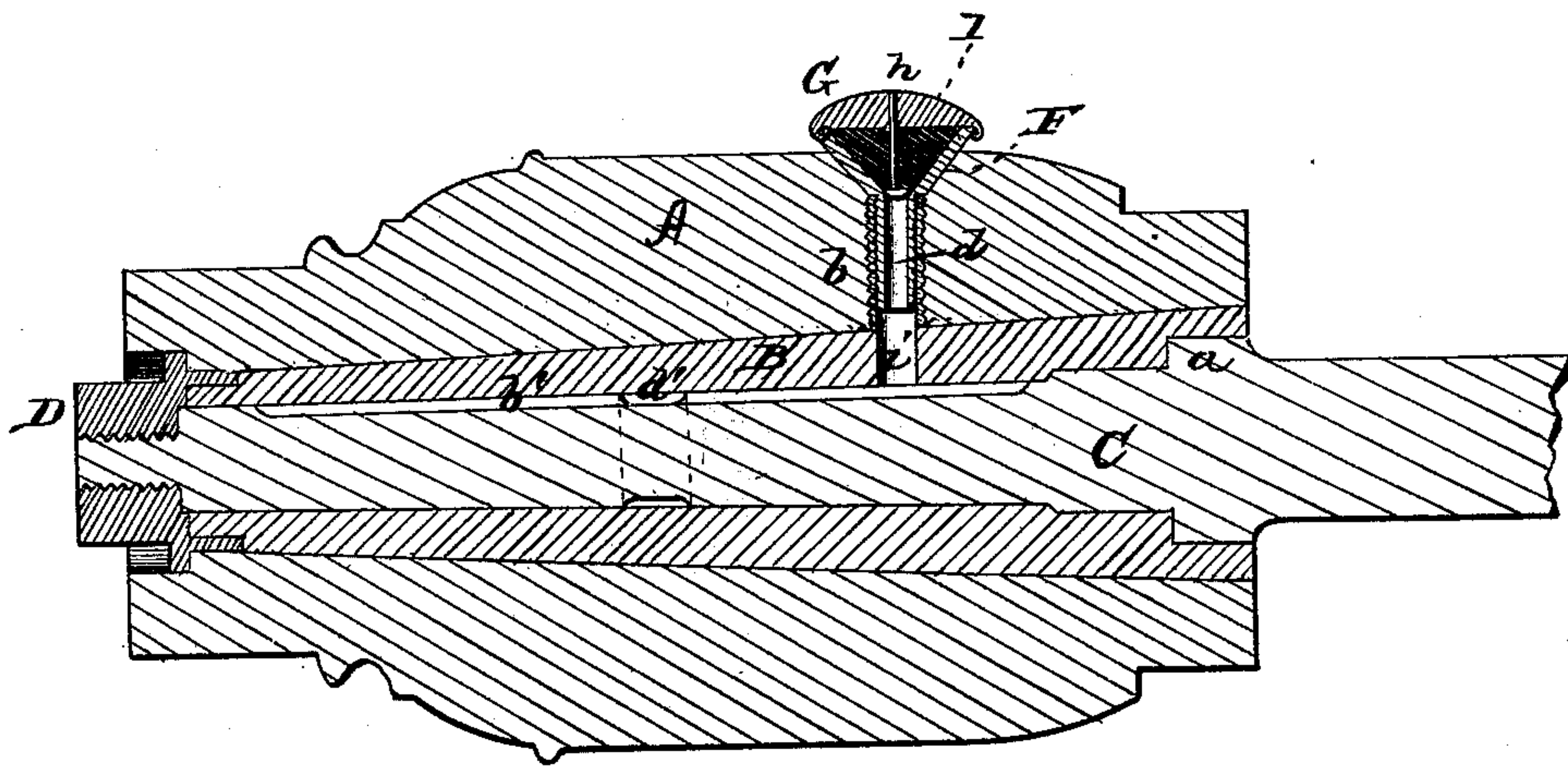


H. PATTENGILL.
Vehicle-Axle Lubricator.

No. 205,899.

Patented July 9, 1878.



WITNESSES
Frank L. Curaud
By *[Signature]*

INVENTOR
Horace Pattengill
Attorneys
[Signature]

UNITED STATES PATENT OFFICE.

HORACE PATTENGILL, OF SCHOOLCRAFT, MICHIGAN.

IMPROVEMENT IN VEHICLE-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **205,899**, dated July 9, 1878; application filed April 20, 1878.

To all whom it may concern:

Be it known that I, HORACE PATTENGILL, of Schoolcraft, in the county of Kalamazoo, and in the State of Michigan, have invented certain new and useful Improvements in Oilers for Vehicle-Axles; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a lubricator for carriage-wheels, 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, referring to the annexed drawing, which represents a longitudinal section of a carriage-axle and wheel-hub embodying my invention.

A represents the hub, with axle-box B secured therein. C is the spindle, with collar *a* at its inner end and nut D at its outer end to hold the wheel on the spindle. The spindle C is on top provided with a longitudinal groove, *b'*, and also one or more circumferential grooves, *d'*, to form oil-passages.

Through the hub A, either on the inner or outside of the spokes, is bored a hole, through which is screwed a tube, *b*, the inner end whereof coincides with an opening, *i*, in the axle-box B, and is intended to remain permanently in the hub.

F represents a funnel-shaped cup, provided at its inner end or apex with a short tube, *d*, which is to be screwed into the tube *b* in the hub, the cup itself fitting in a countersink or seat made in the hub at the end of the tube *b* in such a manner that the cup will project but slightly, if at all, beyond the surface of the hub.

The cup F is provided with a cover, G, which is hinged to the cup on one side and fastened by a spring-catch at the other. To this cover on the under side is, by a central rivet or bolt, *h*, fastened a conical plug, I, of vulcanized rubber, to form an oil-tight joint when the cover is closed.

The axle can be oiled at any time without taking the wheel off, and when the cover is closed over the cup no oil can escape.

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

The oil-reservoir F, having the extension or tube *d*, in combination with the externally and internally threaded tube *b*, forming a permanent seat for said tube *d* in the hub, as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of March, 1878.

HORACE PATTENGILL.

Witnesses:

G. A. WATKINS,
LOU. M. HIND.