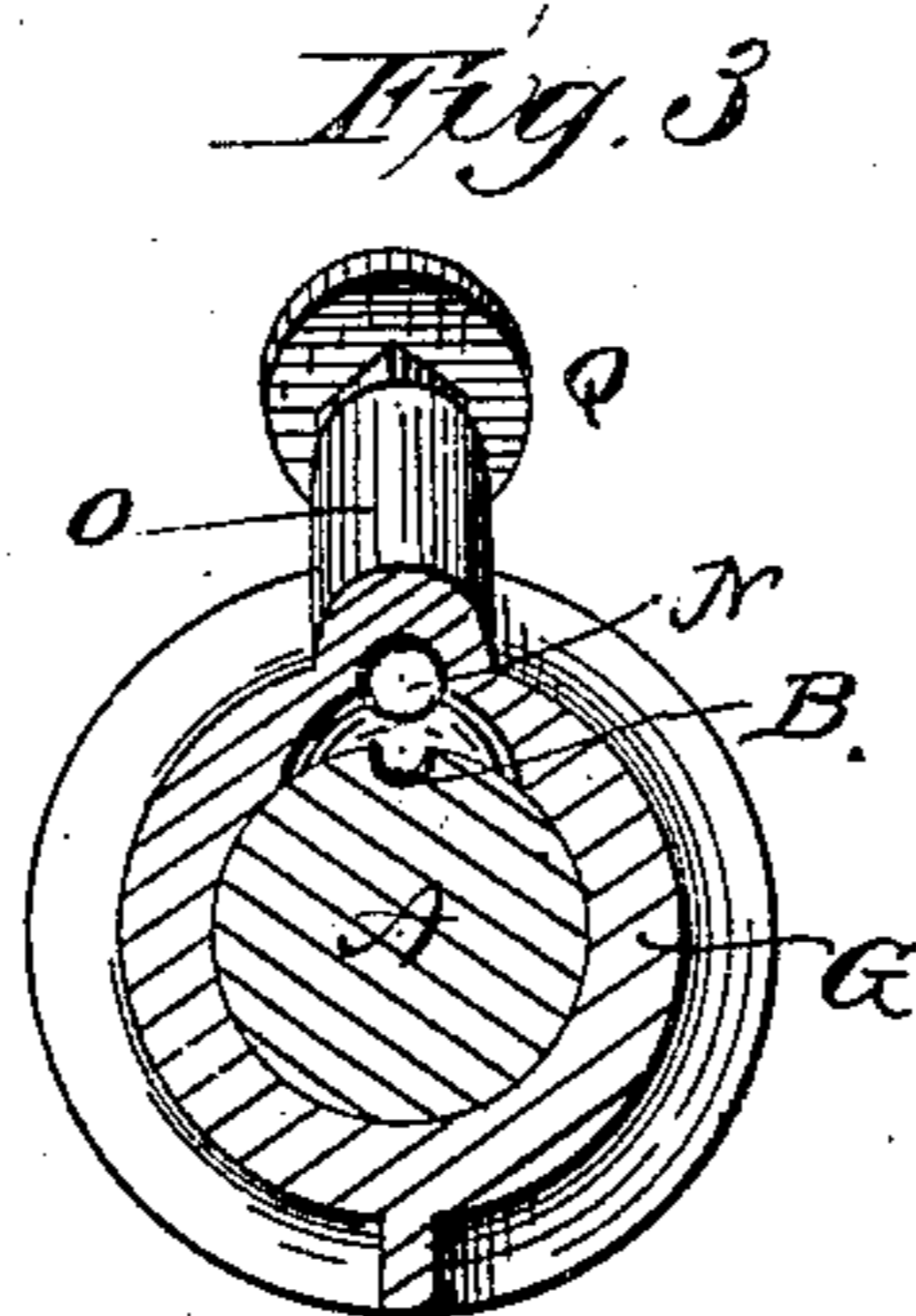
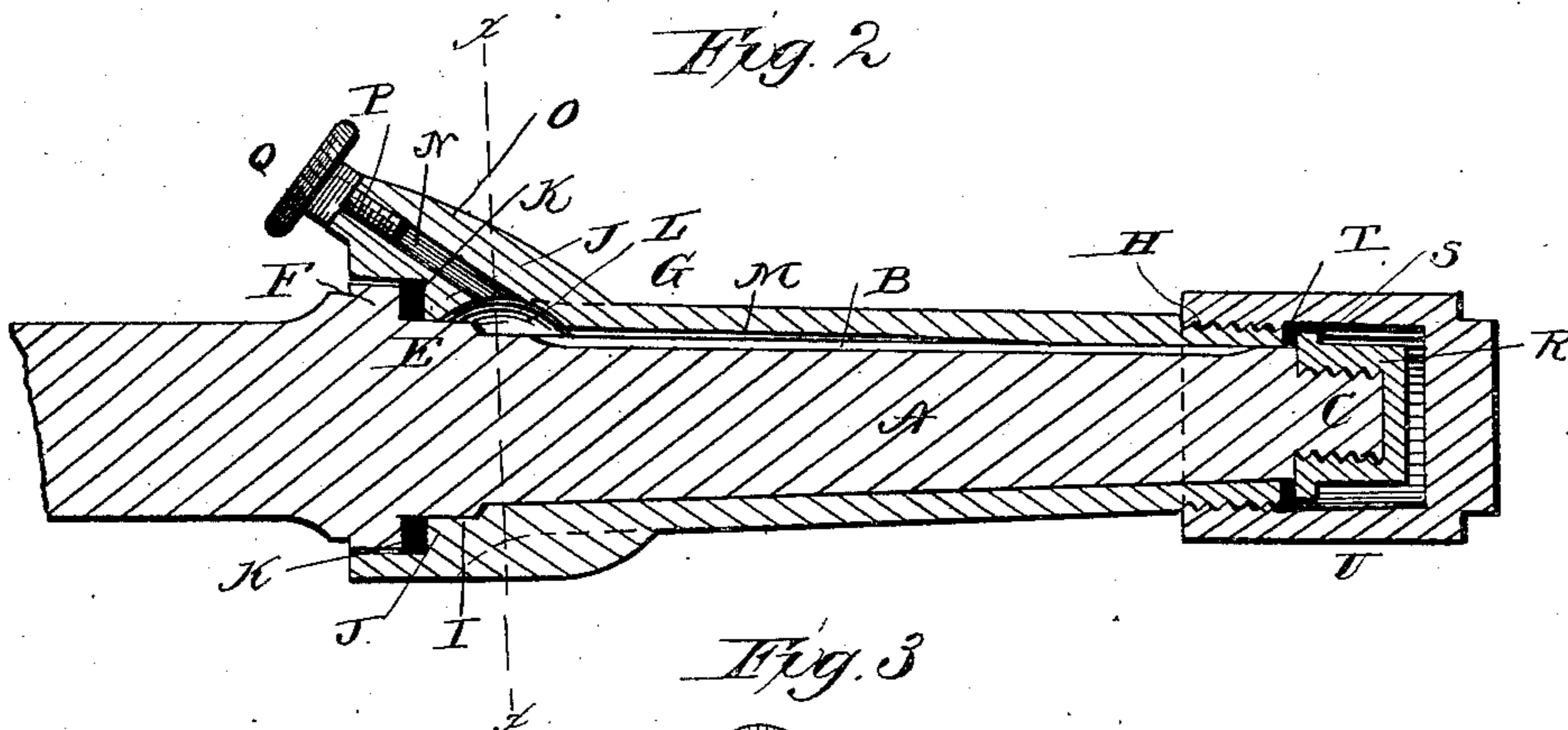
