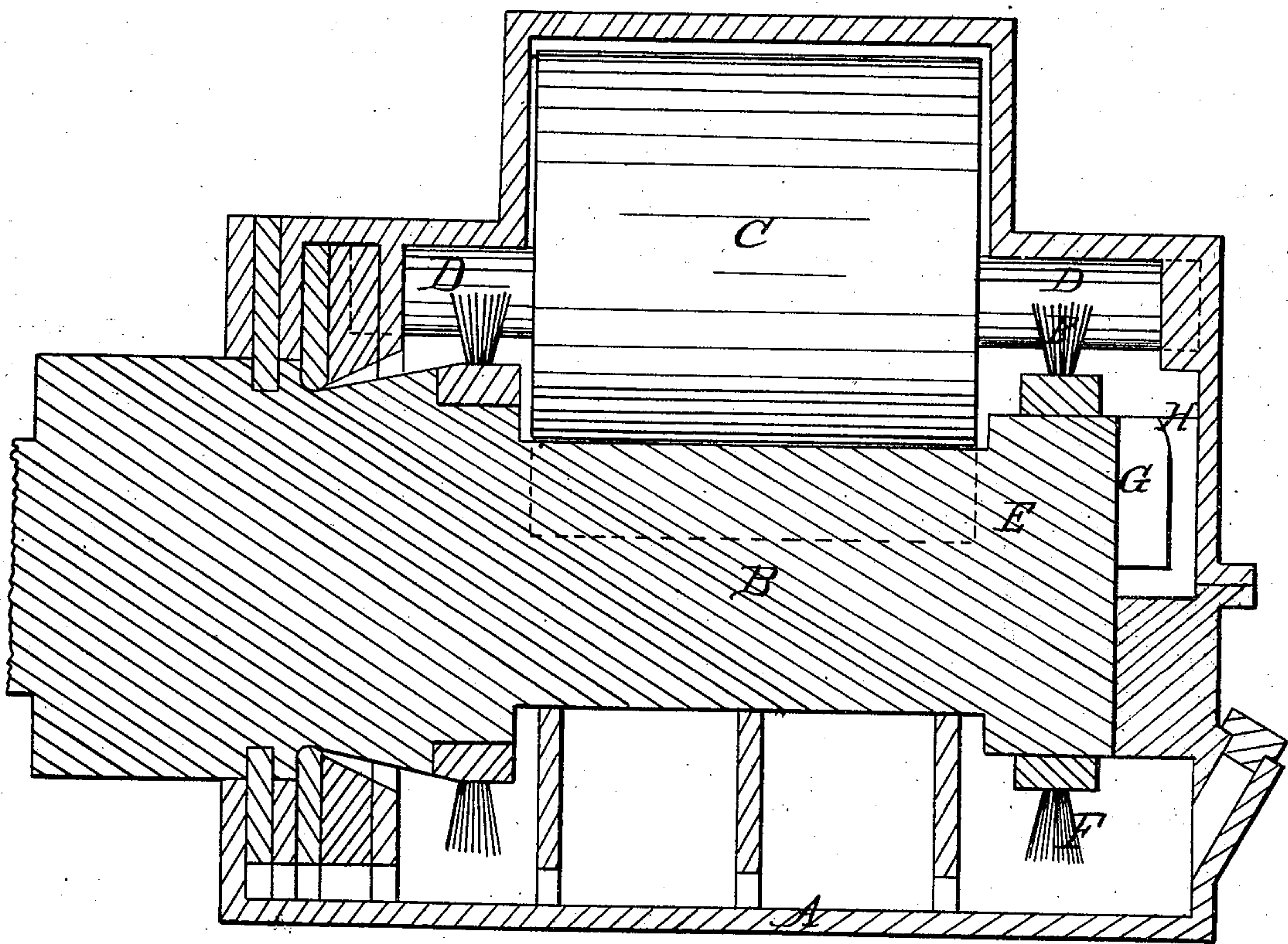


*H. Rice,*  
*Car Axle Box.*

*No. 29551.*

*Patented Aug. 7. 1860.*



*Witnesses*

*Sydney J. Hunt*  
*Napoleon B. Bryant*

*Inventor*

*Harvey Rice*



# UNITED STATES PATENT OFFICE.

HARVEY RICE, OF CONCORD, NEW HAMPSHIRE, ASSIGNOR TO JAMES H. DEMING AND T. H. JENKINS, OF NEW YORK N. Y.

## JOURNAL-BOX FOR RAILROAD-CARS.

Specification of Letters Patent No. 29,551, dated August 7, 1860.

*To all whom it may concern:*

Be it known that I, HARVEY RICE, of Concord, in the State of New Hampshire, have invented a new and useful Improvement in Journal-Boxes for Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification, which said drawing represents the said invention in vertical section.

The use of end bearings in the journals of railroad car axles, which are essential to the steady running of cars has heretofore been objectionable for the want of some mode of keeping the surfaces oiled. The centrifugal action tends constantly to carry the oil away from between the surface of the end of the journal and that part of the box which forms the end bearing, and therefore all attempts to supply the oil heretofore made have failed.

The object of my invention is to insure a constant supply of oil to the surface of the end bearing, and to this end my said invention consists in combining with the usual end bearing of railroad axles and boxes, brushes or other projections on the periphery of the journal, and near the end thereof, which in the rotation of the axle shall dip into and carry up the oil, or other lubricating liquid, from the lower part of the box, and a passage way from the upper surface down to and through the center of the end bearing so that the oil, or other lubricator, so carried up shall fall onto the upper surface of the end bearing and run down the passage way to the center of the end bearing.

In the accompanying drawing (A) represents a railroad box and (B) the axle journal running under friction rollers (C) (one only shown in the drawing,) the journals (D, D) of which are fitted to suitable bearings in the upper part of the box (A). Be-

yond the outer end of the friction rollers (C) the journal is enlarged as at (E), and from the periphery of this enlargement numerous wires or bristles (F) project in the form of a brush, and in the rotation of the axle these wires or bristles dip into the oil, or other lubricating liquid, in the lower part of the box and carry it up and apply it to the outer journals (D), of the friction rollers (C). The oil so applied, or rather so carried up, (for although I prefer to use friction rollers, the use of them makes no part of my invention) is scattered about in the upper part of the box, and a portion of it falls on the upper surface of the end bearing (G), and thence descends in a channel way (H), leading to and passing out through the center thereof to supply the oil to the end surface of the axles. In this way the end bearing is constantly supplied with oil while the car is in motion, for although the centrifugal action due to the rotation of the axle, constantly carries the oil from the center to discharge it at the periphery, nevertheless the supply at the center will be constant and will keep the end bearing fully supplied.

Although I have pointed out the mode of construction which I prefer and which I have tried with success, I do not wish to be understood as limiting my claim of invention to such mode of application.

What I claim as my invention, and desire to secure by Letters Patent, is—

Combining with the end bearings of the journal and box, oil lifting projections on the journal, and the channel way for receiving the oil and leading to and discharging it at or near the center of the end face of the journal, substantially as and for the purpose specified.

HARVEY RICE.

Witnesses:

LYMAN T. FLINT,  
NAPOLEON B. BRYANT.