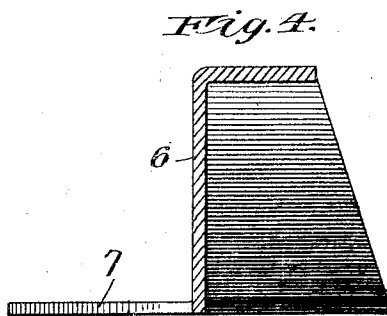
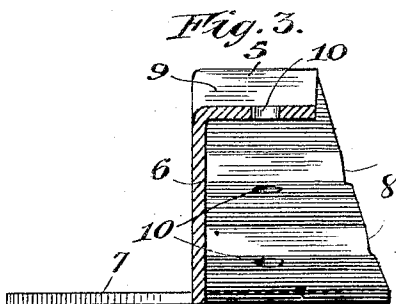
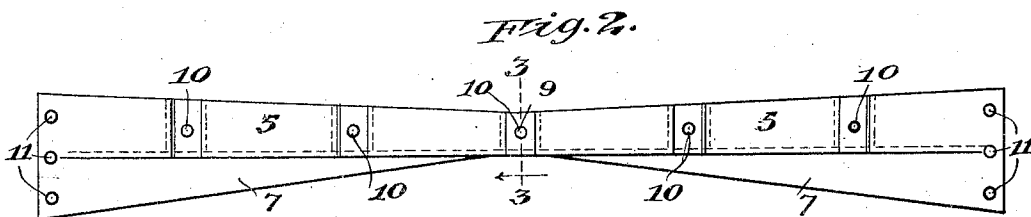
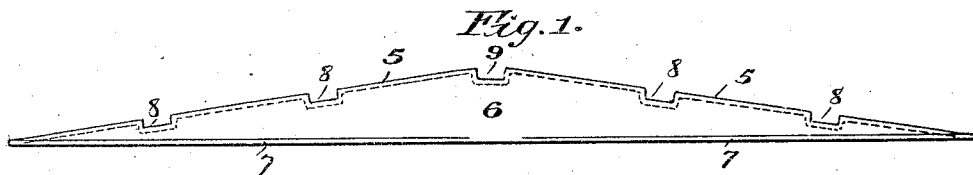


No. 836,370.

PATENTED NOV. 20, 1906.

E. I. DODDS.
CARLINE AND METHOD OF MANUFACTURE.
APPLICATION FILED MAY 8, 1905.



Witnesses,

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UNITED STATES PATENT OFFICE.

ETHAN I. DODDS, OF PULLMAN, ILLINOIS, ASSIGNOR TO THE PULLMAN COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

CARLINE AND METHOD OF MANUFACTURE.

No. 836,370.

Specification of Letters Patent.

Patented Nov. 20, 1906.

Application filed May 8, 1905. Serial No 259,378.

To all whom it may concern:

Be it known that I, ETHAN I. DODDS, a citizen of the United States, residing at Pullman, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Carlines and the Methods of Manufacture, of which the following is a specification.

My invention relates to carlines for railway-cars and methods of manufacturing them, and pertains more particularly to that class of carlines which are made of pressed steel.

One object of my invention is to provide an improved carline combining a maximum of strength and rigidity with a minimum of weight and simplicity of manufacture.

A carline constructed in accordance with my invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevational view of my improved carline. Fig. 2 is a top plan view. Fig. 3 is a cross-sectional view, on an enlarged scale, on the line 3 3 of Fig. 2; and Fig. 4 is a similar cross-sectional view of a modification, omitting the countersunk seats for the purlins and ridge-pole.

In constructing my improved carline I take a plain flat rectangular strip of plate-steel and press one longitudinal half thereof outwardly from the plane of the strip until the same assumes the low roof-shaped formation illustrated in Fig. 1, thereby producing the oppositely-sloping upper surfaces 5 and the central vertical web 6. This operation, when performed by means of a suitable die, results in drawing inwardly the metal of the opposite longitudinal half, thereby producing horizontal flanges 7 on the lower margin of the vertical web 6, which flanges start from substantially the center of the lower margin of said web and gradually increase in width to the ends of the carline. The pressing operation is also preferably so performed as to cause the outwardly-displaced longitudinal half of the strip to contribute a slight portion of its metal to the formation of the vertical web 6, whereby the inclined upper surfaces 5 are slightly narrower at the center than at the ends, tapering slightly on their free edges, as shown in Fig. 2. The upper surfaces 5 are preferably depressed at intervals to form seats 8 for the purlins and a central seat 9 for the ridge-pole, said seats being apertured, as

shown at 10, for the passage of bolts uniting the carline and purlins. However, the seats 8 and 9, either or both, may be omitted, as shown in Fig. 4, if desired. In the ends of the purlin are formed the usual holes 11, whereby it may be secured to the plates.

I claim—

1. A carline having oppositely-inclined purlin-supporting surfaces, a vertical web, and flanges on the lower margin of the latter, the parts being so proportioned that the sum of the width of the purlin-supporting surface, the depth of the vertical web, and the width of the lower flange is substantially the same at all points in the length of the carline, substantially as described.

2. A carline having oppositely-inclined purlin-supporting surfaces slightly increasing in width from the center to the ends of the carline, a vertical web, and flanges on the lower margin of the latter, the parts being so proportioned that the sum of the width of the purlin-supporting surface, the depth of the vertical web, and the width of the lower flange is substantially the same at all points in the length of the carline, substantially as described.

3. A carline having oppositely-inclined purlin-supporting surfaces, a vertical web, and flanges on the lower margin of the latter increasing in width from the center to the ends of the carline, the parts being so proportioned that the sum of the width of the purlin-supporting surface, the depth of the vertical web, and the width of the lower flange is substantially the same at all points in the length of the carline, substantially as described.

4. A carline having oppositely-inclined purlin-supporting surfaces slightly increasing in width from the center to the ends of the carline, a vertical web, and flanges on the lower margin of the latter increasing in width from the center to the ends of the carline, the parts being so proportioned that the sum of the width of the purlin-supporting surface, the depth of the vertical web, and the width of the lower flange is substantially the same at all points in the length of the carline, substantially as described.

5. A carline made from a single strip of sheet metal pressed into form to present oppositely-inclined upper surfaces of slightly-increasing width from the center to the ends of the carline and provided with countersunk

purlin-supporting seats, a vertical web, and horizontal flanges of increasing width from the center to the ends of the carline on the lower margin of said web, the parts being so
5 proportioned that the sum of the width of the upper surface, the depth of the vertical web, and the width of the lower flange is substantially the same at all points in the length of the carline, substantially as described.

10 6. The method of manufacturing a carline which consists in pressing a rectangular metal sheet to form oppositely-inclined purlin-supporting surfaces, a vertical web, and one or more horizontal flanges on the lower margin
15 of the latter, substantially as described.

7. The method of manufacturing a carline which consists in pressing a rectangular metal sheet to form oppositely-inclined purlin-supporting surfaces of slightly-increasing width

from the center to the ends, a vertical web, 20 and one or more horizontal flanges of increasing width from the center to the end of the lower margin of said web, substantially as described.

8. The method of manufacturing a carline 25 which consists in pressing a rectangular metal sheet to form oppositely-inclined upper surfaces of slightly-increasing width from the center to the ends and provided with countersunk purlin-supporting seats, a vertical web, 30 and one or more substantially horizontal flanges of increasing width from the center to the end of the lower margin of said web, substantially as described.

ETHAN I. DODDS.

Witnesses:

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