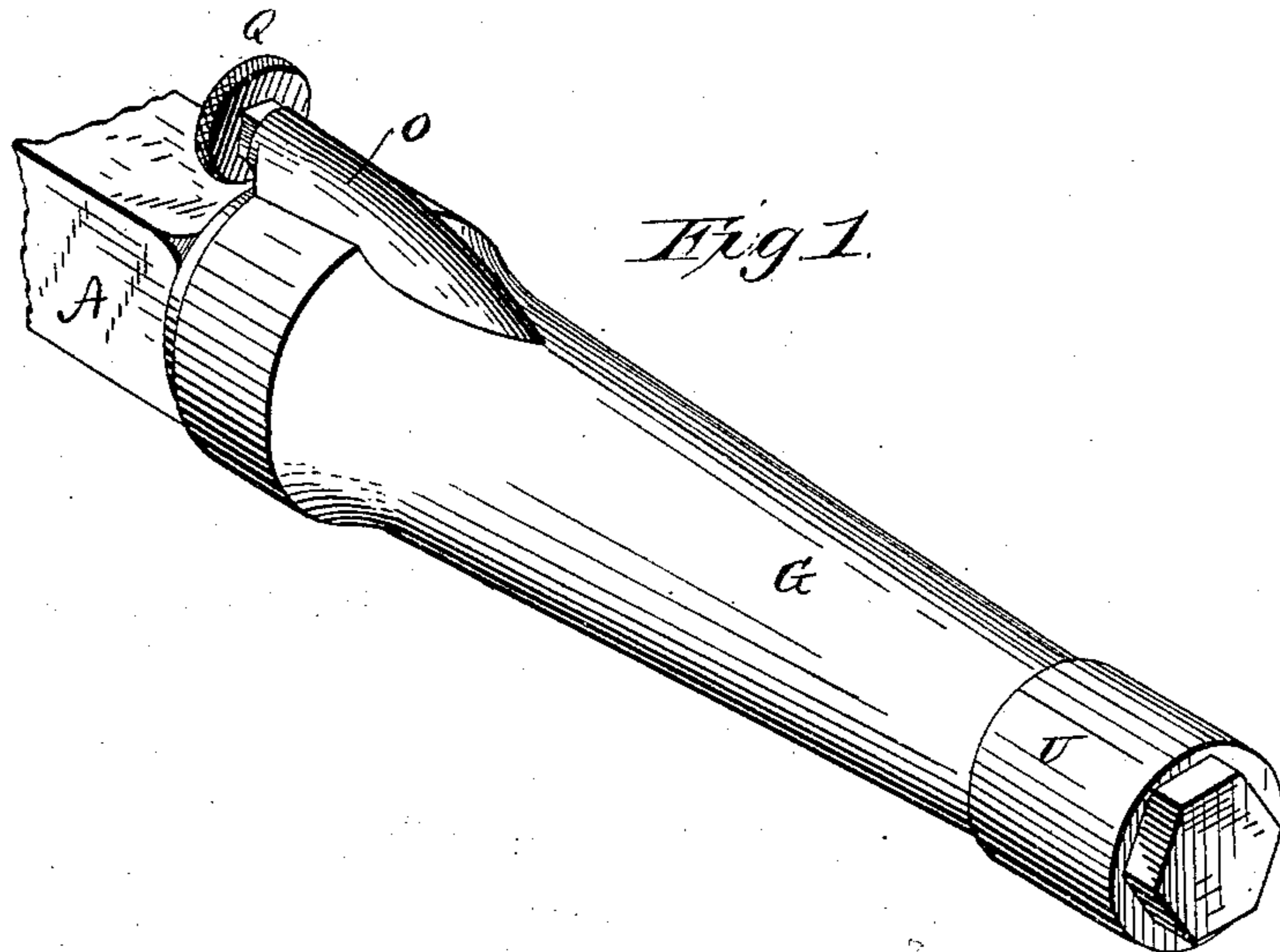


