

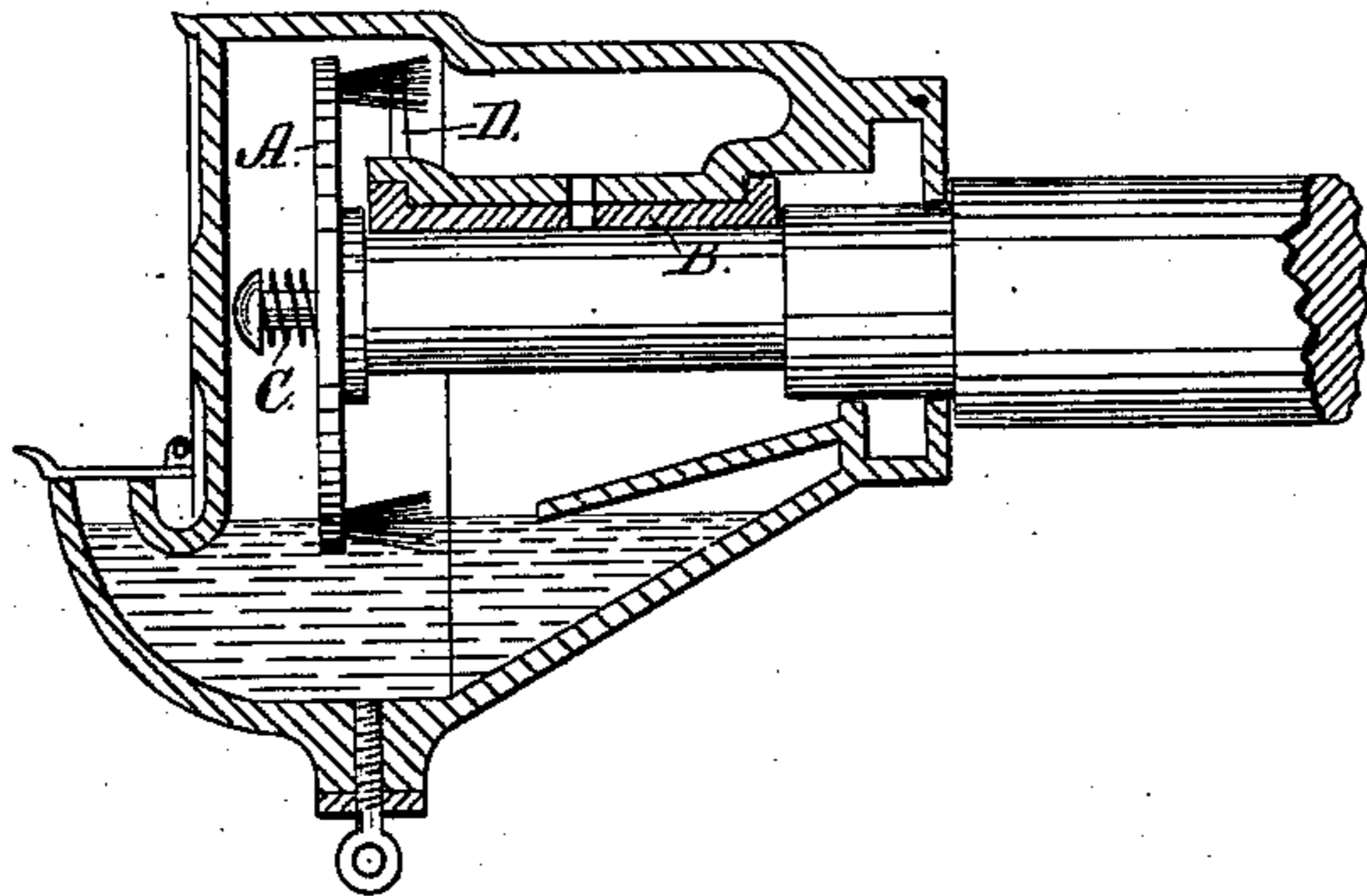
(No Model.)

