

No. 733,285.

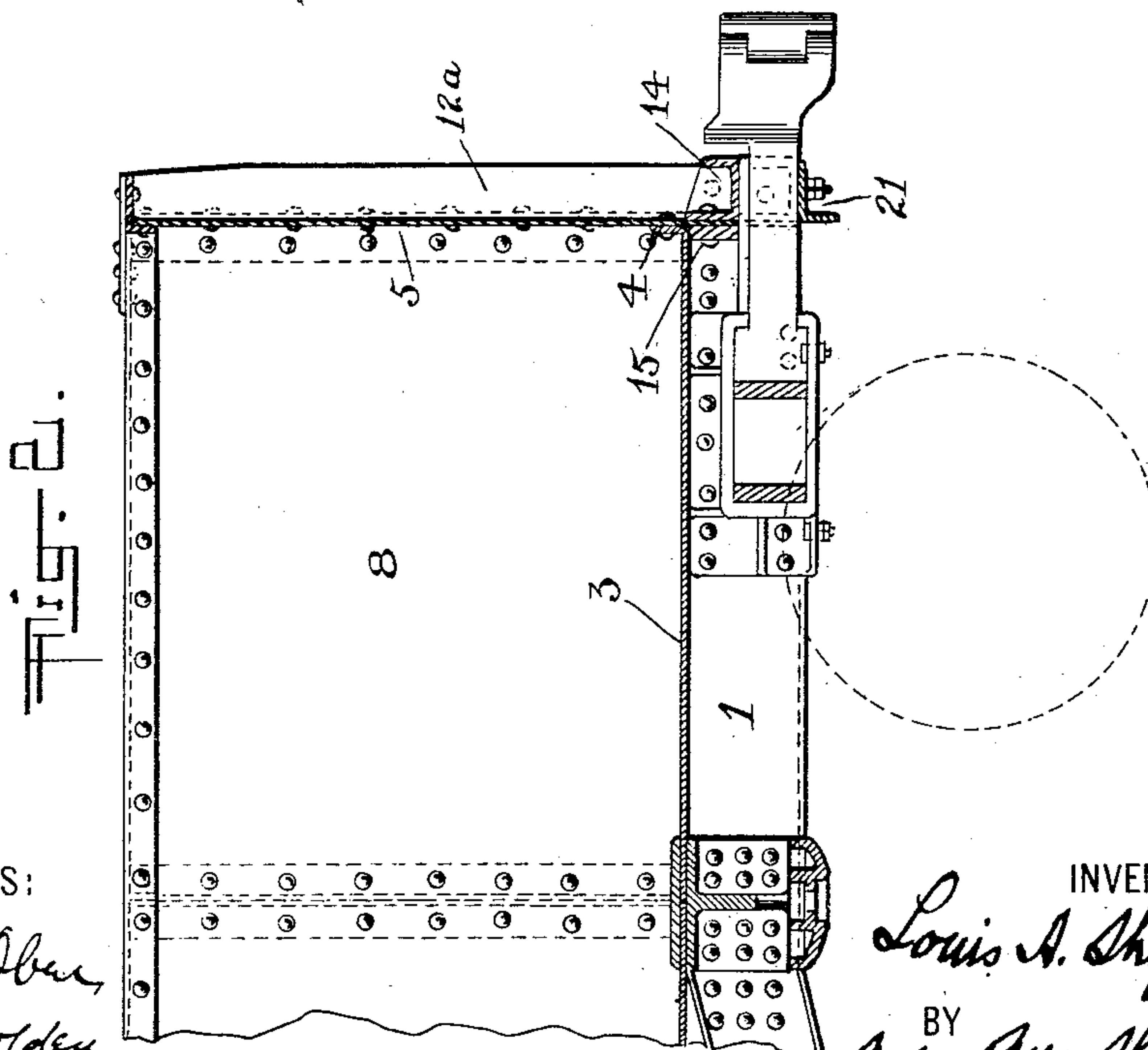
