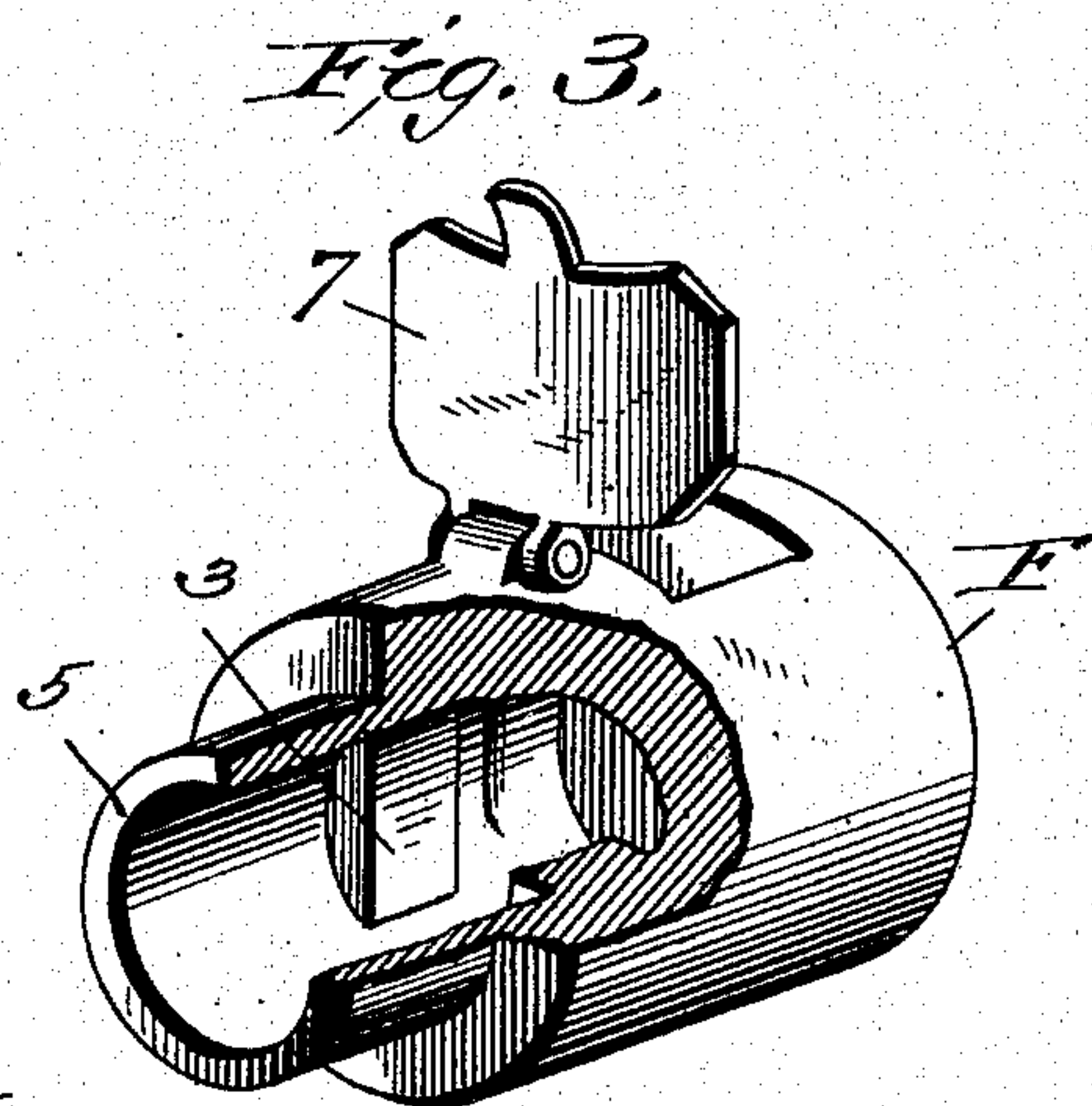
