

WILCOX & WILLS.

Car-Axle Bearing.

No. 93,151.

Patented July 27, 1869.

Fig. 1.

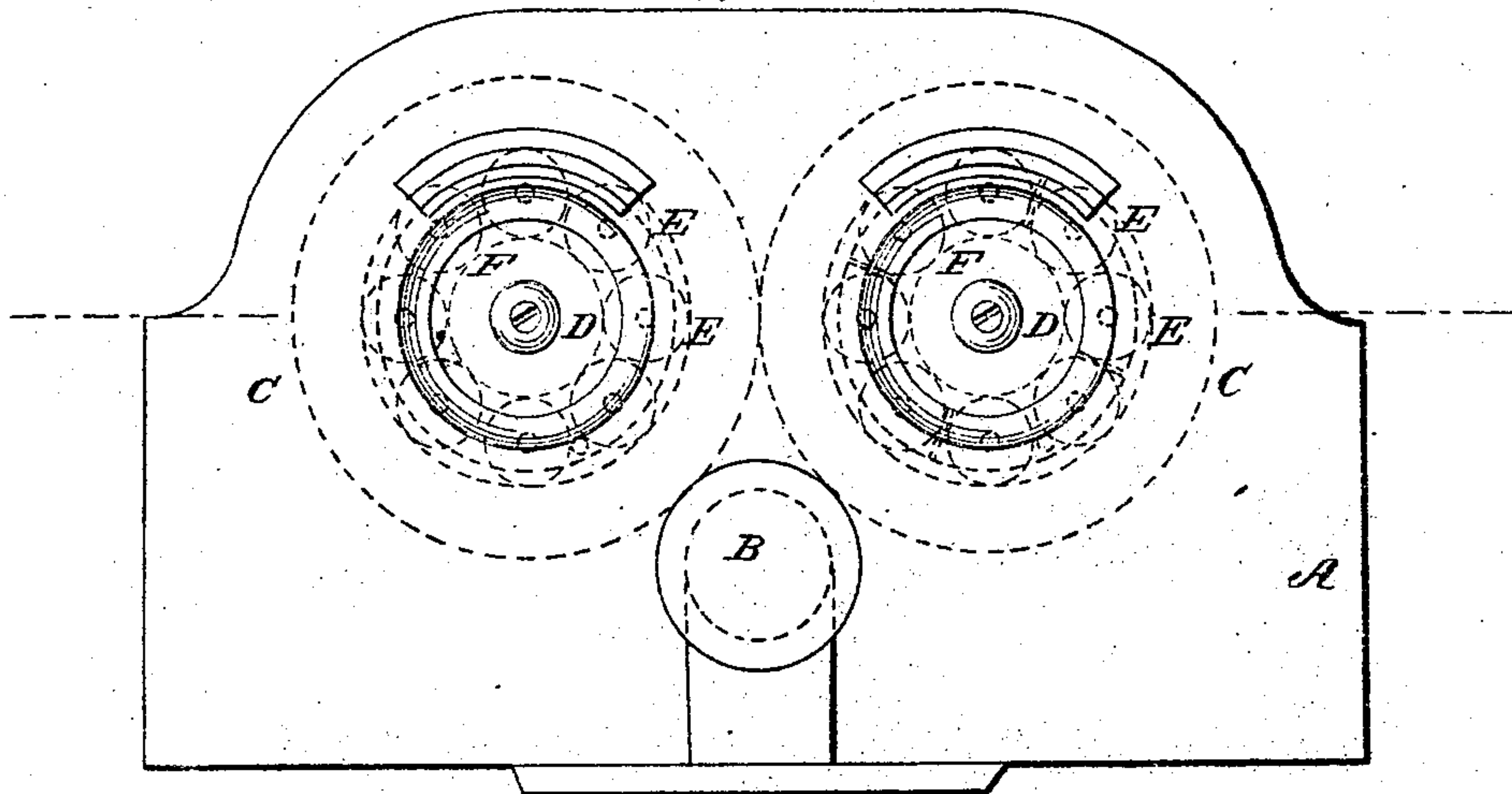


Fig. 2.

