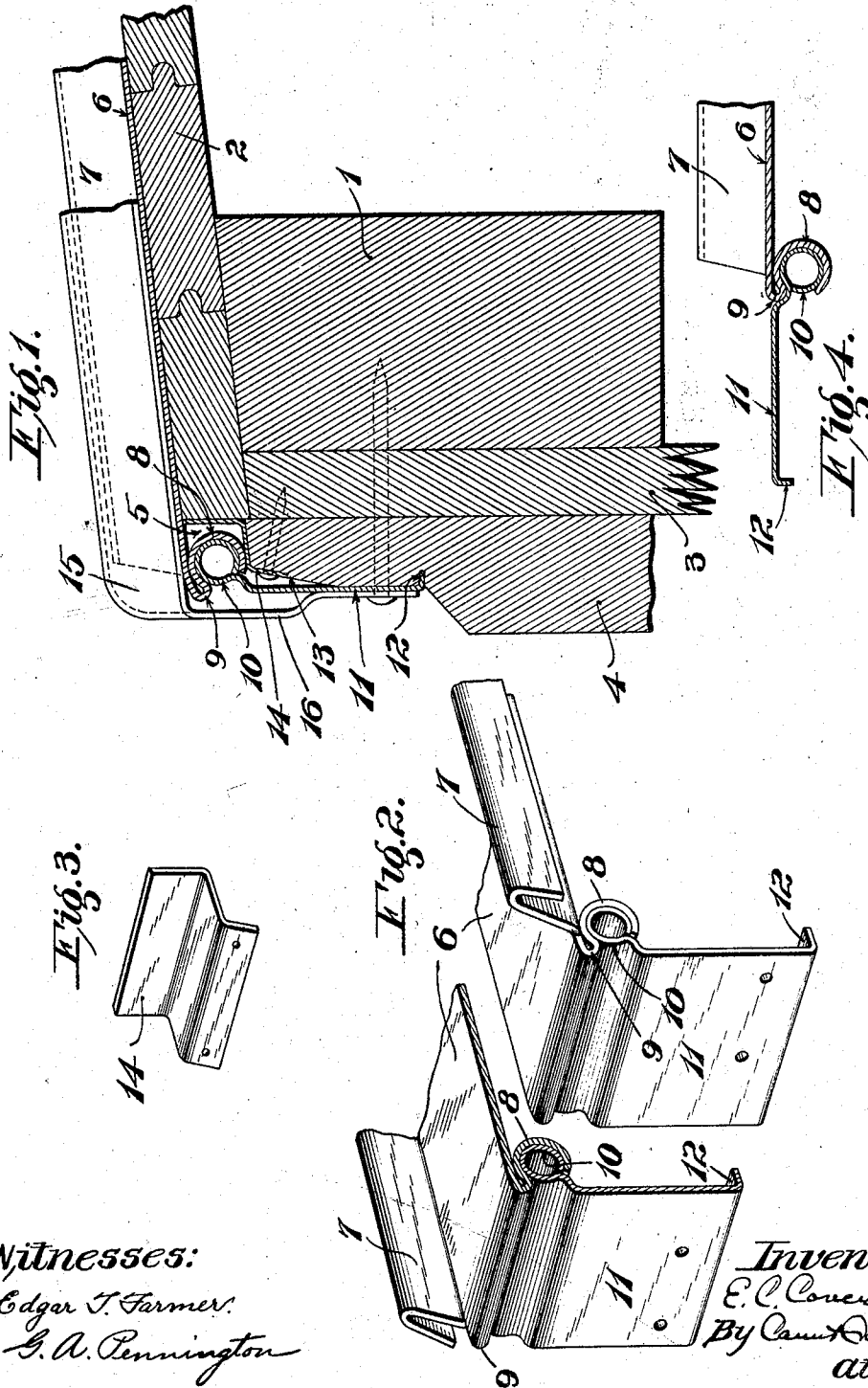


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CAR ROOF.
APPLICATION FILED APR. 3, 1909.

942,249.

Patented Dec. 7, 1909.



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UNITED STATES PATENT OFFICE.

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CAR-ROOF.

942,249.

Specification of Letters Patent.

Patented Dec. 7, 1909.

Application filed April 3, 1909. Serial No. 487,708.

To all whom it may concern:

Be it known that I, EDSON C. COVERT, a citizen of the United States, and a resident of New Kensington, county of Westmoreland, State of Pennsylvania, have invented a new and useful Improvement in Car-Roofs, of which the following is a specification.

My invention relates to metal car roofs, and has for its principal objects to secure the roof sheets at the eaves in such manner as to effectually exclude the weather and still permit the roof sheets to accommodate themselves to the weaving of the car; to eliminate the chance of having careless workmen nail the roof sheets to the side of the car; and to secure other advantages hereinafter appearing. The invention consists principally in securing a flexible nailing strip to the end of the roof sheets in such a way as to permit the roof sheets to move relative to the roof sheathing. It also consists in forming a flexible joint between the roof sheet and the nailing strip; it also consists in providing a longitudinal recess at the edge of the car to accommodate the joint between the roof sheets and their nailing strips; it also consists in the constructions and arrangements of parts hereinafter described and claimed.

