

No. 776,811.

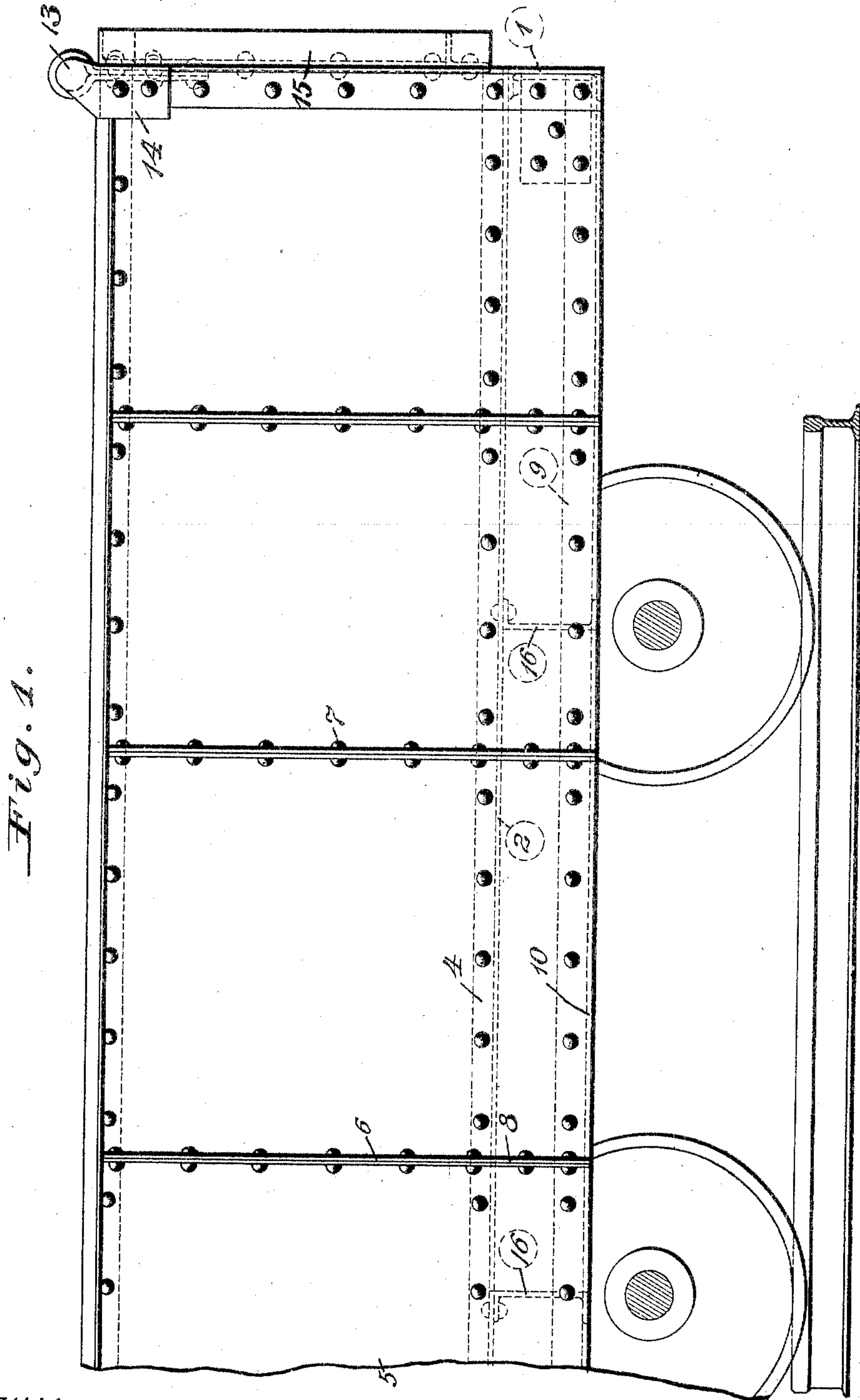
PATENTED DEC. 6, 1904.

