

No. 827,317.

PATENTED JULY 31, 1906.

G. B. MALTBY.  
ROOF CARLINE.

APPLICATION FILED AUG. 2, 1905. RENEWED JUNE 29, 1906.

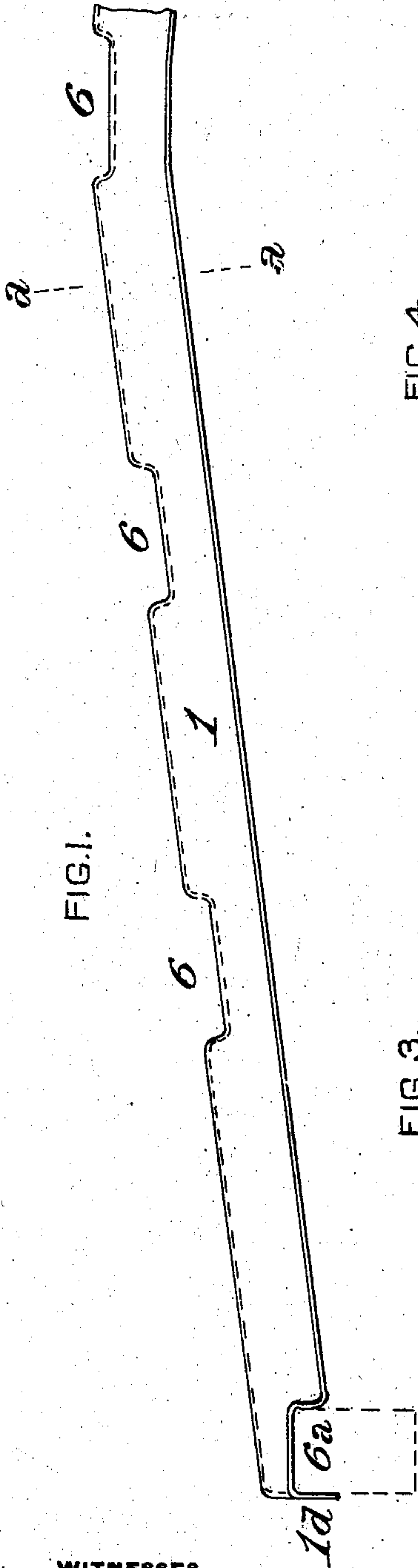


FIG. 4.

