

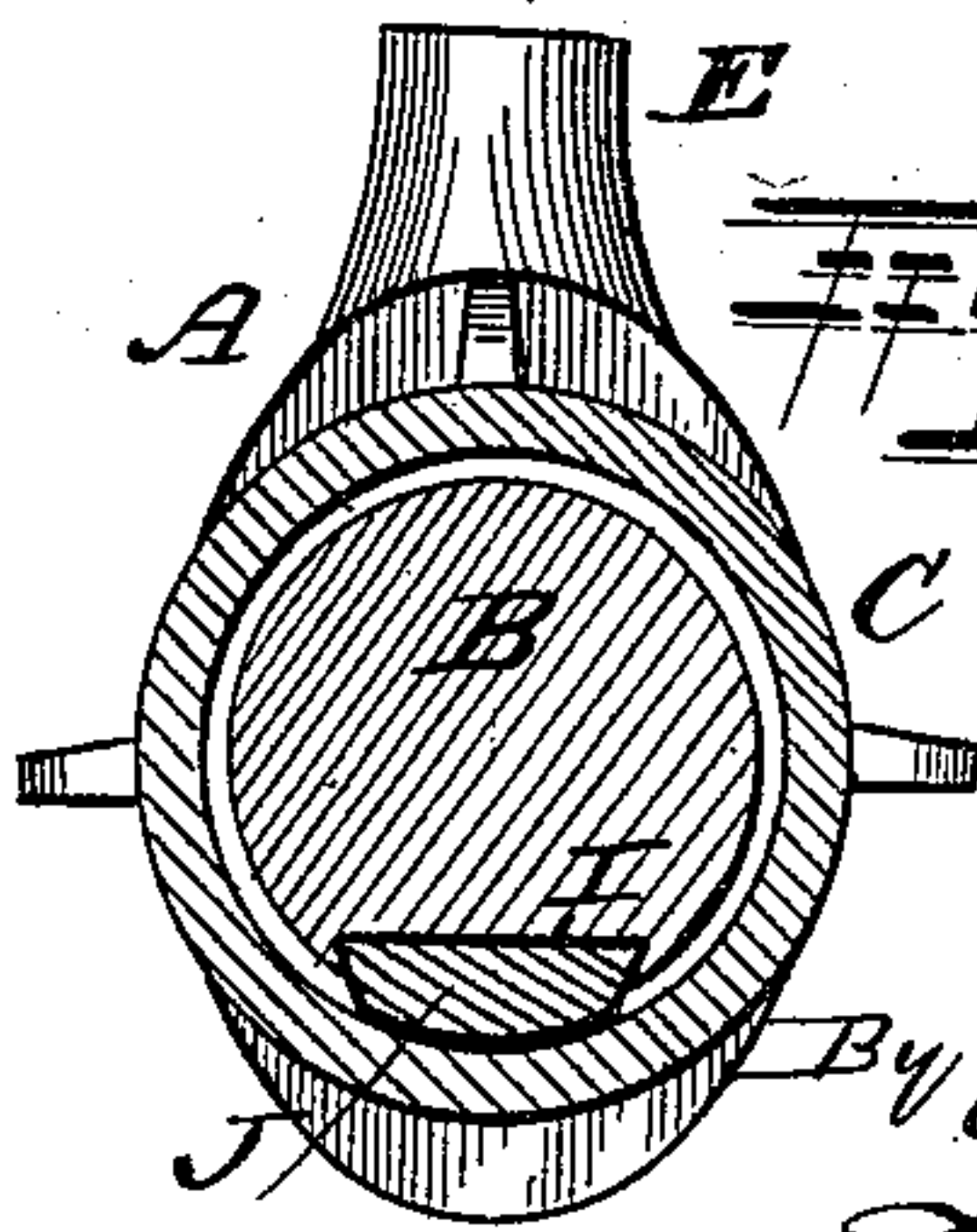