(No Model.)

A. D. HOWE.
AXLE LUBRICATOR.

No. 280,826.

Patented July 10, 1883.



WITNESSES

F. L. Curand
J. R. Sittell

INVENTOR

A. D. Howe
by *A. Snow & Co.* Attorneys.

UNITED STATES PATENT OFFICE.

ALBERT D. HOWE, OF COSHOCTON, OHIO, ASSIGNOR OF ONE-HALF TO
JOSEPH H. ASKRENS.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 280,826, dated July 10, 1883.

Application filed November 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALBERT D. HOWE, a citizen of the United States, residing at Coshocton, in the county of Coshocton and State of Ohio, have invented a new and useful Self-Lubricating Axle-Box, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to axle-boxes, and has for its object to provide a simple, durable, and efficient box that will contain and automatically supply its own lubricants.

In the drawings, Figure 1 is a perspective view of my improved axle-box in position. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a transverse sectional view on the line *x x*, Fig. 2.

Referring to the drawings; A designates the axle-spindle, which is formed with a straight longitudinal groove, B, in its top surface, and with a screw-threaded end, C, having a shoulder, D, as shown. The spindle A is formed with a raised portion, E, at its inner end, which terminates in a shoulder, F.

G is the axle-box, which is also exteriorly screw-threaded at its end H, and is formed with an interior depressed portion, I, at its rear end corresponding to the raised portion E, said depression I terminating in a shoulder, J. A ring or washer, K, is placed against the shoulder F, and against this washer the shoulder J works. The axle-box G is provided with a recess or reservoir, L, at its depressed portion I, from which extends a longitudinal interior groove, M, which gradually decreases in depth toward its terminus. From the reservoir L extends a channel or perforation, N, through an exterior raised portion, O, to the inner edge of the box G. The outer mouth of this channel N is adapted to be closed by a screw-threaded pin, P, having a nuted

or milled head, Q. The lubricant is fed through this channel to the reservoir L, which feeds it to the axle-spindle through groove M as the axle-box revolves. By this construction the reservoir may be filled, and the spindle is automatically lubricated without removing the wheel from the axle.

R is a nut which has a flange, S, that binds against a ring or washer, T, placed against the end of the box G, and retains the latter in position on the spindle.

U is an end cap-piece which goes over the nut R and end of the box G and screws onto the threads H. This cap-piece serves to retain any oil that might escape from between the box and axle, and also protects the journal from sand and dust.

I claim as my invention—

As an improved article of manufacture, the herein-described self-lubricating axle-box, formed with the exterior raised portion, O, which is arranged longitudinally and terminates at the inner end of the box, the segmental or concaved chamber or reservoir L, formed interiorly in the enlarged portion of the box at the projection O, and adapted to spread over the surface of the spindle, the channel N, extending through the projecting rib or enlargement O, from its mouth at the inner edge of the box, down through the rib and opening centrally into the spreading-reservoir, and the longitudinally-disposed interior groove, M, leading from the chamber or reservoir, as set forth.

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

ALBERT DUAINÉ HOWE.

Witnesses:

WARREN CLEMMENS,
S. E. WILCOX.