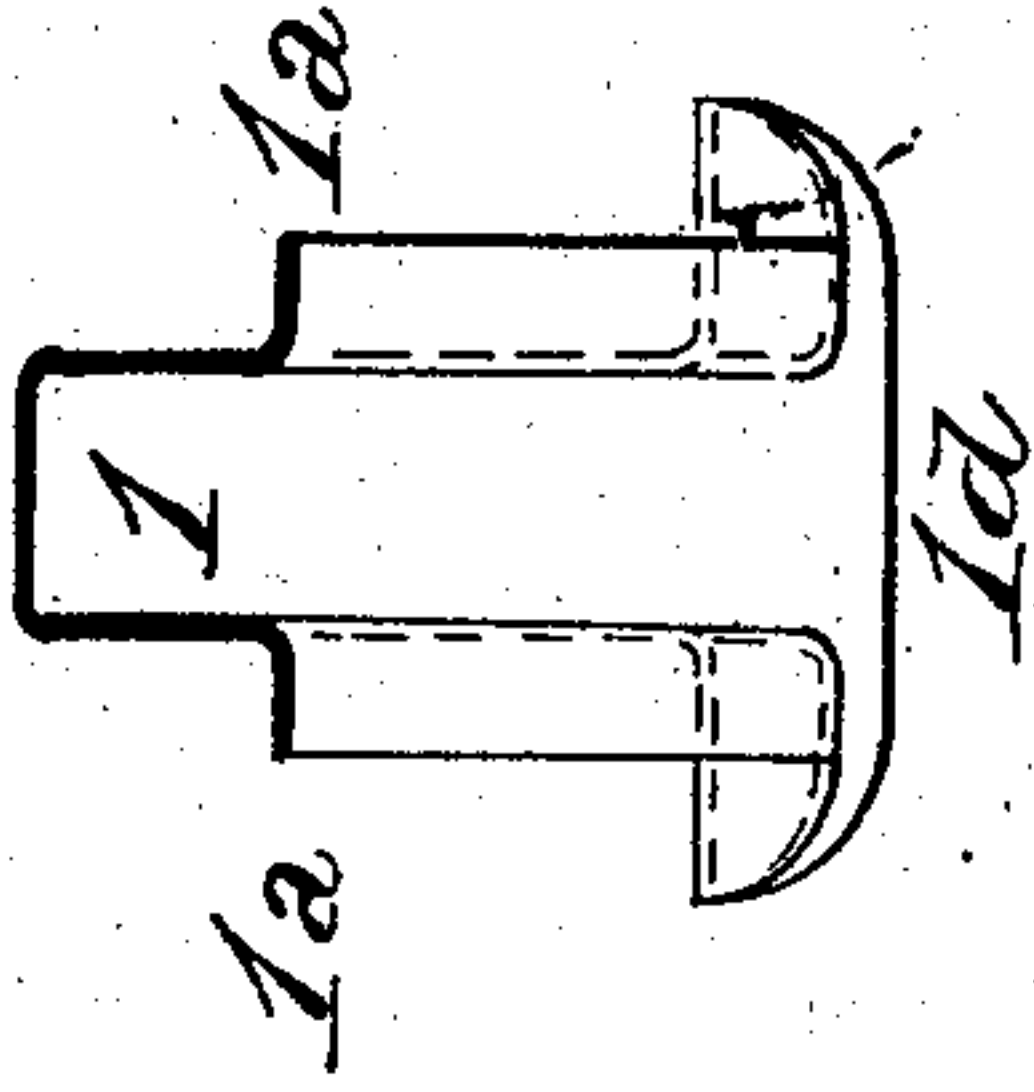


FIG. 3.

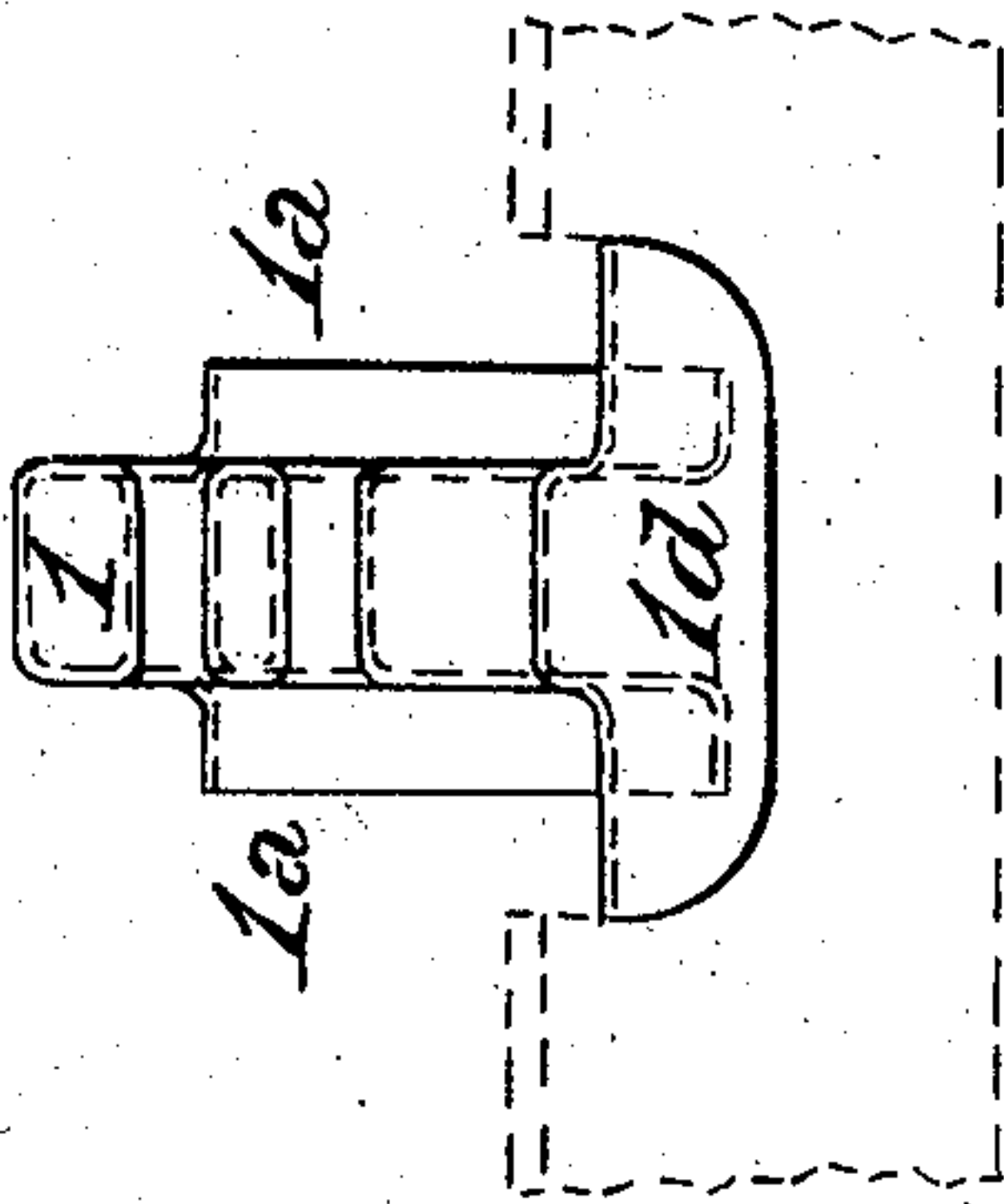
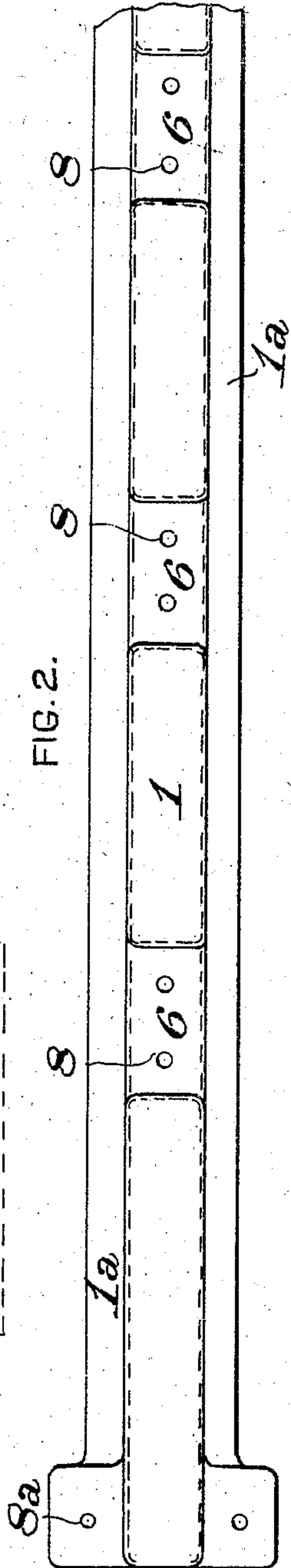


