

A. HIGLEY.
Car-Axle Box.

No. 86,543.

Patented Feb. 2, 1869.

Fig. 1

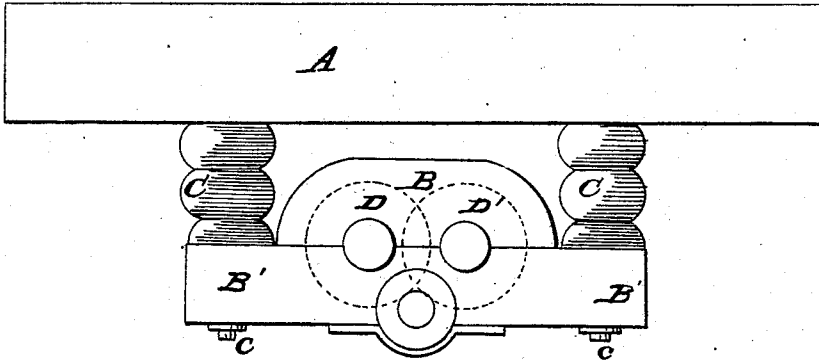


Fig. 2

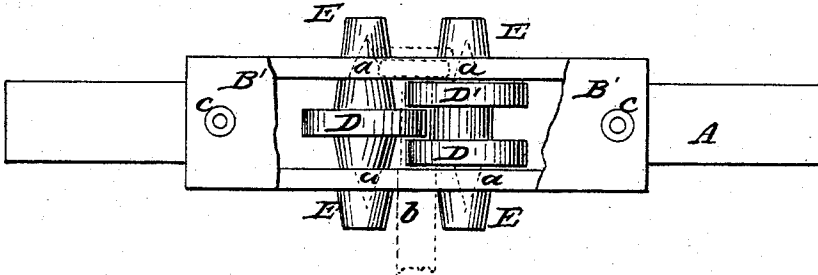
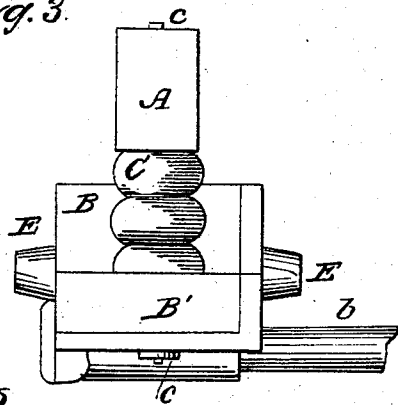


Fig. 3.



Witnesses
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AARON HIGLEY, OF SOUTH BEND, INDIANA.

IMPROVED RAILWAY AXLE-BOX.

Specification forming part of Letters Patent No. **86,543**, dated February 2, 1869.

To all whom it may concern:

Be it known that I, AARON HIGLEY, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Railroad-Car Axle-Boxes; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the box. Fig. 2 is a view of the under side. Fig. 3 is an end view.

Like letters of reference refer to like parts in the several views.

In Fig. 1, A represents a car-sill, to the under side of which is secured the journal-box case B, with interposed rubber springs C between them, and on which the sill rests. Said box is composed of two parts, so that one side and the bottom can be removed for the admission of the friction-rollers D D', which, as will be seen, are arranged transversely in the box. The journals of said rollers are conical, as indicated by the dotted lines *a*, Fig. 2, and which have their bearings in the sides of the box extending through into the lugs E, by which they are protected, on the outside, from the intrusion of dust and dirt.

It will be observed that the roller D' is double, or rather that there are two rollers on one shaft, and so arranged on the shaft that they have a space between them, into which the roller D is received, as shown in the drawing, Fig. 3, also indicated by the dotted lines.

b, in Fig. 2, is the axle of the car, which, as will be seen, lies upon and between the rollers, said rollers forming the seat of the journals.

By this arrangement of the rollers, one between the others, the axle can have no lateral movement, but will be held by the rollers D', one at each end of the journal, with as much security from any twisting or lateral movement as though secured in an ordinary seat, and still possess all the advantages of the rollers, which, as ordinarily used, are but two in number, one on each side of the journal, which, though holding the journal and reducing the friction, do not prevent it from turning laterally more or less, thereby wearing the journal unequally, and often in grooves, by the cutting in of the edges of the rollers. In the application of this journal-box to the car no pedestal is required in order to connect it to the sill, as is necessary when using the ordinary box. This box is connected to the sill of the car by means of the arms B' extending from the case and the bolts *c c*, the sill resting directly upon the springs and arms B', thereto secured by the bolts *c*, thereby making a much cheaper coupling than the pedestal one, and equally as strong.

The rods or bolts *c c* fit loosely in the springs and arms B', so as to allow the box to work or move according to the motion of the car.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The interlapping friction-rollers D D', case B, arms B', and springs C, all arranged to operate in the manner as and for the purpose described.

AARON HIGLEY.

Witnesses:

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J. H. BURRIDGE.