

(No Model.)

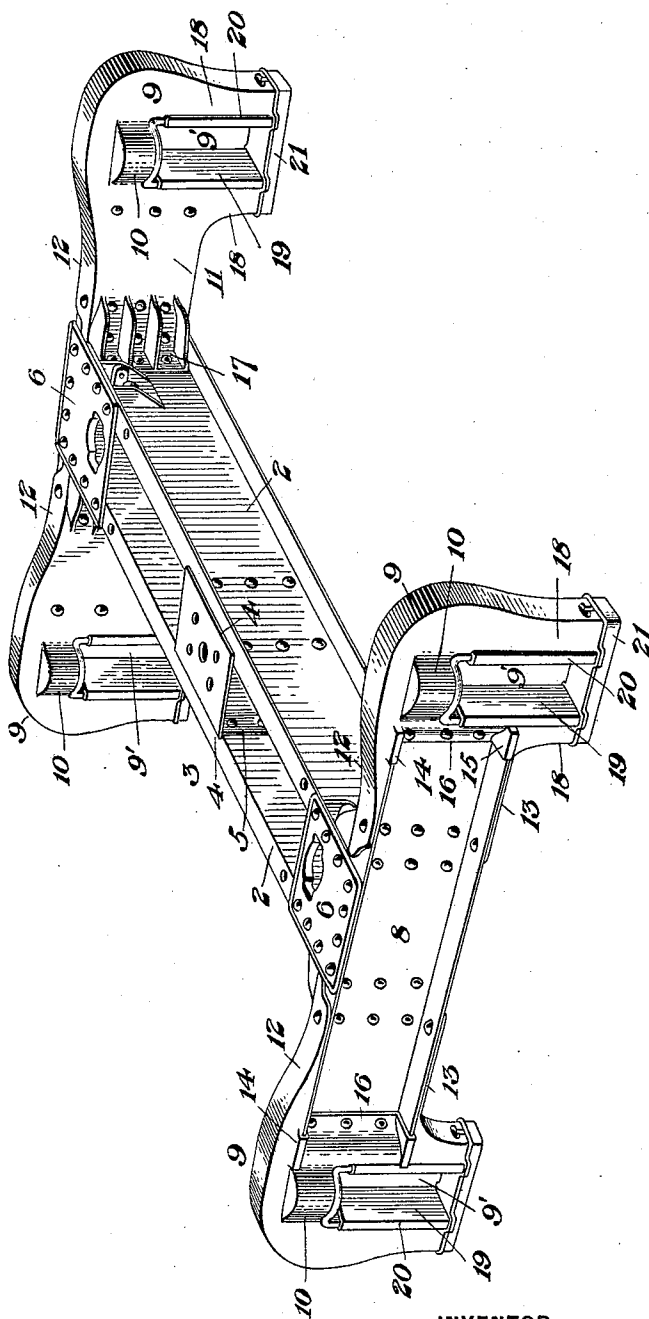
2 Sheets—Sheet 1.

W. CASE.
TRUCK.

No. 565,406.

Patented Aug. 4, 1896.

Fig. 1.



