No. 670,218. Patented Mar. 19, 1901.

A. ZENOWSKE.

PRESSED STEEL CAR TRUCK.

(Application filed Sept. 5, 1900.)

(No Model.)

Fig. 1.

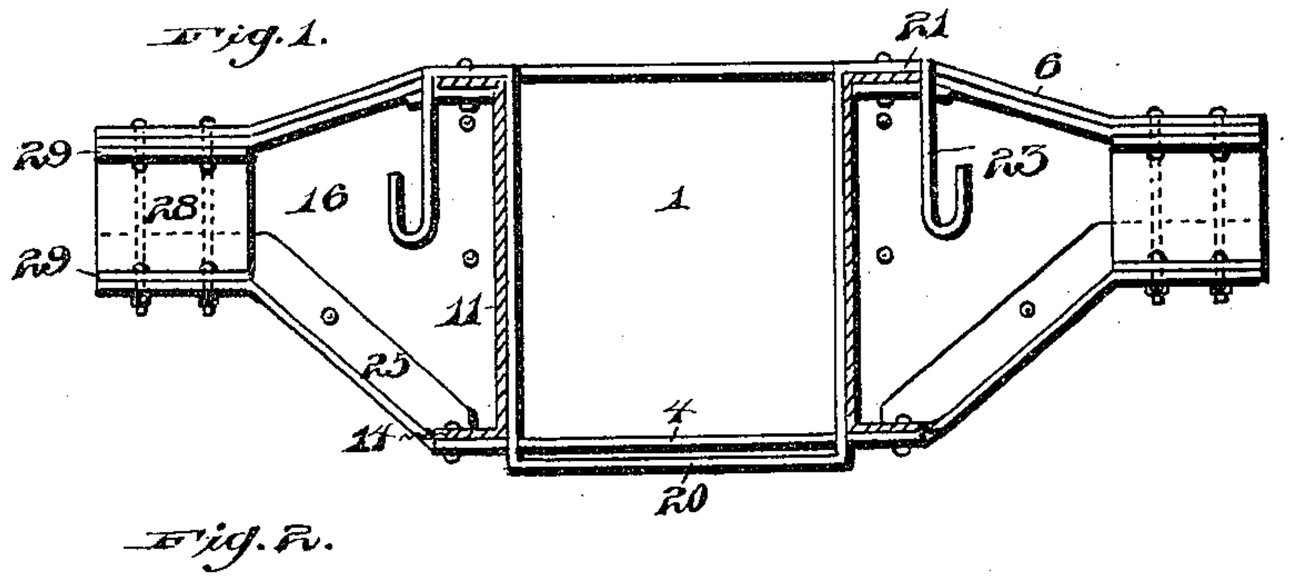


Fig. 2.

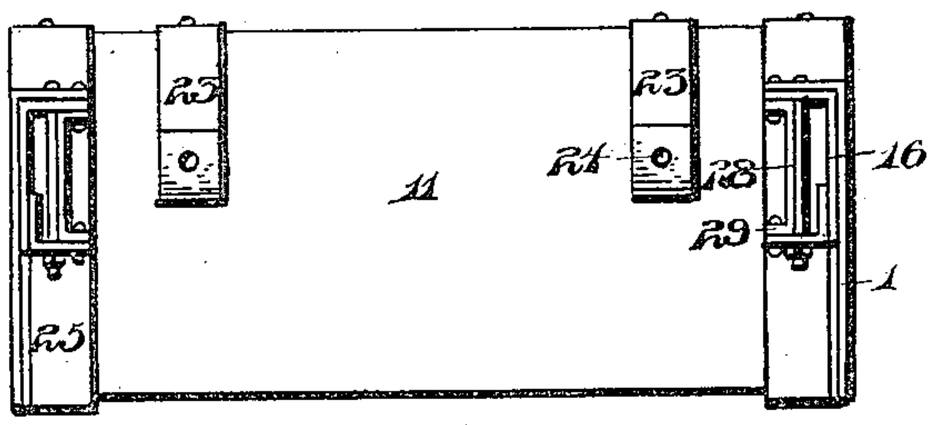


Fig. 5.

