F. M. WHYTE.

CAR ROOF.

APPLICATION FILED NOV. 15, 1913.

1,101,824. **Patented June 30, 1914.**

Fig. 1.

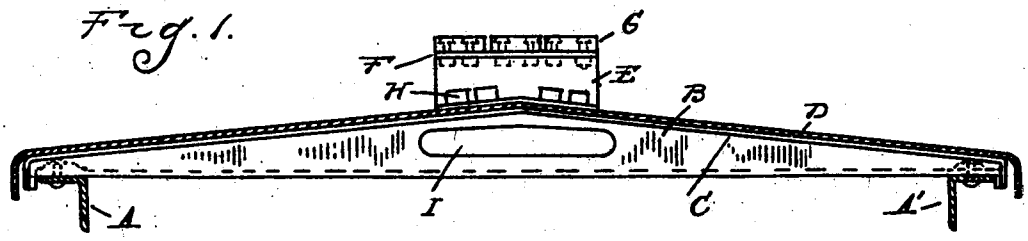


Fig. 2.

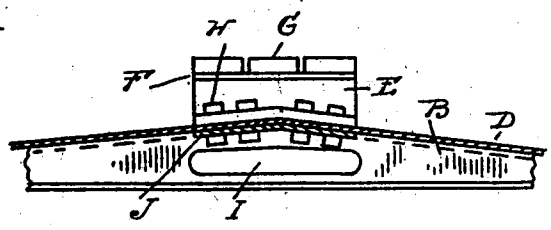


Fig. 3.

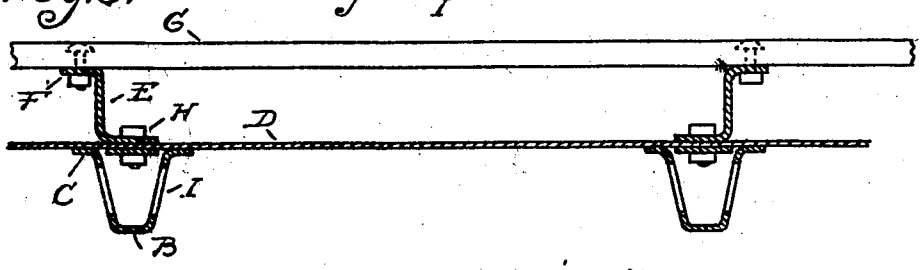


Fig. 4.

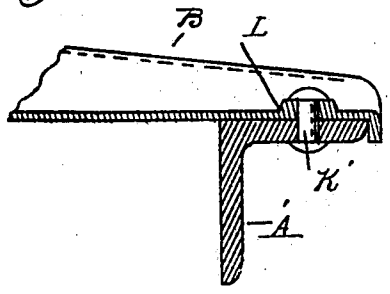
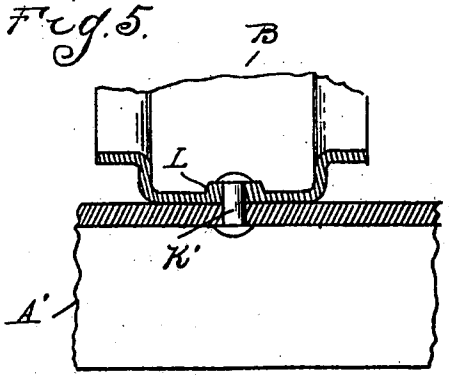


Fig. 5.



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UNITED STATES PATENT OFFICE.

FREDERICK M. WHYTE, OF TARRYTOWN, NEW YORK, ASSIGNOR TO HUTCHINS CAR ROOFING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

CAR-ROOF.

1,101,824. Specification of Letters Patent. Patented June 30, 1914.

Application filed November 15, 1913. Serial No. 801,282.

To all whom it may concern:

Be it known that I, FREDERICK M. WHYTE, a citizen of the United States of America, residing at Tarrytown, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Car-Roofs, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to car roofs, and has more particular reference to the construction of carline and running-board, as hereinafter set forth.