FIG. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE B. MALTBY, OF CLEVELAND, OHIO, ASSIGNOR TO CLEVELAND CAR SPECIALTY COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF WEST VIRGINIA.

## ROOF-CARLINE.

No. 827,317.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed August 2, 1905. Renewed June 29, 1906. Serial No. 324,055.

*To all whom it may concern:*

Be it known that I, GEORGE B. MALTBY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Roof-Carlines, of which improvement the following is a specification.

My invention relates to sheet or plate metal roof-carlines of the general type which is exemplified in Letters Patent of the United States No. 649,171, granted and issued to me and to Broderick Haskell (as assignee of two-thirds of the right) under date of May 8, 1900.

The object of my present invention is to provide a roof-carline embodying the advantageous features of that set forth in Letters Patent No. 649,171 aforesaid and which shall further afford improved facilities for being supported on the car side plates and for acting as a tie between the opposite sides of the car.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side view in elevation, showing slightly more than one-half in length of a roof-carline embodying my invention; Fig. 2, a plan or top view; Fig. 3, an end view, and Fig. 4 a transverse section on the line *a a* of Fig. 1.

In the practice of my invention I provide a roof-carline which is formed of sheet or plate metal, preferably by being pressed or shaped in a die or mold. The body of the carline is integral and comprises a web 1 of inverted-U or channel transverse section and lateral flanges 1<sup>a</sup>, projecting from the bottoms of the opposite side members of the web.

The web 1 is downwardly inclined from its middle to each of its ends at such an angle as may be adapted to impart the desired pitch to the roof, and the ends of the carline extend completely over and are supported on the side plates of the car-frame. (Indicated in dotted lines in Figs. 1 and 3.) In order to provide for the secure attachment of the carline to the side plates and the connection of the opposite sides of the car so as to dispense with the usual tie-rods, a transverse recess or pocket 6<sup>a</sup> of channel-section is formed in the

bottom of the body at each end thereof, the outer wall of said pocket being formed by a downwardly-turned flange 1<sup>d</sup>. The pockets 6<sup>a</sup> fit over the side plates, as indicated in Figs. 1 and 3, and the carline is secured thereto by vertical bolts passing through holes 8<sup>a</sup> in the top walls of the pockets. The carline may also be connected to the side plates by horizontal bolts, if desired.

To provide suitable bearings for the ridge-pole and purlins of the roof, the metal of the web 1 is turned downwardly at the middle of the carline and at proper distances between the middle and the ends, so as to form seats 6 of channel-section, in which the ridge-pole and purlins are fitted and to which they are secured by bolts passing through holes 8 in the seats.

The practical advantages of strength, lightness, and facility of application in ordinary car-framing which are presented by my improvement will be obvious to those familiar with railroad-car construction, and it will also be apparent that it may be employed in connection with a car-roof of any desired type.

I claim as my invention and desire to secure by Letters Patent—

1. A sheet or plate metal roof-carline having an integral body comprising a web of inverted-U or channel section, lateral flanges projecting from the side members thereof, and channel-section pockets formed at the ends of the body for the reception of car-frame side plates and having walls comprising portions of the side members and lateral flanges of the body.

2. A sheet or plate metal roof-carline having an integral body comprising a web of inverted-U or channel section, lateral flanges projecting from the side members thereof, channel-section pockets formed at the ends of the body for the reception of car-frame side plates, and having upper and inner walls comprising portions of the side members and lateral flanges of the body and downwardly-turned end flanges forming the outer walls of said pockets.

3. A sheet or plate metal roof-carline hav-

ing an integral body comprising a web of inverted-U or channel section, lateral flanges projecting from the side members thereof, recessed or channel-section seats formed in the top of the body, and channel-section pockets formed in the bottom of the body, at the ends thereof, for the reception of car-

frame side plates, and having walls comprising portions of the side members and lateral flanges of the body.

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