

No. 769,130.

PATENTED AUG. 30, 1904.

J. E. COOPER.
JOURNAL BOX.

APPLICATION FILED MAR. 12, 1904.

NO MODEL.

FIG. 1.

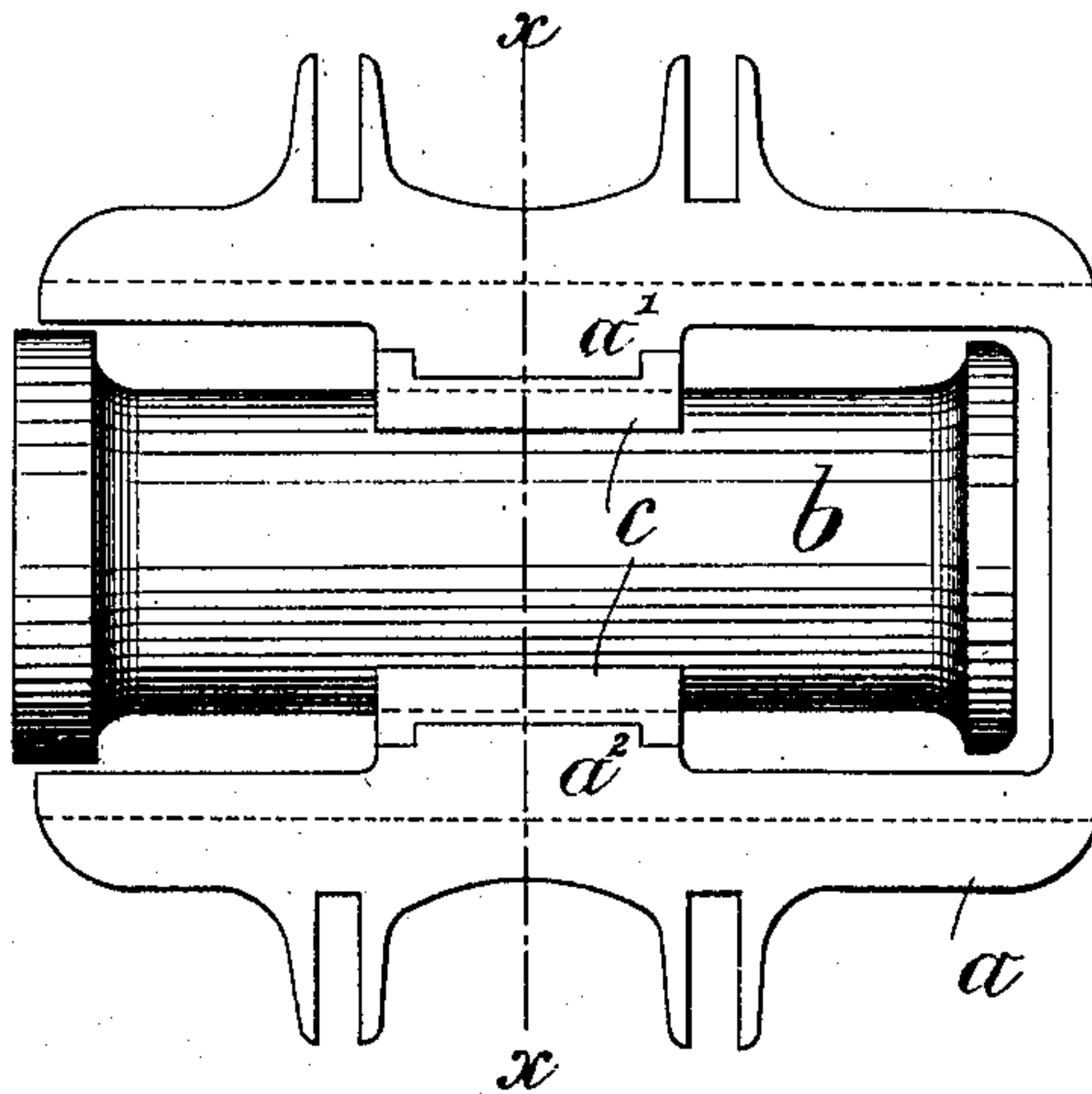
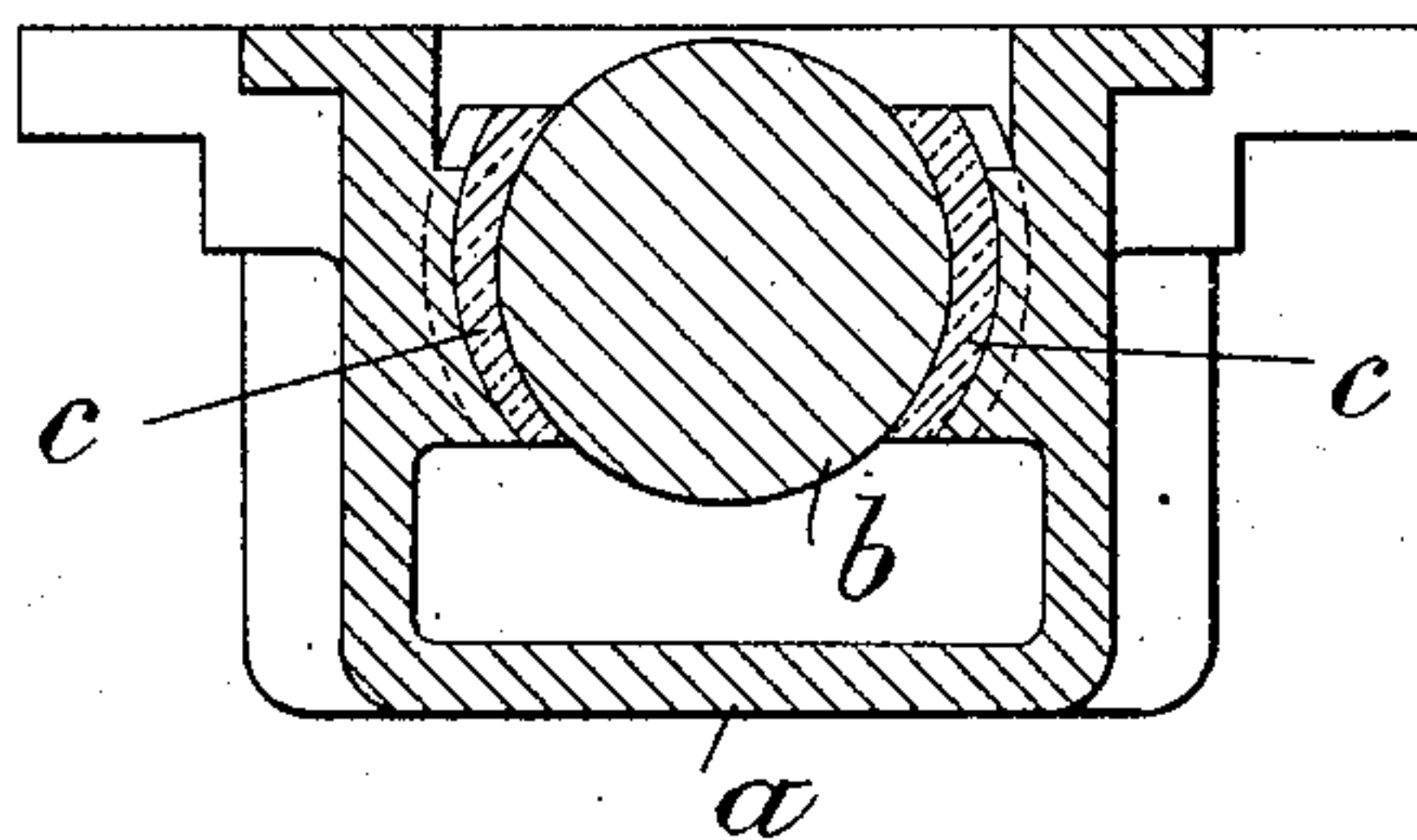


