

J. J. BYERS.
CAR TRUCK.

APPLICATION FILED NOV. 10, 1910.

Patented June 20, 1911.

2 SHEETS-SHEET 1.

996,000.

Fig. 1.

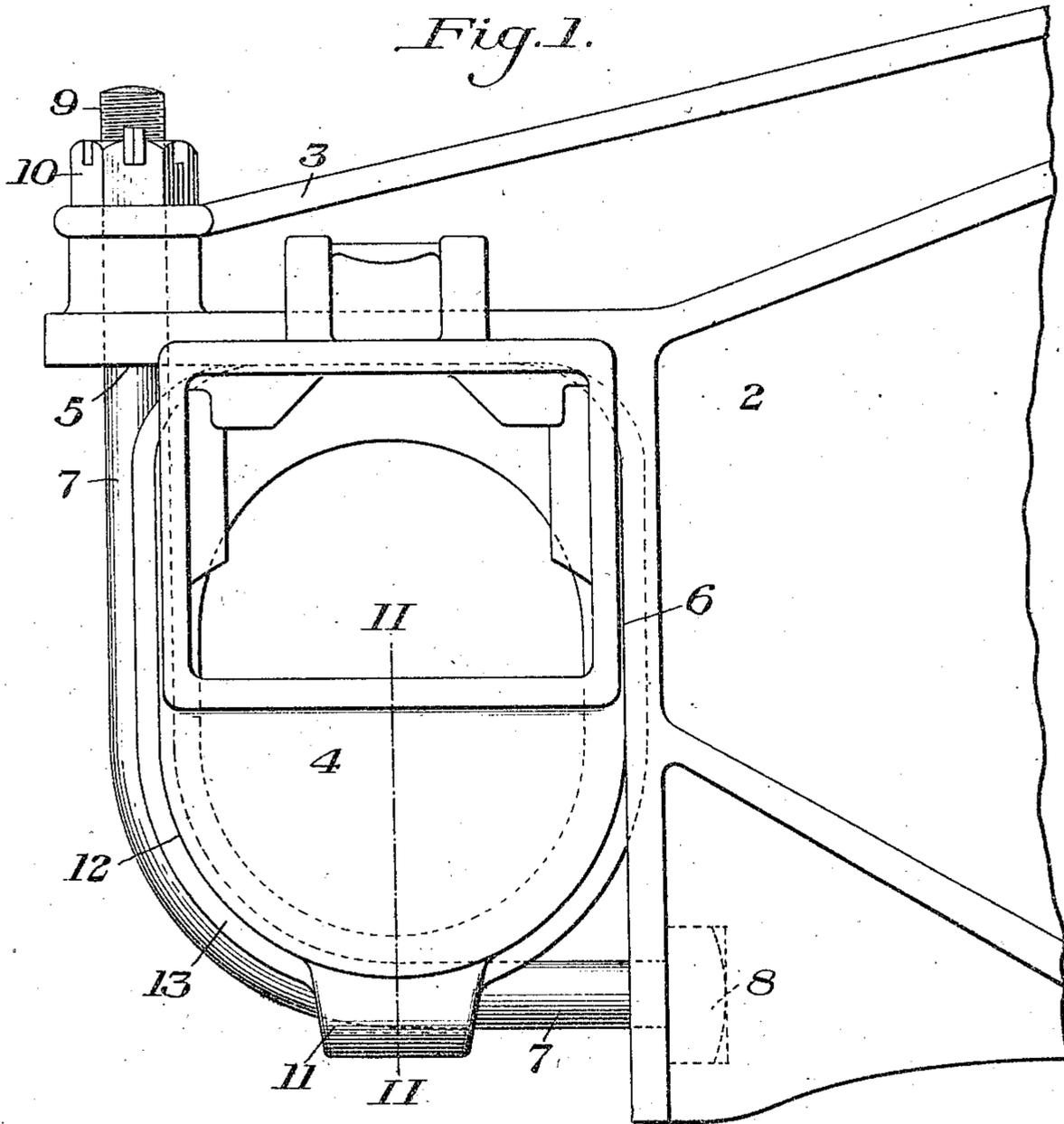
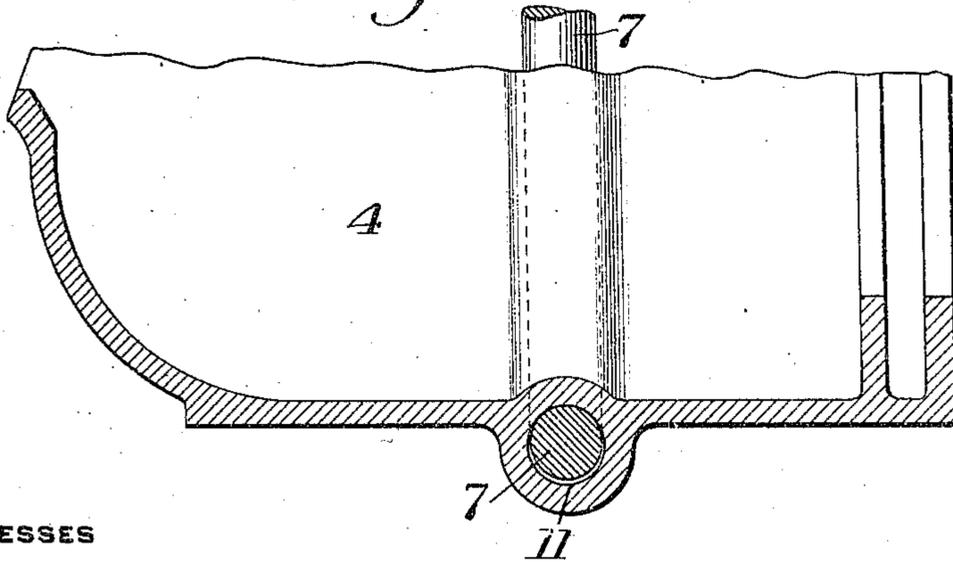