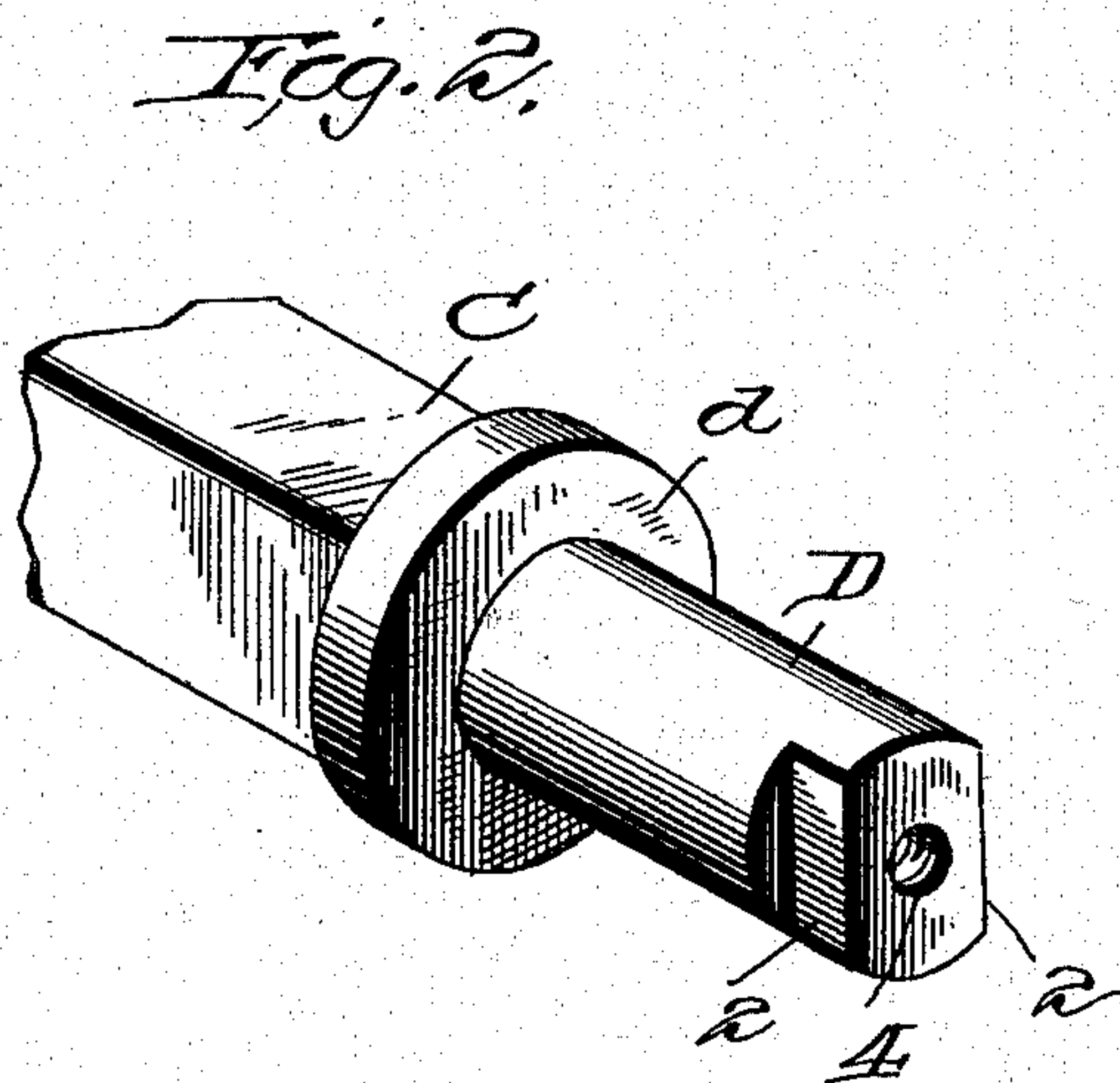
