

(No Model.)

2 Sheets—Sheet 1.

J. W. CLOUD.
CAR TRUCK.

No. 578,627.

Patented Mar. 9, 1897.

FIG. 1.

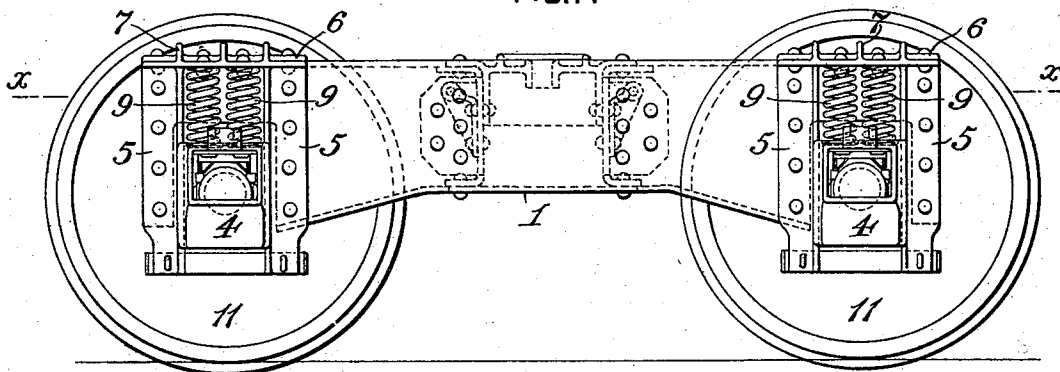
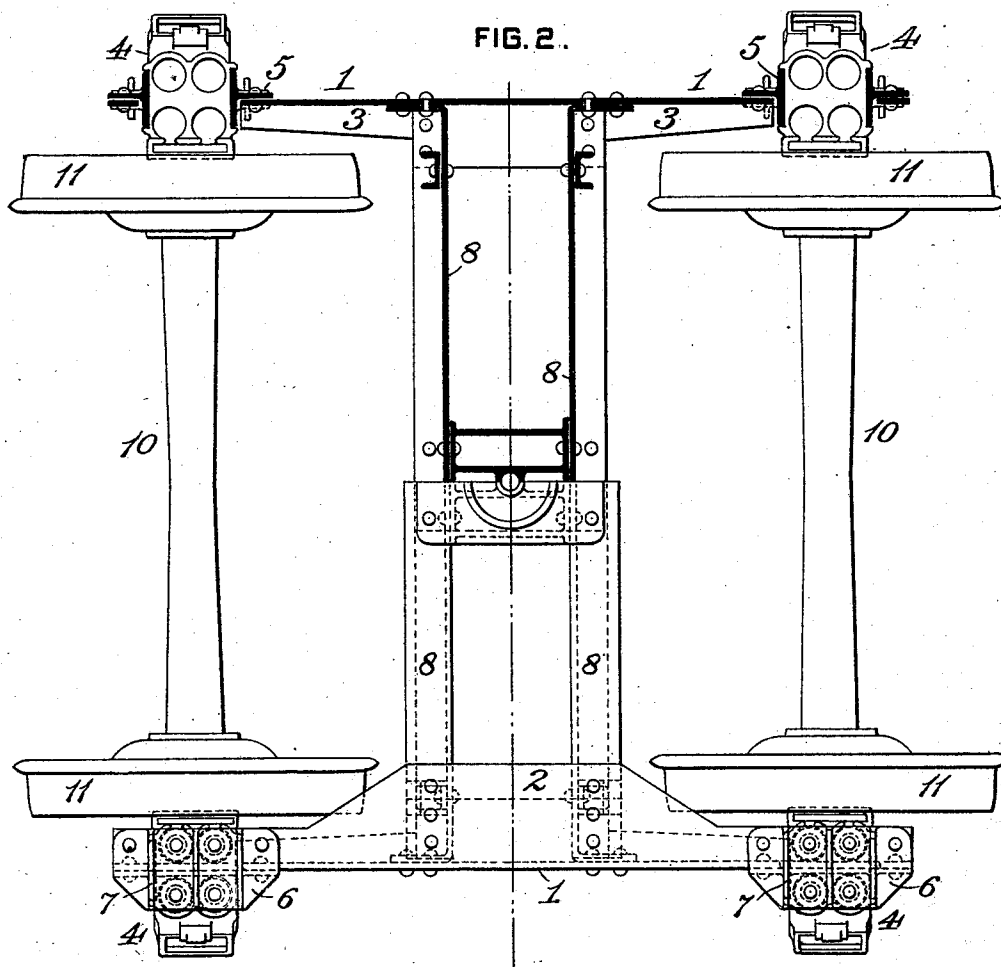


FIG. 2.