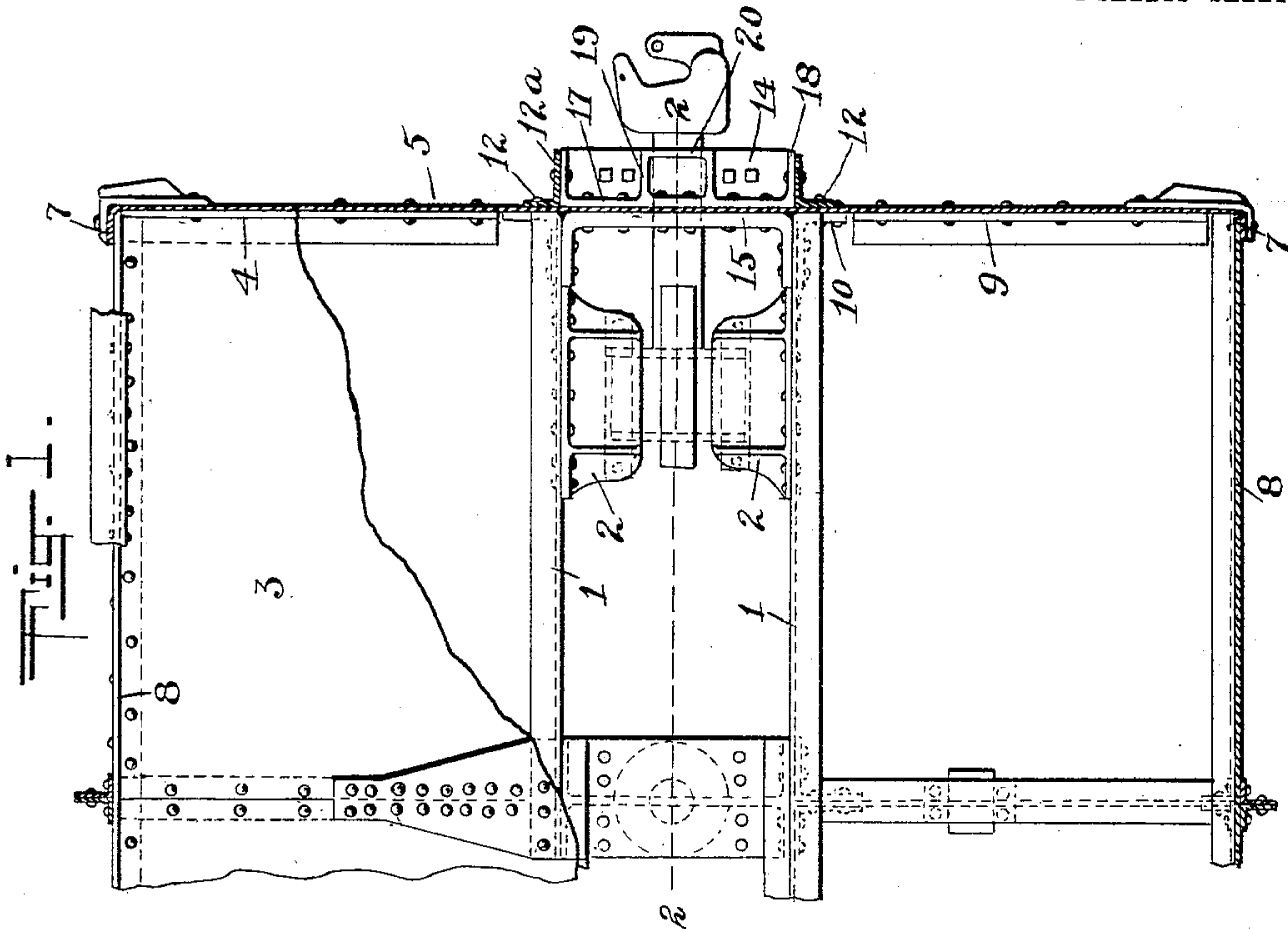
PATENTED JULY 7, 1903.

