

W. L. AUSTIN.
CAR TRUCK.

APPLICATION FILED JUNE 9, 1911.

Patented Apr. 9, 1912.

2 SHEETS—SHEET 1.

1,022,922.

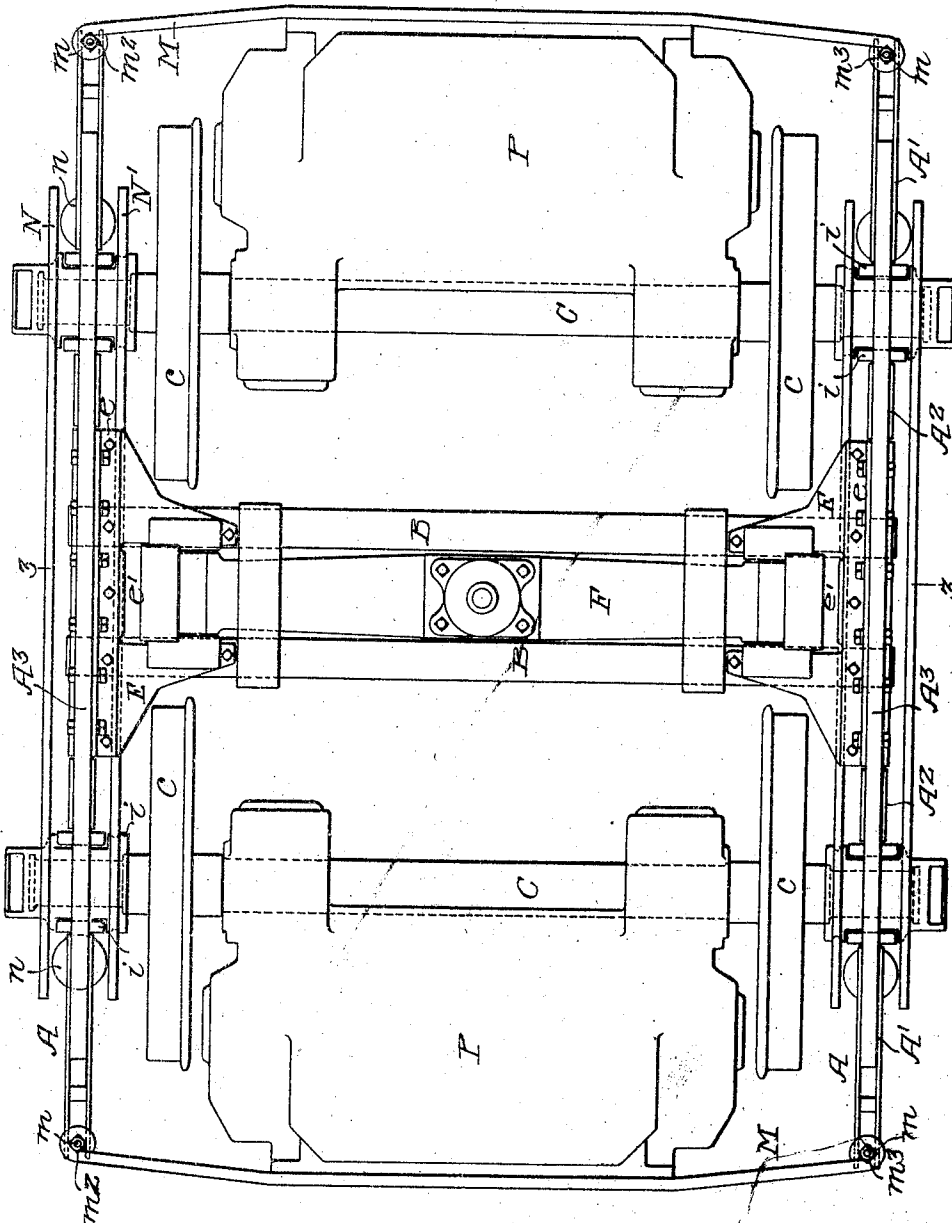


Fig. 1.

