(No Model.)

J. GERHARDT.

CAR TRUCK.

No. 324,831. Patented Aug. 25, 1885.

Fig. 1

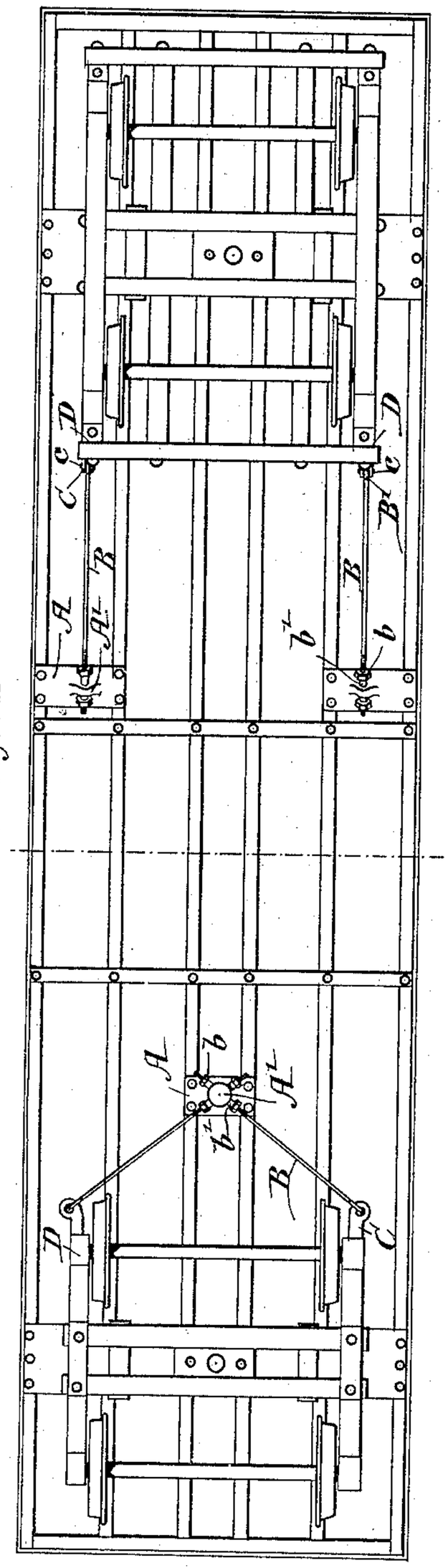


Fig. 2

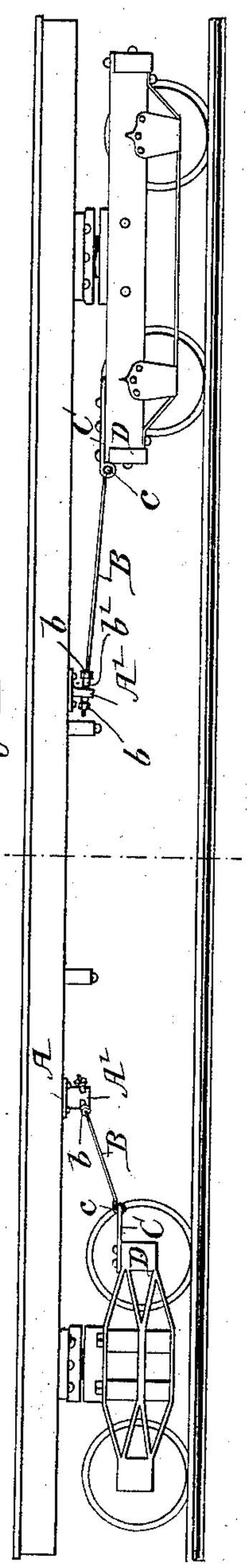


Fig. 4

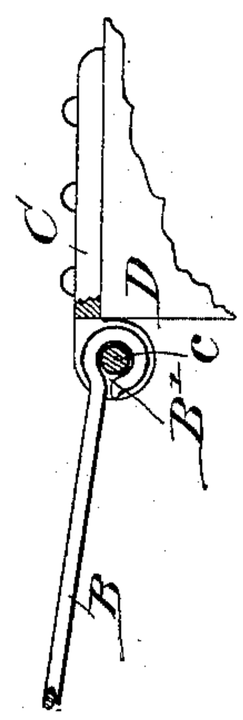
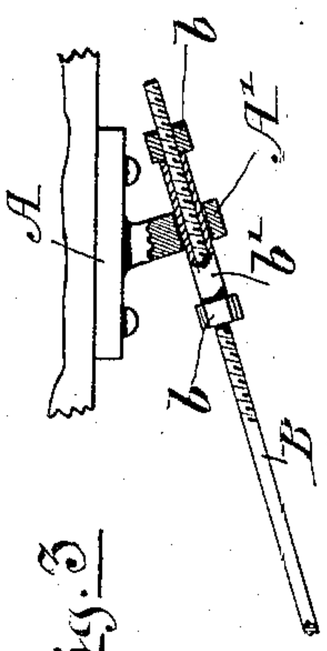


Fig. 3



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UNITED STATES PATENT OFFICE.

