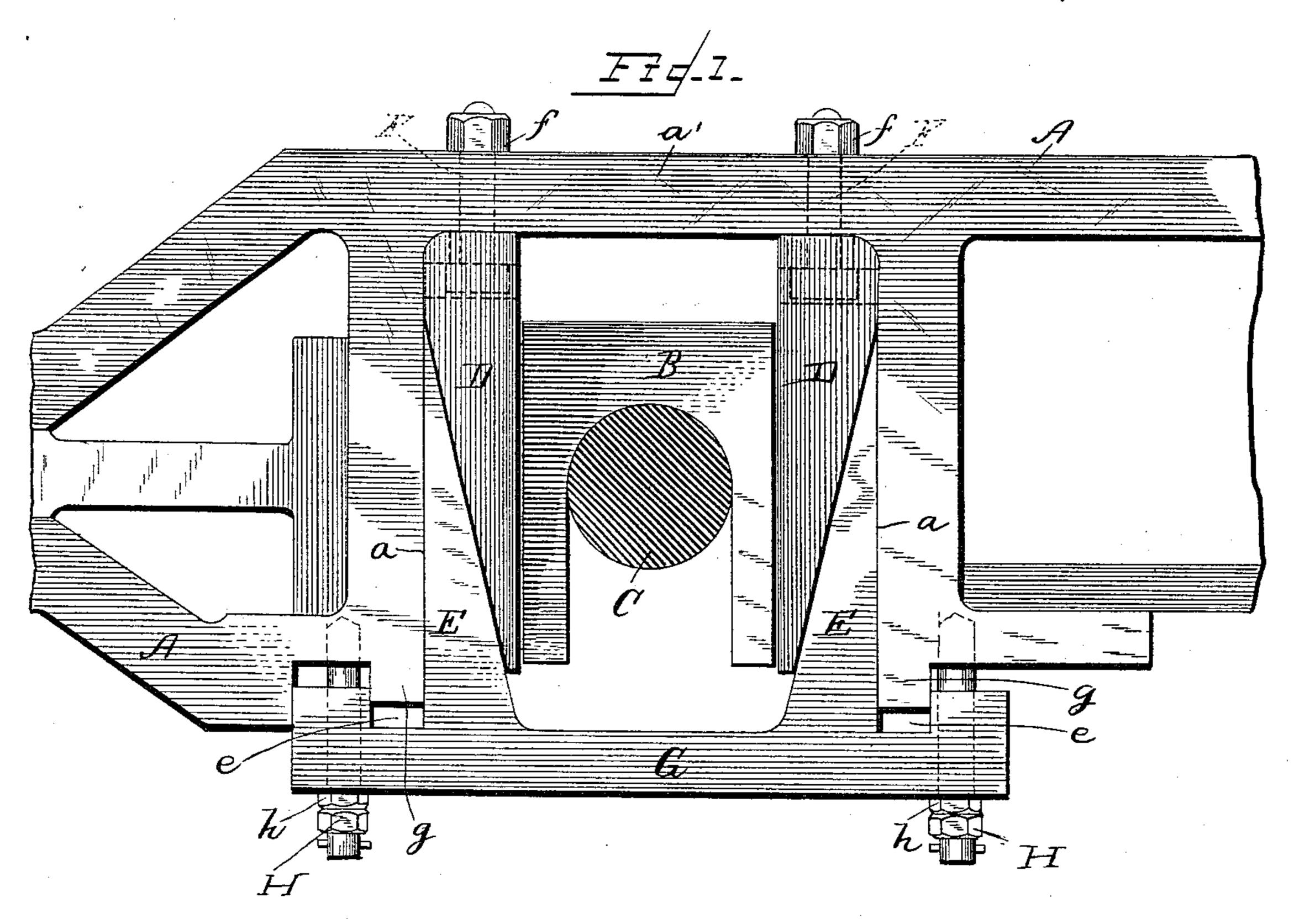
(No Model.)

## D. H. DUGAR.

CAR AXLE BOX.

No. 379,767.

Patented Mar. 20, 1888.



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Witnesses.

Specht,

Delano H. Dugar.

