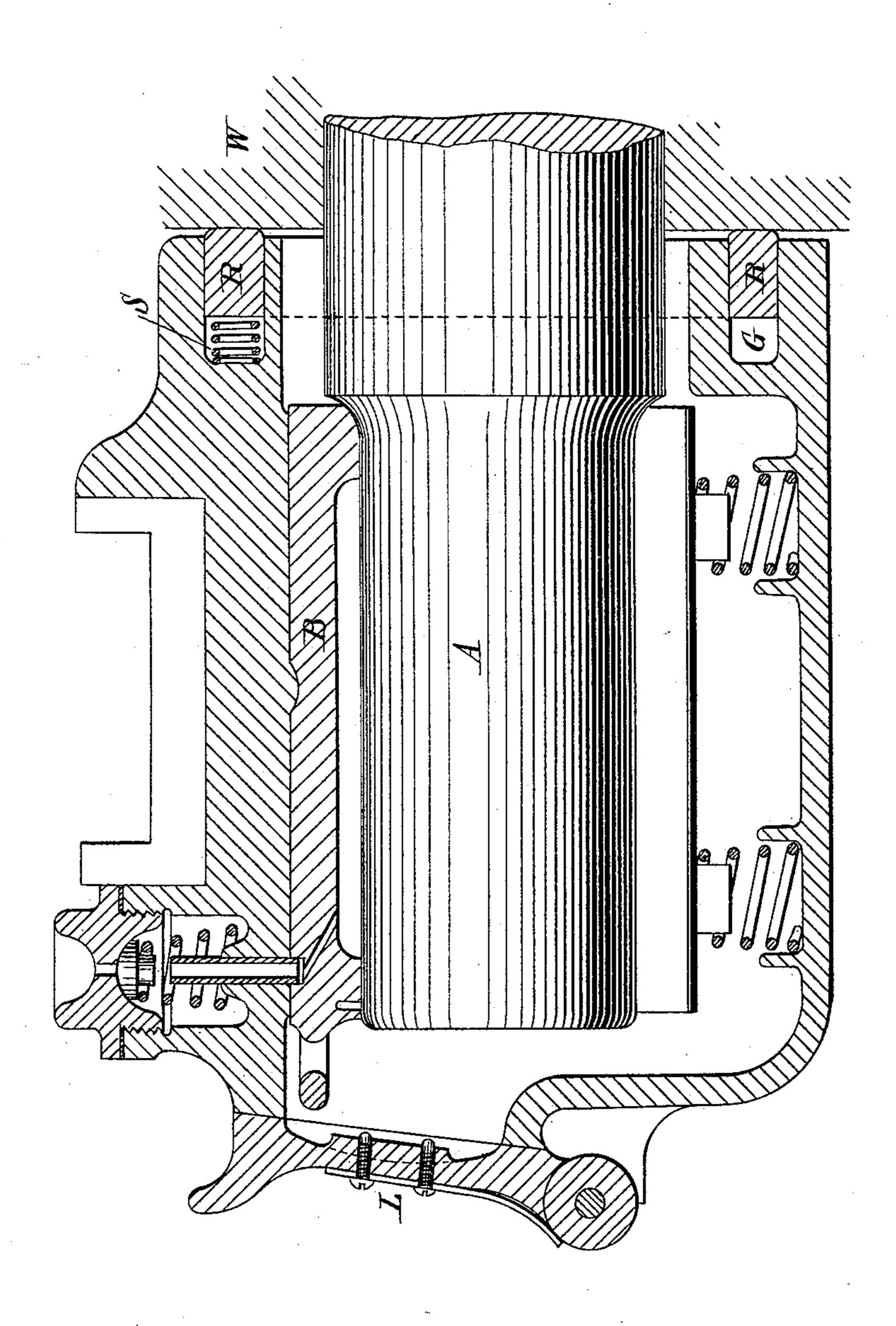
(No Model.)

D. MACNEE.

CAR AXLE BOX.

No. 379,873.

Patented Mar. 20, 1888.



Mitnesses: Jakkenford. Geo. N. Rea. Daniel Macreel. By James L. Norms.

## United States Patent Office.

DANIEL MACNEE, OF NO. 2 WESTMINSTER CHAMBERS, VICTORIA STREET, COUNTY OF MIDDLESEX, ENGLAND.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 379,873, dated March 20, 1888.

Application filed January 26, 1888. Serial No. 261,941. (No model.)

To all whom it may concern:

Be it known that I, Daniel Macnee, a subject of the Queen of England, residing at No. 2 Westminster Chambers, Victoria Street, in 5 the county of Middlesex, England, engineer, have invented an Improvement in Axle-Boxes for Railway Rolling-Stock, of which the following is a specification.

My invention relates to means of preventing to access of dust or grit to the axle-boxes of railway rolling-stock, and so preventing, to a large extent, much of the friction and wear which result from the entrance of gritty particles mostly at that side of the box which is next to the 15 wheel. For this purpose I form in the side of the box next to the wheel a circular groove concentric with the axle, and in this groove I insert a ring, which may be of soft metal or alloy or of iron or hard wood, with springs ar-20 ranged in the groove behind it, so as to press it outward against the boss of the wheel.

The accompanying drawing is a longitudinal section of an axle-box of ordinary construction modified according to my invention.

A is the axle; B, the bush.

W is part of the boss of one of the running wheels, against which the ring R is pressed by several springs, S, arranged behind it in the circular groove G, which is formed in the in-30 ner face of the axle-box. The ring R, thus

pressed against the boss W of the revolving wheel, and being capable of moving to and fro with it in the transverse oscillations of the axle, forms a joint practically tight, which prevents access of dust or grit on the inner side of the 35 axle-box, the outer side of which is closed by a cover and lid, L, in the usual way.

Having thus described the nature of my invention and the best means I know of carrying it out in practice, I claim—

In combination with an axle box for railway rolling-stock, a packing-ring fitted in a groove formed in the inner side of the box and pressed against the boss of the running wheel by springs arranged in the groove behind the said ring, 45 substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 13th day of January, 50 A. D. 1888.

DAN. MACNEE.

Witnesses:

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