WITNESSES

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INVENTOR

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

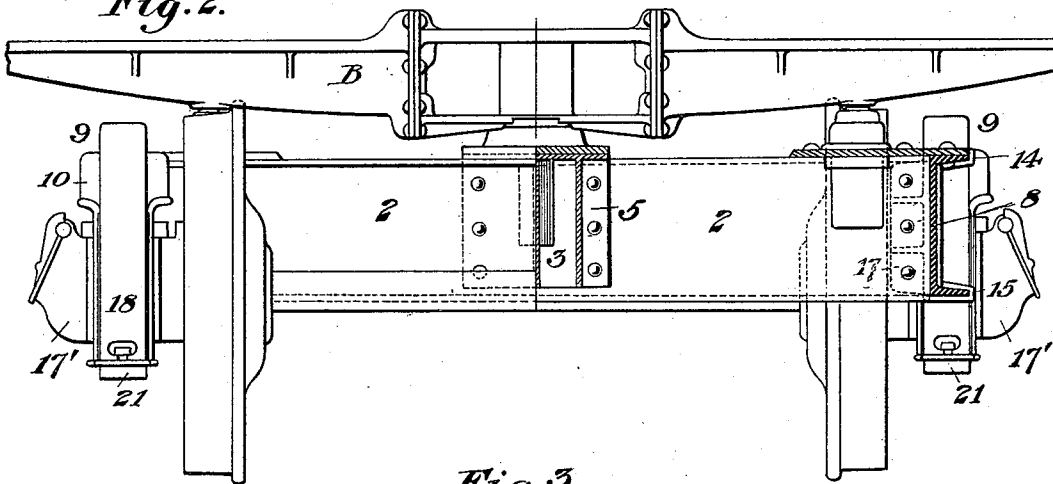


Fig. 3.

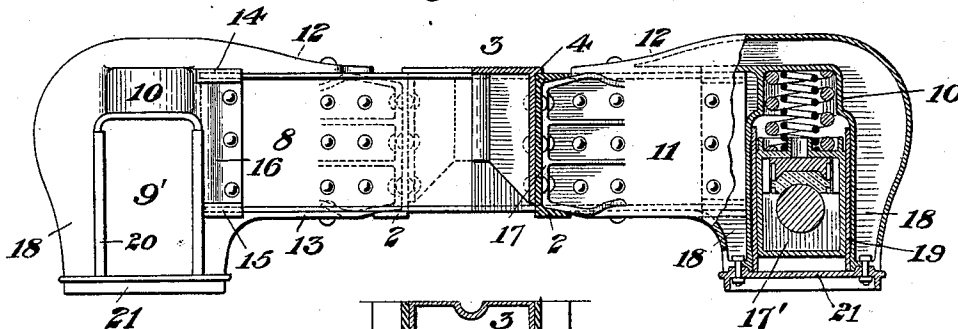
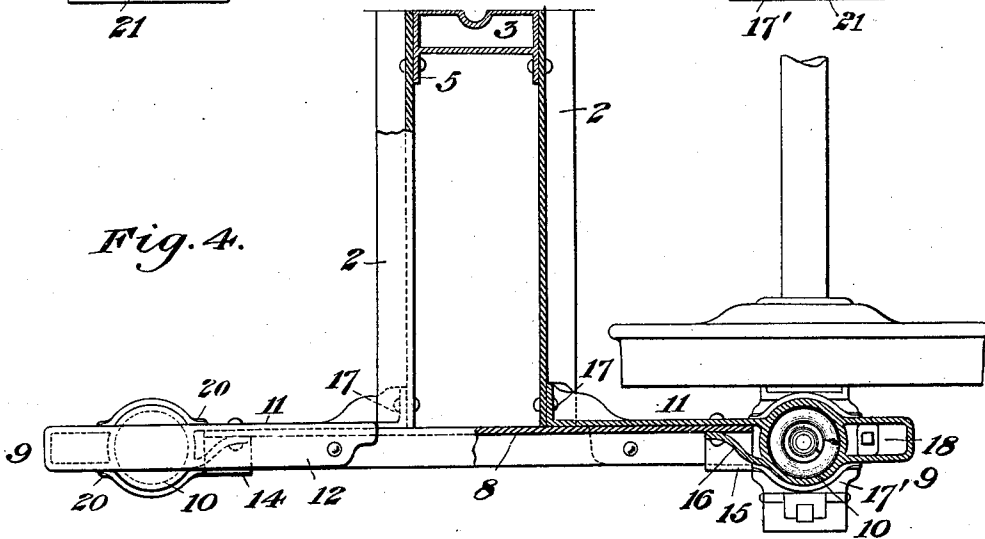


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM CASE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE NATIONAL
MALLEABLE CASTINGS COMPANY, OF CLEVELAND, OHIO.

TRUCK.

SPECIFICATION forming part of Letters Patent No. 565,406, dated August 4, 1896.

Application filed April 11, 1896. Serial No. 587,115. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CASE, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the bolster and side frames of the truck. Fig. 2 is a front elevation of the truck with the body-bolster B mounted thereon. Fig. 3 is a side elevation, partly in section, of one of the side frames. Fig. 4 is a plan view of part of the truck, partly in horizontal section.

