

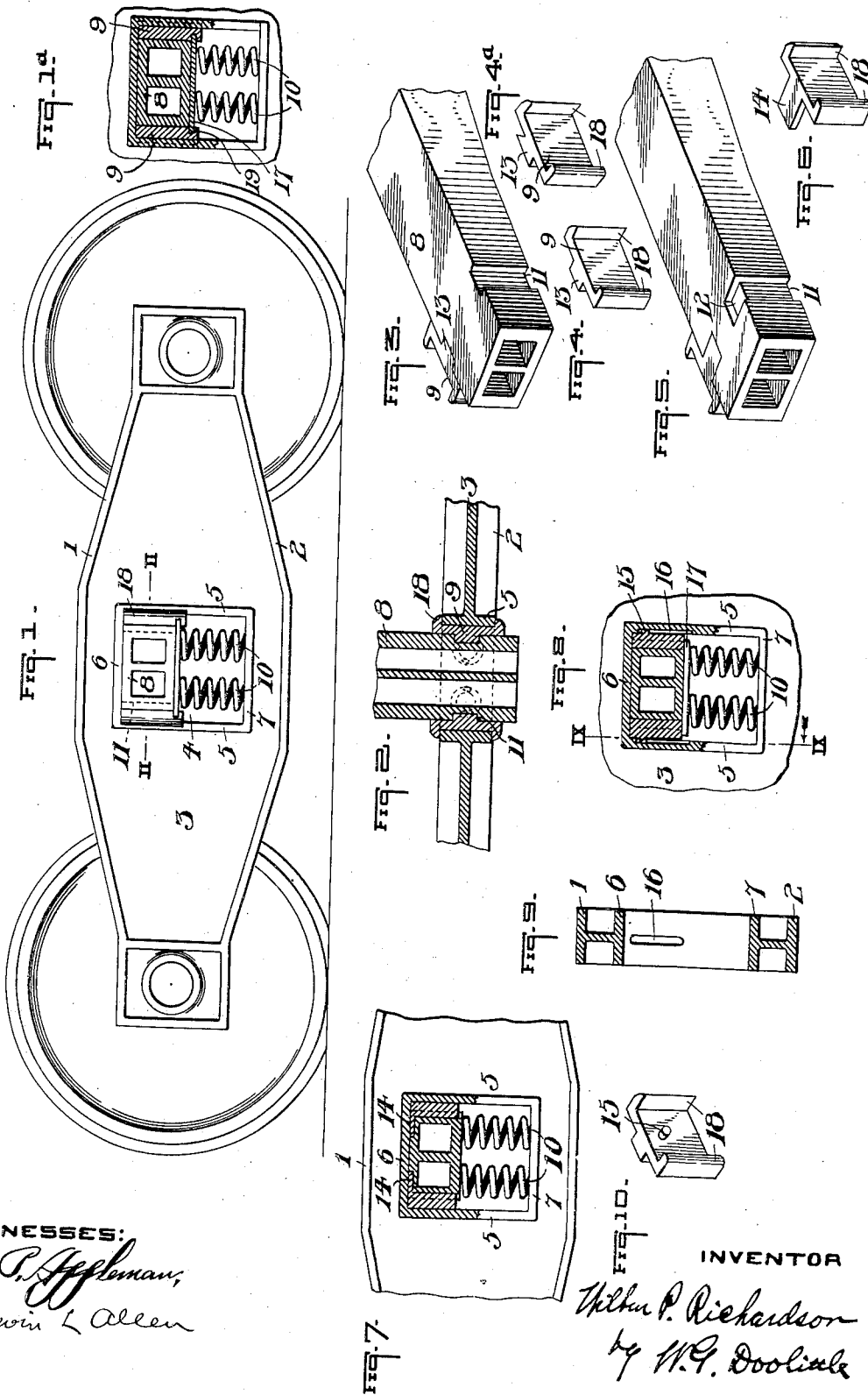
No. 839,785.

PATENTED DEC. 25, 1906.

W. P. RICHARDSON.

CAR TRUCK.

APPLICATION FILED JAN. 12, 1906.



WITNESSES:

J. P. Hoffman,
Edwin L. Allen

INVENTOR

Walter P. Richardson
by W. G. Doolittle

ATTORNEY

UNITED STATES PATENT OFFICE.

WILBUR P. RICHARDSON, OF BEAVER, PENNSYLVANIA, ASSIGNOR TO
PITTSBURGH EQUIPMENT COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CAR-TRUCK.

No. 839,785.

Specification of Letters Patent.

Patented Dec. 25, 1906.

Application filed January 12, 1906. Serial No. 295,809.

To all whom it may concern:

Be it known that I, WILBUR P. RICHARDSON, a citizen of the United States, residing at Beaver, in the county of Beaver and State of Pennsylvania, have invented new and useful Improvements in Car-Trucks, of which the following is a specification.

My invention relates to improvements in car-trucks, and more particularly to the side-frame and truck-bolster construction of car-trucks.

To this end my invention consists of a new and improved side-frame and truck-bolster construction, in the novel features of construction, and in the combination of parts, all as hereinafter described and claimed.