W. W. SMITH.
CAR BODY.

NO MODEL.

APPLICATION FILED SEPT. 24, 1904.

3 SHEETS—SHEET 1.



Witnesses:
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B. F. Funk

Inventor:
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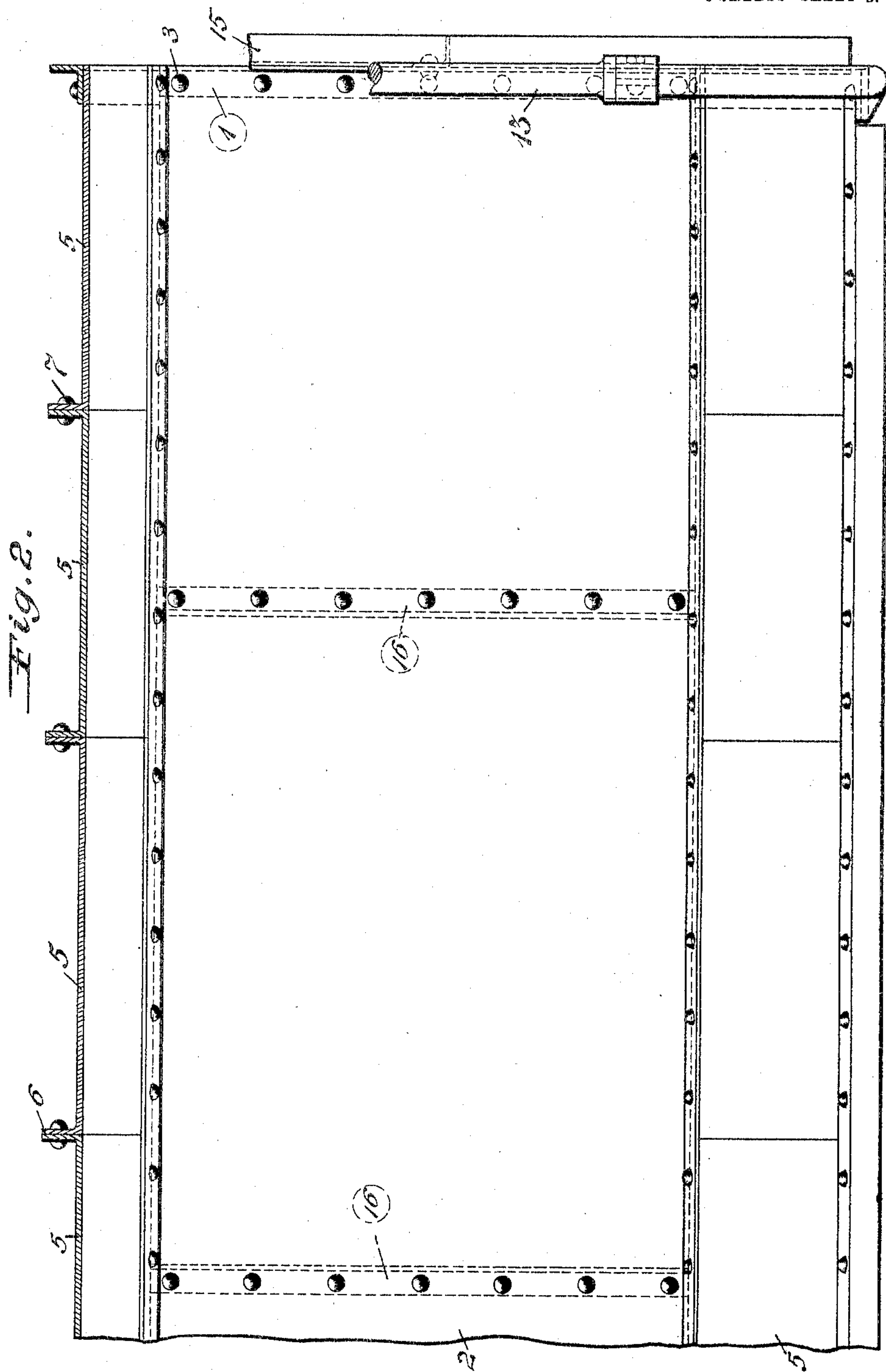
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3 SHEETS—SHEET 3.



