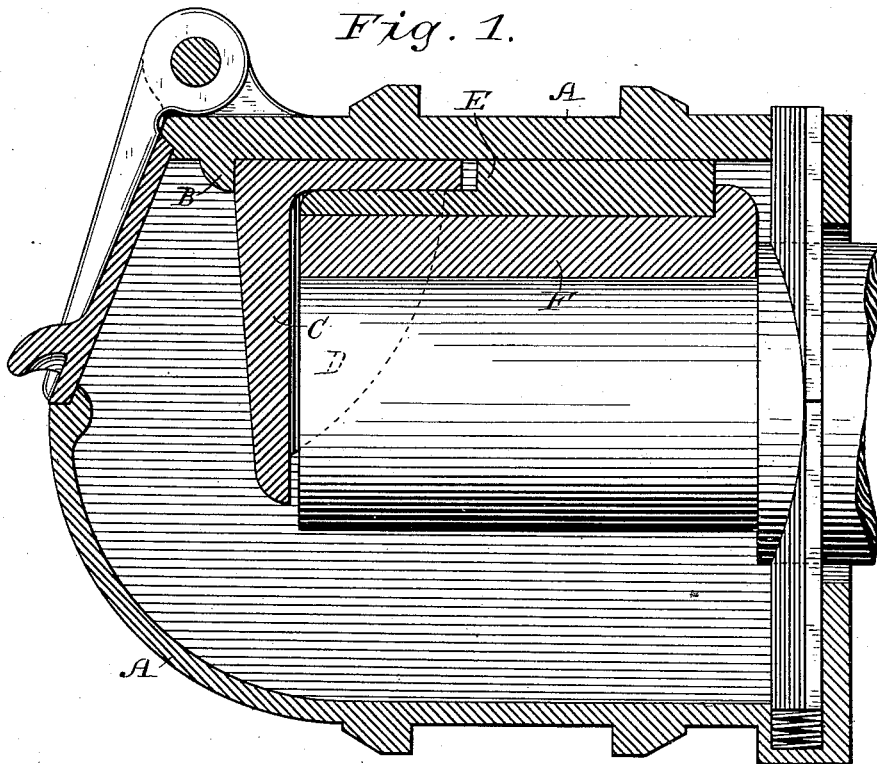


(No Model.)

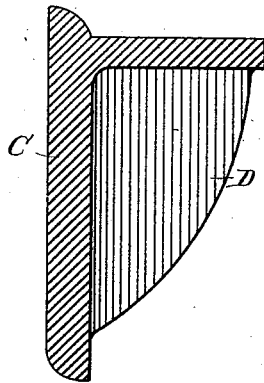
J. TIMMS.  
CAR AXLE BOX.

No. 345,458.

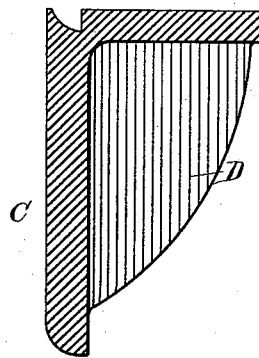
Patented July 13, 1886.



*Fig. 2.*



*Fig. 3.*



WITNESSES

*Ed. A. Newman.*  
*Al. C. Newman.*

INVENTOR

*James Timms.*

By his Attorneys

*Baldwin, Hopkins & Peyton.*

# UNITED STATES PATENT OFFICE.

JAMES TIMMS, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO B. F. REES,  
OF SAME PLACE.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 345,458, dated July 13, 1886.

Application filed April 5, 1886. Serial No. 197,862. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES TIMMS, of Columbus, in the county of Franklin and State of Ohio, have invented certain Improvements in Car-Axle Boxes, of which the following is a specification, reference being had to the accompanying drawings.

My improvements relate to a plate or end bearing, such in general character as illustrated in my Patent No. 319,643, dated June 9, 1885, and are improvements upon the end bearing and its connections shown in said patent.

The object of my invention is to simplify and economize the construction of the end bearing and its connections.

In the accompanying drawings, Figure 1 is a longitudinal vertical section of an axle-box containing my invention. Figs. 2 and 3 are sections of the right-angular plate, showing merely formal variations in holding lugs or recesses.

A indicates the car-axle box, provided with a lug or projection, B, upon its upper part, intended to hold the end bearing in position.

C indicates the end bearing, which is a right-angular piece provided with side flanges or braces, D.

E indicates the cap, and F the brass. The inner horizontal extension of the plate rests on a cut-away portion of the cap, as illustrated. Instead of having a projection, B, there might be a recess in the box, and a corresponding projection upon the corner of the plate, as shown in Fig. 2, or the form shown in Fig. 3 might be employed, these alterations in mode of holding the plate in place being merely formal. This right-angular plate and its connections with the box and cap are much simpler than those shown in my said patent, and are hence more economical to make, and are preferable practically to a T-shaped plate with its peculiar form, as shown in said patent.

Having thus described my improvement, what I claim to be new, and desire to secure by Letters Patent of the United States, is—

A right-angular end bearing having side flanges, and combined with the cap, brass, and box, and held in place by a lug and recess, substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

JAMES TIMMS.

Witnesses:

F. F. D. ALBERY,  
H. B. ALBERY.