

W. P. MURPHY.

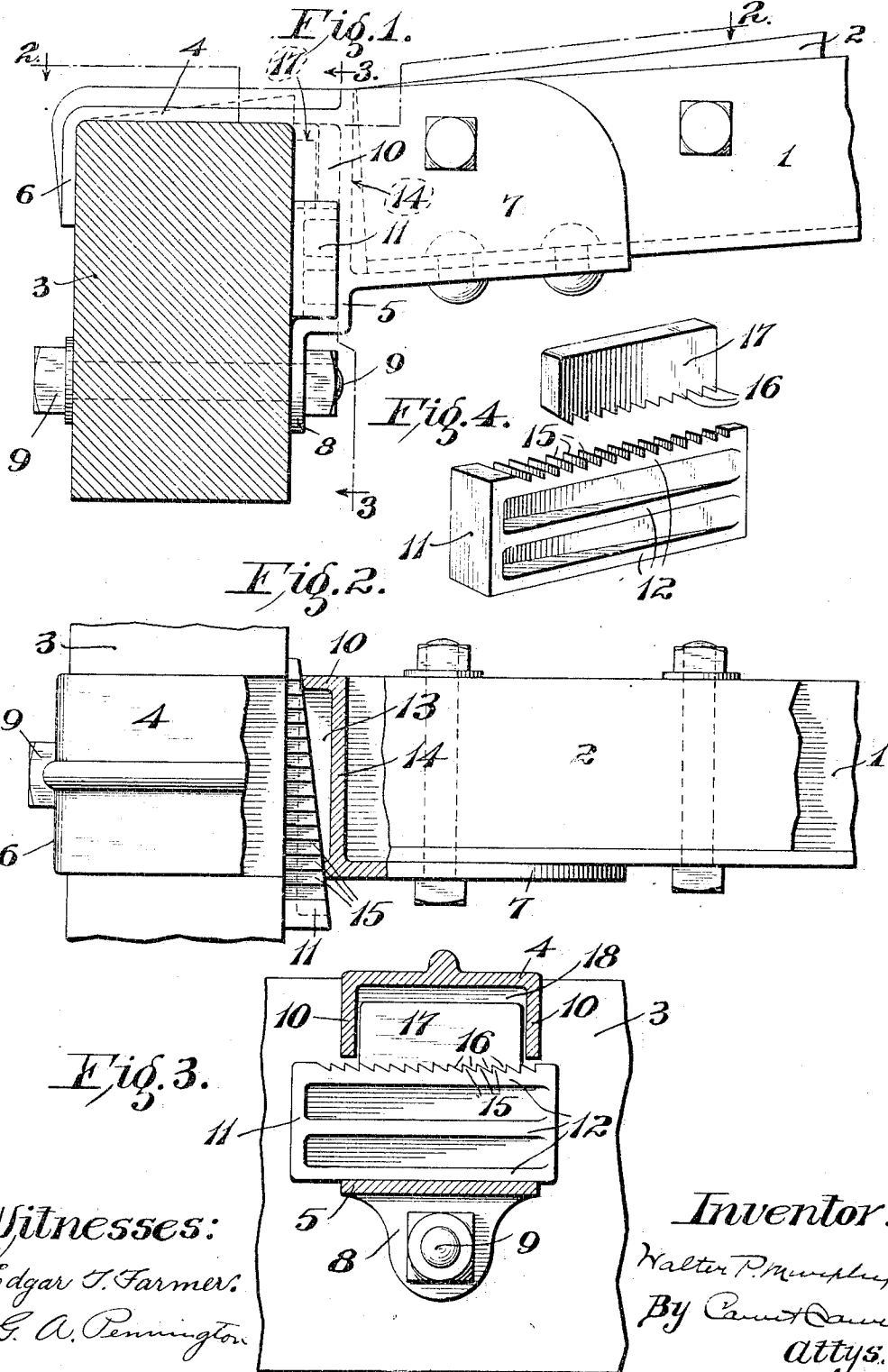
CAR ROOF.

