G. GALLOWAY.

Side-Bearings for Railroad-Cars.

No. 168,476. Patented Oct. 5, 1875.

Fig. 1.

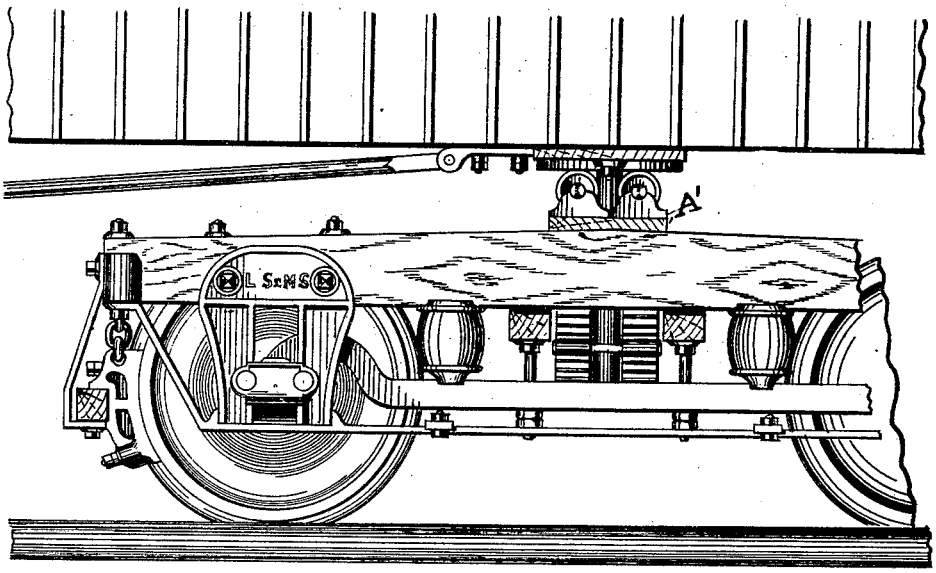


Fig. 2.

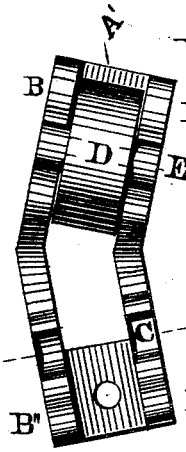


Fig. 3.

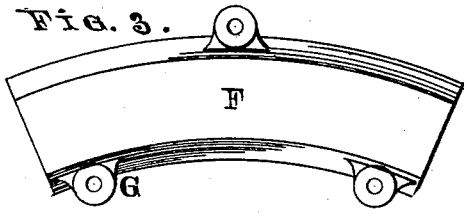
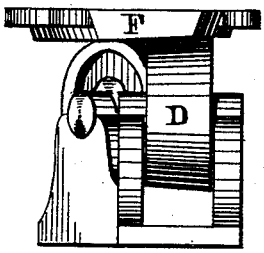


Fig. 4.



WITNESSES:

Jno Stark

John R. Edmonds

INVENTOR:

George Galloway

by Michael J. Stark

His Attorney

UNITED STATES PATENT OFFICE.

GEORGE GALLOWAY, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO PHILLIP STELLWAGEN, WILLIAM MILLER, AND MICHAEL J. STARK, OF SAME PLACE.

IMPROVEMENT IN SIDE BEARINGS FOR RAILROAD-CARS.

Specification forming part of Letters Patent No. **168,476**, dated October 5, 1875; application filed March 26, 1875.

To all whom it may concern:

Be it known that I, GEORGE GALLOWAY, of the city of Buffalo, in the county of Erie and State of New York, have invented an Improved Side Bearing for Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, having reference to the accompanying drawings, in which—

Figure 1 is an elevation of a fragment of a car-truck and railway-car, showing my improved side bearing in its proper position. Fig. 2 is a plan view of the chair and wheels; Fig. 3, a plan view of the bearing-plate, and Fig. 4 an end view of the side bearing complete.

Like letters of reference indicate like parts in the various figures.

The nature of this invention relates to improvements on side bearings for railroad-cars; and it consists in the arrangement and details of construction, as hereinafter fully set forth, and pointed out in the claim.

A′ is the chair of my improved side bearing. It is constructed of any suitable material, cast-iron being preferable, and consists of the two parallel sides B′ B and B″ B‴, arranged at an obtuse angle to one another, in such a manner that they are at right angles with a line drawn through the center of the truck and the wheels D of the chairs A. C are semicircular excisions in the chair, and serve as bearings for the pivots of the wheels D. The double chair, as described, I produce of a single piece, in the process of casting or forging, and is therefore less costly than any other device of a similar nature. I arrange two of these chairs upon the bolster of each truck, at any point convenient from the king-bolt, and provide them with wheels D, having pivots E formed in one piece with the wheel D. The faces of these wheels are either parallel, or slightly beveled to an angle of about two degrees, and bear against a curved top plate, F, having a parallel or slightly tapering cross-section, and being provided with lugs G, whereby it is attached to the bottom of the car by means of bolts, or the like. The wheels D are loosely set into the chair; but, if found necessary, a strap or cap may be put over the bearings to prevent the displacing of the wheels in case of accident, &c.

In constructing side bearings, as described, I derive results that cannot be obtained by any other mode of construction with which I am acquainted, and which may be stated to be as follows, to wit: First, in making the sides of each set of bearings parallel, and arranging the two sets of each chair at an obtuse angle to one another, in such a manner that each set of sides is at right angles to a line drawn through the center of the wheels and the king-bolt of the truck, I am enabled to fit the wheels snugly within the chair, so that the accumulation of grit and dirt is prevented where it would impair the action of the said wheels, and thereby cause undue strain and friction, and the abrasion of the rollers, which would thus be rendered useless. Second, by arranging a wheel at each edge of the bolster in each chair, the weight of the car is more equally distributed upon the car-springs, allowing the center plate to work freely and prevent the inclining of the bolster, caused by the unequal strength of these car-springs.

Having thus fully described my invention, in order to enable any one skilled in the arts to which it pertains to make and use the same, I desire to secure by Letters Patent the following claim:

A double chair, A′, having its parallel sides B B′ and B″ B‴ arranged at an obtuse angle with each other, and at right angles with a line through the center of the bearings and the king-bolt of the truck, and provided with semicircular excisions C, serving as bearings for the pivots of the wheels, all substantially as and for the purpose set forth.

This specification subscribed this 8th day of March, 1875.

GEO. GALLOWAY.

Witnesses:
MICHAEL J. STARK,
JNO. STARK.