In the drawings: Figure 1 is a cross section through the roof; Fig. 2 is a similar view showing a slightly modified construction; Fig. 3 is a longitudinal section in the plane of the ridge showing the running-board support; Fig. 4 is a cross section showing the means of attaching the carline to the side plate of the car; and Fig. 5 is a section at right angles to Fig. 4.

A A′ are the side plates of the car, which, as shown, are formed of metallic angle bars.

B are carlines connecting the side plates A and A′, and which are preferably formed of channel bars having a U or V section with laterally-extending flanges C at their upper ends, attached to the metallic sheet D, forming the roof cover. This roofing sheet may be of any suitable construction, which forms no part of the present invention.

To support the running-board at the ridge of the roof I have provided brackets E, which are riveted, bolted or otherwise secured to the roof sheet D in that portion thereof which is above the channel carline B, while the upper end of said bracket has a laterally-extending flange F bolted or riveted to the running-board G. As the brackets E are secured to the roof sheet after the latter is attached to the carline, it would be difficult to engage the bolts or rivets H to secure this bracket. I therefore cut away the metal of the carline adjacent to the neutral axis at opposite the bracket E, so as to form an opening I through which the bolts or rivets H may be inserted. The bolts may be engaged either directly with the sheet D and the flange of the bracket E, or, as shown in Fig. 2, a reinforcing strip J may be arranged adjacent to the sheet on the opposite side from the flange of the bracket E. Where bolts are employed there is some danger that the water on the roof may leak through the bolt holes. It cannot, however, penetrate to the interior of the car, as the U-shaped section forms a drain trough for conveying the water to the eaves. At the eaves the carlines are secured to the side plates A and A′ by bolts or rivets K′, and to prevent leakage of the drainage water into these bolt holes a boss L is formed surrounding the bolt hole, and which will shed the water draining through the trough.

What I claim as my invention is:

1. In a car roof, the combination with a roofing sheet of the channel carline secured to said sheet and cut away at its neutral axis to form an opening into the channel, and a member secured to said sheet intermediate the sides of said channel, the securing means being engageable through said aperture.

2. In a car roof, the combination with a roofing sheet of a carline of channel section, secured to said sheet and cut away in the neutral axis to form a lateral entrance to the channel, a member secured to said sheet intermediate the sides of said channel, and securing means engageable with said member and sheet through the opening in said channel.

3. In a car roof, the combination with a roofing sheet of a carline of channel cross section, secured to said sheet and cut away in the neutral axis to form a lateral opening into the channel, a running-board, a bracket for supporting said running board, and securing means for said bracket engageable with said sheet intermediate the flanges of said carline, the cut-away portion of said carline providing access to said securing means.

4. In a car roof, the combination with a roofing sheet of a carline of channel section having laterally-extending flanges secured to said roofing sheet, a portion of said carline opposite the ridge being cut away at the neutral axis to form a lateral opening into said channel, a running-board, a bracket for supporting said running-board, bearing upon said sheet intermediate the sides of said channel, and securing means for said bracket to said sheet accessible through the aperture in said carline.

5. In a car roof, the combination with the side plates of the car, of a carline of channel

section extending across the car, a portion of the metal of the carline in the neutral axis and opposite the ridge being cut away to form a lateral opening into the channel, a roofing sheet above said carline and secured thereto, a running-board, a bracket for supporting said running-board, securing devices for said bracket to said sheet intermediate the sides of said carline and accessible through the aperture in the carline, and securing devices for said carline to said side plates engaging a raised boss in the bottom of the channel; for the purpose described.

6. In a car, the combination with the roofing sheet, of a carline for supporting said sheet formed of a channel section with laterally projecting flanges at its upper ends secured to said sheet, said carline forming also a drain channel and being cut away at the neutral axis to form a lateral opening therein, a running-board, a bracket for supporting said running-board, bearing upon said sheet intermediate the sides of said channel, securing devices for said bracket accessible through the lateral opening in said channel, car side plates, and securing devices for said carline to said side plates engaging raised bosses in said carline, to shed the drainage water passing through the channel.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK M. WHYTE.

Witnesses:
DAVID W. HAWKSWORTH
WM. J. BELKNAP.