APPLICATION FILED JUNE 14, 1909.

951,094.

Patented Mar. 1, 1910.

2 SHEETS—SHEET 1.



Witnesses:
Edgar T. Farmer.
G. A. Pennington

Inventor:
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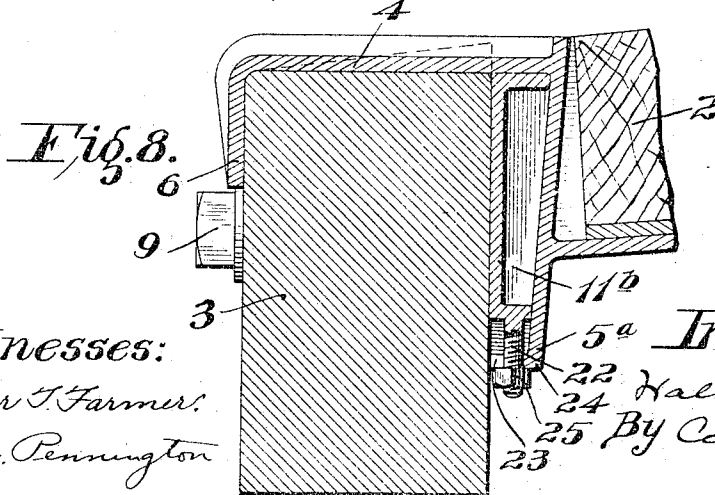
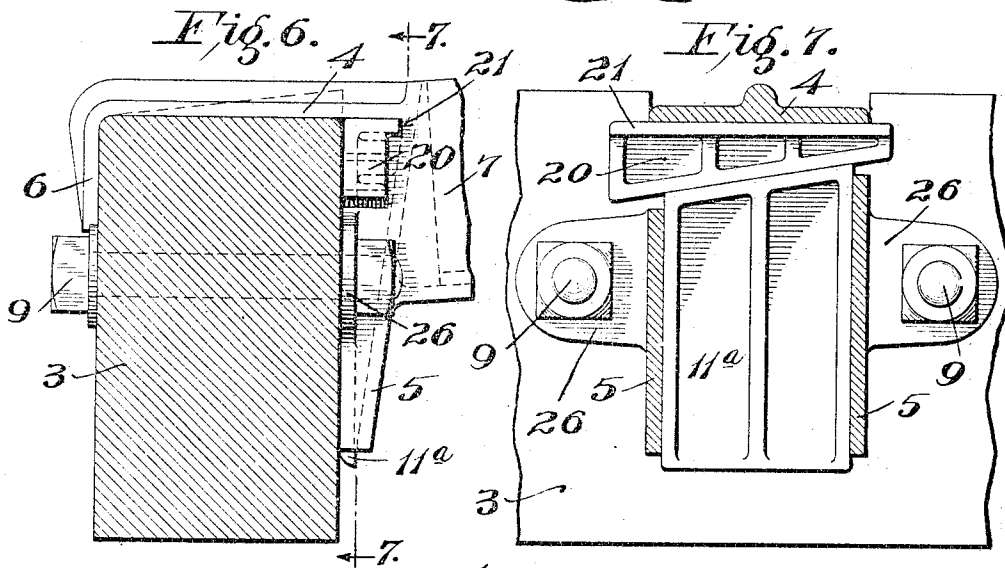
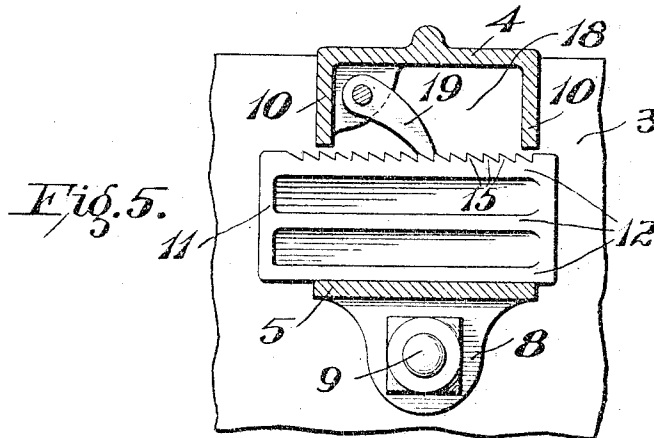
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UNITED STATES PATENT OFFICE.

