig. 5 represents a perspective view of one of the carlines.

In said drawings, 1 designates the upper 35 horizontal sills of a car of the usual or any preferred construction, and 2 the rafters of

the same.

3 designates a pair of parallel strips extending longitudinally from one end of the car to 4c the other and secured upon the rafters.

4 designates the carlines which rest upon the rafters, said carlines being provided in their side edges with longitudinal grooves 5 to receive the side edges of the roof-plates 6, 45 said plates being of sheet metal or its equivalent.

7 designates short wood strips which rest upon the plates 6 at opposite sides of the ridge or apex of the roof, and 8 sheet-metal 50 angle-plates seated upon the wood strips 7 and bridging the ridge-line of the roof, said

roof-plates and fitting in the bifurcated upper ends 8 of the carlines. This disposition of the angle-plates holds them securely in po- 55 sition and obviates all chance of water leaking through the roof at the ridge-line, as happens when the ridge-pole of the Chicago roof, for instance, splits or cracks. Furthermore, the joint is still bridged and remains un- 60 broken even if the carlines move apart a considerable distance. The wood ridge-strips 7 serve to hold the plates 8 snugly in the bifurcated ends of the carlines and obviate rattling or unnecessary play therein of said plates 8. 65

10 designates a ridge-strip which extends from end to end of the car and rests upon the carlines at the ridge or apex of the roof.

11 designates the roof-boards proper, and surmounting them at the apex or ridge of the 70 roof is the running or foot board 12.

13 designates strips which extend from end to end of the car and rest upon the carlines, being secured thereto by screws or equivalent means.

14 designates side and end boards which support the outer ends of the roof and are secured in position by means of the stop-blocks 15, interposed between them at suitable intervals and the sides and ends of the car in 80 order that the roof may be perfectly ventilated—that is to say, in order that air may circulate freely between the roof 11 and the water-tight roof, consisting of the carlines, the plates 6, the strips 7, and the angle-plates 85 8—and said blocks are provided with notches 16 in their inner edges to receive the outer edges of plates 6 to prevent said plates from sliding outward.

It will be seen that the provision of a live- 90 air space between the upper and lower sections of the roof prevents the interior of the car from attaining as high a temperature as it otherwise would, and it is also clear that the arrangement of the parts 4, 6, 7, and 8, 95 forming the lower section of the roof, absolutely prevents water from entering the car.

From the above description it will be apparent that I have produced a ventilating water-tight car-roof which embodies the fea- 100 tures of advantage enumerated in the statement of invention and which is simple, durable, and comparatively inexpensive, and, plates also overlapping the upper edges of the I furthermore, a car-roof which can be applied

in or removed from position or repaired easily and quickly.

Having thus described the invention, what I claim as new, and desire to secure by Letters

5 Patent, is—

A car-roof, consisting of a suitable frame, carlines mounted thereon and provided with bifurcated upper ends meeting in the longitudinal center of the car, a ridge-strip 10, resting on the meeting ends of the carlines, roof-plates connecting the carlines at their sides,

and angle-plates bridging the ridge-line, overlapping the upper edges of the roof-plates and fitting in the bifurcated upper ends of the carlines, substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

## ALEXANDER N. MONTEER.

Witnesses:

M. R. REMLEY, F. S. THRASHER.