(No Model.) 2 Sheets—Sheet 1.

J. M. HALLOWES.

CAR AXLE BOX.

No. 383,728. Patented May 29, 1888.

Fig. 1.

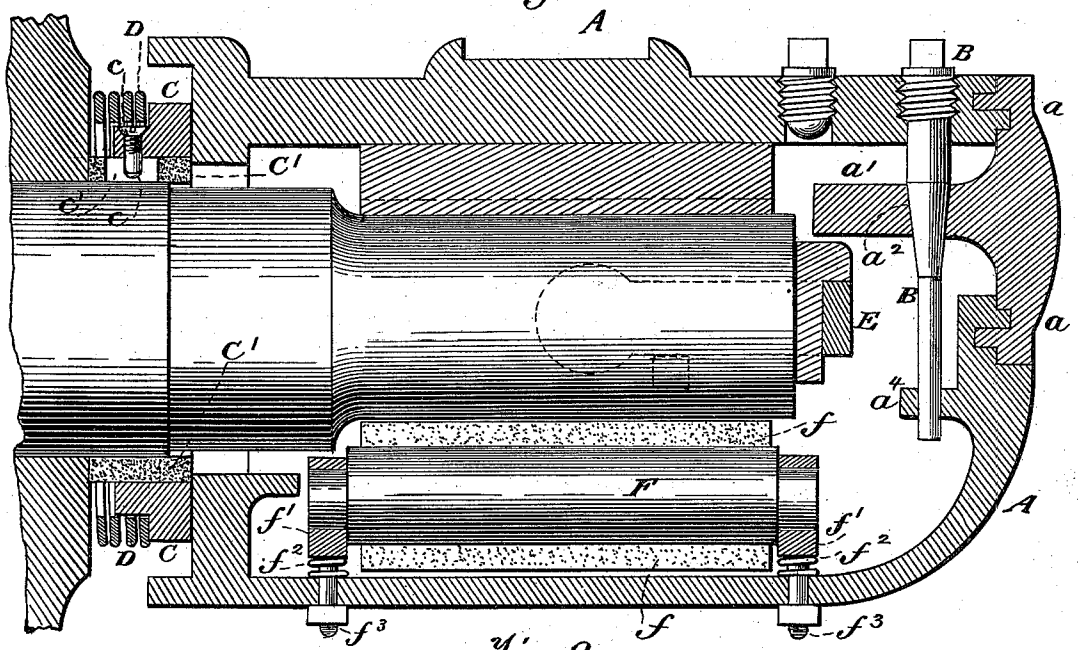
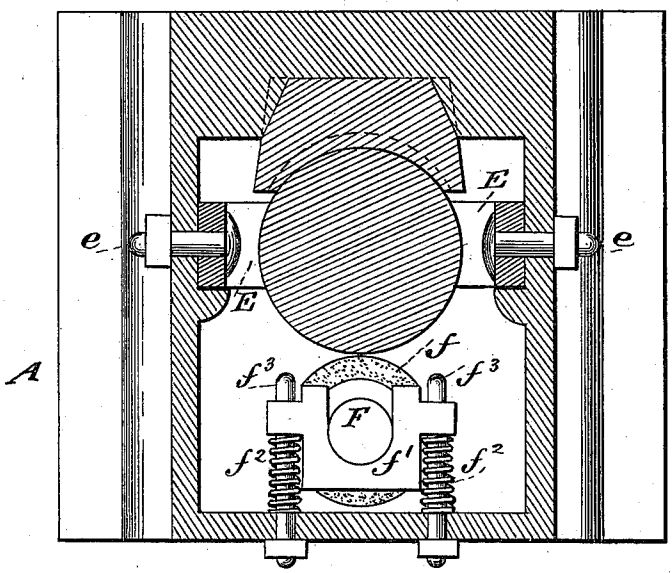


Fig. 2.



Witnesses.
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E. Louse.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