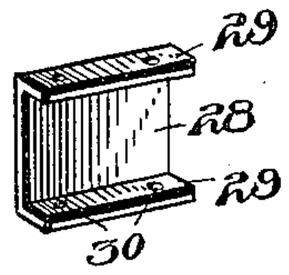


Fig. 3.

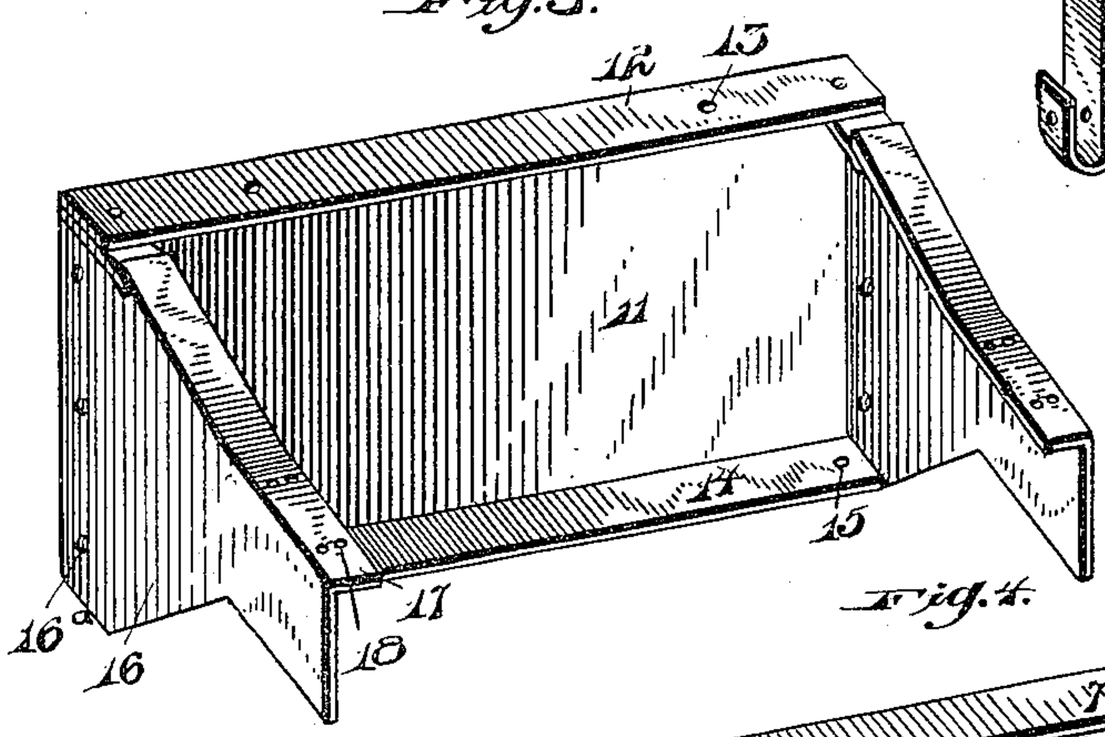


Fig. 6.

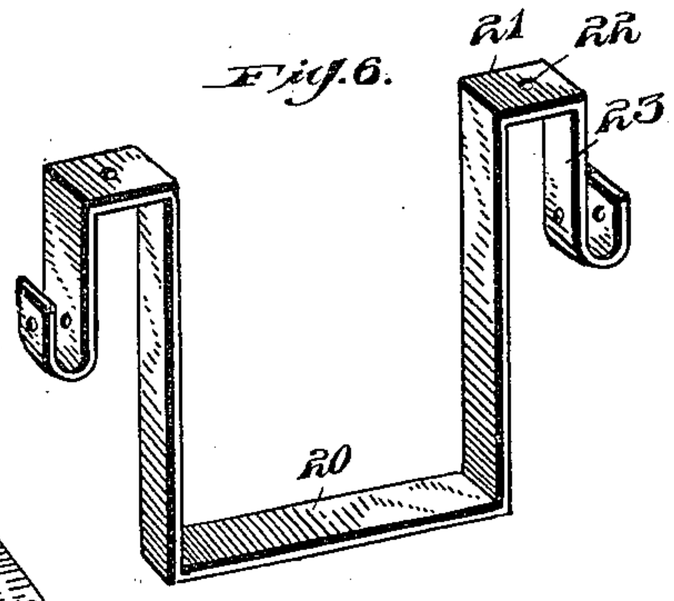


Fig. 4.