WALTER P. MURPHY, OF CHICAGO, ILLINOIS.

CAR-ROOF.

951,094.

Specification of Letters Patent.

Patented Mar. 1, 1910.

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To all whom it may concern:

Be it known that I, WALTER P. MURPHY, a citizen of the United States, and a resident of Chicago, county of Cook, State of Illinois, have invented a new and useful Improvement in Car-Roofs, of which the following is a specification.

This invention relates to car roofs and more particularly to the carlines for supporting the same.

It has for its principal objects to take up looseness due to the shrinkage of the wooden side plates or longitudinal timbers to which the ends of the carlines are secured, and to attain certain advantages hereinafter more fully appearing.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a fragmentary cross section through the side plate of a car adjacent to a carline, illustrating an adaptation of my invention; Fig. 2 is a view partly in top plan and partly in horizontal section on the line 2-2 of Fig. 1; Fig. 3 is a view partly in elevation and partly in vertical section on the line 3-3 of Fig. 1; Fig. 4 is a perspective view of the tightening wedge and locking member detached; Fig. 5 is a view partly in elevation and partly in vertical section showing a modification of the locking member for the tightening wedge; Fig. 6 is a fragmentary cross section through the side plate of a car adjacent to a carline, illustrating a modification of the tightening wedge; Fig. 7 is a section on the line 7-7 of Fig. 6; and, Fig. 8 is a fragmentary section showing a further modification of the tightening wedge.

The carline shown in the drawings comprises a metal angle member 1 having secured thereon a wooden filler or beam 2 to which the roof superstructure is fastened. Obviously, however, the carline may be of any other desirable construction.

The ends of the angle member 1 are connected to the side plates 3 by a saddle mem-

ber or casting 4. This member is provided with a downwardly extending bracket portion 5 and a downturned end portion 6 so as to straddle the side plate 3. The saddle member is provided with an inwardly projecting bracket 7 of angular section corresponding to the angle member 1 to which it is riveted or otherwise rigidly secured. The portion 5 is provided with a depending lug or ear 8 which is perforated to receive a securing bolt 9 extending through the side plate 3.

The bracket portion 5 is hollowed out and the lower portions of the side walls 10 are cut away to provide a transverse passageway for a wedge member 11. The outer face of the member 11 is made flat so as to bear flatwise against the inner face of the side plate 3 while the inner face is inclined or, preferably, it is provided with inclined ribs 12, as shown, which are adapted to bear against correspondingly inclined horizontal ribs 13 on the outer face of the wall 14 of the bracket portion 5. To prevent the wedge from working out when it is driven between the side plate and saddle member, the upper side of the wedge is provided with a series of serrations or teeth 15. These are adapted to engage reversely arranged or counterpart teeth 16 on the underside of a gravitating block 17 which is fitted loosely in the pocket 18 provided in the portion 5 of the saddle member above the transverse wedge passageway. By the foregoing arrangement the wedge 11 may be driven until the downturned end portion 6 of the saddle member is drawn tightly against the outer face of the side plate. The block 17 being fitted loosely in the pocket 18 will rise and fall as the serrated side of the wedge moves thereunder, the block being limited to an almost imperceptible endwise movement by the side walls 10.

As shown in Fig. 5, a pawl or dog 19 may be pivotally mounted in the pocket 18 and substituted for the gravitating block 17 to prevent the tightening wedge 11 from working out.