In the accompanying drawings, which illustrate applications of my invention, Figure 1 is a side elevational view of a car-truck embodying my invention. Fig. 2 is a central horizontal sectional view taken on line II II of Fig. 1; Fig. 3, a perspective view of one end of a bolster, showing a bolster-guide applied to one side of the bolster; Fig. 4, a perspective view of a bolster-guide; Fig. 5, a view similar to Fig. 3, showing a modified construction; Fig. 6, a perspective view of a modified form of bolster-guide; Fig. 7, a part side elevational and a part sectional view of the form of Fig. 5; Fig. 8, a part elevational and a part sectional view of a further modified form of my invention; Fig. 9, a vertical section taken on line IX IX of Fig. 8; Fig. 10, a perspective view of a bolster-guide shown in Fig. 8; Fig. 1^a, a sectional view of the form of Fig. 1; and Fig. 4^a, a perspective view of bolster-guide, showing a dovetailed column-guide.

Referring to the drawings, the car-truck illustrated comprises two side frames or truck-arches, each consisting of a top member or flanged portion 1, a bottom member or flanged members 1 and 2. The side frames are each formed with a bolster-receiving opening 4, bounded by side flanges 5 5 and top and bottom flanges 6 and 7.

Bolster-receiving opening 4 is designed to receive the respective ends of a truck-bolster 8 and in addition thereto a pair of bolster-guides 9 and bolster-springs 10. As particularly shown by Figs. 3 and 5, the bolster near its ends is formed on each side with a

recess or groove 11, and in the form of Fig. 5 in addition to the side recesses 11 top recesses 12 are provided. While I have shown in Fig. 5 the recesses 12 formed on the top of the bolster, these recesses may be made in the bottom member of the bolster.

Side recesses 11 of the bolster are adapted to receive column-guides 13. These column-guides as illustrated are formed integral with the bolster-guides 9, but may be, if desired, made in separate pieces and connected with the bolster-guides.

In the form of Fig. 4^a the column-guides are dovetailed, and when this construction is employed the side recesses 11 of the bolster are made to correspond. In the form of bolster-guide shown by Fig. 6 I employ an inwardly-projecting flange 14, adapted to be fitted into the top recesses 12 of the bolster when the parts are assembled. Flange 14 may be formed on the lower side of the bolster-guide to adapt the flange to be seated in the recesses made in the lower member of the bolster. The form of bolster-guide illustrated by Fig. 10 shows a lug 15, adapted when the parts are in position to fit into an opening 16 in the side flanges 5 5 of the side frame.

17 designates a spring-cap located between the springs and the lower side of the bolster. This cap, however, may be dispensed with and the bolster mounted directly on the springs, as shown by Fig. 7.

In all the forms of bolster-guides shown I employ the column-guide 13 and engaging flanges 18. These flanges 18 engage with the side flanges 5 5 of the side frames. As shown by Figs. 1 and 1^a, the bolster-guides are each provided with a groove 19, and these grooves are adapted to receive the spring-cap 17.

What I claim is—

1. In a car-truck, a side frame formed with a bolster-receiving opening and side flanges adjacent to the opening, a bolster-guide having flanges to engage the side flanges and formed with a column-guide and a groove, a bolster having a recess to receive the column-guide, a spring, and a spring-cap adapted to fit into the groove of the bolster-guide.

2. In a car-truck, a side frame formed with a bolster-receiving opening and with

side and bottom flanges adjacent to the opening, a pair of bolster-guides each having flanges to engage the side flanges and formed with a column-guide and a groove, a bolster
5 having recesses to receive the column-guides, a spring resting upon the bottom flanges of the side frame, and a spring-cap fitted into the grooves of the column-guides.

3. In a car-truck, a side frame comprising
10 a cast-metal integral structure formed with a bolster-receiving opening, a pair of removable bolster-guides each having a dovetailed column-guide, and a bolster formed with dovetailed recesses to receive the column-guides.
15

4. In a car-truck, a side frame formed with a bolster-receiving opening, a bolster-guide provided with a groove, a bolster, and a spring-cap adapted to fit into the groove of
20 the bolster-guide.

5. In a car-truck, a side frame formed with a bolster-receiving opening, a bolster-guide having a column-guide formed integral therewith, a bolster formed with a recess
25 to receive the column-guide, a spring-cap, said bolster-guide formed with a groove to receive the spring-cap.

6. In a car-truck, a cast-metal integral

side frame formed with a bolster-receiving opening, said opening bounded by top, bottom and side flanges, a bolster-guide having
30 flanges to engage the side flanges of the side frame and formed with a column-guide, a bolster formed with a recess to receive the column-guide, and a spring arranged to support the bolster, said spring resting upon the
35 flange at the bottom of the bolster-receiving opening.

7. In a car-truck, a cast-metal integral side frame formed with a bolster-receiving
40 opening, said opening bounded by side and bottom flanges, a bolster-guide having a column-guide formed integral therewith and provided with flanges to engage the side
45 flanges of the side frame, a bolster formed with a recess to receive the column-guide, a spring resting upon the flange at the bottom of the bolster-opening, and a spring-cap interposed between the spring and bolster.

In testimony whereof I affix my signature
50 in presence of two subscribing witnesses.

WILBUR P. RICHARDSON.

Witnesses:

W. G. DOOLITTLE,
MARGARET HUGHES.