M. M. BARRY.
Car-Axle Box.

No. 217,319. Patented July 8, 1879.

Fig. 1.

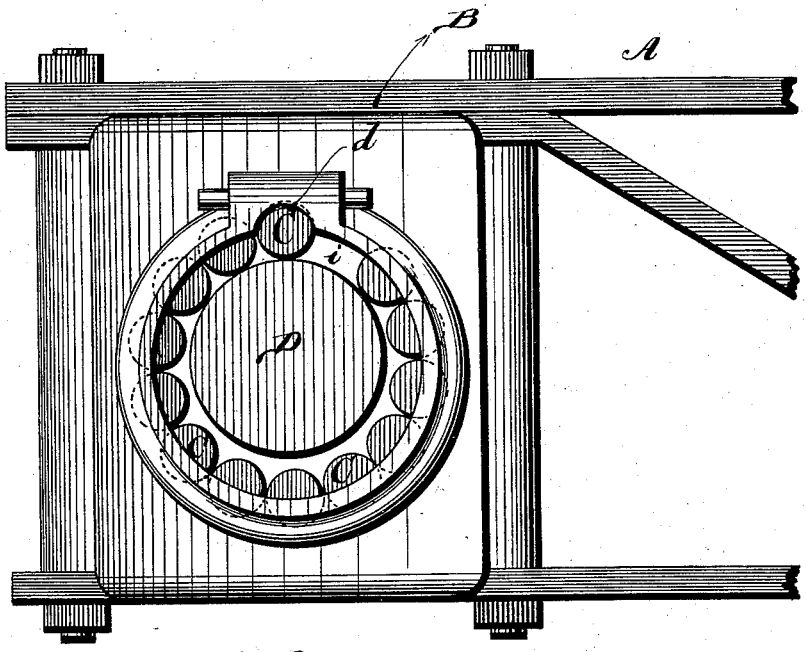


Fig. 2.

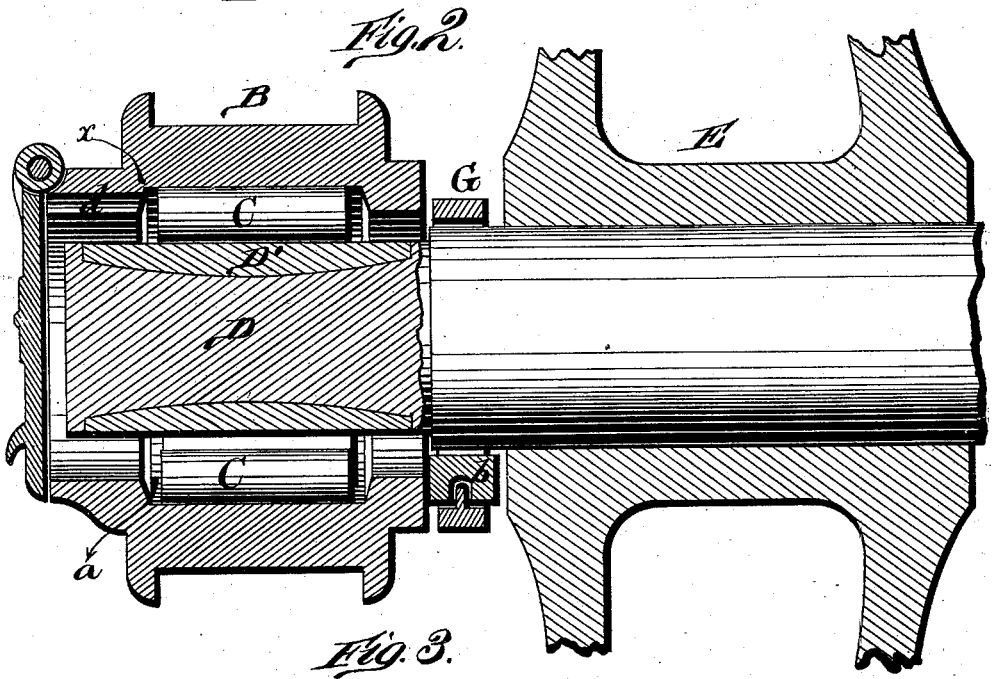
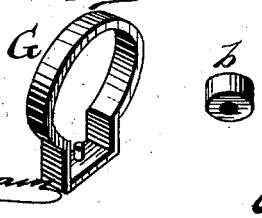


Fig. 3.



WITNESSES
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MEDDY M. BARRY, OF ROME, GEORGIA.

IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. **217,319**, dated July 8, 1879; application filed June 9, 1879.

To all whom it may concern:

Be it known that I, MEDDY M. BARRY, of Rome, in the county of Floyd and State of Georgia, have invented a new and valuable Improvement in Journal-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of an end view of my journal-box, and Fig. 2 is a central sectional view of the same.

The nature of my invention consists in the construction and arrangement of a car-axle-journal box, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the usual pedestal, in which the journal-box B is placed. C C represent a series of friction-rollers, made in a chill, and which travel in a chilled channel, *a*, on the inside of the journal-box. D represents the journal, having a sleeve, D′, cast upon it to bring it to a uniform size. This is intended only in case of old journals.

E is the hub of the car-wheel. Between this hub and the side of the box A is a strap, G, placed around the journal, and this strap carries a lateral roller, *b*, in an enlargement of the strap.

d is a recess in the end of the box B, through which the rollers C are put in and taken out. At the inner end of this recess at the entrance to the channel *a* is a shoulder, *x*, to prevent rollers coming out after the weight of the car is let down.

When the car is in motion the weight on the rollers will be only about from fifty to sixty degrees at the top of the inside circle of the journal-box, so that the rollers will be relieved of their burden at or near a vertical position. As said rollers are relieved they force the ones ahead of them around up to the point where they are received again.

It will be noticed that the inner circle formed by the rollers is larger than that of the journal, whereby the rollers are kept from being rubbed from the time they are relieved until they are received again.

The space left vacant between the rollers at *i* is to keep them from binding or rubbing while working under the weight of the car. By this vacancy they will mount a little ahead of each other, thereby preventing the friction which would otherwise occur by their rubbing.

The lateral roller *b* between the box and the wheel destroys the friction that occurs by the rubbing of the car-wheel against the journal-box. There is lateral play between this box and wheel, the same as all other boxes, so that the rollers *b b*, applied on the same axle at opposite ends, do not run both at the same time, but they run alternately.

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

1. The combination, with a car-axle-journal box, B, provided with interior circumferential chilled channel *a* and recess *d*, with shoulder *x*, of the series of chilled rollers C and journals D D′, the inner circle formed by the rollers being larger than the journal, substantially as described, and for the purpose set forth.

2. The loose band G, with lateral rollers *b*, in combination with the journal D, wheel-hub E, and box B, substantially as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MEDDY M. BARRY.

Witnesses:

THOS. J. PERRY,

JOHN B. F. LUMPKIN.