

No. 811,073.

PATENTED JAN. 30, 1906.

A. LIPSCHUTZ.

ROOF CARLINE.

APPLICATION FILED APR. 20, 1905.

Fig. 1.

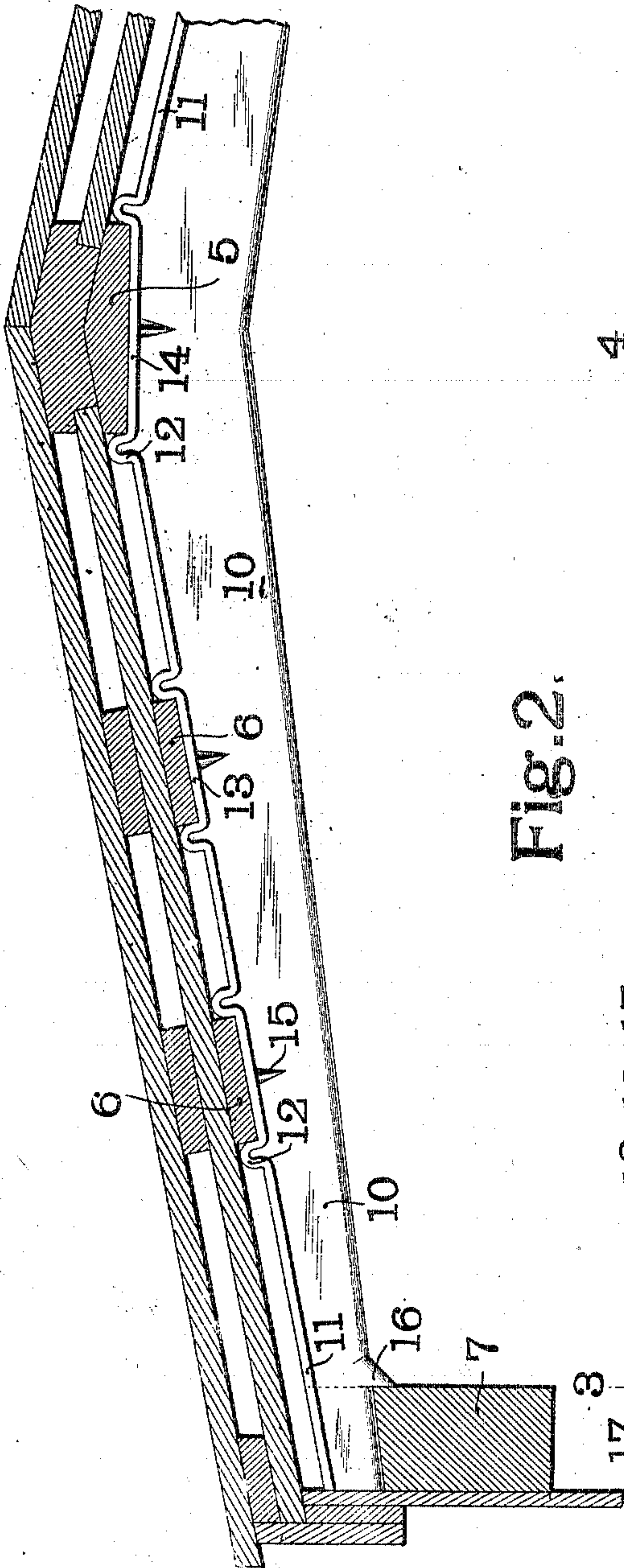


Fig. 2.

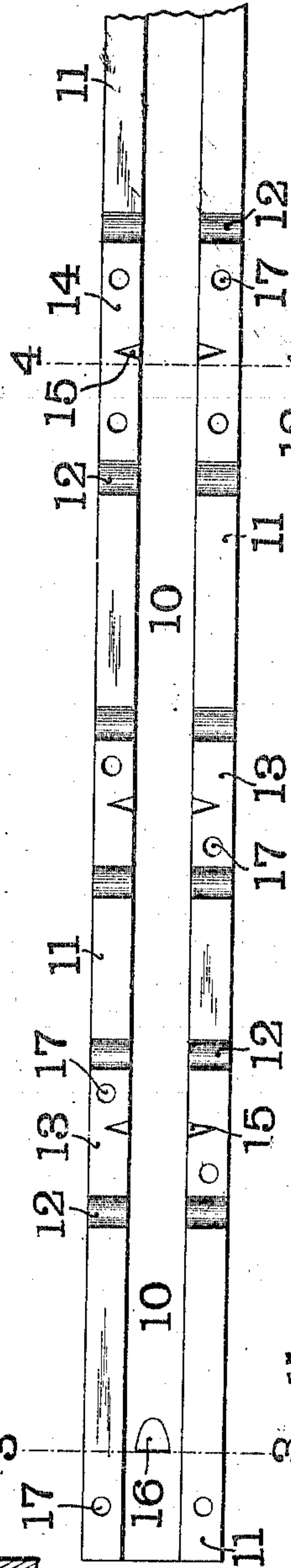
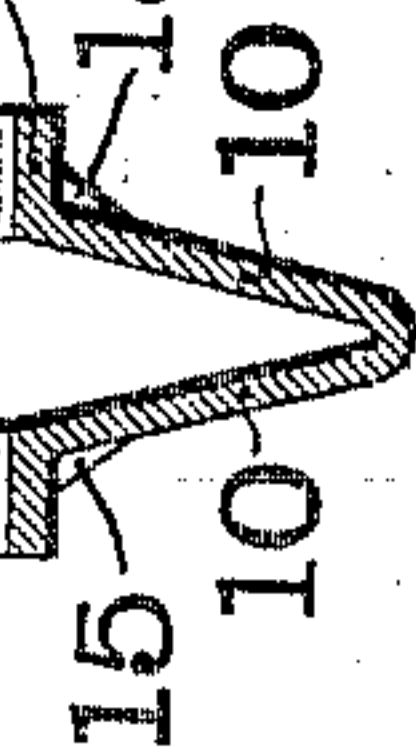