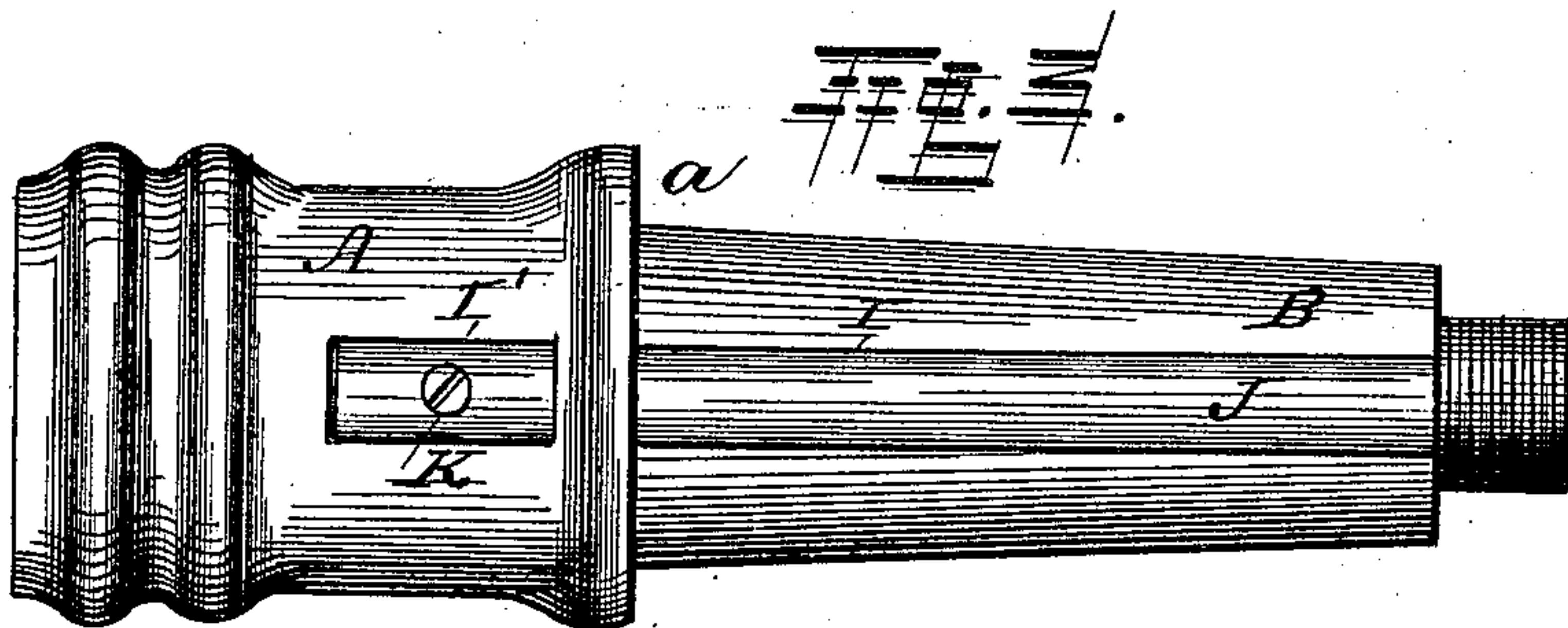
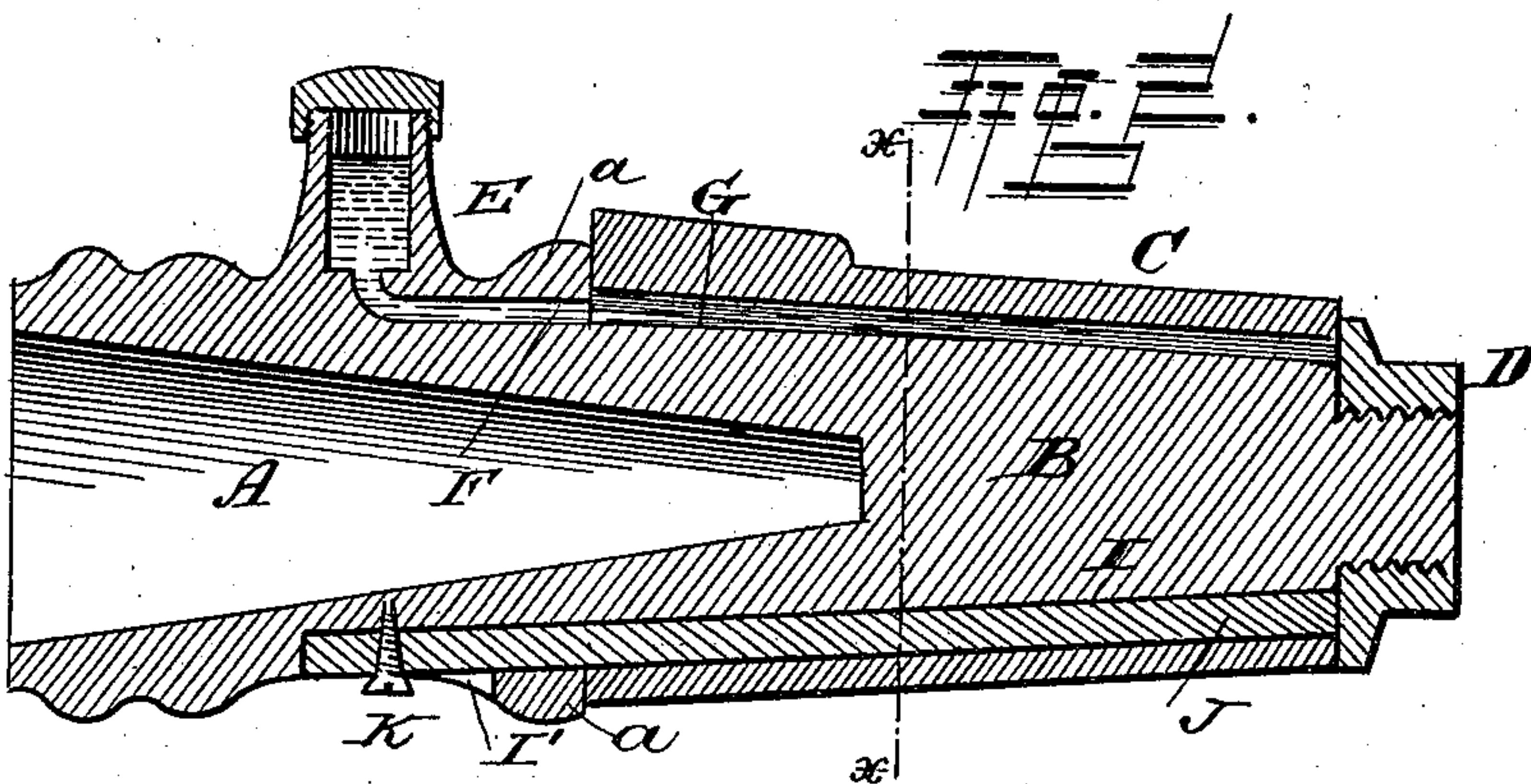