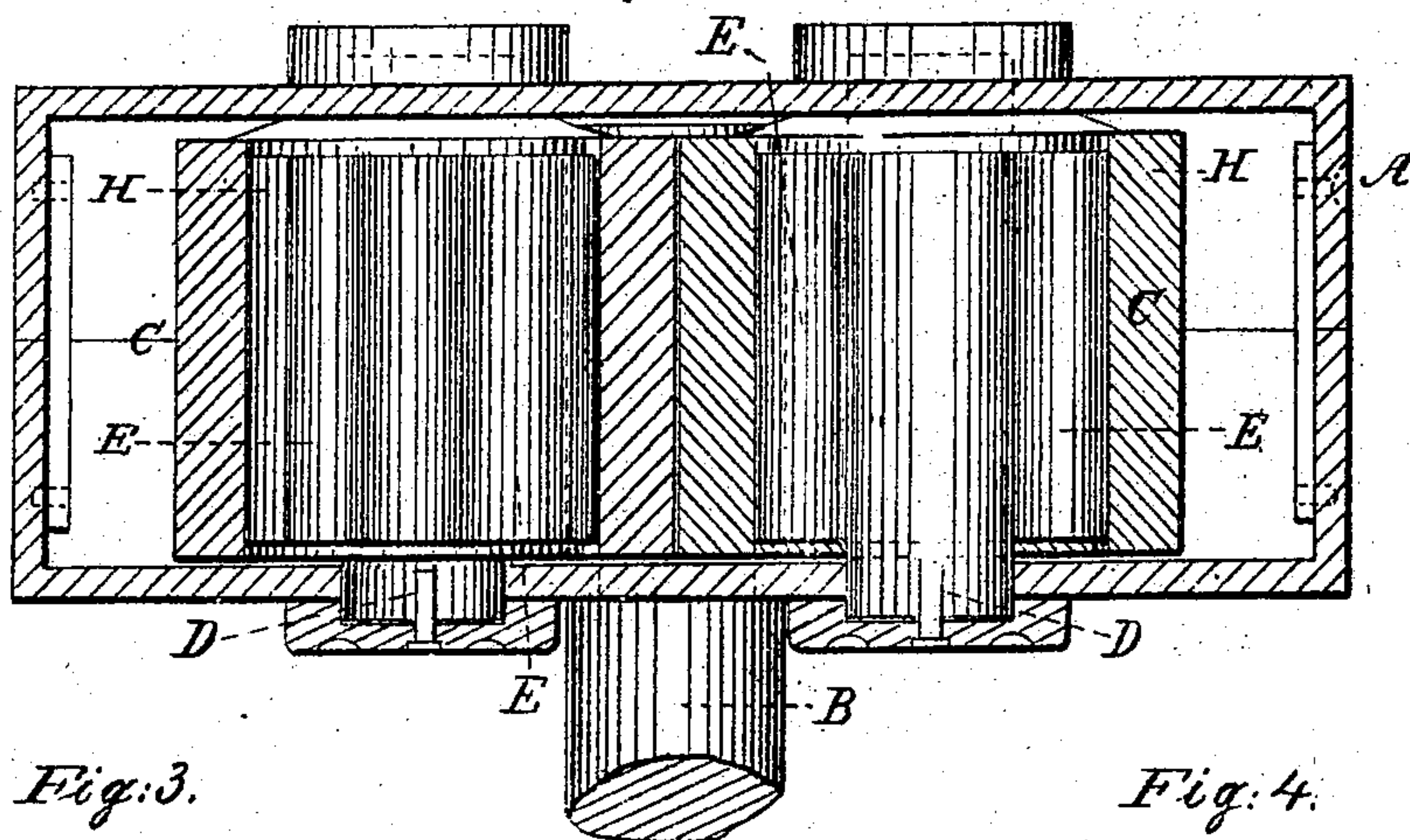


Fig. 3.