I. N. SNEDECOR.  
AXLE LUBRICATOR.

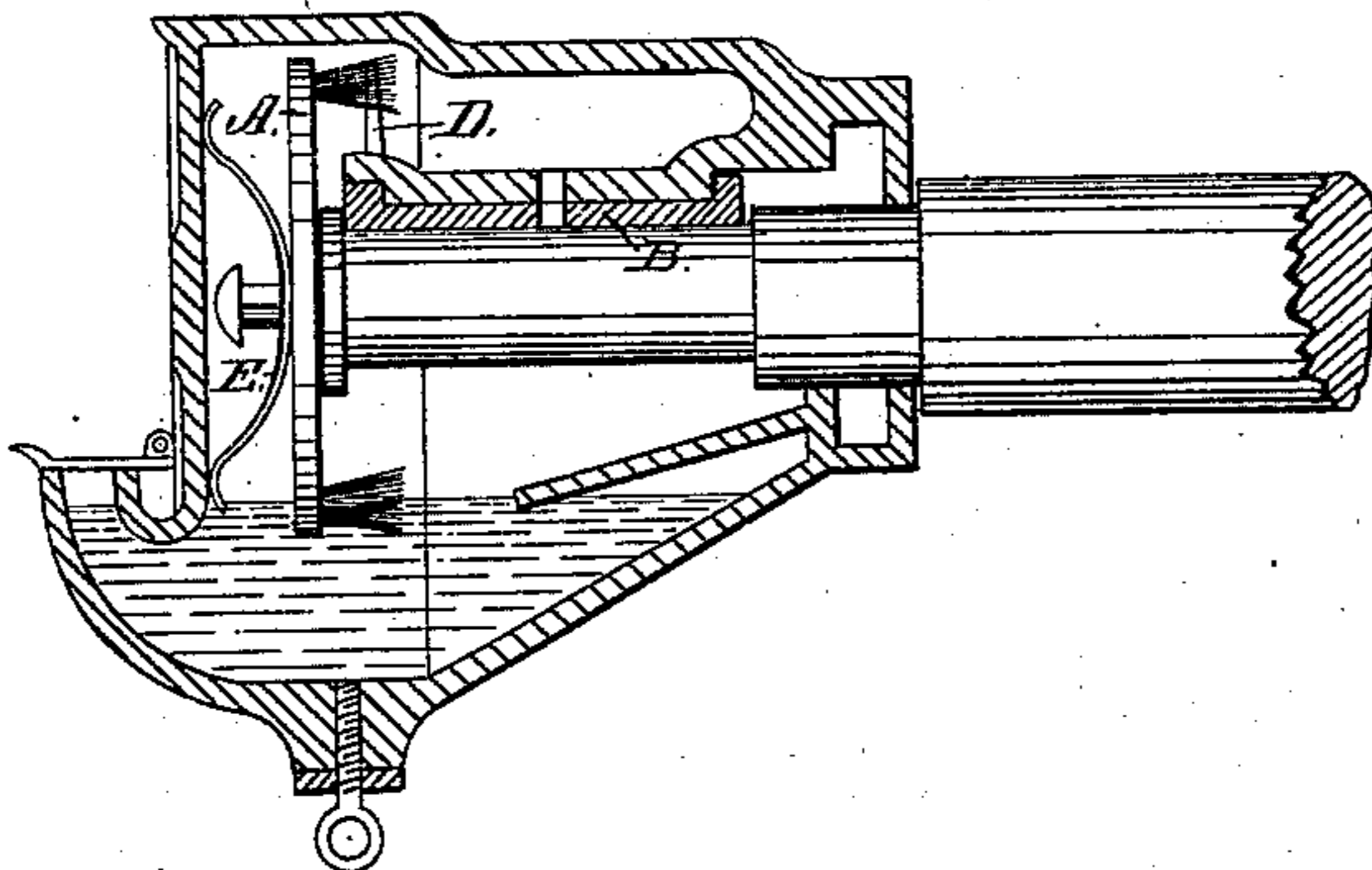
No. 248,225.

Patented Oct. 11, 1881.