In the accompanying drawing, which forms part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a vertical cross section of the upper edge of a car embodying my invention; Fig. 2 is a perspective view of a roof sheet having a nailing strip connected thereto in accordance with my invention; Fig. 3 is a perspective view of a flashing strip; Fig. 4 is a sectional view of the end portion of a roof sheet with a nailing strip secured thereto, said nailing strip being swung out substantially in the plane of the sheet.

The car comprises a side plate 1, roof sheathing 2, side sheathing 3, and a fascia 4, which are made of wood, and, except as otherwise noted herein, conform to ordinary practice. Usually the top surface of the side plate is flush with the upper surface of the roof sheathing, or the side of the roof sheathing is flush with the outer surface of the side plate. In the present construction, however, a longitudinal recess 5 is formed in the woodwork at the upper longitudinal

edge of the car. As illustrated in Fig. 1, this recess is formed by terminating the roof sheathing flush with the inner face of the fascia and mounting said fascia with its upper surface lower than the upper surface of the roof sheathing.

Resting upon roof sheathing are metal roof sheets 6 which are connected at their sides by transverse joints or seams 7 of any suitable type which will permit relative movement of the sheets. The outer end portion 8 of each roof sheet is rebent on its under side and the rebent portion is rolled or formed into an open cylindrical socket, the open gap being smaller than the diameter of the socket. The portion 9 of the sheet immediately adjacent to the line along which it is rebent is turned downward slightly to form a drip edge. Under normal conditions, the socket portion of the sheet lies in the longitudinal recess at the edge of the woodwork but at a distance from the roof sheathing sufficient to permit the roof sheets to move toward the ridge.

Interlocking with the socket of each roof sheet is a curled or rolled rib or head 10 which is formed on the upper margin of a sheet or strip 11 of metal hereinafter referred to as the nailing strip. The lower portion of this nailing strip is nailed flatwise to the fascia and its lower edge is provided with a narrow flange 12 adapted to be driven into said fascia. In order to permit the nailing strip to move inwardly with the roof sheet, the upper portion of the outer face of the fascia is beveled or tapered off, as illustrated at 13 in Fig. 2.

In consequence of the arrangement above described, each roof sheet is securely fastened to the substructure and at the same time is free to accommodate itself to the various distortions of the car. Movement of the sheets longitudinally of the car is permitted by the fact that the members of the fastening joint are free to slide or telescope; and movement transversely of the car is permitted by the springing of the nailing strips in connection with the fact that the joint is of the hinge or flexible type. These movements and all combinations thereof are readily accommodated without disengaging the roof sheets from their nailing strips. It is desirable to line the longitudinal recess with a flashing strip 14 under each joint or seam between the roof sheets. Preferably, 110

the flashing fits flatwise against the side and bottom of the recess and has a flange turned down over the edge of the fascia. So, too, it is desirable to protect the ribs or seams 7 by caps 15 which have downwardly extending members 16 that are secured at the eaves.

Obviously, my device admits of considerable modification without departing from my invention, and therefore I do not wish to be limited to the specific construction shown and described.

What I claim as my invention and desire to secure by Letters Patent is:

1. A car comprising roof sheets whose outer ends are rebent on the underside to form outwardly opening sockets, and clips mounted at the side of the car and having heads interlocking with said sockets.

2. A car comprising roof sheets whose outer ends are rebent on the underside to form sockets, the part adjacent to the line of the rebent being turned downwardly, and clips mounted at the side of the car and having heads interlocking with said sockets.

3. A car comprising roof sheets whose outer ends are bent to form sockets at the edge of the car and sheet metal clips mounted on the side of the car and having their upper marginal portions rolled to fit pivotally in said sockets.

4. A car comprising roof sheets whose outer ends are bent to form sockets, and metal sheets secured to the side of the car and having their upper marginal portions offset and rolled to fit pivotally in said sockets.

5. A car comprising roof sheets whose outer ends are bent to form sockets at the edge of the car and sheets of metal mounted on the side of the car and having their upper marginal portions rolled to fit pivotally in

said sockets, the upper portion of said last mentioned sheets being normally spaced from the side of the car.

6. A car comprising side plates, side sheathing and roof sheathing and fascia arranged to form an angular recess, and metal roof sheets having their outer ends rebent to form sockets located in said recess, and clips consisting of sheets of metal mounted on the fascia and having their upper marginal portions rolled to form cylindrical heads fitting pivotally in said sockets, the opening of said sockets being narrower than said heads.

7. A car comprising side plates, side sheathing, and roof sheathing and fascia arranged to form an angular recess, and metal roof sheets having their outer ends rebent to form outwardly opening sockets located in said recess, and clips mounted on the fascia and provided with heads interlocking with said sockets, the outermost portions of said sheets being turned downwardly to partially close the opening of said sockets and form a drip edge.

8. A car comprising side plates, side sheathing, roof sheathing, a fascia, said fascia terminating below the upper surface of the roof sheathing and having the upper portion of its outer surface beveled, metal roof sheets having their outer ends rebent to form sockets located above the fascia, and resilient clips mounted on the fascia below the beveled portion and having heads interlocking with said sockets.

Signed at Pittsburg, Pennsylvania, April 2nd, 1909.

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