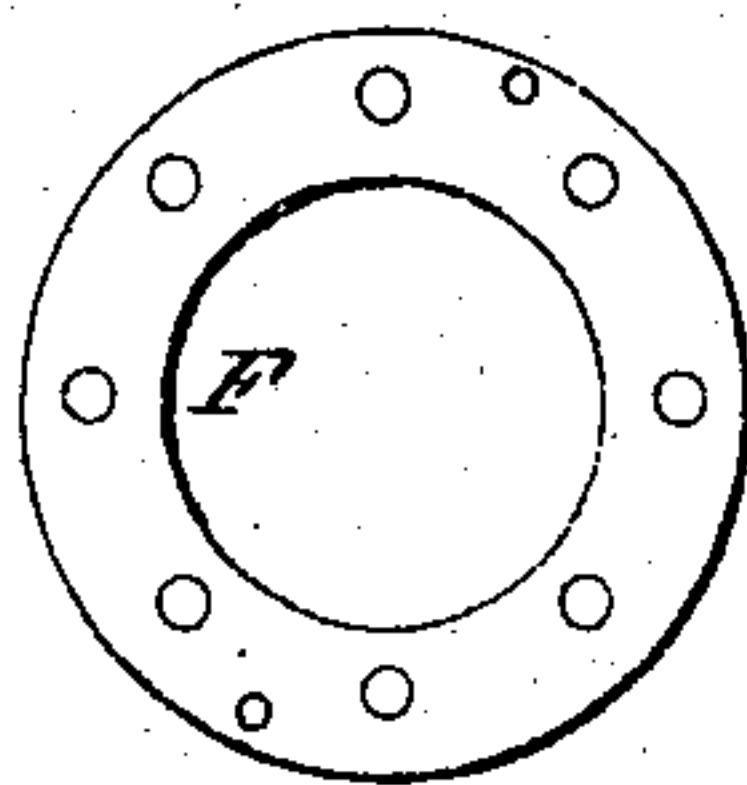


Fig. 5.

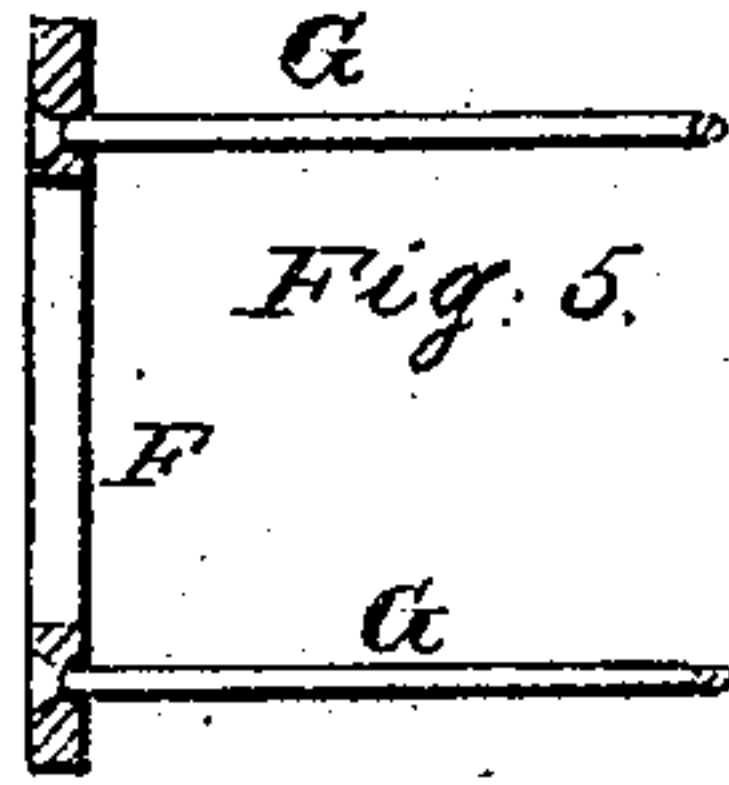
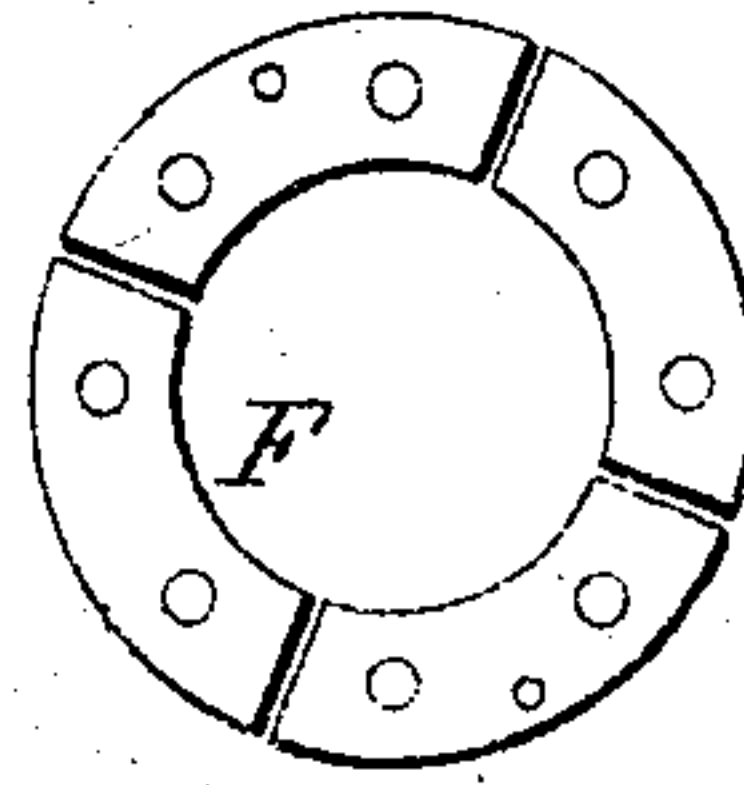