L. A. SHEPARD.
RAILWAY CAR.

APPLICATION FILED OCT. 10, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

Frank S. Ober,
Delos Holden.

INVENTOR

Louis A. Shepard

BY

Wm. B. Shepard & Co.
ATTORNEYS

No. 733,285.

PATENTED JULY 7, 1903.

L. A. SHEPARD.
RAILWAY CAR.

APPLICATION FILED OCT. 10, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

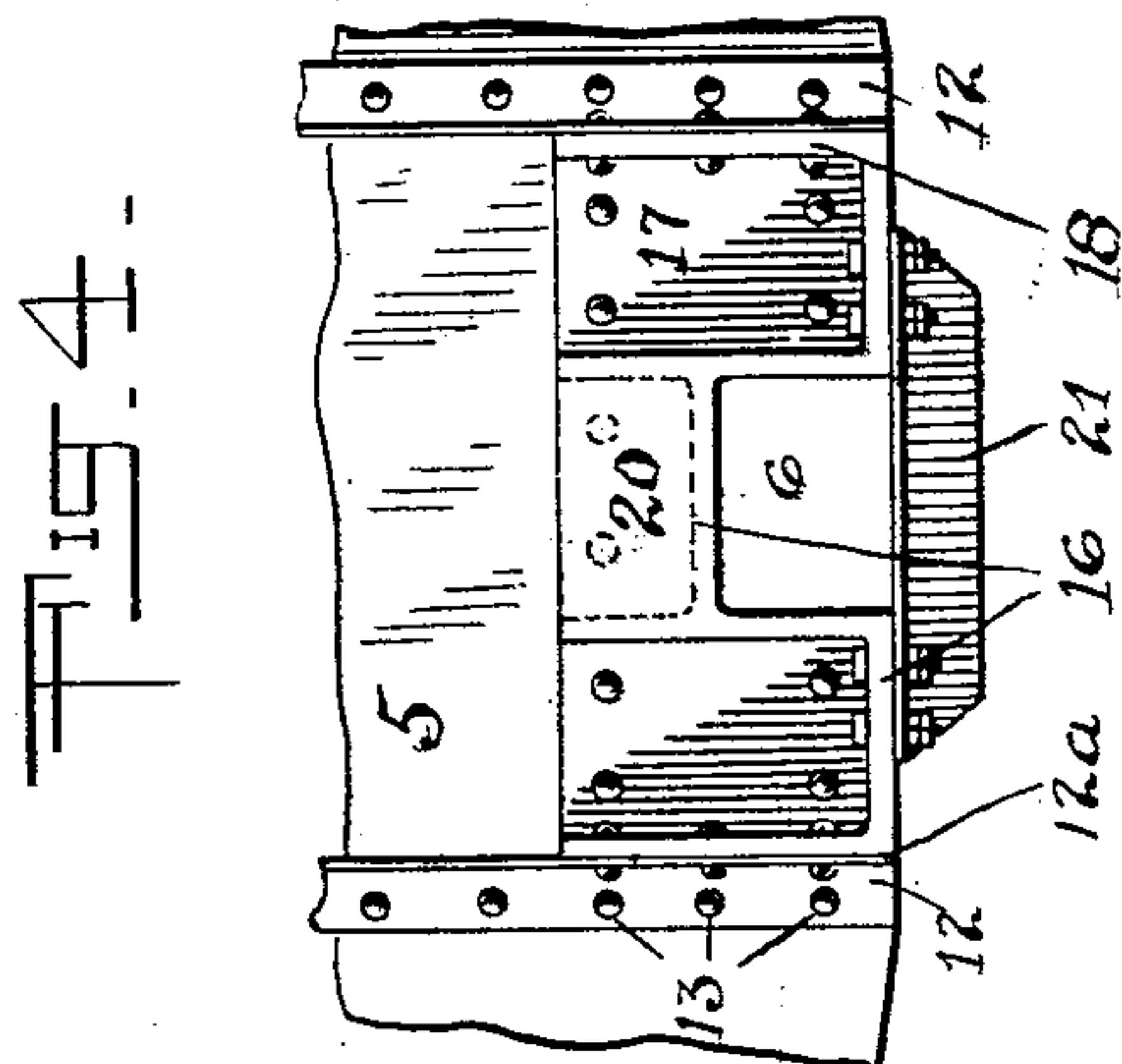
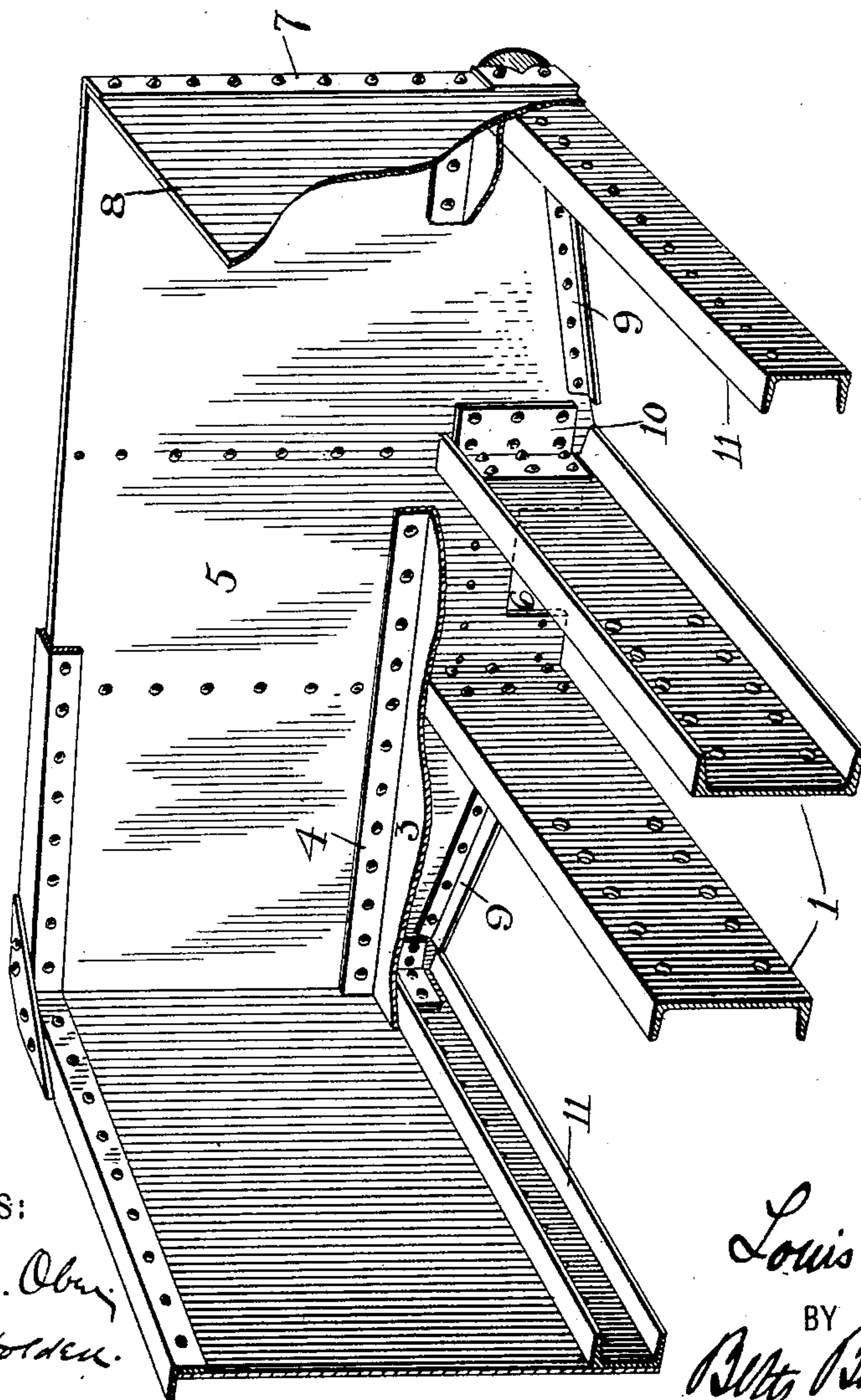