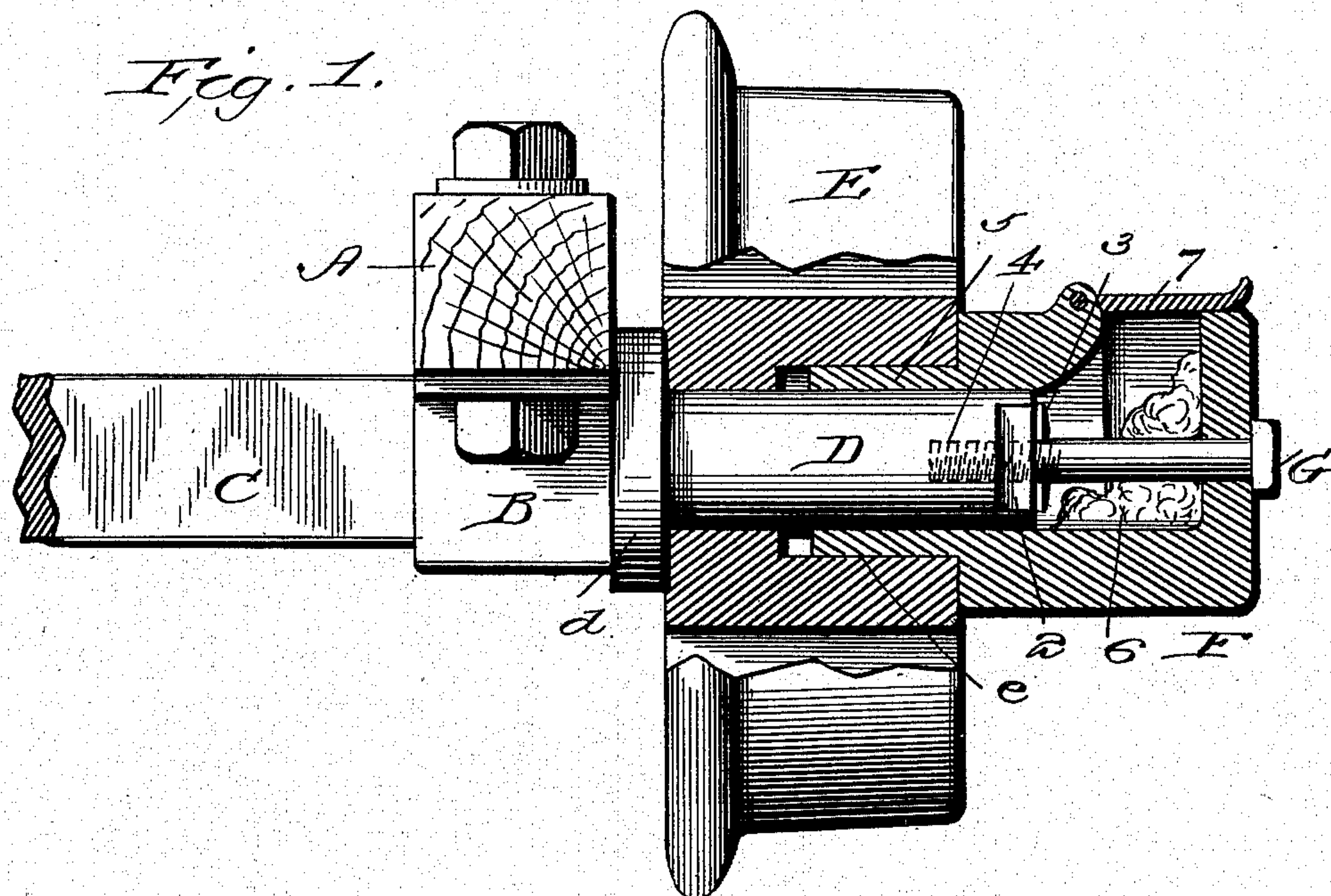