FIG. 2.



Witnesses.

Stephen Kinsta.
Geo. H. Dupre.

Inventor.

J. E. Cooper
by Wilkinson & Fisher
his Attorneys

UNITED STATES PATENT OFFICE.

JOHN EDWARD COOPER, OF STRATFORD, ENGLAND.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 769,130, dated August 30, 1904.

Original application filed March 14, 1903, Serial No. 147,843. Divided and this application filed March 12, 1904. Serial No. 197,900. (No model.)

To all whom it may concern:

Be it known that I, JOHN EDWARD COOPER, a subject of the King of Great Britain and Ireland, residing at 9 Chatsworth road, Stratford, in the county of London, England, have invented certain new and useful Improvements in Journal-Boxes; and I do hereby 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 appertains to make and use the same.

This invention relates to antifriction mechanism as applied to the axle-shafts of railway carriages or vehicles; and it consists in a new or improved combination of parts which are thought to have certain practical advantages, being a division of the application filed by me March 14, 1903, Serial No. 147,843, and in order that my invention may be clearly understood and readily carried into effect I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 is a detail plan view illustrating the journal-box for the main axle, corresponding to which Fig. 2 is a transverse sectional view taken on line *xx* of Fig. 1.

In the drawings a special feature of the journal-box *a* for the main axle *b* is the construction of same, which must be of sufficient width to allow the axle to pass freely into the box and is made with internal bearings *a'* *a''* on opposite sides of the axle-box, preferably in line with the transverse diameter. These internal bearings or supports for the brasses *c c* are of the circular form shown and are made to fit the back parts of the brasses, which must not exceed the semicircle and in practice are preferably rather less, the inside of the brasses being made to fit the main axle. The object of this

form of bearing is such that after the brasses are placed in position there can be no vertical or other dislocation of the main shaft, which is held rigidly in respect to such movement, but in rolling contact with the brasses until these are taken out, which can only be done by working them round the shaft clear of their bearings. The brasses are made slightly thicker at the top end for taking up wear, which can be done by removing metal from the bottom, thus allowing the brasses to lower as the wear takes place.

One advantage of this construction is that the brasses *c* are so shaped that they can be slipped into place and that they will retain their position by gravity and without the aid of supplemental fastening devices.

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

The combination of a shaft and a support therefor, said support including a journal-box provided with central projecting portions cut away at their outer edges and sectional bearings of less extent than a semicircle provided with recessed portions adapted to fit the projections on the box and with lugs adapted to fit into the cut-away portions of the journal-box, said bearings being fixed at the top and being adapted to be slipped into position in the journal-box and to be held in place by gravity, without the aid of supplemental fastening devices, substantially as described.

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

JOHN EDWARD COOPER.

Witnesses:

A. NUTTING,
H. D. JAMESON