

C. WILLIAMS.

Improvement in Car Axle Boxes.

No. 120,473.

Patented Oct. 31, 1871.

Fig. 1.

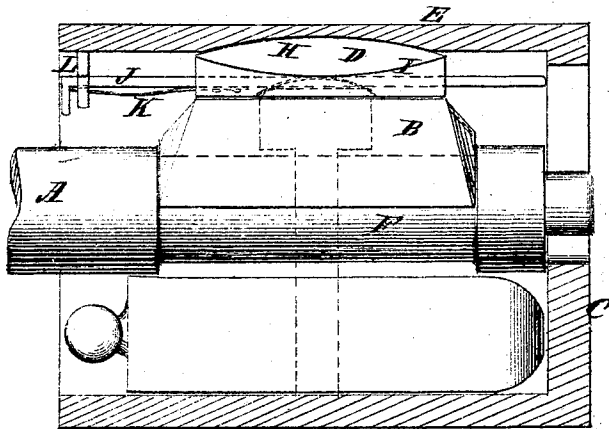


Fig. 2.

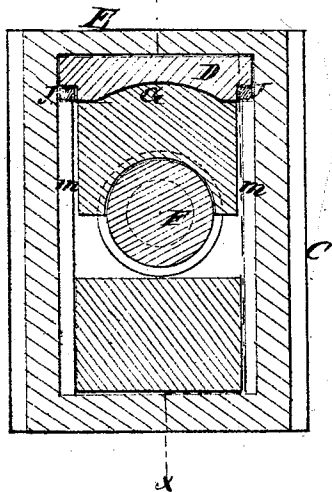
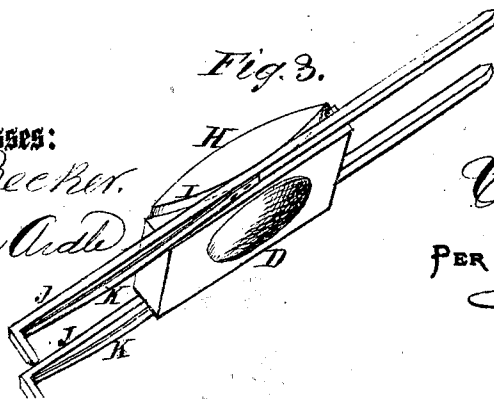


Fig. 3.

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UNITED STATES PATENT OFFICE.

CHRISTOPHER WILLIAMS, OF ADRIAN, MICHIGAN.

IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. 120,473, dated October 31, 1871.

To all whom it may concern:

Be it known that I, CHRISTOPHER WILLIAMS, of Adrian, in the county of Lenawee and State of Michigan, have invented a new and useful Improvement in Car-Axle Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

The object of this invention is to furnish an improvement in the class of axle-boxes having an adjustable bearing-block, or one which conforms to the movement or position of the axle journal, being to this end provided with a spherical projection on its upper surface. The improvement consists in the construction of the bearing-blocks as hereinafter described and as specifically stated in the claim.

In the accompanying drawing, Figure 1 is a section of the arrangement taken on the line *xx* of Fig. 2. Fig. 2 is a vertical cross-section. Fig. 3 is a perspective view of the plate and slides.

Similar letters of reference indicate corresponding parts.

A is the axle. B is the box or bearing. C represents the housing. D is the plate, which is placed beneath the cap E of the housing on the box B. The box is bored to fit the journal F of the axle, and has a section, G, of a ball or sphere on its top. The bottom side of the plate D has a cavity of corresponding size and shape,

which receives the section G. This confines the plate on the box or keeps it in position. The top of the plate is longitudinally the arc of a circle, H, which fits into a corresponding circular cavity in the bottom of the cap E, as seen in Fig. 1. The side edges of the plate are rabbeted, and the lip I is made to correspond in shape with the top of the plate. J J are slides beneath the plate D in the rabbets, which serve to hold the plate up and in place when the box or bearing is being taken out or put in. From this arrangement it will be seen that the bearing will adjust itself to the journal should the axle or the truck-timbers spring or get out of the proper line. The slides J J are made with springs K K, and are supported by the metallic brackets L on top of the projecting cleats M M on the inner sides of the housing. These slides may be made in various ways, so as to answer the required purpose, and screw-bolts may be used, if preferred.

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

The housing cap E, plate D, and box B, the same being respectively constructed with cavities and projections, as specified, so as to fit together and co-operate, as shown and described.

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