The bolster of the truck is made up of flanged beams 2 2, preferably of the form known in the art as "channel-beams," which are set parallel to each other with their webs in vertical position and their flanges outwardly directed, as shown in Fig. 1. Between these beams, at their middle portion, directly under the position of the center plates, is a filler-block 3, which serves to transmit the load from the center plates throughout the bolster. This filler-block consists, preferably, of an integral hollow casting having at its upper margin flanges or lips 4, which rest upon the flanges of the beams 2 and support the block therefrom, and also lateral flanges or lips 5, which fit the inner sides of the webs of the channel-beams and are riveted thereto. At the ends of the bolster its beams are connected by plates 6, riveted thereto and to the side frames of the truck. Each side frame has a middle portion 8, composed of a channel-shaped flanged piece, the flanges of which are preferably directed outwardly, and end castings 9 9, which carry the springs and axle-bearings, and are constructed as follows:

Each casting has the usual vertical slot 9' for the springs and axle-bearings, and a spring socket and seat 10 at the upper end of the slot. It is also formed with a vertical web-piece 11 and flanges 12 13 14 15 16, which together constitute a socket whose shape is that of a cross-section of the channel-beam, and is adapted to receive and inclose the end

portions of its flanges and web, the parts being then fixed together by rivets.

The inner web 11 of the casting 9 extends inwardly to the web of the adjacent bolster-beam 2 and terminates in a vertical flange 17, which fits against the beam between its flanges and is riveted to the web thereof. The beams 2 2 are thus interfitted with parts of the side frame and are well supported thereby, the load transmitted from the bolster being put mainly upon the castings 9 and other portions of the side frames, and not solely upon the rivets. I therefore secure a strong and rigid structure, all the parts of which consist of a double or triple thickness of metal. By thus making the side frames in connected parts I secure economy of construction, and obtain an article less likely to have flaws or imperfections than if it were formed in a single piece. The construction shown is also desirable because it in a manner constitutes a knockdown truck, the parts of which can be sold to railway companies and assembled for use by them. There are, however, peculiar and novel features in the construction of the end castings of the side frame, which I intend to cover herein, whether the side frame be made up of several parts, as shown, or made of a single integral casting, including the middle portion 8 as well as the end portions.

Above the spring-seat 10 and at opposite sides of the slot 9' the casting is made hollow, so as to constitute a hollow upper portion and hollow guides or legs 18 for the axle-journals. On the inner sides of the guides 18 are chafing-plates 19, between which the vertically-movable axle-box 17' is set. These plates have at their margins hooked portions 20, the distance between which preferably tapers somewhat, so that they may be driven and wedged upon the guides to constitute facings therefor, and at the bottom the plates are confined by a cap-plate 21, which is bolted to the lower ends of the hollow guides or legs and is provided with projections interfitting with recesses thereon.

I claim as new—

1. A truck side frame composed of a flanged

beam having at the ends castings adapted to receive the springs and journals, and having recesses, which receive the web and flanges of the beam, the latter being riveted to the end castings at said recesses.

2. A truck side frame composed of a flanged beam and end castings formed with flanges or brackets, in combination with a truck-bolster composed of flanged beams which abut against and are riveted to said flanges or brackets.

3. A truck side frame composed of a flanged beam and end castings formed with integral flanges or brackets, in combination with a truck-bolster composed of flanged beams which abut against, interfit with, and are riveted to said flanges or brackets.

4. A truck side frame having as an integral casting a hollow end portion with a vertical slot adapted to receive within it the spring

and axle-journals, and integral flanges or brackets adapted to connect the same to a bolster.

5. A bolster comprising parallel flanged beams set with their webs in vertical position, and having an interposed filler-block which is fixed to the beams and has at the upper margin a lip or flange by which it is supported from the beams.

6. A truck comprising a bolster, and a side frame having a central portion and end castings, with which the central portion interfits and which end castings have portions extending along the central portion to the bolster.

In testimony whereof I have hereunto set my hand.

WILLIAM CASE.

Witnesses:

THOMAS W. BAKEWELL,
THOMAS H. ROBINSON.