J. BLAKELEY.
Car-Axle Box.

No. 199,613. Patented Jan. 29, 1878.

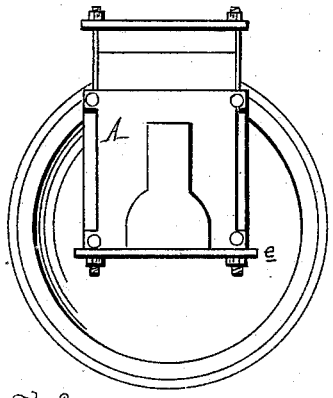

Fig. 1.

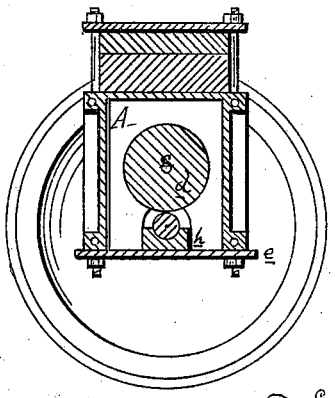

Fig. 2.

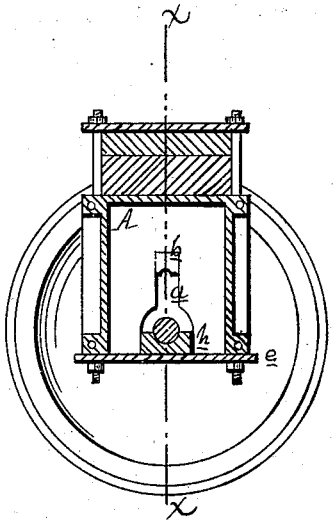

Fig. 3.

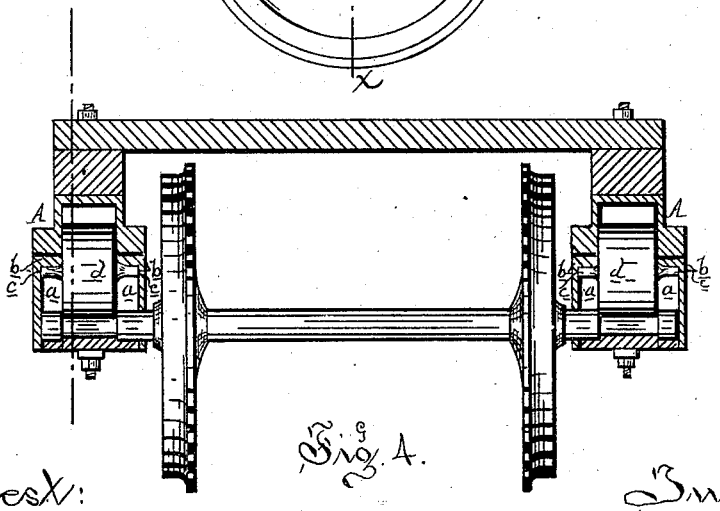

Fig. 4.

Witnesses:
H. L. Aulls
W. Spragne

Inventor:
Thos. S. Sprague
Atty for
Joseph Blakeley

UNITED STATES PATENT OFFICE.

JOSEPH BLAKELEY, OF TORONTO, ONTARIO, CANADA.

IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. **199,613,** dated January 29, 1878; application filed November 22, 1877.

To all whom it may concern:

Be it known that I, JOSEPH BLAKELEY, of Toronto, in the county of York and Dominion of Canada, have invented a new and useful Improvement in Railway-Car Trucks; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention relates to certain new and novel improvements in that portion of a car-truck employed to form a connection between the axle and the truck; and the invention consists in the peculiar construction of the axle-box, and its combination with the axle and its bearings, whereby a dust-excluding box may be employed to shield and protect the axle and its anti-frictional bearing.

Figure 1 is an elevation of a portion of a car-truck. Fig. 2 is a section of the same, showing the front side of the box broken away and the engagement of the anti-friction wheel with the axle and box. Fig. 3 is a section of the same, showing the front side of the box broken away and the contents of the box shown in Fig. 2 removed. Fig. 4 is a longitudinal vertical section on the line *x x* in Fig. 3.

Like letters indicate like parts in each figure.

In the drawings, A represents a hollow box, preferably cast in one piece, the inner faces of the front and rear cheeks being cast with vertical recesses *a*, open at the bottom. At the top of these recesses, and opposite and in line with each other, are placed the half-boxes *b*, which form bearings for the journals *c* of the anti-frictional wheel *d*, the face of the periphery of which should be as broad as is the length of the bearing or journal of the axle B. A half-box, *h*, is placed below the axle-bearing, and within the lower and enlarged part of the recesses, and when all the parts are in place they are secured, and the bottom of the box closed by means of the strap *e* and the side bolts *k*, by means of which the box is bolted to the beam of the truck.

By this arrangement all dust is excluded from the interior of the box, which is lubricated by the use of oil-cups (not shown) of any suitable or ordinary construction, entering the box from the top. I am also enabled to provide rigid seats for the boxes for the journals in an economical and effective manner.

If desired, the face of the box may be cast open and provided with a cap without detracting from the spirit of my invention, so long as the inner face of such cap is provided with the recess, as described. Preferably the box should be cast in one piece, and arranged to enter the working parts from the bottom, as stronger and less liable to get out of order.

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

1. In combination with a hollow axle-box provided with vertical recesses, the boxes *b* and anti-frictional wheel *d*, constructed and arranged to operate substantially as specified.

2. In a hollow axle-box the inner faces of which are provided with vertical and coincident recesses, and in combination therewith, the boxes *b*, anti-frictional wheel *d*, box *h*, and axle B, the parts being constructed and arranged to operate substantially as and for the purposes described.

JOSEPH BLAKELEY.

Witnesses:

H. S. SPRAGUE,

CHAS. THURMAN.