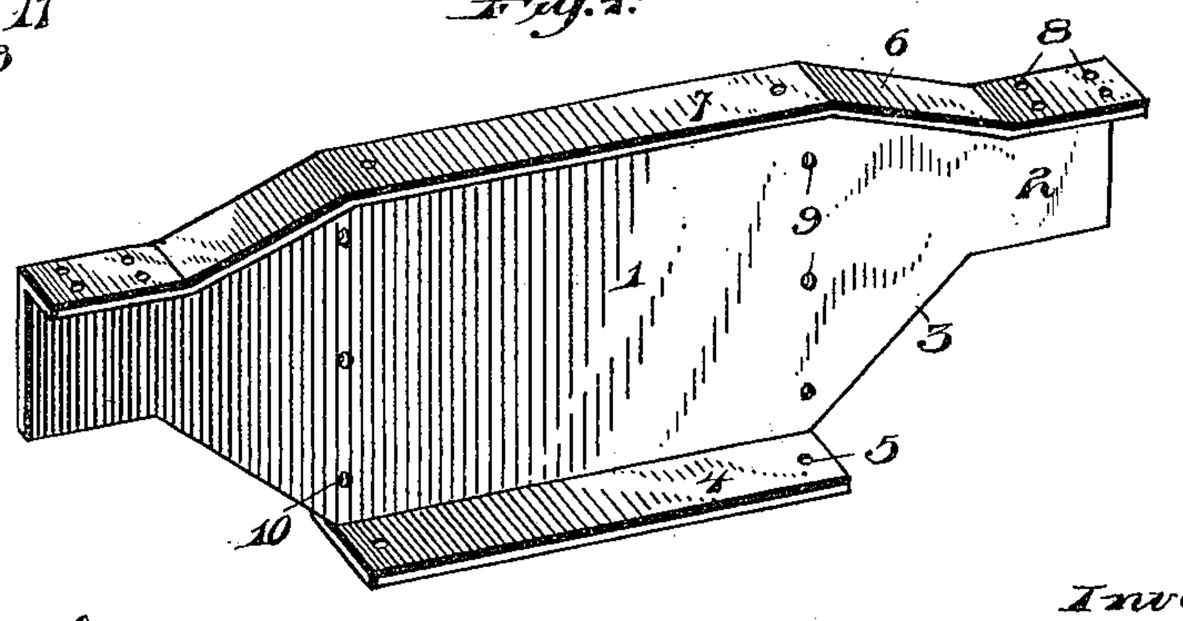
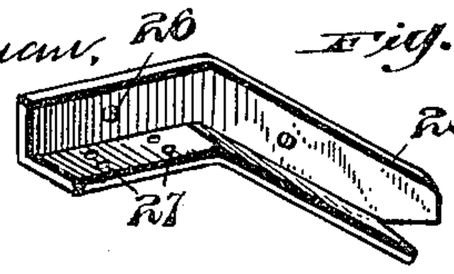


Fig. 7.



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UNITED STATES PATENT OFFICE.

ALEXANDER ZENOWSKE, OF ALLEGHENY, PENNSYLVANIA.

PRESSED-STEEL CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 670,218, dated March 19, 1901.

Application filed September 5, 1900. Serial No. 29,090. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER ZENOWSKE, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Pressed-Steel Car-Trucks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in steel constructions, and more particularly to pressed-steel trucks for cars.

The object of the invention is to provide means whereby a car-truck frame may be constructed of pressed-steel plates of a less thickness than is ordinarily employed, thereby lessening the cost of trucks of this type; and I accomplish this object by the peculiar manner of bracing the side frame members or beams of the truck-frame at their ends, together with other details in construction as will be hereinafter described.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a vertical longitudinal sectional view of my improved car-truck frame. Fig. 2 is a front elevation of the same. Fig. 3 is a perspective view of a portion of the end of the truck-frame. Fig. 4 is a like view of one of the sides of the truck-frame. Fig. 5 is a detail perspective view of the strengthening-plate. Fig. 6 is a perspective view of one of the hangers. Fig. 7 is a perspective view of the L-shaped angle-brace.