Fig. 2.



WITNESSES

R. A. Balderson
W. J. Farniss

INVENTOR

J. J. Byers,
by B. Akers, Bymer & Carmichael,
his Attys.

J. J. BYERS.

CAR TRUCK.

APPLICATION FILED NOV. 10, 1910.

Patented June 20, 1911.

2 SHEETS—SHEET 2.

996,000.

Fig. 3.

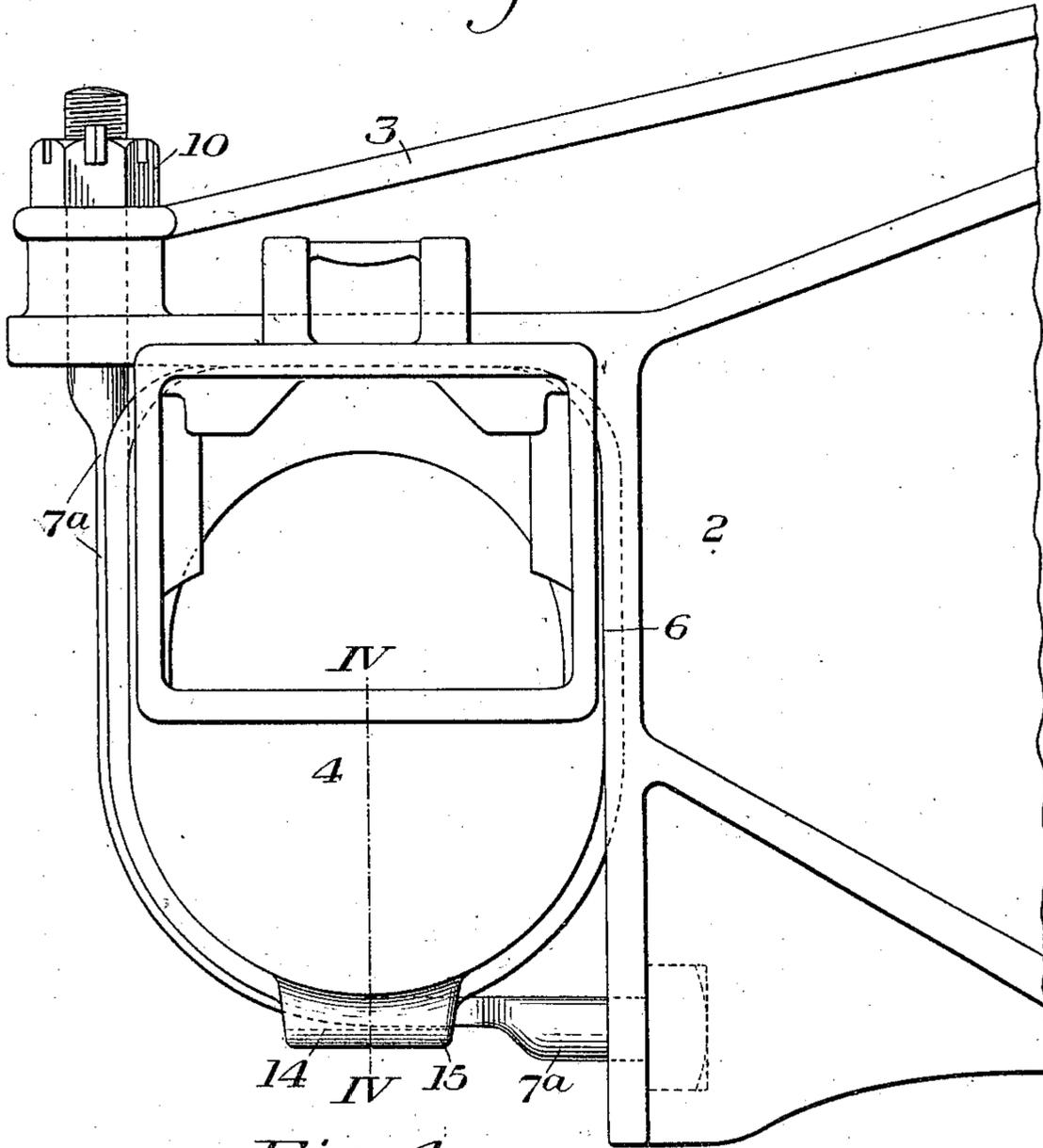
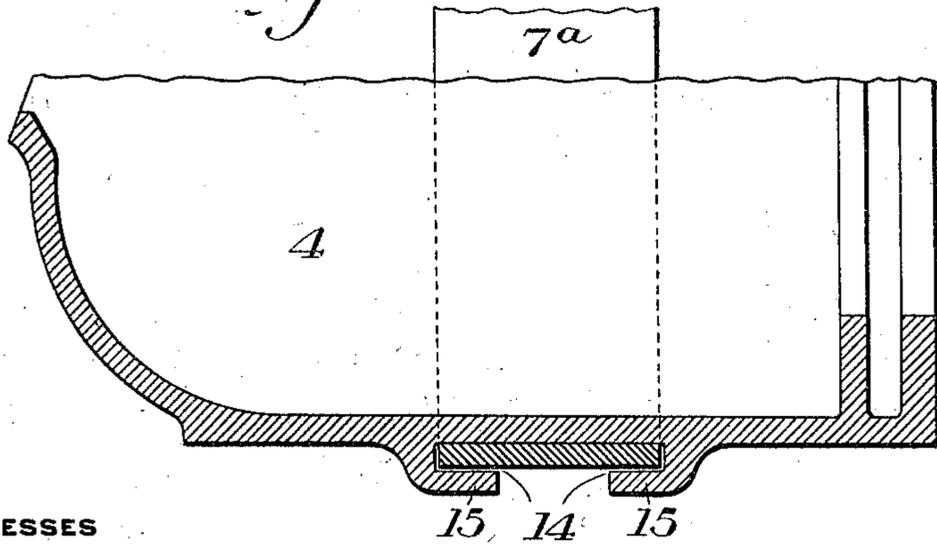


Fig. 4.