WITNESSES:

Arthur Garner
S. P. Hollingworth

INVENTOR.

John W. Cloud,
by J. Howard Bell,
Att'y.

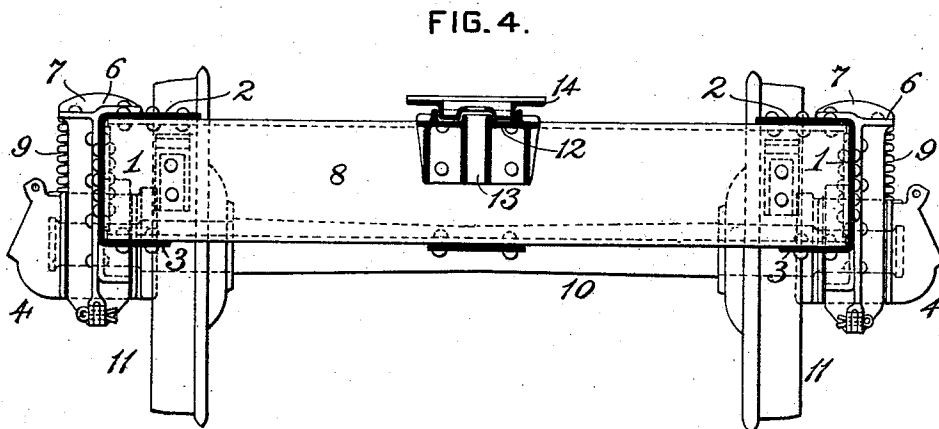
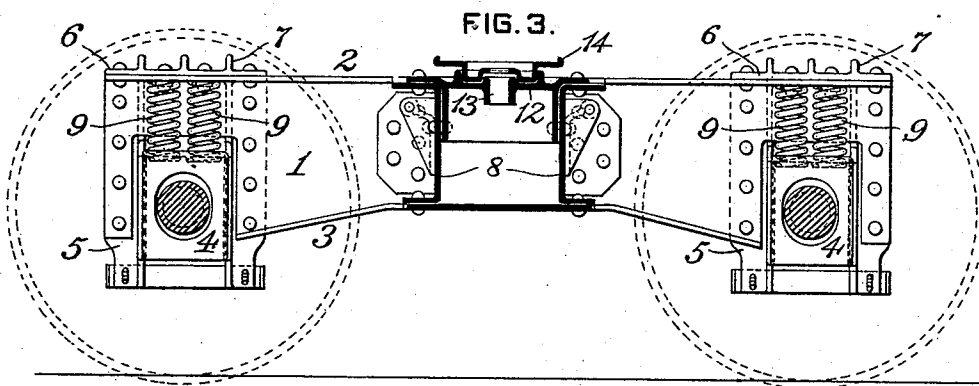
(No Model.)

2 Sheets—Sheet 2.

J. W. CLOUD.
CAR TRUCK.

No. 578,627.

Patented Mar. 9, 1897.



WITNESSES:

Arthur Garner
S. P. Hollingworth

INVENTOR.

John W. Cloud
By J. Mendenhall

Att'y.

UNITED STATES PATENT OFFICE.

JOHN W. CLOUD, OF CHICAGO, ILLINOIS.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 578,627, dated March 9, 1897.

Application filed December 2, 1896. Serial No. 614,163. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. CLOUD, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Car-Trucks, of which improvement the following is a specification.

My invention, which relates to car-trucks the frames of which are composed of pressed or rolled metal plates and which are more particularly designed for freight-cars and locomotive-tenders, is an improvement upon that for which Letters Patent of the United States, No. 560,258, were granted and issued to me under date of May 19, 1896.

The object of my present invention is to provide a car-truck which shall embody the general features of advantage as to strength of side frames and location of springs attained in that of Patent No. 560,258 aforesaid, and also that of pedestals and spring-seats so formed and connected to the side frames as to desirably reinforce the same and afford simple and strong supports for the axle-boxes and springs.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side view in elevation of a car or tender truck, illustrating an embodiment of my invention; Fig. 2, a plan view with the upper half in section at the line *xx* of Fig. 1; Fig. 3, a vertical longitudinal central section, and Fig. 4 a vertical transverse central section.

