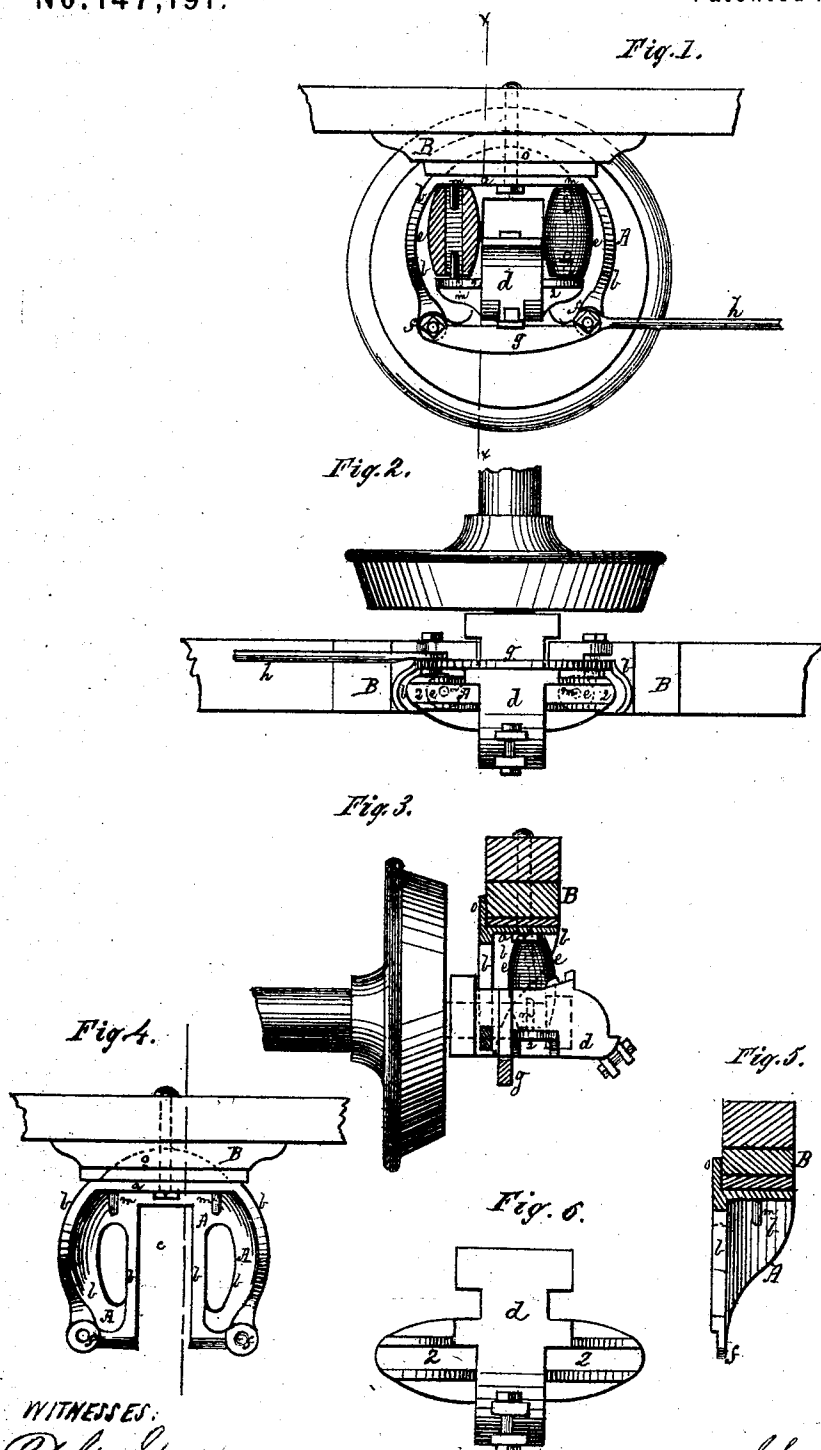


J. STEPHENSON.
Pedestals for Railway-Cars.

No. 147,191.

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JOHN STEPHENSON, OF NEW YORK, N. Y.

IMPROVEMENT IN PEDESTALS FOR RAILWAY-CARS.

Specification forming part of Letters Patent No. 147,191, dated February 3, 1874; application filed January 6, 1874.

CASE C C.