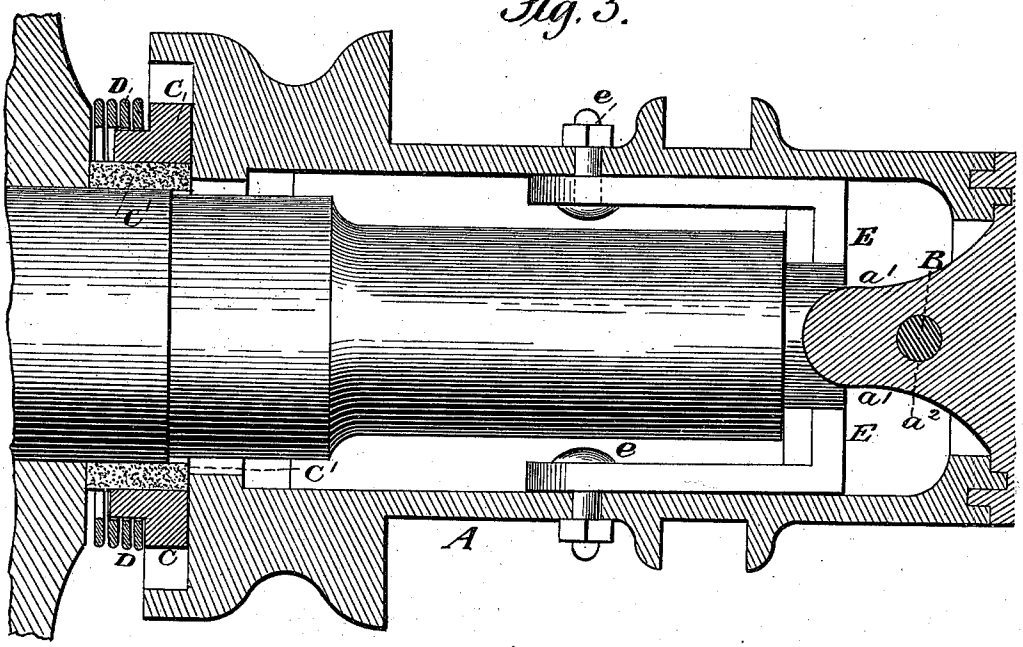
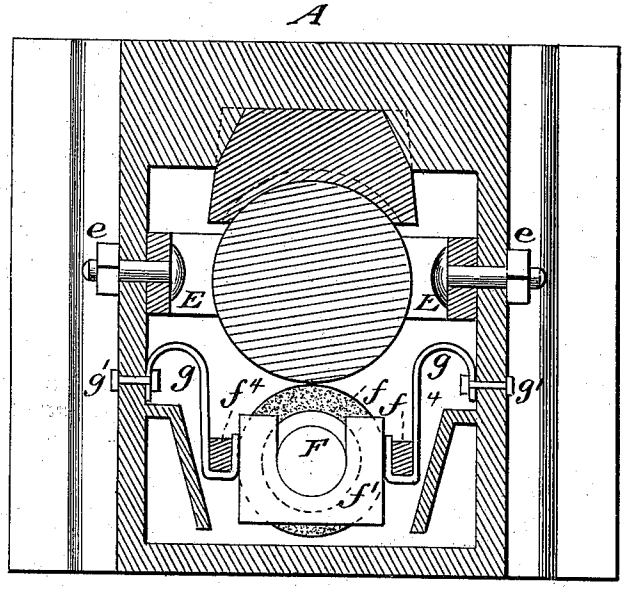


Fig. 4.



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E. Cruse

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N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JAMES M. HALLOWES, OF NEW YORK, N. Y.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 383,728, dated May 29, 1888.

Application filed November 2, 1887. Serial No. 254,095. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. HALLOWES, of the city, county, and State of New York, have invented certain new and useful Improvements in Car-Axle Boxes, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to render car-axle boxes dust and oil tight, to provide an end stop for the axle within the box, and also to improve the lubricating devices; and my invention consists in the improved construction and arrangement of parts, as will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a longitudinal section showing my invention. Fig. 2 is a transverse section. Fig. 3 is a sectional plan. Fig. 4 shows a modification. Similar letters of reference indicate similar parts in the respective figures.

A is an axle-box, of which *a* is the door. This door has a lug or ear, *a'*, projecting into the box, which lug has a tapered hole, a^2.

B is a bolt which is screw-threaded at its upper end and passes through a hole in the upper face of the box, through the tapered hole a^2, and also through a hole in a lug, a^4, which forms part of the axle-box. When the bolt B is screwed home, it draws the door *a* tightly against the box A and holds it firmly in that position.

The back end of the axle-box is cut out to receive the revolving plate C. This plate C is made to revolve with the axle by means of the screw *c*, which passes through the plate into a slot, *c'*, in the packing-ring C', which fits tightly on the axle. The object of this slot is to allow the axle to have longitudinal movement in the box. The plate C is held against the plane of the back end of the axle-box by means of the spring D between the hub of the wheel and the plate C.

E is an end stop for the axle, which is pivoted on the inside of the axle box by means of the bolts *e*.

F is a lubricating-roller, which is covered with an absorbent material, *f*. This roller is held by bearings *f'*, supported by spiral springs f^2, surrounding the bolts f^3, and which hold the roller constantly in contact with the axle-journal.

Fig. 4 shows a modified construction, in which the bearings *f'* are supported by springs *g*, attached to the side of the axle-box by means of the bolts *g'*.

The operation of this device will be apparent from the foregoing. It will be seen that it possesses the advantages of simplicity, effectiveness, and strength.

Having described my invention, I claim—

1. The axle-box A, having the perforated lug a^4, combined with the door *a*, having the lug *a'*, provided with the tapered hole a^2, and the screw-bolt B, substantially as set forth.

2. The axle and the packing-ring C', having the slot *c'*, combined with the circular plate C and screw *c*, substantially as set forth.

3. The axle and the packing-ring C', having the slot *c'*, combined with the plate C, screw *c*, and spring D, substantially as specified.

4. The axle-box A, combined with the interior end stop, E, and bolts *e*, substantially as set forth.

In testimony whereof I have hereunto set my hand and seal.

JAMES M. HALLOWES. [L. S.]

Witnesses:

FRANCIS C. BOWEN,

JAMES S. EWBANK.