Fig. 4.



Witnesses;

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By their Atty.  
J. H. Peigant

# United States Patent Office.

WILLIAM E. WILCOX, OF PEORIA, AND T. H. WILLS, OF BEARDS-  
TOWN, ILLINOIS.

Letters Patent No. 93,151, dated July 27, 1869.

## IMPROVED RAILWAY-CAR-AXLE BEARING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, WILLIAM E. WILCOX, of Peoria, Peoria county, and T. H. WILLS, of Beardstown, Cass county, Illinois, have invented "new and improved Anti-Friction Rollers Revolving Inside of Cylinders for Car-Axle Boxes;" and we do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents an end view of the axle, cylinders, rollers, and box.

Figure 2, a top view of the same.

Figures 3 and 4 represent the end rings of the anti-friction rollers, either single or divided in sections.

Figure 5, the end ring or plate, with its connecting-rods.

The nature of our invention consists in the construction, arrangement, and combination of the cylinders above the car-axle, having anti-friction rollers on the inside of the cylinders, and revolving on sectional circular plates at each end.

The object of our invention is to lessen friction by arranging two cylinders that are hollow cylinders with stationary axles, having anti-friction rollers between the stationary axles and the cylinders, and the cylinders and rollers revolving around the stationary axles, and above the car-axle or journal of the car-axle, enabling the car-axle to run more freely, and for street-railway cars especially, as the draught of the

horses is lessened, and the cars are started with perfect ease.

A represents the car-axle box.

B, the car-axle or journal of the axle.

C, the hollow cylinders.

D D, the stationary axles, with the anti-friction rollers E E revolving around the axles D D, and inside of the revolving cylinders C C.

The rollers E E revolve on their journals in circular plates or sectional rings F F, as shown at fig. 4, but the rollers may revolve with solid, instead of sectional rings F, as shown at fig. 5.

The connecting-rods G are riveted to the rings F on each side of the rollers E E, as shown at fig. 5.

H H are bevelled washers revolving at each end of the cylinders, to assist the free movement of the cylinders and keep the rollers E to their places, to prevent them sliding to either side.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination of the car-axle B with the revolving hollow cylinders C above, having anti-friction rollers E on the inside, revolving on sectional rings F around the stationary axles D, with bevelled washers H at the ends, when arranged and operating as herein described and for the purposes set forth.

Witnesses:

J. FRANKLIN REIGART,  
EDM. F. BROWN.

W. E. WILCOX.  
T. H. WILLS.