To all whom it may concern :

Be it known that I, JOHN STEPHENSON, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Car-Pedestals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 represents an elevation of my improved car-pedestal as applied to the frame of a car, the frame being broken off; and Fig. 2, a plan of the same, taken from the under side. Fig. 3 represents a vertical section of the pedestal, taken through the line *x x* of Fig. 1, but showing the car-wheel and axle in elevation. Fig. 4 represents the pedestal detached from the wheel and its axle-bearing, but otherwise attached to the car-frame, as in Figs. 1, 2, and 3; and Fig. 5, a vertical section of the same, taken through the line *x x* of Fig. 4. Fig. 6 represents a detached view of the bearing-box.

My invention relates to a new and improved mode of constructing the pedestals that support the car upon the running-gear. In early times these pedestals were made of a single straight plate, having two jaws grasping the axle-box. Pedestals of this kind were found to lack stiffness, and were soon superseded by the box form, in which four jaws were made to embrace or grasp the axle-box. These four-jaw pedestals are regarded as very suitable for heavy work, but the system of light cars for one horse requires pedestals of a light construction, yet having the necessary stiffness and strength. My invention, therefore, consists in forming the pedestal of a single plate or piece of metal, of peculiar form and construction—that is to say, with but two jaws to clasp the axle-box, and these so made as to connect at the top with the bed-plate on which the car-body rests, and so as to curve gradually forward and upward at their outer end, in order to form at once a brace to the bed-plate, and a recess or concavity for the accom-

modation of the springs on which the bed-plate and car rest.

This peculiar form and construction of the jaws enables me, through the distribution of the metal thereby made, to give, with a minimum of metal and weight, the necessary strength and rigidity to the pedestal. They also lessen the labor and other costs of manufacture, and greatly facilitate repairs.

To enable others skilled in the art to make, construct, and use my improved pedestal, I will now proceed to describe its parts in detail.

In Fig. 4 the pedestal proper is shown as consisting of a bed-plate, *a*, and the two jaws *b*, all cast in a single piece, the opening *c* being the space into which the axle-box *d* fits. These jaws *b* are flat on their rear side, and hang in a vertical plane, and, if desired, may be extended above the line of the bed-plate *a*, so as to form a back brace or support, *o*, to the pedestal-block B. The outer edge of each jaw is curved outward and forward, as shown in Figs. 2, 4, and 5, and, like the back proper, connected at its upper end with the bed-plate *a*, which gives great strength and rigidity to the pedestal, while dispensing with much extra metal. The curved form of the jaws, as thus united to the bed-plate, provides the necessary recess or space for the accommodation of the springs *e*, on which the bed-plate *a* and car rest. The foot of each side member of the pedestal is formed with a lug or ear, *f*, of suitable shape and strength to lodge the retainer or tie plate *g*, and also the tie-bar *h*, which unites the two pedestals of the one side of a car together, and which also forms part of the system of bracing invented by me to retain the pedestals in their normal position—i. e., in a vertical plane. The axle-box *d* is provided on each side with a projection or lug, *2*, of suitable form and strength for the support of the springs *e*; but as such forms no part of my present invention it is unnecessary to describe it further than to state that both the bed-plate *a* and lugs *2* are provided with suitable pins *m*, to hold the springs in place, and which are made to take into a longitudinal hole cut centrally through the springs *e*. The axle-box is

also provided near its inner end, and on each side, with a vertical groove, into which the inner sides of the pedestal-jaws fit, so that the box is free to slide up and down between the pedestal-jaws, as the undulations of the car may enforce.

It will be apparent from what has been said that the pedestal may be made of wrought-iron swaged into form, as well as of cast-iron, and that the bed-plate and jaws may be made in separate pieces, and afterward firmly and securely united together; but I prefer to make them in one piece, and of cast metal, as being both simpler and cheaper, while quite as strong as, and possibly more enduring than, when otherwise made; nor do I deem such unprotected by this patent.

It will also be apparent that while the outer or curved edge of each jaw is shown as inclining in a curved form from the front of the bed-plate at top to the rear of the pedestal at bottom, as shown in Fig. 5, the same may be made in any other suitable form—as, for instance, it may be made to descend to the foot

of the pedestal from the bed-plate in a vertical plane; but such is not deemed necessary, as the form shown yields the necessary strength and rigidity, saves material, and makes the pedestal much lighter.

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

1. A car-pedestal consisting of a bed-plate, *a*, and the two jaws *b b*, the jaws being flanged vertically to receive and partly cover the springs *e e*, as and for the purpose set forth.

2. A car-pedestal consisting of the bed-plate *a* and the two jaws *b b*, the jaws being provided at their lower ends with vertically-faced lodgments *f* for the retaining-bar *g*, as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of December, 1873.

JOHN STEPHENSON.

Witnesses:

JOHN S. PUGH,

WILLIAM J. WALKER.