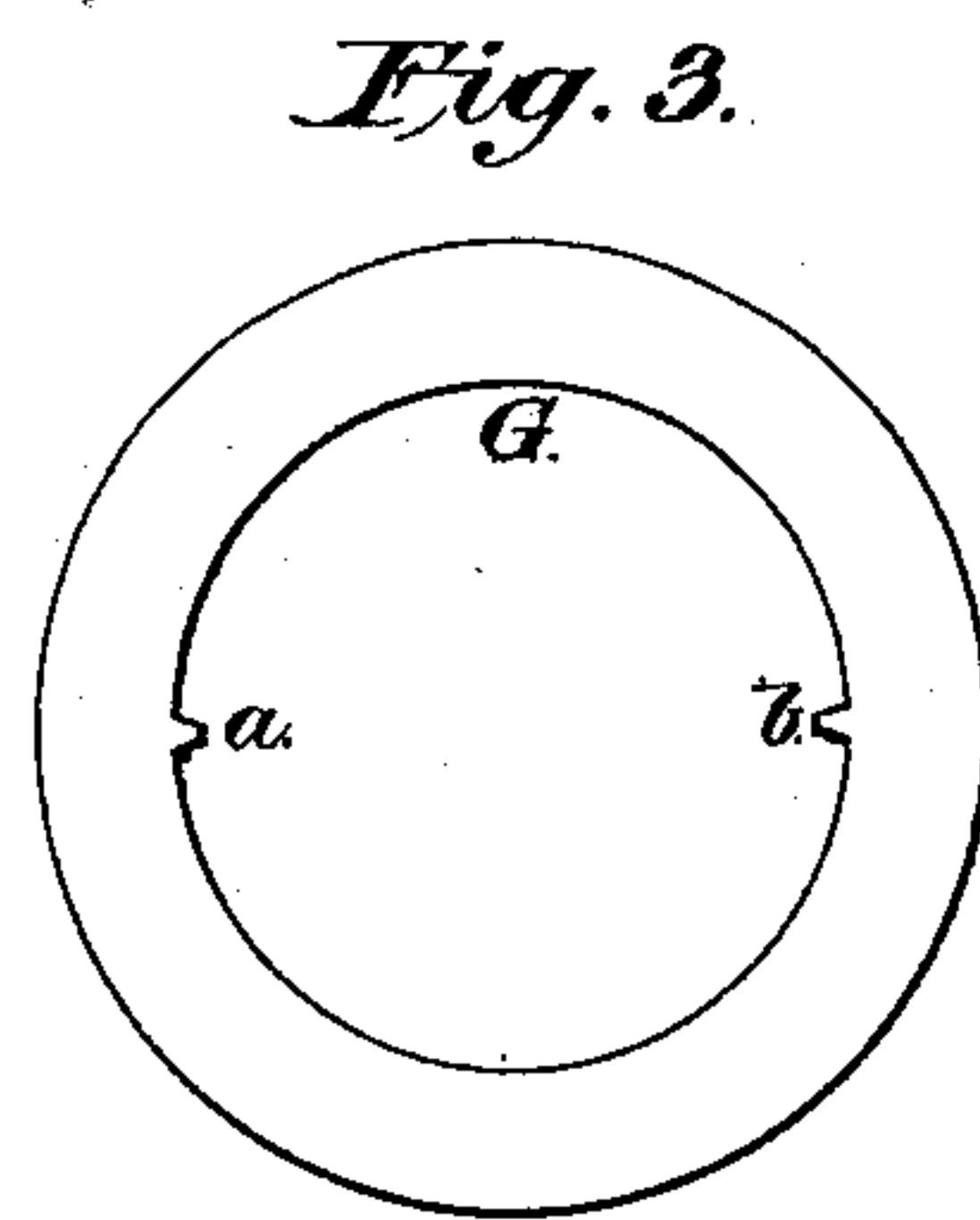
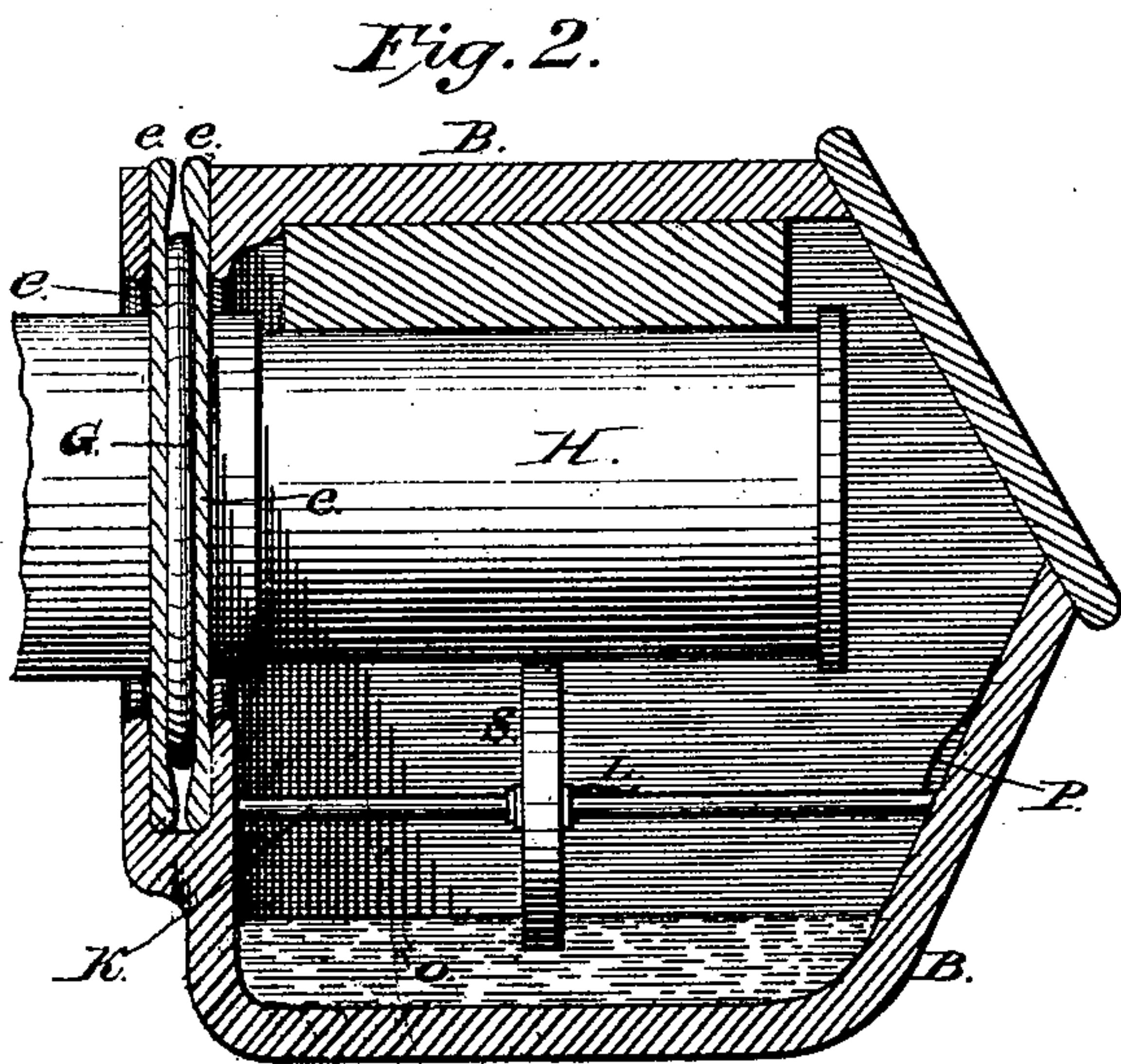
