

(No Model.)

2 Sheets—Sheet 1.

W. P. HENSZEY.  
TRUCK.

No. 567,472.

Patented Sept. 8, 1896.

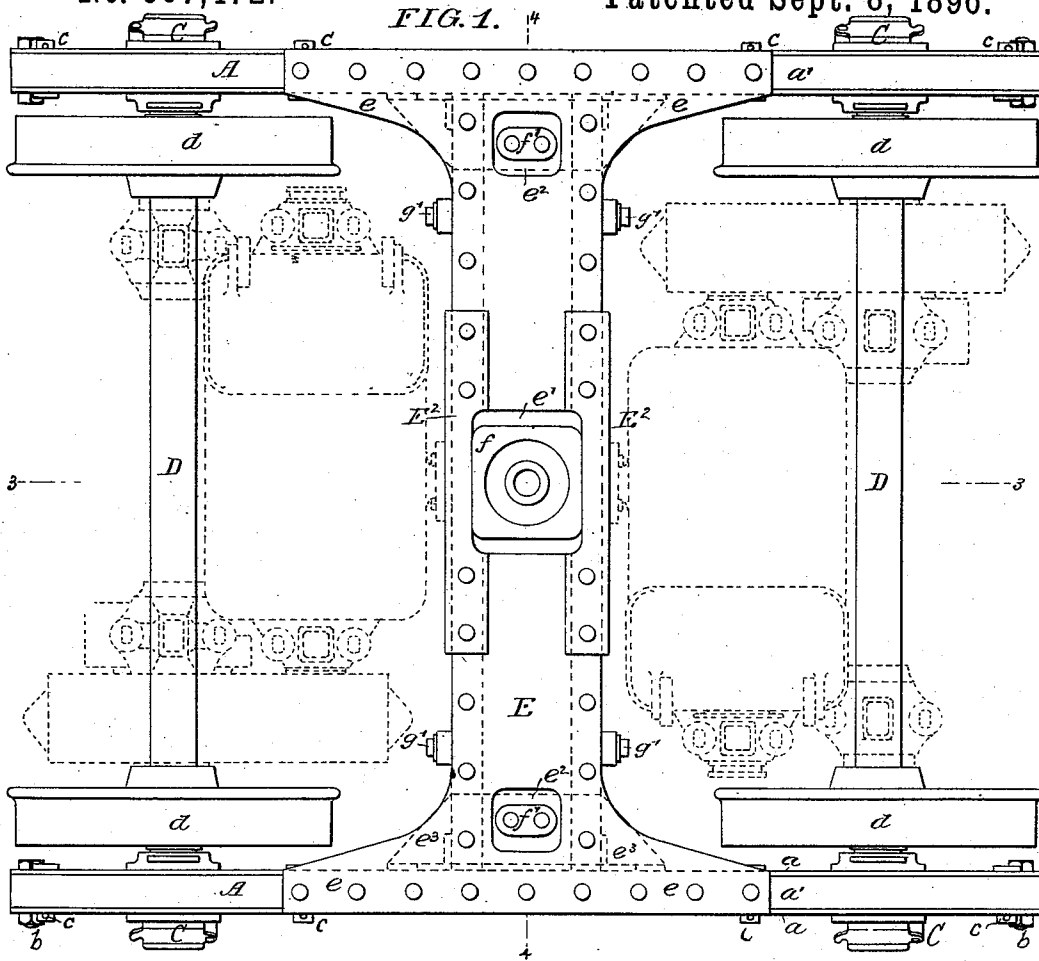
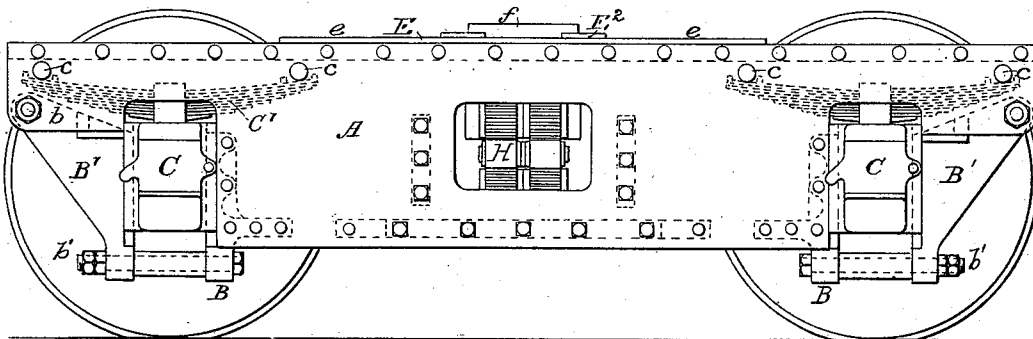


FIG. 2.



