No. 650,128. Patented May 22, 1900.

H. S. GOUGHNOUR.

CAR TRUCK.

(Application filed July 22, 1899.)

(No Model.)

Fig. 1.

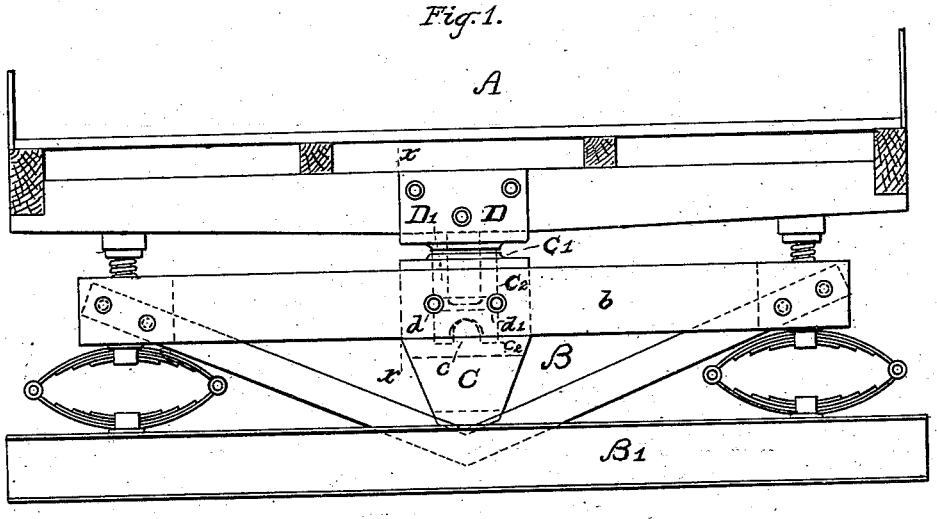


Fig. 3.

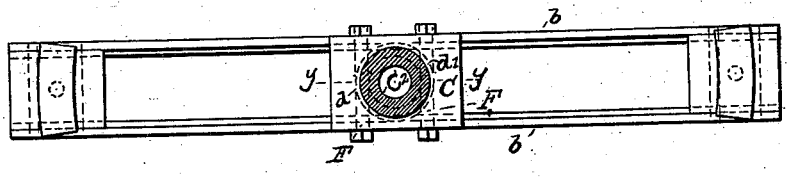


Fig. 4.

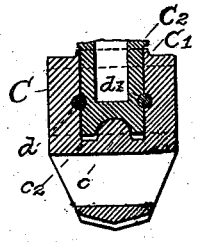
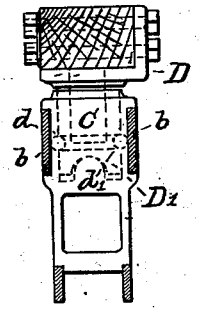


Fig. 2.



WITNESSES:
M. E. Sharpe.
A. M. Mann.

INVENTOR
H. S. Goughnour
BY
Geo H. Parmelee
his ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY S. GOUGHNOUR, OF JOHNSTOWN, PENNSYLVANIA, ASSIGNOR TO THE LORAIN STEEL COMPANY, OF PENNSYLVANIA.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 650,128, dated May 22, 1900.

Application filed July 22, 1899. Serial No. 724,867. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. GOUGHNOUR, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Improvement in Car-Trucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has relation to an improved bolster-fastening for car-trucks and is designed to provide means of simple character for connecting a vehicle-body to a bolster to be used in lieu of the king-pin and swivel-plate connections usually employed and which is designed to facilitate the ready connection and disconnection of the car body and truck. I attain this object by the means now to be described and hereinafter more particularly pointed out, reference being had to the accompanying drawings, in which—

Figure 1 is an end elevation, partly in section, of so much of a car body and truck as is necessary to illustrate my invention. Fig. 2 is a vertical section of my improved fastening on the line $x\ x$ of Fig. 1. Fig. 3 is a detail plan view, and Fig. 4 is a section on the line $y\ y$ of Fig. 3.

In the drawings the letter A designates a car-body, and B a double truck, which in general may be of any of the various types known to the art. The truck which I have shown has a rigid bolster consisting of parallel bars $b\ b$, spring-supported on the transverse members B′ of the truck-frame.

C designates a solid block or casting which is securely fastened between the bolster-bars b at the center of the truck in the place of the usual king-bolt socket and lower swivel-plate. This block or casting is formed on the upper face with a boss or projection C′, cored out to form a cylindrical socket C^2. At the bottom of the socket there is preferably provided a hemispherical bearing projection c, elevated above the bottom of the socket to a considerable extent, the surrounding space constituting in use an oil or lubricant chamber. Formed in the lateral wall of the socket above the said projection is an annular groove c^2.

D designates a casting or forging which is securely bolted to the under side of the car-body above and directly over the block or casting C and which is provided with a depending cylindric stud or post D′, adapted to enter the socket of the said block or casting and form a neat bearing fit therein. The lower end of this stud or post is hollowed out, as indicated at d, to fit the projection c, and its lower end portion is provided with an annular groove d', which registers with the groove c^2 when the parts are applied to each other, as shown, the connection between said post and socket for preventing vertical separation being made by one or more cylindrical pins F, inserted into the closed annular space formed by said registering grooves.

The means above described form, as will be readily seen, a simple yet secure and efficient connection between the car body and truck, possessing perfect lateral rigidity, while it affords freedom of rotary movement and extended bearing-surfaces. To permit the body to be removed from the truck, it is only necessary to withdraw the pins F, when the parts may be readily separated from each other.

The lower portion of the block or casting C is shaped to have a central bearing and support on the bolster-truss G.

The connection described can be readily adapted to other forms of trucks and bolsters without departing from the scope of the invention and may also be otherwise changed in its details of construction and arrangement, to which therefore I do not desire to limit myself.

Having thus described my invention, what I claim, and desire to protect by Letters Patent, is—

1. The herein-described bolster-fastening, comprising a member rigidly secured to the bolster and formed with a cylindrical vertical socket whose bottom wall has a convex bearing projection and a surrounding oil-space, and a member rigidly secured to the under side of the car-body and carrying a depending post adapted for rotary engagement with said socket and concaved on its lower face to fit said projection, together with means for preventing vertical separation of said members.

2. The combination with a member secured to the bolster and formed with a vertical cylindric socket whose lateral wall is grooved and whose bottom wall has a convex bearing projection, of a post or stud secured to and depending from the car-body, and engaging the said socket, said post or stud having an annular groove coinciding with that of the socket, and its lower end concaved to fit said projection, and a pin engaging the coinciding grooves to prevent vertical separation of said socket member and the post or stud while it permits rotary movement of the latter.

3. In a car-truck, the combination with a car-body provided with a depending bearing post or stud, of a car-truck having a block secured between the bolster-bars and formed with a socket to receive the said post or stud, and means for securing said stud against vertical movement in said socket without interfering with its rotary movement, said block at its lower end also having a bearing on the bolster-truss.

In testimony whereof I have affixed my signature in presence of two witnesses.

HENRY S. GOUGHNOUR.

Witnesses:
JOHN H. KENNEDY,
H. W. SMITH.