Witnesses:
Walter E. Smith
Violet B. Burrows.

Inventor:
William L. Austin.
by his Attorneys:
Hosmer Hosmer

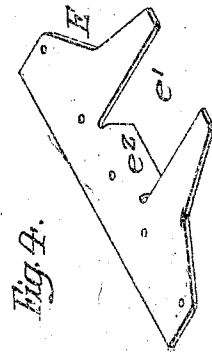
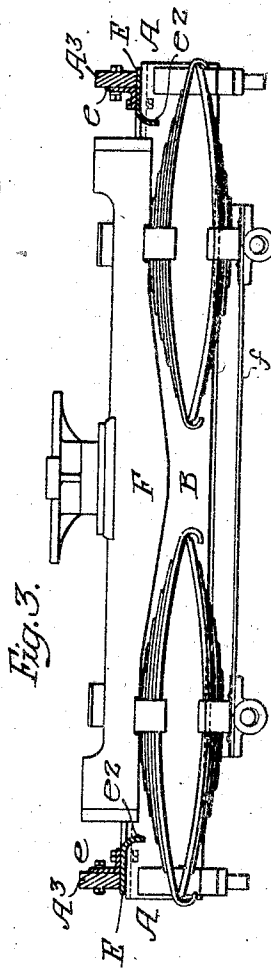
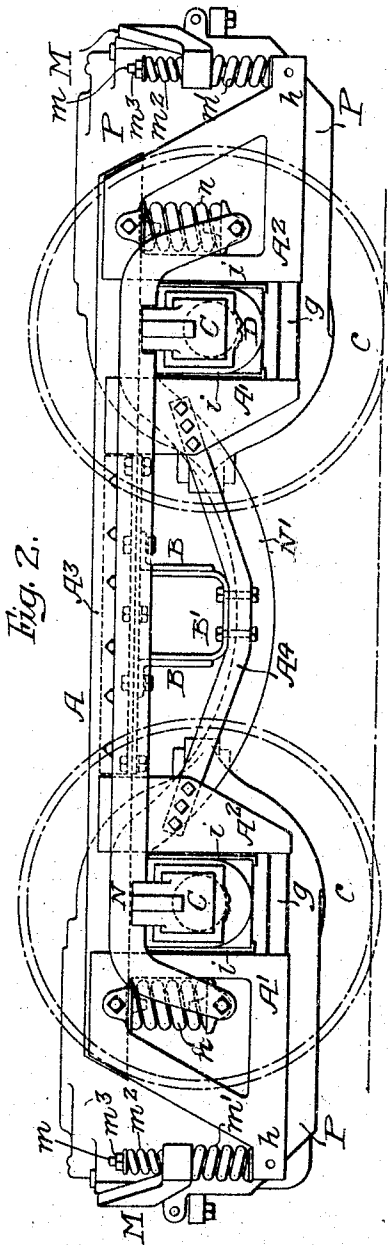
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Witnesses—
Walter E. Chish
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William L. Austin
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UNITED STATES PATENT OFFICE.

WILLIAM L. AUSTIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE BALDWIN LOCOMOTIVE WORKS, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CAR-TRUCK.

1,022,922.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed June 9, 1911. Serial No. 632,190.

To all whom it may concern:

Be it known that I, WILLIAM L. AUSTIN, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Car-Trucks, of which the following is a specification.

This invention relates to certain improvements in the construction of car trucks, particularly those in which an electric motor is carried by the truck.

One object of the invention is to make a comparatively light truck, in which the side frames will be rigidly connected to the transoms.

A further object of the invention is to design the truck in such a manner that the motor supporting frame will be carried by the projecting ends of the truck.

In the accompanying drawings:—Figure 1, is a plan view of my improved car truck; Fig. 2, is a side view; Fig. 3, is a transverse sectional view on the line 3—3, Fig. 1; and Fig. 4, is a perspective view of one of the brace plates connecting the side frames to the transoms.