To construct a truck-frame in accordance with my invention, I provide two side frame members or beams 1, each of which is cut away along the under side of its ends, as at 3, serving to lighten the frame members or beams and forming extensions 2. These side frame members or beams are provided along their lower or shorter edge with an inwardly-extending flange 4, having apertures 5, and along their upper or longer edge with a similar flange 7, provided at intervals with apertures 8. This flange 7, near each end of the side frame members, is inclined as at 6. The side frame members are each provided with two vertical rows of apertures 9 10 to receive rivets which secure the strengthening-plates 16 to the side frame members or beams. These strengthening-plates are provided with apertures 16ª, registering with the apertures 9 10, two of the plates being provided for each side frame member, one at each end. The plates are shaped to conform to the shape of the side frame members or beams at the ends of the latter and are each provided along the upper edge with an inwardly-extending flange 17, having apertures 18 registering with the apertures 8, near the ends of the flange 7, so that these two flanges may be riveted together, as shown. The two side frame members or beams 1 are connected together by transoms 11, of channel-beam form, which transoms have the strengthening-plates 16 formed integral with their ends. The flange 12 along the top edge of the transoms is provided with apertures 13, and the flange 14 at the bottom or lower edge having apertures 15. These transoms are riveted at the ends of their flanges to the flanges 4 and 7 of the side frame members or beams. For supporting the car springs and bolster (not shown) I provide a pair of haugers 30 of substantially U shape, the two vertical bars of which lie against the web of the channel-bar forming the transom and which are bent outwardly at right angles at their upper ends, as shown at 21, this portion being provided with an aperture 22, which registers with the apertures 13 in the flange 12 of the transom to receive a rivet for securing the hanger in position. The ends 23 are bent downwardly into hook members to support a part of the brake apparatus. (Not shown.) The side frame members or beams are further strengthened at their ends by angle-bars 25, substantially L-shaped and having apertures 26 27, and by channel-bars 28, the flanges 29 of which are provided with apertures 30. These chan-

nel-bars are secured in the ends of the side frame members by the same rivets which secure the flanges 7 17 together.

As the strain of the load is upon the truck at the ends of the side-frame members or beams it will be observed that I have by this construction provided a truck-frame which is strengthened at the point where this strain is greatest, the same being three ply at the extreme ends and two ply from the transoms to the ends.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-truck frame, the side frame members or beams having ends of less width than the body of the beam and provided with inwardly-extending flanges, angle-iron strengthening-bars of substantially L shape secured to the beams at their ends, transoms of channel-bar form connecting the beams together, flanged strengthening-plates secured to the inner face of the beams at each end thereof, and channel-bars secured to the flanges of the strengthening-plates, substantially as shown and described.

2. In a car-truck, the side frame members or beams having ends of less width than the body of the beam, flanged strengthening-plates secured to the inner faces of said beams at their ends, channel-bars secured to the flanges of the strengthening-plates, and transoms of channel-bar form connecting the side frame members or beams together, substantially as shown and described.

3. In a car-truck, side frame members or beams having ends of less width than the body of the beam, flanged strengthening-plates secured to the inner face of the beams at their ends, channel-bars secured to the flanges of said strengthening-plates, transoms connecting the beams together, and hangers carried by said transoms, as and for the purpose described.

4. A pressed-steel frame for car-trucks comprising side frame members or beams flanged along the upper and lower edge and having ends of less width than the body of the beam, flanged strengthening-plates secured to the inner face of the beams at the ends thereof, channel-bars secured to the flanges of the strengthening-plates, strengthening-bars of angle-iron form secured to the strengthening-plates and channel-bars, and transoms of channel-bar form connecting the side frame members or beams together, substantially as shown and described.

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

ALEXANDER ZENOWSKE.

Witnesses:
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