Fig. 3.



Fig. 4.



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## ROOF-CARLINE.

No. 811,073.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed April 20, 1905. Serial No. 256,578.

*To all whom it may concern:*

Be it known that I, ARTHUR LIPSCHUTZ, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Roof-Carline, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to roof-carlines, and more particularly to carlines which are pressed or stamped out of sheet-steel or other sheet metal and adapted to be used in the framing of railway-cars, and especially in the type of cars known as "freight" or "box" cars.

One object of my invention is to economize the amount of metal used in carlines of the type above referred to without materially decreasing the strength of the carlines.

Another object of my invention is to so shape the carline that the tendency of the die to stick in the carline while the same is being formed will be obviated.

Other objects of my invention are to provide the carline with stops for abutting against the side plates of the car and also to provide brackets for supporting the purlin-seats.

In the accompanying drawings, which illustrate one form of carline made in accordance with my invention, together with a portion of the car to which the same is applied, Figure 1 is a side elevation of slightly more than one half of a carline, together with a section of the parts of the car adjacent thereto. Fig. 2 is a top plan view of the part of the carline shown in Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 2, and Fig. 4 is a section on the line 4 4 of Fig. 2.

Like marks of reference refer to similar parts of the several views of the drawings.

5 represents the ridge-pole, 6 the purlins, and 7 the side plates, of an ordinary box or freight car. These parts may be of any usual form. The carline is pressed or stamped from sheet metal, preferably sheet-steel. The two sides 10 of the carline in place of being parallel, as in the carlines heretofore in use, are arranged to lie in intersecting planes, as best shown in Figs. 3 and 4. These sides 10 are deepest at the center, tapering toward the

ends, as shown in Fig. 1. Extending laterally from the sides 10 at the upper edge of the carline are a pair of continuous flanges 11. These flanges 11 have pressed in them upwardly-projecting stops 12, which form purlin-seats 13 for the purlins 6 and a ridge-pole seat 14 for the ridge-pole 5. In order to support the seats 13 and 14, I form under said seats V-shaped brackets 15, which are pressed from the metal of the sides 10 and the seats 13 and 14. Near the ends of the carline I form downwardly-projecting stops 16, which are adapted to abut against the inner faces of the side plates 7, these stops 16 being stamped or pressed from the metal of the carline. The flanges 11 are provided with suitable bolt-holes 17, by means of which the carline can be secured to the side plates 7 and to the ridge-pole 5 and purlins 6.

By forming the sides of my carline so that they lie in intersecting planes I am enabled to form a carline having substantially the same dimensions and strength as a carline with vertical sides, but containing considerably less metal. The liability of the die to stick between the vertical sides of the carline is also obviated by this construction. It will also be seen that by forming the purlin-seats 13 and ridge-pole seat 14 by upwardly-projecting stops the said seats remain on a line with the rest of the flanges 11, so that the entire upper edge of the carline conforms to the roof-line.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is--

1. A metal roof-carline having a body formed of two folds of sheet metal connected at their lower edges, continuous flanges extending laterally from the upper edge of said body, and pressed-metal stops in said flanges extending above the upper face thereof and forming purlin-seats.

2. A metal roof-carline having a body, two continuous flanges extending laterally from the upper edge of said body and shaped to conform to the outline of the roof of the car, and stops integral and continuous with said flanges but extending above the same and forming purlin-seats.

3. A metal roof-carline having a body formed of two folds of sheet-metal connected



at their lower edges, flanges extending later-  
ally from the upper edge of said body and  
forming purlin-seats, and brackets pressed  
from the metal of said body and flanges for  
5 supporting said purlin-seats.

4 A metal roof-carline the sides of which  
are in intersecting planes and are provided  
with horizontally - extending flanges, said  
flanges being provided with upwardly-pro-  
10 jecting stops forming purlin-seats, pressed

brackets for said seats, and stops adapted to  
abut against the side plates.

In testimony whereof I have hereunto set  
my hand and affixed my seal in the presence  
of the two subscribing witnesses.

ARTHUR LIPSCHUTZ. [L. s.]

Witnesses:

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BENNETTE PIKE.