Day Tris Etterney A. A. Lace

## United States Patent Office,

DELANO H. DUGAR, OF CEDARTOWN, GEORGIA.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 379,767, dated March 20, 1888.

Application filed July 14, 1887. Serial No. 244,313. (No model.)

To all whom it may concern:

Be it known that I, Delano H. Dugar, a citizen of the United States, residing at Cedar town, in the county of Polk and State of Georgia, have invented certain new and useful Improvements in Car-Axle Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appears to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to car-axle boxes, and has for its object the production of a simple and compact means for taking up wear between the box and hanger or axle-frame and allowing for variation of casting, which can be conveniently adjusted and will be positive and efficient in operation and not liable to get out of repair.

The improvement consists in having interposed between the sides of the box and the sides of the hanger or axle-frame a series of wedges oppositely disposed and independently operated to adjust the box for aligning it with the corresponding box on the opposite side of the car or truck. Two of such wedges—one on each side of the box—are carried and operated simultaneously by a common plate, so that lost motion can be taken up without shifting the box to the right or left, thus preserving the center of bearing in the same relative vertical plane after once being adjusted.

The improvement further consists in the novel features and peculiar construction and combination of parts, which will be more fully hereinafter described and claimed, and shown in the annexed drawings, in which—

Figure 1 is a side view, parts broken away, 4c of a hanger or axle-frame embodying my invention; and Fig. 2 a top, and Fig. 3 a front, view of the independently-operated wedge.

The hanger or axle-frame A is of ordinary and well-known construction, and is shown simply to illustrate the application of my invention. The axle-box B, of usual construction, is placed astraddle of the axle C and arranged in the space between the vertical walls a of the hanger.

Between the sides of the box and the walls a of the hanger are placed the oppositely-dis-

posed wedges D and E. The wedges D are independently and adjustably connected with the top a' of the frame by appropriate devices, so that the one or the other can be adjusted to 55 shift the box to the front or to the rear when aligning corresponding boxes on opposite sides of the truck or car to allow for any irregularities of casting in either the frame or box or variation in the adjustment of the frame. It 6c is preferred to connect the wedges D with the frame by the bolts F, which pass through the frame and have their heads fitted in undercut recesses d in the tops of the wedges. The recesses do not extend across the full length of 65 the tops of the wedges, but terminate a short distance from one end, the end placed farther from the box to allow a limited movement of the wedges toward the box, and yet prevent their accidental displacement from the bolts 70 when once adjusted thereto, which will be readily comprehended by reference to Fig. 1 of the drawings. The ends of the bolts project above the frame and receive the nuts f, by which they are adjusted vertically and held in an ad-75 justed position.

The wedges E are carried by the plate G, which is common to each and forms the capplate to close the space between the lower ends of the walls of the hanger. The cap-plate has 80 grooves e near each end, in which corresponding ribs or flanges g of the frame fit and guide the plate and wedges in their movements when adjusted. A space is left between the capplate and the hanger to permit the progressive 85 adjustment of said plate and wedges to take up wear. The bolts H, passed through the ends of the cap-plate and screwed into the frame, serve to advance said plate when desired. The jam-nuts h hold the bolts against slacken-90 ing when once adjusted.

From the foregoing description, reference being had to the accompanying drawings, the operation of the several parts can be readily understood.

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

1. The combination, with the hanger and the box, of the series of oppositely-disposed 100 wedges located on each side of the box, substantially as and for the purpose specified.

2. The combination, with the hanger and the box, of wedges D, means, as bolts F, independently connecting them with the frame, wedges E, carried by a plate common to each, and means for adjusting said wedges E simultaneously, substantially as described.

3. The combination, with the frame and the box, of the wedges D, having an undercut recess, and the bolt having its head fitted in the recess and connecting the wedge with the frame.

4. The combination of the frame, the box, the wedges D, having undercut recesses, the bolts F, having their heads fitted in said re-

cesses, the wedges E, the cap-plate G, carrying wedges E, and having transverse grooves 15 near each end, the flanges g, projecting from the frame and fitting in said grooves, and the bolts H, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in 20 presence of two witnesses.

DELANO H. DUGAR.

Witnesses:

VAN BUREN HILLYARD, G. P. KRAMER.