Witnesses:

*P. D. Goodwin*  
*Wm. G. Barr.*

Inventor:  
*William P. Henszey*  
by his Attorneys  
*Howson & Howson*

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2 Sheets—Sheet 2.

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FIG. 3.

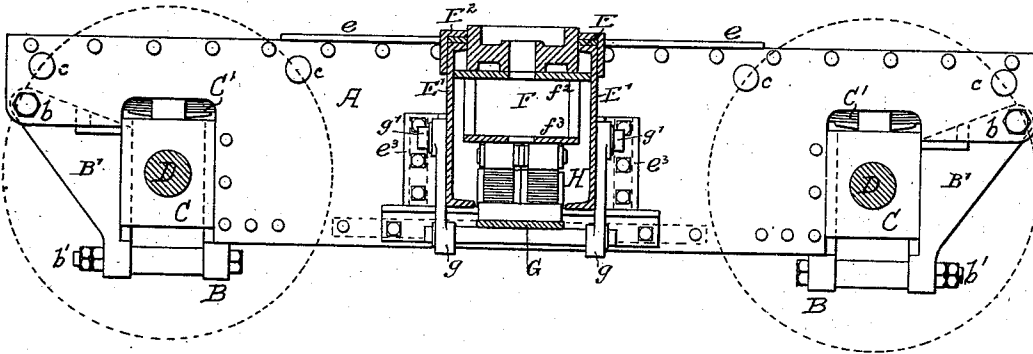
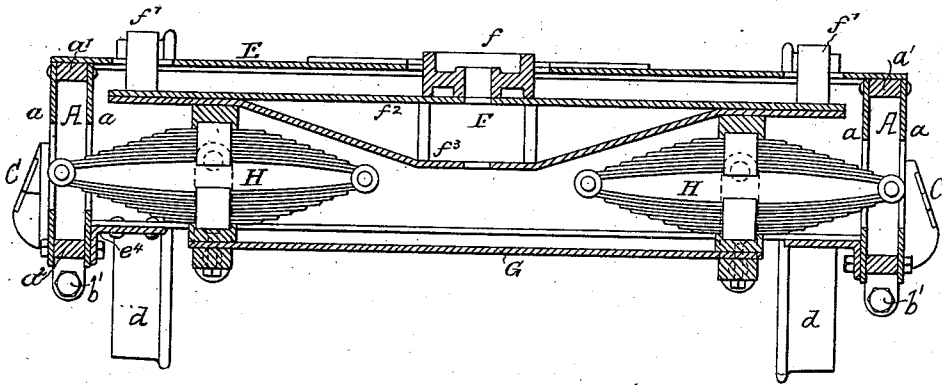


FIG. 4.



Witnesses:

*G. D. Goodwin*  
*Will. C. Raw.*

Inventor:

*William P. Henszey*  
*by his Attorneys*  
*Hewson & Hewson*

# UNITED STATES PATENT OFFICE.

WILLIAM P. HENSZEY, OF PHILADELPHIA, PENNSYLVANIA.

## TRUCK.

SPECIFICATION forming part of Letters Patent No. 567,472, dated September 8, 1896.

Application filed March 19, 1896. Serial No. 583,910. (No model.)

*To all whom it may concern:*

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

My invention relates particularly to the trucks of electric locomotives, and the main object of my invention is to so construct the truck that it will be perfectly rigid and fully capable of withstanding the strains to which the truck of an electric locomotive is subjected.

A further object of the invention is to provide for the ready removal of the axles from the truck.

Referring to the accompanying drawings, Figure 1 is a plan view of my improved locomotive-truck. Fig. 2 is a side view of the same. Fig 3 is a longitudinal section on the line 3 3, Fig 1; and Fig. 4 is a transverse section on the line 4 4, Fig. 1.