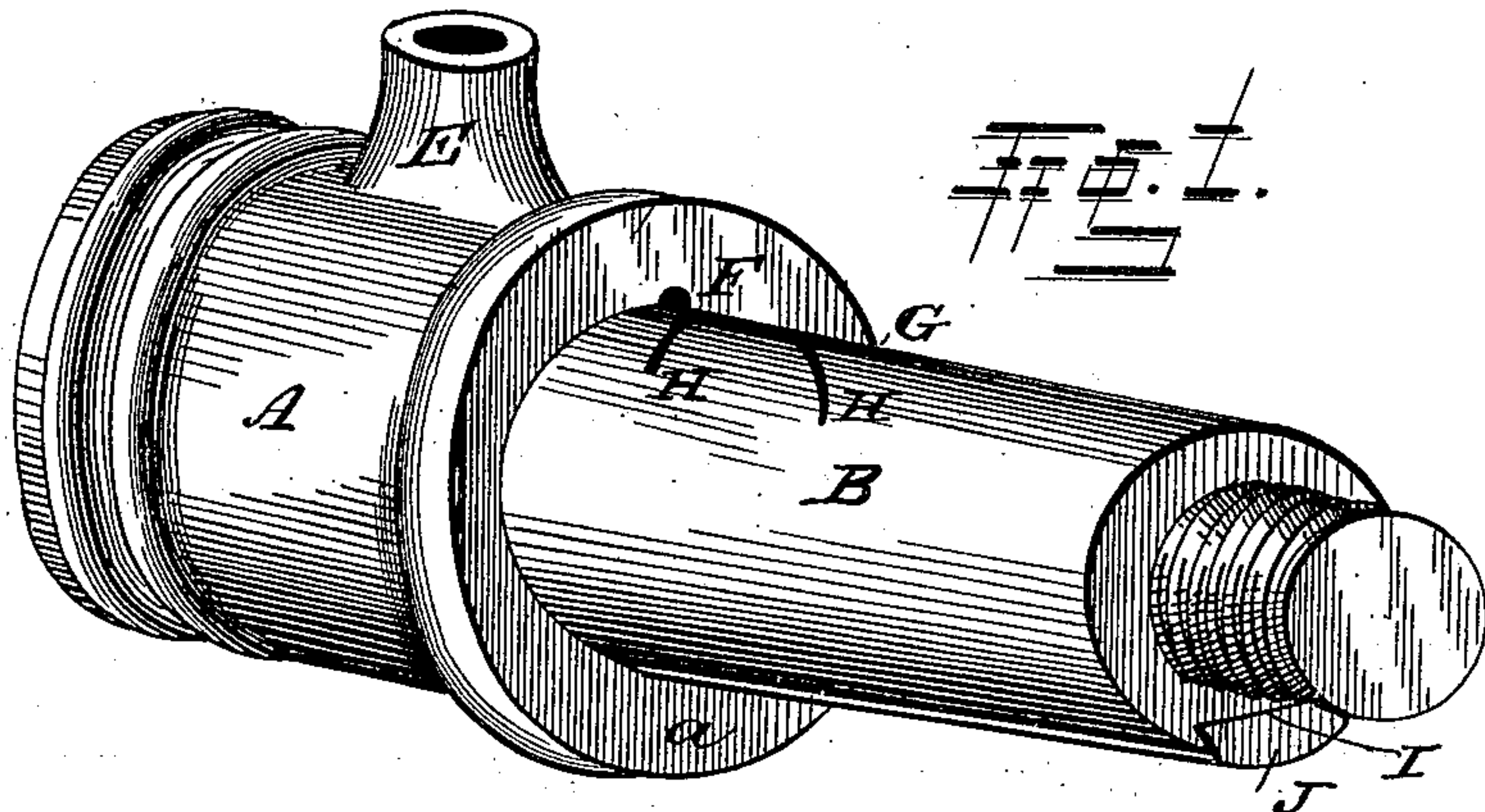
(No Model.)