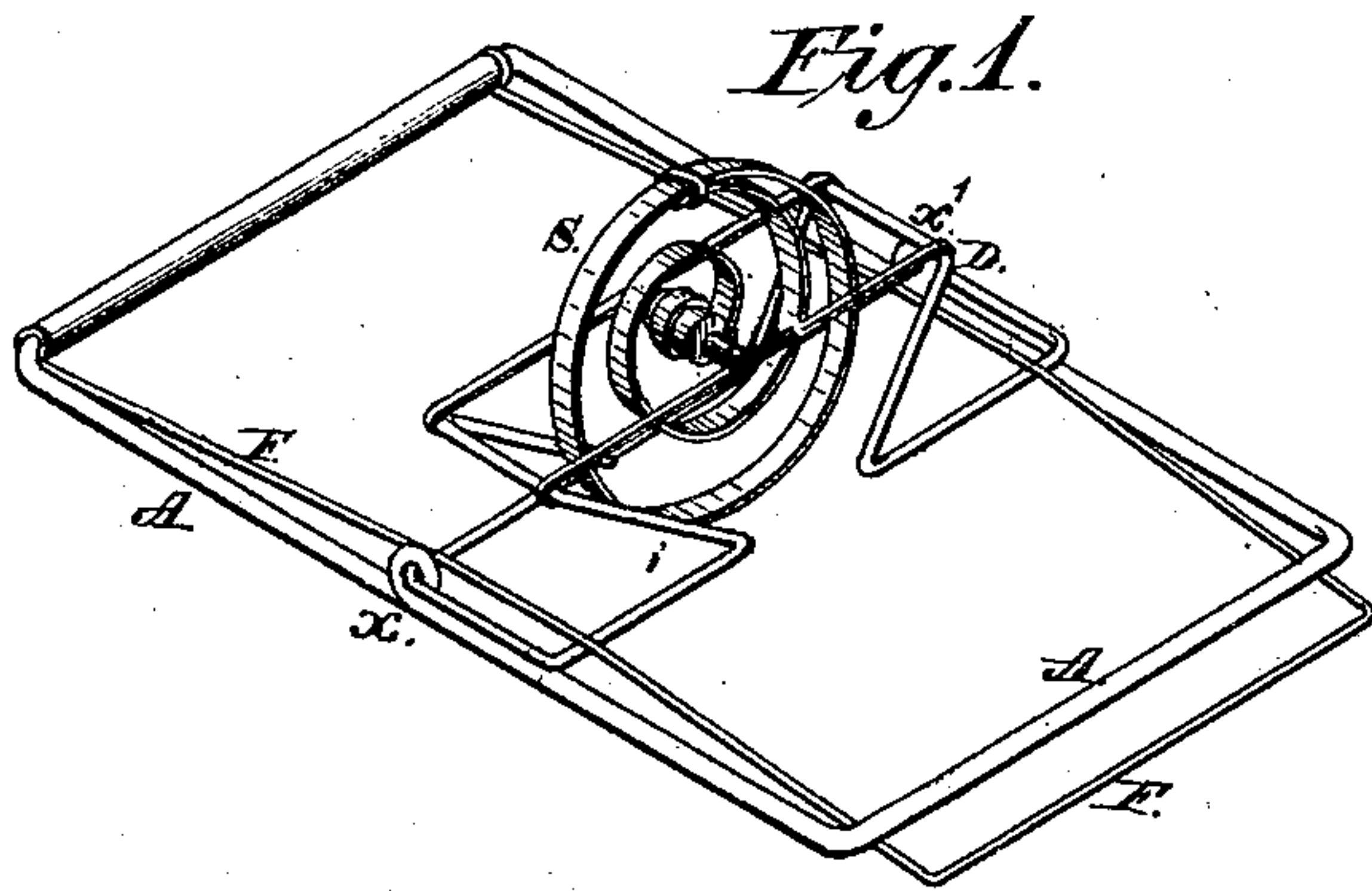