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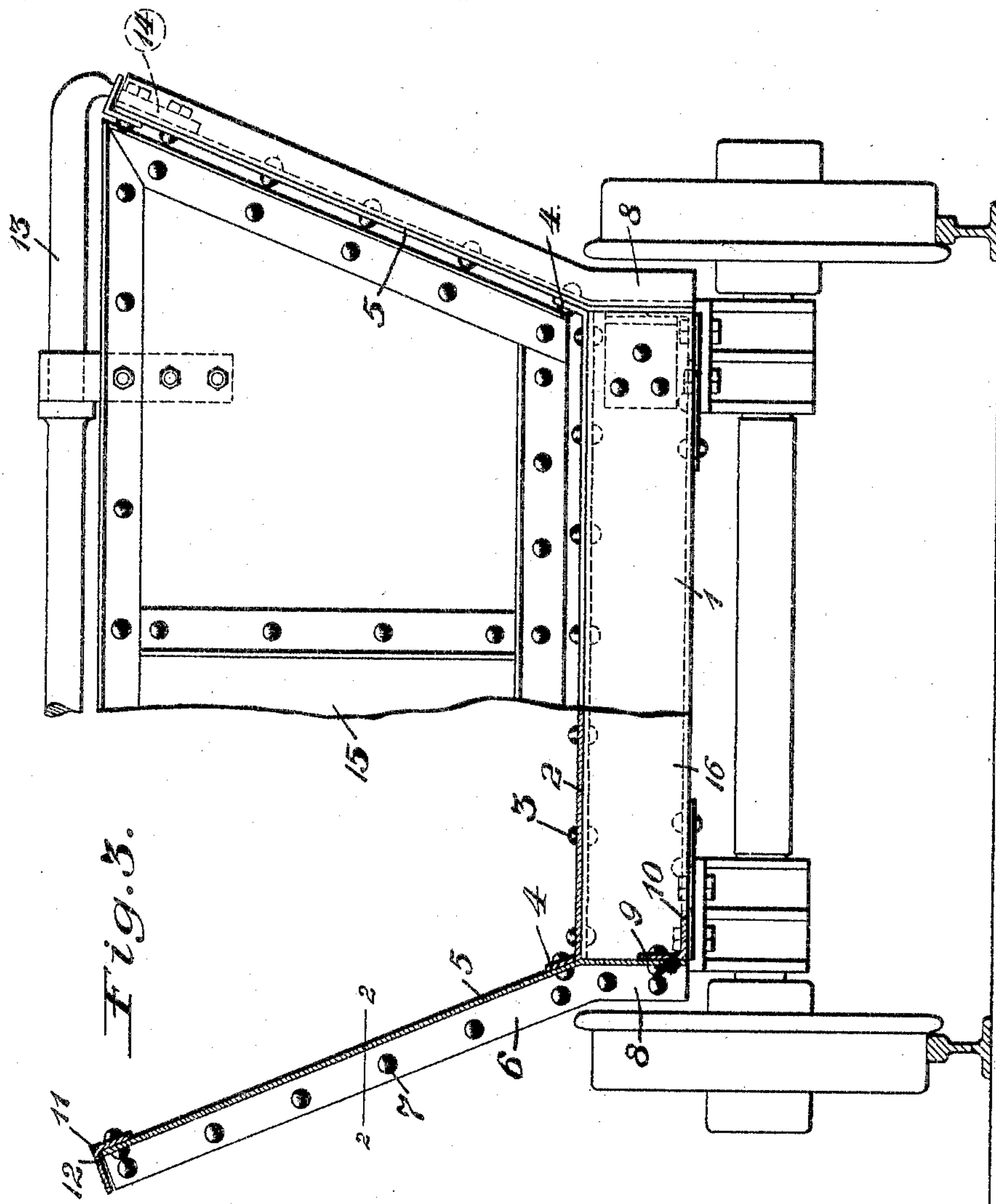
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UNITED STATES PATENT OFFICE.