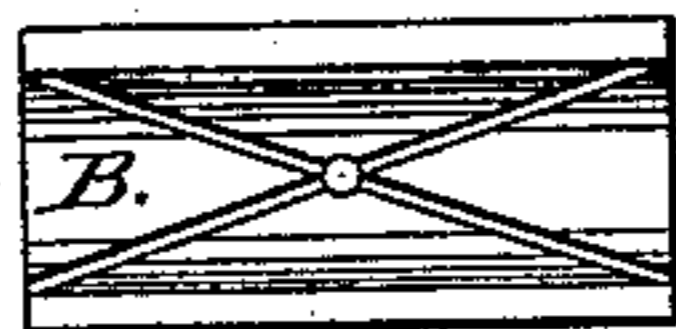
*Fig. 1.*



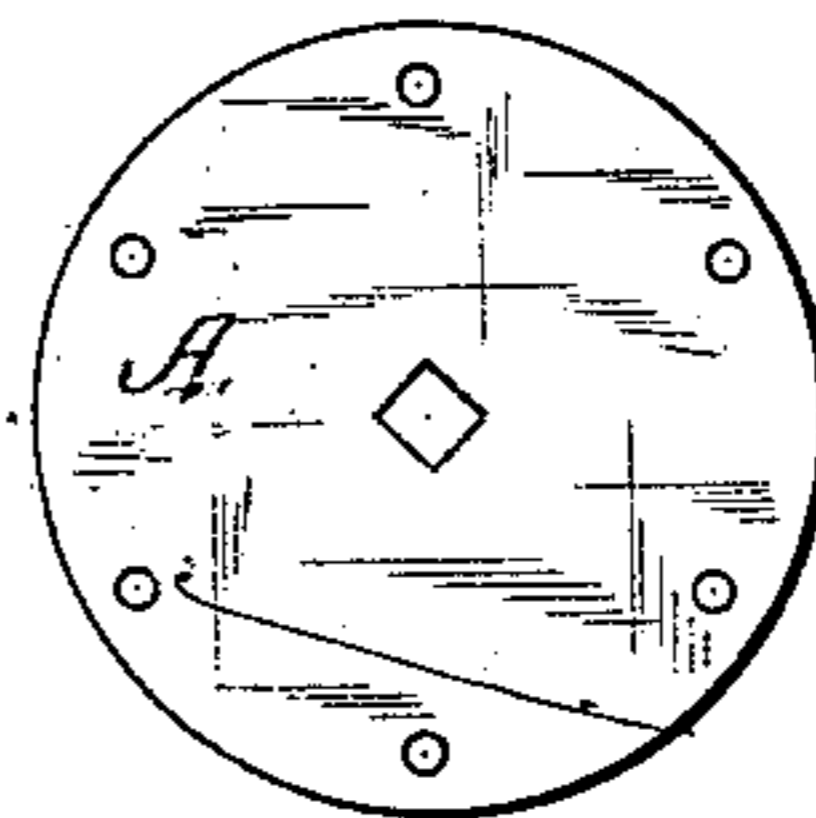
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

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*I. N. Snedecor*  
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# UNITED STATES PATENT OFFICE.

ISAAC N. SNEDECOR, OF GAINESVILLE, ALABAMA.

## AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 248,225, dated October 11, 1881.

Application filed May 31, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC NEWTON SNEDECOR, of Gainesville, in the county of Sumter and State of Alabama, have invented a new and useful Improvement in Axle-Lubricators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates particularly to axle-lubricators for railway-cars, in which the oil is conveyed from a reservoir beneath the axle to one above it by means of a suitable rotating device attached to the end of the axle.

My improvement consists in the employment of a brush-wheel and pin, and the peculiar means of attaching the same to the end of the axle and in a diagonally-grooved axle-box, as hereinafter described.

In the accompanying drawings, Figure 1 is a longitudinal section of an axle-box, showing my improvements; Fig. 2, a similar view, showing a modification, and Figs. 3 and 4 details.

Heretofore self-lubricating axle-boxes having a rotating device for conveying the oil to the top of the axle have been constructed with a small wheel having recesses on its inner face and rigidly attached to the end of the axle. As thus constructed a slight longitudinal oscillation of the axle is sufficient to strain or displace the said rotating device, and the cups or recesses in said device are calculated to supply the oil more copiously than necessary.

To overcome these objections I employ a brush-wheel, A, consisting in a disk made somewhat larger than the end of the axle and provided on its inner face, near its outer rim, with bunches of bristles arranged at suitable intervals. This brush-wheel is attached to the end of the axle by means of a square pin or its equivalent for the purpose of insuring its rotation with the axle of the car. At the same time the brush-wheel is allowed to move freely upon the pin in a lateral direction to accommodate itself to the oscillation of the

car, whereby it is prevented from being strained or displaced. A spiral spring, C, secured on the outer end of said pin, presses the brush-wheel against the end of the axle, so that the oil will be discharged into the reservoir at the top of the box. A suitable pin, D, is arranged in the reservoir at the top, against which the brushes strike to discharge the oil. By this means the oil is thrown farther into the reservoir than where it is simply poured out of cups, and consequently the brush-wheel may be used with a reservoir of almost any construction.

As a modification of my invention a bow-shaped spring, E, may be used for pressing the rotating elevator against the axle-box. This spring I prefer to arrange with its bow against the disk and its ends against the inner surface of the housing.

It is obvious that my improved method of attaching the brush-wheel is equally as well adapted for use upon the usual disk having cups or recesses, as above described.

The box B which fits on top of the axle is provided with two grooves cut diagonally across the under surface from corner to corner, so that they will intersect each other at the vertical canal leading through said-box to the reservoir above it. These grooves will convey the oil from the base of said vertical canal diagonally along the axle.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In an axle-lubricator, a brush-wheel secured to the end of an axle by a square pin and suitable spring, in combination with a pin arranged in a receiving-reservoir and a diagonally-grooved box, substantially as shown and described.

ISAAC NEWTON SNEDECOR.

Witnesses:

C. U. SILLIMAN,  
W. V. STEWART.