A—A are the side frames of the truck connected together by transoms B—B. These transoms are connected together at their outer edges by U-shaped plates B'.

C—C are the axles on which are mounted the wheels *c* and these axles are adapted to boxes D mounted between the pedestals A'—A² of the side frames.

E are brace plates, which rigidly connect the side frames of the transoms. These plates are each made of a single piece, and are beveled at each end. The plates extend under the longitudinal upper bar A³ of each side frame and are connected thereto by angle bars *e*. These angle bars are secured by bolts to the bars A³ and to the plate E. Two of the bolts extend through the upper flange of the transom. Thus each plate has an extended connection with the side frames and is rigidly connected by a series of bolts to the upper flange of each transom, as clearly illustrated in Fig. 1. Each plate is cut away to form a recess *e'* to allow for the reception of the bolster F, which is carried by springs F', mounted on a spring plank *f* suspended by links from the transoms in the ordinary manner. Each plate E is turned down at the inner end of the recess *e'* to form an abutment *e²* to receive the end

thrust of the bolster. This is one of the essential features of the invention.

The pedestals A'—A², of the frame A, are made of plates secured to the sides of the top bar A³ and there is but a single brace A⁴, of the diagonal type, extending under the U-shaped plate B'; connecting the transoms to the inner pedestal plate, in the present instance.

P are the motors, which are mounted on the axles, and the inner ends of these motors are supported by the frame M, as clearly illustrated in Figs. 1 and 2.

The outer pedestals A' are triangular in shape and have extensions *h* at their lower, outer ends and pivoted to these extensions are rods *m*, which extend through perforations in the ends of the motor supporting frames M. There is a heavy spring *m'* mounted on the rod between the extension *h* of the pedestal and the supporting frame, also a light spring *m²* between the nut *m³* on the end of the rod and the supporting frame.

Mounted between the plates of the pedestals, in the present instance, are gibs *i*, which are detachably secured in place. The two pedestals for each box are connected together at their lower ends by bars *g*. In the present instance, the end pedestal frames A' have open centers and mounted in these openings are springs *n*, which are located between the side frames and the equalizing beams N—N'. The equalizing beam N, in the present instance, on the outside of the frame, extends straight across from one box to the other, but the inner beam N' is curved and extends under the transoms, as clearly illustrated in Fig. 2.

I lay no claim to the following special construction, namely, the solid longitudinal bars extending above the boxes of the truck, plates secured to each side of the bar and forming pedestals, the inner pedestals being wider at the upper end, with angle braces extending under the transoms at the center of the frame and extending between the plates forming the pedestals and secured thereto at a point below the longitudinal bar. Nor do I claim the detachable gibs secured to the pedestals, as the above construction is set forth and claimed in a separate application filed by Walter Hobson, on April 22nd, 1911 under Serial No. 622,681. Nor do I lay claim to a short angle brace ex-

tending under the U-shaped member of the transom and attached to the pedestals at a point below the top bar, as this is set forth and claimed in a separate application filed by Benjamin R. Van Kirk on June 9th, 1911, under Serial No. 632,151.

By the above construction, it will be seen that I am enabled to make a very light and substantial truck, especially adapted for trolley and inter-urban work; in which the side frames are comparatively light and in which the chafing of the bolster is taken by a part of each plate which connects the transoms to the side frames. I also provide for the proper support of the overhanging portion of the motors.

I claim:

The combination in a truck, of side frames; transoms extending from one side frame to the other; with brace plates connecting the side frames to the transoms; each plate being made of a single piece and recessed to receive the bolster; the plate being bent at the inner end of the recess to form an abutment to receive the end thrust of the bolster.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WILLIAM L. AUSTIN.

Witnesses:

KENNETH RUSHTON,
JOSEPH H. MCGREGOR.