Fig. 3.



WITNESSES:

Frank S. Olin
Devis Holden.

INVENTOR

Louis A. Shepard

BY

Robt. Robt. Sheppard
his ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS A. SHEPARD, OF BROOKLYN, NEW YORK, ASSIGNOR TO CORNELIUS VANDERBILT, OF NEW YORK, N. Y.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 733,285, dated July 7, 1903.

Application filed October 10, 1902. Serial No. 126,727. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. SHEPARD, a citizen of the United States, and a resident of the borough of Brooklyn, city and State of New York, have invented certain new and useful Improvements in Railway-Cars, of which the following is a specification.

My invention relates to railway-cars constructed wholly or in part of metal. It has for its object the production of a light, strong, and serviceable car; and it consists of the features hereinafter described and claimed.

I prefer to use wherever practicable in the construction of the car rolled-metal beams of the ordinary commercial shapes and sizes, whereby the car may be manufactured at a small cost and in the least possible time.

I have shown my invention as embodied in a gondola car; but obviously it is not limited to this form of car, but may be used in other cars to which the structure is appropriate.

Reference is made to the accompanying drawings, in which—

Figure 1 is a plan view, partly in section, of one end of a car embodying my invention, the flooring being partly broken away. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a perspective view showing the inner face of the end plate, adjacent parts being broken away; and Fig. 4 is a detail front view of the buffer-block, adjacent parts being broken away.

The supporting-framework of the car preferably includes two longitudinal center sills 1 1, to which the draft-rigging guides 2 2 are secured. Upon the upper surface of these sills the end floor-plate 3 is laid. This plate preferably extends from the bolster to the end of the car, and its forward edge is upturned to form an attaching-flange 4 for the end wall-plate 5. Obviously the forward edge of the floor-plate may be turned downwardly instead of upwardly to form this attaching-flange.

The wall-plate 5 consists of a flat plate of metal, the lower edge of which is apertured or cut away, as shown at 6, for the passage of the draw-bar, and the side edges of which are turned back, as shown, to form attaching-flanges 7 for the side wall-plates 8. The

lower edge of the plate 5 is provided with stiffening-flanges 9 on either side of the aperture 6. These flanges may either be integral with the said plate or may be composed of separate angle-strips riveted thereto, as shown. The plate 5 is placed in a vertical position with its lower portion immediately in front of the ends of the longitudinal sills 1 1 and extending upwardly therefrom, preferably to the top of the car. The plate is then riveted to the flange 4 of the floor-plate 3 and is also secured to the ends of the sills 1 by knee-braces 10. The side walls of the car consist of plates 8, supported in any suitable manner, as by side sills 11. The flanges 7 of the end plate 5 are then riveted to the wall-plates 8. The construction described forms a very light and strong car end and dispenses with the use of an end sill and corner-strips.

Vertical stiffening-strips 12 are preferably riveted to the outer surface of the plate 5, the rivets 13 passing through the strip 12, plate 5, and knee-brace 10. The strips 12 are preferably angles, as shown, and between their forwardly-projecting flanges 12^a I secure the buffer-block 14. This block is riveted to the flanges 12^a and through the plate 5 to an inner intermediate member 15, placed between and secured to the sills 1. The member 15 not only acts as a lateral brace for the ends of the sills 1, but also acts to transmit to said ends thrusts imparted to the buffer-block. The block 14 is in the form of a yoke above and partly surrounding the draw-bar. It comprises a yoke-shaped bottom wall 16, a vertical rear wall 17, serving as an attaching-flange, and end walls 18 for attachment to the flanges 12^a. Between the end walls are intermediate vertical walls 19, united by a front wall 20 above the raised portion of the bottom wall 16. Below the draw-bar and secured at each end to the bottom wall 16 is an angle-strip 21.

What I claim, and desire to secure by Letters Patent, is—

1. In a metallic car, a longitudinal sill, an end plate secured to the end of the said sill and a buffer-block secured to the said sill on the outside of said end plate, substantially as described.

2. In a metallic car, longitudinal sills, vertical flanged beams secured at their lower ends to said sills, and a buffer-block secured to the flanges of said vertical beams, substantially as described.

3. In a metallic car, a buffer-block, having a yoke-shaped bottom wall, a vertical rear wall and vertical end walls, substantially as described.

4. In a metallic car, longitudinal center sills, an inner intermediate member secured therebetween, an end wall extending in front of said sills, and a buffer-block in front of said end wall and secured to said intermediate member, substantially as described.

5. In a metallic car, longitudinal center sills, a transverse intermediate member having ends secured to said center sills, and a buffer-block secured to said intermediate member, substantially as described.

6. In a metallic car, a longitudinal sill and an end wall consisting of a single flat plate, having its side edges bent over to form attaching-flanges, said end wall extending im-

mediately in front of said sills and being secured thereto, whereby an end sill is dispensed with, substantially as described.

7. In a metallic car, a longitudinal center sill, a transverse body-bolster, side walls supported by said bolster and an end wall consisting of a single flat plate secured to said center sill and having its side edges bent at right angles and secured to said side walls, whereby an end sill is dispensed with, substantially as described.

8. In a metallic car, side sills, side wall-plates secured to said sills, and an end wall consisting of a single flat plate secured to the ends of said sills, and having its side edges bent at right angles and secured to said side wall-plates, whereby an end sill is dispensed with, substantially as described.

In witness whereof I have hereunto set my hand this 9th day of October, 1902.

LOUIS A. SHEPARD.

In presence of—

WILLIAM K. AUCHINCLOSS,
JAMES J. COSGROVE.