In the practice of my invention I provide a truck-frame having two side-frame members 1 1, each of which is composed of a metal plate, preferably of steel, having inwardly-turned upper and lower flanges 2 3, formed by pressing or rolling, and which, as in Patent No. 560,258, is recessed or cut out adjacent to each of its ends to receive an axle-box 4, the recesses for the axle-boxes extending above the tops thereof only for such comparatively short distance as will admit of the desired and determined degree of vertical movement of the frames due to the resilience of the springs.

The axle-boxes 4 are fitted between the jaws or vertical side members of pedestals 5, which are preferably malleable-iron castings extending through the axle-box recesses and riveted at each side thereof to the side-frame

members 1. The pedestal-jaws are, as shown in Figs. 2, of T section, their vertical transverse portions being of sufficient depth to provide the desired amount of bearing for the boxes and their vertical longitudinal portions receiving the rivets by which they are connected to the side-frame members. Horizontal flanges 6 are formed on the tops of the pedestals, said flanges extending both inwardly and outwardly from the jaws and being strengthened by transverse ribs 7.

While I have herein illustrated the pedestals 5 as integral castings extending through the axle-box recesses, it will be obvious that, if desired, they may be made in two sections, each having an upper flange, as described, secured to opposite sides of the side-frame members. Such minor structural modification would in no wise depart from the leading and essential features of the invention as herein shown.

The side-frame members 1 1 are connected by transoms 8 8, which are plates pressed into channel form and having their ends turned at right angles and abutting against the side-frame members to which they are riveted. The upper flanges 3 of the side-frame members are of greatest width at their middle portions from the outside of one transom to that of the other, and are thence tapered toward the webs of the frames to properly clear the wheels to a width substantially equal to that of the inwardly-extending top flanges 6 of the pedestals, which width is maintained to the ends of the side frames. The transoms 8 and the top flanges 6 of the pedestals are riveted to the upper flanges 2 of the side-frame members.

The springs 9 are, as in Patent No. 560,258, located on each side of each of the side-frame members, with their lower ends seated on the tops of the axle-boxes 4, four helical springs being preferably employed for each box. The seats for the upper ends of the springs on the outer sides of the side frames are formed on the bottoms of the outer projections of the pedestal top flanges 6, and the springs on the innersides of the side frames bear at their upper ends against the under sides of the top flanges 3 of said frames, which are reinforced and stiffened by the abutting and connected top flanges 6 of the pedestals, thus providing

a substantial spring-bearing and strengthening the ends of the side-frame members.

The axle-boxes 4 may be of the Master Car-Builder's standard or of any other preferred type and carry in the usual manner the journal-bearings of the axles 10, on which the car-wheels 11 are secured. In the instance shown a lower center plate 12, having a central passage 13 for a king-bolt, is secured to the transoms 8, and an upper center plate 14 is fitted thereon in the ordinary way. It will, however, be obvious that, if desired, lateral motion of the center plates may be provided for without variation from the essential features above described.

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

1. In a car-truck, the combination, substantially as set forth, of a plate-metal side-frame member, having lower axle-box recesses near its ends, and inwardly-extending flanges turned on its upper and lower sides forming a channel-section, the upper flange extending throughout its length, and pedestals secured to the web of the side-frame member on each side of the axle-box recesses, and to the top flange of the side frame.

2. In a car-truck, the combination, substantially as set forth, of a plate-metal side-frame member, having lower axle-box recesses near its ends, and upper and lower flanges,

the upper flange extending throughout its length, and pedestals extending through said axle-box recesses and having inwardly and outwardly extending upper flanges, the vertical portions of said pedestals being secured to the web of the side-frame member, and their inwardly-extending upper flanges being secured to the upper flange of the side-frame member.

3. In a car-truck, the combination, substantially as set forth, of a plate-metal side-frame member, having lower axle-box recesses near its ends, and upper and lower flanges, the upper flange extending throughout its length, pedestals secured to the web of the side-frame member, at the sides of the axle-box recesses, said pedestals having outwardly-extending upper flanges and inwardly-extending upper flanges secured to the upper flange of the side-frame member, axle-boxes fitting in said pedestals, and one or more springs located above the axle-boxes on each side of the side-frame member, the outer springs bearing at top against the outer flanges of the pedestals, and the inner springs bearing at top against the upper flange of the side-frame member.

JOHN W. CLOUD.

Witnesses:

FREDK. PAPENBROOK,
JOSEPH W. TAYLOR.