WITNESSES

R. A. Balderson
W. F. Amariss

INVENTOR

J. J. Byers,
by Baker, Byers & Carmichael,
his Attys.

UNITED STATES PATENT OFFICE

JACOB J. BYERS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE NATIONAL MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

CAR-TRUCK.

996,000.

Specification of Letters Patent. Patented June 20, 1911.

Application filed November 10, 1910. Serial No. 591,734.

To all whom it may concern:

Be it known that I, JACOB J. BYERS, a resident of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Car-Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 is a side view of a portion of the side frame and one of the journal boxes of a car truck and illustrating my invention; Fig. 2 is a section on the line II—II of Fig. 1; and Figs. 3 and 4 are views similar to 15 Figs. 1 and 2, respectively, but showing a modification.

My invention has relation to car trucks, and more particularly to means for securing the journal boxes to the side frames, the 20 object of my invention being to provide a simple and convenient securing means whereby both vertical and horizontal movements of the boxes with relation to the side frame are prevented, and which is provided with a safeguard for holding the parts 25 in proper relation, in case the securing nuts should become loose or work off.

Referring to the drawings, the numeral 2 designates the side frame of a car truck, 30 which is provided at the end with an overhung extension 3 to receive the journal box 4, the under side of this extension being provided with a horizontal bearing face 5, for the top of the box, and the end of the 35 side frame preferably being provided with a bearing face 6, at substantially right angles to the bearing face 5, and the box fitting in the angle between these two faces.

7 is a strap bolt by means of which the 40 box is secured to the frame. This bolt extends downwardly through the end of the overhung extension 3, around and underneath the box, its lower end being provided with a head 8, and its upper end being provided with a threaded portion 9, to receive 45 a holding nut 10. Inasmuch as the nut 10 may, in practice, become loose or work off,

in order to hold the parts in secure relation in such a case, I provide the bottom of the box with an eye 11, through which the 50 lower horizontal arm of the bolt is passed. In this manner, the parts are held securely in place, notwithstanding the looseness or loss of the nut 10.

The box is shown as having lateral and 55 bottom flanges 12, forming a groove to receive the strap bolt, and its lower portion 13 is convexed, the strap bolt being bent to conform to the curvature of the lower outer portion of the box, so that when the bolt is 60 tightened, it tends to draw the box both upwardly and also inwardly into contact with the bearing faces 5 and 6, thus preventing any looseness.

In Figs. 3 and 4, I have shown a modi- 65 fication in which the strap bolt 7^a is of flat form, with rounded end portions. In this form, the bottom of the box is formed with a retainer 14 for the strap bolt. This re- 70 tainer is shown as formed by the lugs 15. It will be obvious that the strap bolt may be of various forms, and that the retainer therefor may be formed in various other ways.

Features of my invention which are here- 75 in shown but not claimed form the subject matter of another pending application.

I claim:

1. A journal box for car axles having a 80 retainer at its lower portion to receive a securing device, said retainer being arranged to prevent dropping away of the securing device, substantially as described.

2. In a car truck, a side frame having a 85 seat for a journal box open at one side and at the bottom, a journal box having a retainer on its bottom portion, and a strap or bolt passing through said retainer and securing the box to the side frame, substantially as 90 described.

3. In a car truck, a side frame having an 95 overhung end portion, a journal box seating underneath the overhung portion and against the end of the side frame and hav-

ing a retainer at its bottom, and a strap or bolt embracing the journal box and passing through said retainer to prevent dropping away of said strap or bolt, substantially as described.

5 4. A journal box for car axles having an exterior groove to receive a holding strap or bolt, and provided in its lower portion with a retainer arranged to receive a se-

curing device and hold it against dropping id away; substantially as described.

In testimony whereof, I have hereunto set my hand.

JACOB J. BYERS.

Witnesses:

LOUIS W. ...
TOM H. ...