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CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 324,831, dated August 25, 1885.

Application filed February 3, 1885. (No model.) Patented in Canada February 12, 1885, No. 21,093.

To all whom it may concern:

Be it known that I, JOHN GERHARDT, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented a certain new and useful Improved Safety-Truck Appliance for Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to prevent the trucks of a railway-car from slewing or ditching when from any cause—such as an open switch or any other form of derailment—the wheels leave the track; and, further, in such a case, to keep the trucks in their usual position with respect to the car. Besides this, my invention will be equally effective in keeping the truck-frames parallel with the car in the case of a broken axle. It may be briefly described as consisting in the attachment loosely of the truck-frames to the framing of the car by rods placed on either side of such trucks. These rods are usually, although not necessarily, attached to the truck-frames on their inner sides at or near the corners, and thence are preferably taken up obliquely to and secured to the longitudinals of the car at a point or points nearer to the center than the trucks. Sufficient play is allowed to permit the trucks to accommodate themselves to curves, the amount of radiation required being adjusted at will.

For full comprehension of the invention reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a plan of the under side of a car-body, looking up, one of the trucks shown being that of a passenger-car and the other that of a freight-car. Fig. 2 is a side view of the above, and Figs. 3 and 4 details of the fastenings of the rods.

Similar letters of reference indicate like parts.

A A are plates, secured by bolts or other suitable means to the under side of the longitudinals at, preferably, about the positions shown in the drawings, A′ being perforated projections or bosses cast or formed on same. Through this projection passes one end of a rod, B, which is preferably threaded for some distance and provided with jam-nuts *b b*, to secure it in place. The distance apart of these jam-nuts gives the amount of play, and they may, for greater security, be doubled or provided with lock-nuts. To prevent the wear of the thread on the rod by friction in the aperture of A′, I slip over it at that point a sleeve, *b*′. (Shown in detail in Fig. 3.) On the other end of the rod B is formed an eye, B′, corresponding to a double eye formed on the end of a plate, C, secured, as shown in the drawings, to the angle of the truck-frame D, the junction being made by an eyebolt or rivet, *c*, or in any other usual way.

As shown in Fig. 1, this construction may be slightly modified, the principle, however, remaining the same. The rods B may be taken obliquely to a single plate, A, secured to the car-frame at some point on its longitudinal axis and doubly perforated to receive the ends of both.

In some cases it may be found desirable to do away altogether with the plates A A and carry the rods, in the one case, through the transverse stringers, and, in the other, through the longitudinals, these being perforated for the purpose and strengthened by plates on either side.

Another modification which may be made is the substitution for the jam and lock nuts of a shoulder formed on the rod, and a cotter inserted into such rod at the distance required to afford the necessary play.

Either of the constructions above described (which are simply modifications of the primary idea) allows the truck to swivel on the king-bolt sufficiently to accommodate itself to curvature, the amount of play being, as before mentioned, regulated by the distance apart of the jam-nuts or shoulder and cotter.

It is obvious that beyond this amount of play it is impossible for the truck to "slew," and that therefore whenever from any cause the wheels of a truck leave the track the truck is still held by the rods in the proper position with relation to the car and the wheels follow the track, thus doing away with the chance of ditching, going down embankments, and all accidents of this class.

It will also be noticed that any strain upon the rods is in the direction of their length, and therefore of their greatest strength.

My invention is applicable to freight-cars of all kinds, passenger-cars and sleepers, and can also be fitted to the trucks of locomotives and their tenders. In no case is any alteration required in the present mechanism for brakes, &c.

Having thus described my invention, I beg to state that what I claim is as follows:

1. The combination, with the trucks of a railway-car, of sliding rods connecting them to the car-frame, substantially as and for the purposes set forth.

2. The combination, with the truck-frames of a car, of plates C, to which the sliding rods B are connected, and plates A, secured to longitudinals to which such rods are adjustably attached, as and for the purposes set forth.

3. The combination, with a car truck and body, of sliding rods B, stops *b* on such rods, and a sleeve, *b'*, substantially as described.

4. In combination with a car frame and truck, rods extending from the truck to the frame and sliding in such frame, and stops on said rods to limit their motion, substantially as described.

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