L. JOHNSON.

AXLE-LUBRICATOR.

No. 193,962. Patented Aug. 7, 1877.

Fig. 1.

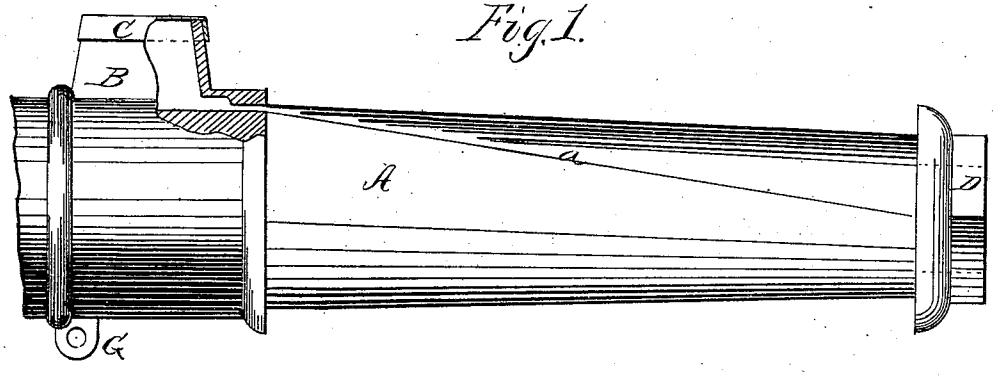


Fig 2

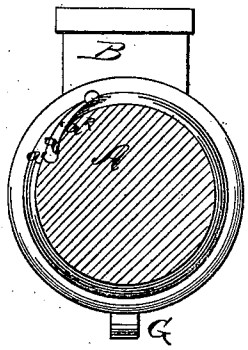
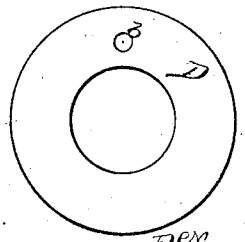


Fig. 3.



Witnesses:

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per

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UNITED STATES PATENT OFFICE.

LENSON JOHNSON, OF VINCENNES, INDIANA.

IMPROVEMENT IN AXLE-LUBRICATORS.

Specification forming part of Letters Patent No. **193,962**, dated August 7, 1877; application filed June 23, 1877.

To all whom it may concern:

Be it known that I, LENSON JOHNSON, of Vincennes, in the county of Knox and State of Indiana, have invented certain new and useful Improvements in Axle-Lubricators; 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.

The nature of my invention consists in the construction and arrangement of an axle-skein or spindle with oiling device, 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 drawings, in which—

Figure 1 is side elevation, partly in section. Fig. 2 is a transverse section, and Fig. 3 is a detail view of the nut D.

A represents an axle-skein or spindle of any ordinary form, provided on the side or top at the butt-end with an oil-reservoir, B, having a cap or cover, C, of sheet or other metal.

From the reservoir B the oil flows the entire length of the skein A through a groove, *a*, made therein, and running quartering or spiral, as shown. The lower side a^1 of this groove extends in a radial direction, while the upper side a^2 is beveled, so as to facilitate the flowing in of the oil into the groove as it is carried around the skein by the revolution of the wheel.

D is the nut or tap on the end of the spindle. In this tap is made a hole, *b*, at such a point that when the tap or nut is reversed or turned forward said hole may come in line or coincide with the groove *a*, for the purpose of inserting a wire or instrument to probe the groove, thereby cleansing the same, and removing any obstructions in the groove without removing the wheel. When the nut D is turned to its proper place the hole *b*, will be away from the end of the groove *a*, thus preventing the oil from running out.

At the butt-end of the skein or spindle, on the under side, is a perforated projecting lug, G, for the purpose of attaching the stay-chains. This lug may be either cast on or attached to the skein.

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

1. The tap or nut, D, provided with the hole *b*, in combination with an axle-skein or spindle, A, having oil-groove *a*, substantially as and for the purposes herein set forth.

2. The combination of the axle-skein A with exterior spiral groove *a*, the reservoir B with cover C, and the nut D with hole *b*, all substantially as and for the purposes herein set forth.

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

LENSON JOHNSON.

Witnesses:

M. P. GHEE,

A. H. JOHNSON.