(No Model.)

J. J. MELVIN.  
LUBRICATING BOX.

No. 535,547.

Patented Mar. 12, 1895.



Witnesses  
*Wm. H. Leiden*  
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# UNITED STATES PATENT OFFICE.

JOHN J. MELVIN, OF FOREST CITY, PENNSYLVANIA.

## LUBRICATING-BOX.

SPECIFICATION forming part of Letters Patent No. 535,547, dated March 12, 1895.

Application filed October 2, 1894. Serial No. 524,713. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. MELVIN, a citizen of the United States, residing at Forest City, in the county of Susquehanna and State of Pennsylvania, have invented certain new and useful Improvements in Lubricating-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to means for lubricating the wheels of mining cars and securing the said wheels upon their spindles; and aims to provide more simple, efficient and durable devices than those in general use, and which will admit of the ready detachment of the wheel or the lubricator for purposes of repair, cleaning, or for any other required purpose.

The invention consists of the novel features which hereinafter will be more fully described and claimed and which are shown in the annexed drawings, in which—

Figure 1, is a cross section of a wheel, and the side bar of a mining car truck, showing the application of the invention, the lubricating device being illustrated in longitudinal section and the spindle in full lines. Fig. 2, is a detail view of the spindle. Fig. 3, is a perspective view of the lubricating device, the cover for the opening in the top thereof being opened.

Referring to the drawings the letter A represents the side beam of a mining car truck; B, the hanger for sustaining the axle, and C the axle whose spindle D projects beyond the beam A to receive the wheel E which is loosely mounted to revolve thereon. This spindle has a collar or annular shoulder *d* at its inner end to limit the inward movement of the wheel. The outer end has seats 2 on diametrically opposite sides to co-operate with corresponding projections 3 on the inner walls of the oil box F to hold the latter from turning on the spindle. A longitudinal bore 4 in the outer end of the spindle receives a lag screw G by means of which the oil box is held

on the spindle and the wheel retained in place.

The wheel E has the inner portion of its hub fitting closely upon the spindle, and the outer portion enlarged, as shown at *e*, for the purpose presently to be made known.

The oil box F is cylindrical and closed at its outer end which is apertured for the passage of the lag screw G. A tubular section, or skein 5, projects from the inner end of the oil box and is designed to embrace or telescope the end of the spindle and enter the enlarged bore *e* of the hub. The box F is chambered and receives the lint 6 or other absorbent material, for receiving the lubricant. A hinged cover 7 closes an opening in the top side of the box through which access is had to the interior of the box for renewing the lint and the lubricant or for any other purpose.

In assembling the parts, the wheel is first placed upon the spindle, the box is next applied to the end of the said spindle, and the lag screw G is passed through the apertured end of the box and screwed into the spindle. The projections 3 fitting the seats 2 serve to limit the inward movement of the box and prevent the latter turning upon the spindle. The tubular extension or skein 5 does not reach to the end of the enlarged bore *e* of the hub in order to leave an intervening annular space for the accumulation of oil, and fits the spindle sufficiently loose to admit of the free passage of the lubricant from the box to the rubbing surfaces of the wheel and spindle.

It will be seen that the wheel is confined between the shoulder or collar *d* and the inner end of the oil box, and cannot be removed without first detaching the oil box.

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

1. The combination with a spindle having seats in its ends and a wheel loosely mounted on the spindle, of an oil box having a tubular portion telescoping over the spindle and projecting within the wheel and having inner projections engaging the seats to prevent the rotation of the box, and a fastening device for holding the box on the spindle.

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2. The combination with a stationary spindle having seats in its end, of a wheel mounted loosely thereon and provided with an annular recess, an oil box having a tubular portion telescoping over the spindle and adapted to partially enter the said recess and provided with inner projections which correspond to and engage the seats on the spindle, and prevent the rotation of the oil box, and a lag

screw passing through the box and entering a threaded opening in the end of the spindle whereby the said box is held in place.

In witness whereof I affix my signature in presence of two witnesses.

JOHN J. MELVIN.

Witnesses:

JASPER S. VAIL,

JOHN P. CARLSON.