W. HOLLOWAY & T. L. CLEVINGER.

SPINDLE FOR VEHICLE WHEELS.

No. 300,974.

Patented June 24, 1884.



WITNESSES:

*Ad. S. Dittrich*  
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INVENTORS

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# UNITED STATES PATENT OFFICE

WILLIAM HOLLOWAY AND THOMAS L. CLEVINGER, OF NEFF, INDIANA.

## SPINDLE FOR VEHICLE-WHEELS.

SPECIFICATION forming part of Letters Patent No. 300,974, dated June 24, 1884.

Application filed March 26, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM HOLLOWAY and THOMAS L. CLEVINGER, citizens of the United States, and residents of Neff, in the county of Randolph and State of Indiana, have invented certain new and useful Improvements in Spindles for Vehicle-Wheels; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of our improved vehicle-spindle with the axle-box removed. Fig. 2 is a longitudinal sectional view of the spindle and axle-box. Fig. 3 is a view of the under side of the spindle with the box removed, and Fig. 4 is a cross-section through line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

Our invention has relation to spindles for vehicles; and it consists in the improved construction of the same, which will be hereinafter more fully described and claimed.

In the accompanying drawings, A denotes a metallic box or socket, which is suitably fastened upon the outer end of the axle, and is provided with the spindle B, adapted to fit the axle-box C. At the outer end of the spindle is the usual nut, D, for holding the box and hub in position on the spindle. The box A is provided with an oil-cup, E, which has a channel or outlet, F, for feeding the lubricant to a groove, G, on the top of the spindle, which has branch grooves H, by means of which the lubricant is fed over a considerable area of the spindle. The under side of the latter has a longitudinal recess, I, which extends through the collar *a* of box A into a recess, I', in the under side of the same, and into this

recess is inserted a dovetailed strip, J, of steel, which is fastened by a screw, K, inserted into the recess I' in the under side of box A. By withdrawing this screw the steel strip J may be removed by sliding it out of its groove or recess I I'. By reference to Fig. 4 it will be seen that the bulge of strip J projects beyond the body of the spindle, on the under side of the same, so as to form a convex bearing for the box, which, in rotating upon the spindle, will always bear against this wearing-strip, thus relieving the body of the spindle proper from wear. As the steel strip becomes worn, it may readily be removed and another one inserted by withdrawing the fastening-screw K. The steel strip also serves as a stop for the lubricating material as this runs down on both sides of the spindle, so that it will be carried round with the box as this revolves upon the spindle, thus economizing in the use of oil.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

A thimble-skein formed with a dovetailed recess in its under side, and having a suitable lubricating attachment, and an annular flange, through which the said recess extends, in combination with a detachable steel wear-strip seated in the said recess and extending through the opening in the said flange, and retained in position by the latter and by a suitably-arranged fastening-screw, substantially as herein described, for the purpose shown and specified.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WILLIAM HOLLOWAY.  
THOMAS L. CLEVINGER.

Witnesses:

BENJAMIN F. CLEVINGER,  
GEORGE W. CLEVINGER.