WILLIAM W. SMITH, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAR & FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

CAR-BODY.

SPECIFICATION forming part of Letters Patent No. 776,811, dated December 6, 1904.

Application filed September 24, 1904. Serial No. 225,809. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. SMITH, a citizen of the United States, residing in the city, county, and State of New York, have invented a certain new and useful Improvement in Car-Bodies, 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, forming part of this specification, in which—

Figure 1 is a side elevational view of a portion of a car-body constructed in accordance with my invention. Fig. 2 is a horizontal sectional view through the car-body; and Fig. 3 is an end view of a car-body, partly in section.

This invention relates to metallic car construction, and particularly to mine-cars.

The primary object of the invention is to provide a metallic car-body possessing the requisite strength and which may be cheaply and conveniently constructed without the necessity of employing side stakes, stiffeners, or angles for the purposes of stiffening the sides.

Other objects and advantages, as well as the novel details of construction of this invention, will be specifically described hereinafter, it being understood that changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages thereof.

Referring now to the drawings by numerals of reference, 1 designates the end sills, each end sill being constructed of a channel extending transversely of the car. Secured on top of the end sills is the floor-sheet 2, which is fastened at its ends to the top flange of the channel end sill 1 by suitable rivets 3. The longitudinal edges of the floor-sheet are flanged, as at 4, the upwardly-projecting flanges diverging to conform to the inclined side sheets 5.

The sides of the car are constructed of a plurality of sheets having their vertical longitudinal edges flanged, as at 6, the adjacent flanges of the connected side sheets resting one against

the other and being secured together by rivets. The side sheets are inclined toward the floor of the car and are then bent vertically, as at 8, their lower edges being connected by longitudinally-disposed angles 9, which form stiffeners for the lower ends of the end sills, whereby the floor-sheets, side sheets, and angles 9 form substantially a boxed-in structure, imparting great strength to the car-body. By arranging the angles 9 so that their flanges 10 project inwardly and in a direction opposite to the flanges 6 of the side sheets the sides are efficiently braced. The top edges of the side sheets are connected by an angle 11, secured to the inner faces of the side sheets, so that the laterally-projecting flange 12 rests upon the end of the flanges 6 and serves as a compression member, the angle 10 serving as a tension member, so that in effect the car is provided with plate-girder sides, the sides being efficiently reinforced at proper intervals without the necessity of employing side stakes, channels, or angles, such as are commonly used.

A hanger-rod 13 is positioned above the car and is provided at its ends with inwardly-inclined flattened portions 14, which are fastened near the ends of the car, said rod supporting an end-gate 15, which is constructed of angles and plates to conform to the shape of the car. A suitable fastening device (not shown) may be used for keeping the door normally closed.

16 represents cross-braces, illustrated as channels, which are riveted to the floor-sheet of the car at proper intervals and connected to the side sheets 5.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A car, the sides of which consist of a plurality of plates having their vertical longitudinal edges flanged and riveted together, a floor-sheet flanged and riveted to the sides, and flanges at the top and bottom edges of the sides; substantially as described.

2. A car whose sides consist of a plurality

of plates inclined from the top to the floor-sheet and straight from the floor-sheet to the bottom of the end sills, said plates having vertical longitudinal flanges connected by rivets, angles along the lower edges of the plates, and angles along the top edges of the plates; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 8th day of September, 1904.

WILLIAM W. SMITH.

Witnesses:

PHILIP B. SHERIDAN,

P. P. STURDEVANT.