In Figs. 6 and 7, the locking wedge 11 is vertically arranged so as to drop by grav-

ity and the motion of the car and thereby have a tendency to continually and automatically take up all looseness between the side plate and saddle member. The top side of the wedge piece 11^a is, however, inclined to cooperate with the inclined underside of a cross wedge or key 20 which is slidably fitted in a transverse slideway across the upper portion of the saddle member. Preferably, the wedge 20 is provided with a horizontal rib 21 extending lengthwise of its upper inner edge and fitting in a groove provided therefor in the saddle member. By this arrangement, the cross wedge 20 may be readily driven forwardly to force the wedge 11^a downwardly. The rib 21 will support the cross wedge 20 and prevent it from sliding out of the slideway when the wedge 11^a drops by its own weight and the motion of the car should any looseness or play occur between the side plate and saddle member after the parts have been tightened by driving the cross wedge 20.

In Fig. 8 a gravitating tightening wedge 11^b is shown. In this modification a screw-threaded stud or projection 22 is provided on the lower end of the wedge. The stud 22 projects through a slot 23 in the bottom wall 24 of the bracket extension 5^a of the saddle member and it is provided with a nut 25 which bears against said bottom wall whereby the wedge may be drawn downwardly and held in tightened position. The saddle members shown in Figs. 6 to 8, inclusive, are provided with lateral ears or lugs 26 in lieu of the depending lugs 8 of the other modifications.

By the construction and arrangements shown, the carlines may be rigidly connected with the side plates when the car is built, and should any looseness later occur due to the shrinkage of the side plates and rough usage of the car, the wedges can be readily tightened to maintain the rigidity of the roof structure. Thus, the many disadvantages due to looseness of the connections are obviated.

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

What I claim is:

1. A carline or the like having an end portion arranged to straddle the side plate of a car, a tightening device arranged to be driven transversely of the end portion of the carline between the same and the side plate, and a locking device arranged to engage said tightening device to prevent the same from working back.

2. A carline or the like having an end portion arranged to straddle the side plate

of a car, a tightening device arranged to be driven transversely of the end portion of the carline between the same and the side plate, and a locking device arranged to automatically engage said tightening device to prevent the same from working back.

3. A carline or the like having an end portion arranged to straddle the side plate of a car, a tightening wedge arranged to be driven transversely of the end portion of the carline between the same and the side plate, said tightening wedge having a serrated side, and a locking device arranged to automatically engage the serrated side of said tightening wedge to prevent the same from working back.

4. A carline or the like having an end portion arranged to straddle the side plate of a car, a tightening wedge arranged to be driven transversely of the end portion of the carline between the same and the side plate, said tightening wedge having a serrated side, and a gravitating locking member arranged to automatically engage the serrated side of said tightening wedge to prevent the same from working back.

5. A carline or the like having an end portion arranged to straddle the side plate of a car, a tightening wedge arranged to be driven transversely of the end portion of the carline between the same and the side plate, and a driving wedge arranged to be driven transversely of said first mentioned tightening wedge to drive and hold the same in tightened position.

6. A carline or the like comprising an end portion arranged to straddle the side plate of a car, a tightening wedge arranged to be driven vertically transversely of the end portion of the carline between the same and the side plate, the upper end of said wedge being inclined, and a driving wedge arranged to be driven horizontally transversely of said carline in cooperative relation to the inclined upper end of said first mentioned tightening wedge, said driving wedge having a horizontal rib and said carline having a slideway arranged to receive said rib whereby the driving wedge is supported independently of said tightening wedge.

7. A carline or the like comprising an end connecting member which is arranged to straddle the side plate of a car, said member being provided with a transverse slideway having an open side adjacent to the face of the side plate and an inclined opposite side, a tightening wedge arranged to be driven in said slideway between said side plate and the inclined side of said slideway, and a locking device adapted to hold said tightening wedge from working back.

8. A carline or the like comprising an end connecting member which is arranged to

straddle the side plate of a car, said member having a transverse slideway having an open side adjacent to the face of the side plate and an inclined opposite side, a
5 tightening wedge arranged to be driven in said slideway between said side plate and the inclined side of said slideway, and a locking device arranged to automatically en-

gage said wedge to hold the same from working back.

Signed at Detroit, Michigan, this 9th day of June, 1909.

WALTER P. MURPHY.

Witnesses:

E. BOWEN,

C. H. SIMPSON.