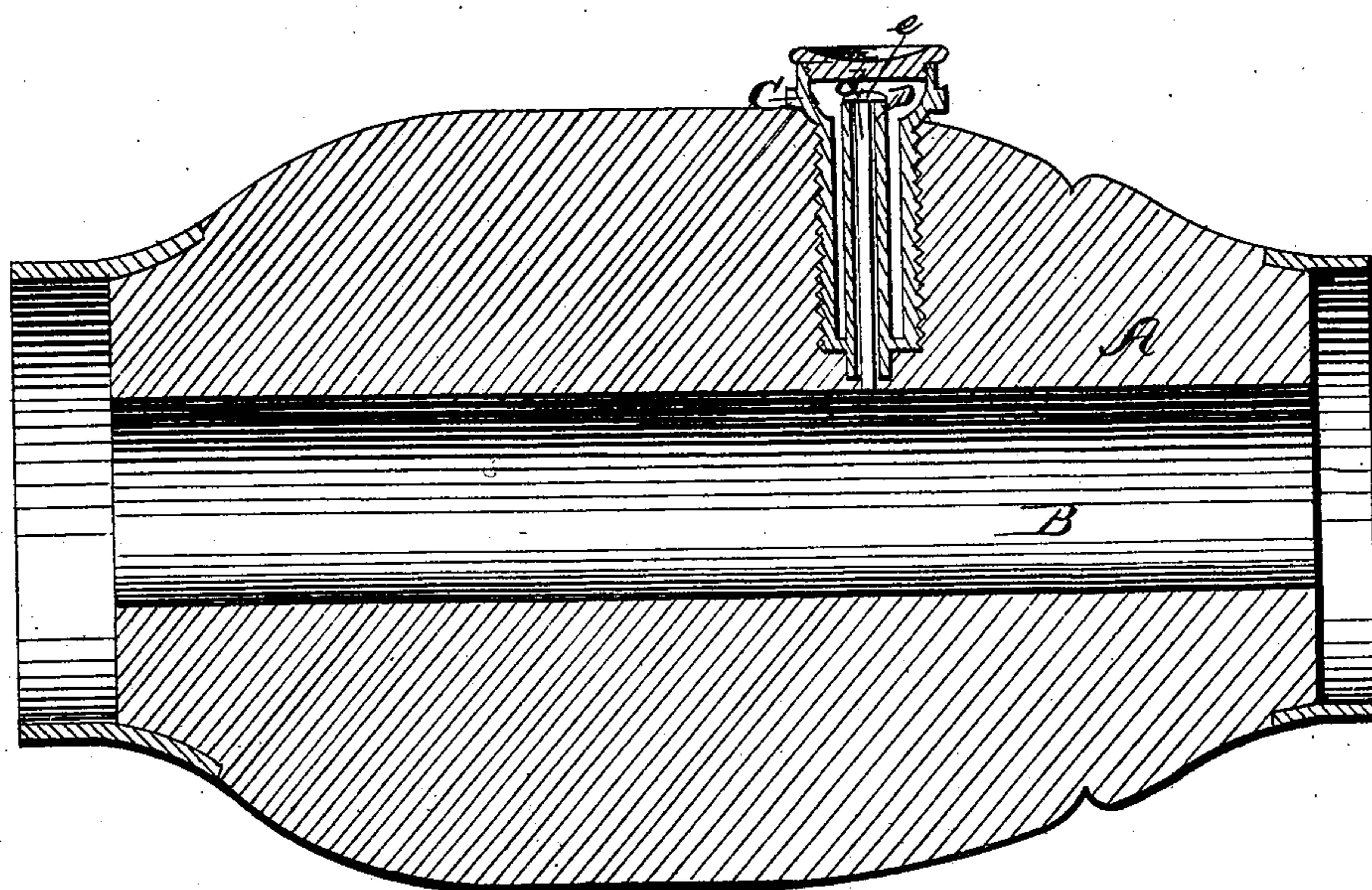


W. J. DREW.  
Vehicle Axle-Lubricators.

No. 207,493.

Patented Aug. 27, 1878.



Witnesses:  
A. C. McArthur,  
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Inventor:  
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By

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# UNITED STATES PATENT OFFICE.

WALTER J. DREW, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR OF ONE-HALF  
HIS RIGHT TO WILLIAM M. ROBINSON, OF SAME PLACE.

## IMPROVEMENT IN VEHICLE-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **207,493**, dated August 27, 1878; application filed  
June 25, 1878.

*To all whom it may concern:*

Be it known that I, WALTER J. DREW, of the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Oil-Cups for Wheeled Vehicles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which the figure is a vertical longitudinal section of the hub of a wheel, showing the application of my improved lubricator.

The nature of my invention relates to the lubrication of vehicle-wheels; and consists in an oil receptacle or tube recessed in the hub of the wheel, and provided with an inner tube connecting with the interior of the hub, and in which is placed a loose rod which plays back and forth with the motion of the hub, alternately opening and closing the tube and conveying the lubricating-fluid to the axle, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation.

In the accompanying drawing, A represents the hub of a vehicle-wheel, having the usual opening B for the reception of the axle-box. In one side of the hub is recessed the oil-receptacle C, closed at the top by a screw-cap or other suitable device. In the center of this cup C is a tube, D, extending upward nearly

to the top of the cup and downward through the bottom of the cup to the axle.

A headed rod, *d*, is placed loosely in the tube D, and as the hub revolves and the cup comes on the under side the rod falls down against the cap or top of the cup, and is immersed in the oil. As the cup again comes uppermost the rod falls back to its place, the head *e* closing the top of the conducting-tube D and preventing the escape of oil in the cup, while that which adheres to the rod is conducted to the axle by the sliding motion of the rod. By this device the wheel while in motion is supplied with oil sufficient to keep it always well lubricated, and should it be stopped while the cup was underneath no oil can run out and escape, while if stopped while the oil-cup is elevated the head *e* on the rod effectually closes the tube and accomplishes the same result.

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

The oil-receptacle C, formed with the conduit-tube D, having loose rod *d*, in combination with a revolving hub, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

WALTER J. DREW.

Witnesses:

WM. M. ROBINSON,  
S. S. PARR.