J. D. STARK.  
Car-Axle Lubricator.

No. 169,203.

Patented Oct. 26, 1875.



*Attest:*

*John D. Pray*  
*Donald B. Smith*

*Inventor:*

*J. Dunn Stark*

# UNITED STATES PATENT OFFICE.

JOHN DUNN STARK, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN CAR-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **169,203**, dated October 26, 1875; application filed November 6, 1874.

*To all whom it may concern:*

Be it known that I, JOHN DUNN STARK, of the city of Brooklyn, county of Kings and State of New York, have invented a Lubricator for Car-Axles, of which the following is a specification:

The object of my invention is to furnish a simple and reliable mode of lubricating the axles of car-wheels and similar journals in any climate, with little trouble or expense, by means of a flexible elastic wheel, supported in the oil-box, in contact with the under side of the journal, by which it is turned round, carrying the oil with it, thus doing away with the use of waste cotton, felting, &c., which, besides being expensive and troublesome, tends to generate heat and produce spontaneous combustion.

The invention is illustrated in full detail in the accompanying drawing, of which—

Figure 1 is a perspective view of the wheel S, mounted on a standard, D, which rests on the base A, and is held in its upright position by the stay-spring F. The standard is made to embrace the lower part of the wheel, in order to steady it, and to tilt down with it on the end of the base, turning at  $x x'$ . When thus doubled down, the lubricator is easily introduced into the box, where it is made to stand, there not being required any of those changes in the box or axle which have to be made at considerable expense for other lubricators.

Fig. 2 is a longitudinal section of the axle-box and contents, showing a modification of the invention. In this instance the wheel S is shown as mounted on the rod K, instead of the support represented in Fig. 1.

H is the journal of the axle; O, the oil; B,

the box;  $e, e$ , and G, packing devices. The rod K is made fast in the box, and held down by the spring P, and has a shoulder on the inner, and a spring, L, on the outer, side of the wheel, to keep it in its place as it is made to revolve by the turning of the axle.

The wheel is kept always gently pressing against the journal by its inner coil, while the outer coil or rim alone runs in the oil, which is thereby abundantly supplied to the journal, but not unnecessarily spattered about the box, as it is with a solid wheel, or one with spokes. This rim is formed by the outer end of the coiled spring being fastened to the part where the first inner coil begins; or it may be a complete and separate ring, convex or other suitable shape on its outer surface, and having its inner surface fastened to the outer end of the coiled spring.

When being put into the oil-box the wheel is drawn to the outer end of this support, and, after passing down by the end of the axle, is slid back again, and held in its place by a catch.

I claim as my invention—

1. A lubricating-wheel for axle-boxes, consisting of a flexible rim, in combination with a coiled spring and a hub, on which it is mounted, substantially as and for the purpose set forth.

2. The combination of the tilting standard, the wheel, and the base, on which it doubles down to be put into the box, substantially as and for the purpose set forth.

JOHN DUNN STARK.

Witnesses:

F. E. PECK,  
JOHN D. PRAY,  
DONALD B. SMITH.