A A are the side frames of the truck, each side frame being composed of two plates  $a a$ , secured together and to two distance-pieces  $a' a^2$  by rivets or bolts, as clearly shown in the drawings. The distance-piece  $a'$  at the top extends the full length of each side frame, while the distance-piece  $a^2$  is shorter and is used to brace the bottom of the frame midway between the pedestals.

B B' are the pedestals for the boxes C. In the present instance the pedestal B is attached rigidly to the frame, being mounted between the two plates  $a a$ , while the pedestal B' is pivoted to the frame at  $b$  and secured to the fixed pedestal by a bolt  $b'$ . By this arrangement the boxes can be readily removed from the truck.

The construction of the pedestals above alluded to forms no part of my invention. It is fully described and claimed in an application filed by George Westinghouse, Jr.

On the axle D are the wheels  $d d$ , the axle, wheels, and journal-boxes being of the ordinary construction.

Bearing on the top of each box C is an elliptic spring C', the ends of the spring resting against pins  $c$  in the frame. Hence it will be seen that while the springs have free vertical yielding movement they are inclosed laterally

between the plates of the frame which protect them.

Extending from one frame A to the other is a top plate E. This plate is made in one piece in the present instance, and is reduced in width at the center but extended at the ends, these extensions  $ee$  being secured to the upper distance-piece  $e'$  of each frame A by rivets or bolts. Extending from one side to the other directly below the plate E are channel-bars E', having their flanges on the inside and forming a box for the bolster F. The upper plate E is bolted to the upper flange of each channel-bar E', as shown in Fig. 1, and the channel-bars are secured to each side frame A by angle-plates  $e^3$  and a bracket  $e^4$ . These brackets are riveted or bolted to the lower flange of each channel-bar and to the frame, the bolts passing through the two plates  $a a$  and lower distance-piece  $a^2$ , as shown in Fig. 4. By this construction I provide a box for the bolster and its springs, the box having an open bottom, so that ready access may be had to the bolster and springs from underneath.

The arrangement of the parts as above described makes a very rigid truck, fully capable of withstanding the strains to which an electric-locomotive truck is subjected, and as the parts are connected at the center, ample room is afforded for the reception of the motor mechanism, brake mechanism, and other parts carried by the trucks.

The upper plate E has a central opening  $e'$ , through which extends the center-plate  $f$ , mounted on the bolster F, and side openings  $e^2$ , through which extend the side bearing blocks  $f'$ , also mounted on the bolster. The bolster F consists of a top plate  $f^2$  and a brace-plate  $f^3$ . A swinging spring-plate G is suspended by links  $g g$  from studs  $g'$  on each channel bar E'. The plate carries the elliptic springs H H, one at each side. These springs support the bolster F, as clearly shown in Fig. 4. Openings are made in the side frames A to allow for the free movement of the springs and also for the ready removal of the bolster when necessary.

The cross-frame or box composed of the upper plate E and channel-bars E' is stiffened by the angle-bars E<sup>2</sup>, mounted on the

plate E at the center, so as to form an additional bearing for the center plate.

I claim as my invention—

1. The combination in a car-truck, of the side frames A A, each made of two plates suitably spaced, vertically-arranged channel-bars and a flat plate extending from one side frame to the other, said plate having extensions secured to the side frames, substantially as described.

2. The combination in a car-truck, of the cross-frame, the two side frames each formed of two plates cut out at each end to receive the boxes, distance-pieces between the plates, pedestals secured to the frames at the cut-out portions, journal-boxes adapted to said pedestals and springs mounted between the plates of each side frame and resting upon the boxes, substantially as described.

3. The combination in a car-truck, of the cross-frame, the two side frames each composed of two plates, distance-pieces between the plates, fixed and movable pedestal sections mounted in the side frames, said frames being cut out to receive the pedestals, elliptic

springs mounted on the journal-boxes between the plates, bearing-pins against which the springs rest, the parts being so constructed that when the movable pedestal sections are withdrawn the boxes and their springs can be detached from the truck, substantially as described.

4. The combination in a car-truck, of the side frames, each composed of two plates, the cross-frame composed of a top plate and side channel-bars, said top plate having extensions secured to the side frames, a bracket securing the lower flanges of the channel-bars to the side frames, a spring-plate suspended from said cross-frame, a bolster within the frame, and springs mounted between the bolster and spring-plate, substantially as described.

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

WILLIAM P. HENSZEY.

Witnesses:

JAMES G. KEYS,  
HENRY HOWSON.