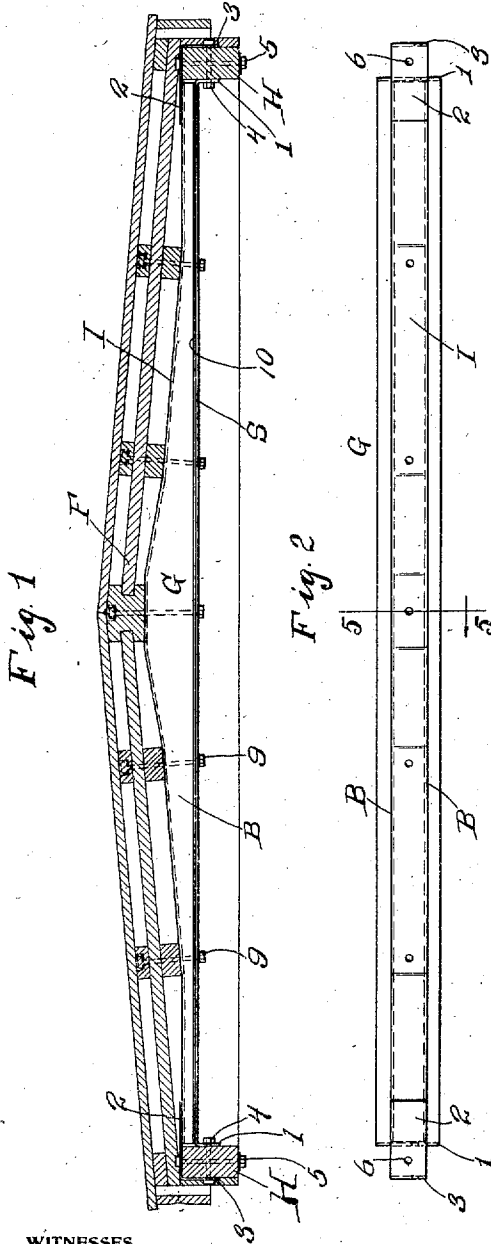
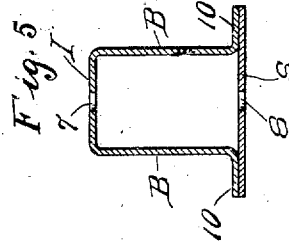
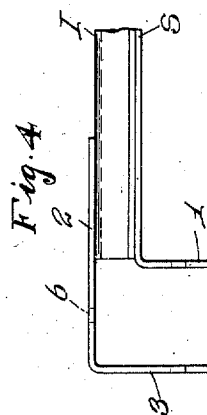
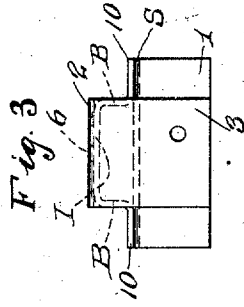


1,066,569.

Patented July 8, 1913.



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CARLINE.

1,066,569.

Specification of Letters Patent.

Patented July 8, 1913.

Application filed June 29, 1911. Serial No. 636,128.

To all whom it may concern:

Be it known that I, JOHN McE. AMES, residing at Dongan Hills, Richmond county, Staten Island, New York, and being a citizen of the United States, have invented certain new and useful Improvements in Carlines, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which illustrate the preferred form of the invention, though it is to be understood that the invention is not limited to the exact details of construction shown and described, as it is obvious that various modifications thereof will occur to persons skilled in the art.

In said drawings: Figure 1, is a transverse sectional view through the roof portion of a car equipped with the carline. Fig. 2 is a plan view of the improved carline detached. Fig. 3 is an end view of said carline. Fig. 4 is an enlarged fragmentary end portion thereof and Fig. 5 is a transverse sectional view section being taken on line 5-5 of Fig. 2.

The object of the invention is to provide a simple strong carline, made up of a minimum number of parts which can be readily assembled and the parts electrically welded together so as to form a unity structure possessing a maximum strength, which can be applied to cars in such manner as to form ready attachment to the side plates of said cars.

Referring to the parts, "F" indicates generally a car roof structure, "H" the side plates of a car, "G" a single channel shaped pressing, comprising the top web portion "I" forming the compression member, vertical side flanges B-B and bottom plate S which bottom plate acts as a tension member and extends the full length of the channel pressing G and is bent downwardly therefrom at each end to form attaching flanges 1 which abut the inner faces of the car side plates. Connected with the top or web portion I of the principal member G

are hanger brackets 2; provided with the depending outer flanges 3 adapted to extend downwardly against the outer faces of the car side plates H as shown in Fig. 1. Extending through perforations in flanges 1 and 3 are bolts 4 which also pass transversely through said car side plates and as supplemental securing means vertical bolts 5 are provided which pass through said side plates and through perforations 6 in said hanger brackets. Coincident perforations 7 and 8 are provided in the plates S and web I through which securing bolts 9 are projected which bolts are attached to secure the roof in position upon the carline.

In assembling the parts comprising the carline, the hanger brackets 2 are electrically welded to the webs I of the principal member G, after which the plates S are likewise electrically welded to the channel member G and to the outstanding bottom tension flanges 10 thereof, so that the several parts are united and preferably without the use of rivets, though it is evident that rivets may be employed instead of electric welding as heretofore suggested.

By forming a principal member G, hanger brackets and bottom plate separately, and afterward uniting them as shown, the process of manufacture is materially simplified, and owing to the arrangement of the parts a very strong carline is produced which may be readily formed of different sizes without the use of expensive dies, etc.

What I claim is:—

1. A carline comprising an inverted U channel member having end portions of substantially uniform depth and a central portion of greatest depth at its center and decreasing toward each end portion, a horizontal bottom plate connecting the sides of said channel and having depending ends forming attaching flanges, and brackets attached to said end portions and co-acting with said attaching flanges to accommodate side plates therebetween.

2. A tubular carline, including a relatively broad horizontally disposed tension plate and a relatively narrow compression

plate having a portion spaced from said tension plate a maximum distance adjacent the center thereof and converging toward said tension plate on opposite sides of said
5 maximunly spaced portion.

3. A tubular carline comprising an inverted channel having flanges outstanding from each leg thereof, and a longitudinal bottom plate connecting said flanges, said

carline being of greater depth adjacent the center than adjacent the ends thereof.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

JOHN McE. AMES.

Witnesses:

FREDERICK H. GIBBS,
H. N. HENNESSY.