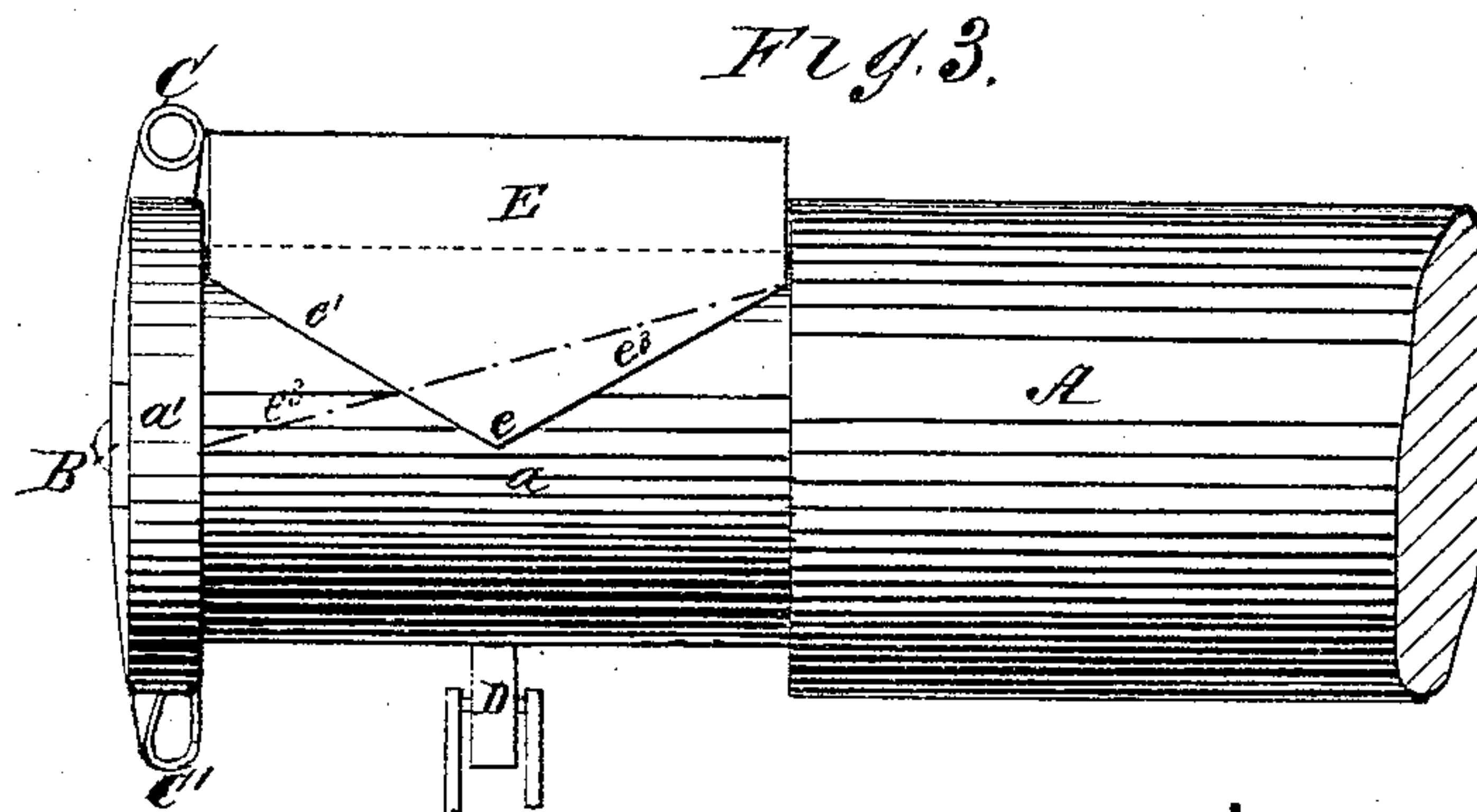
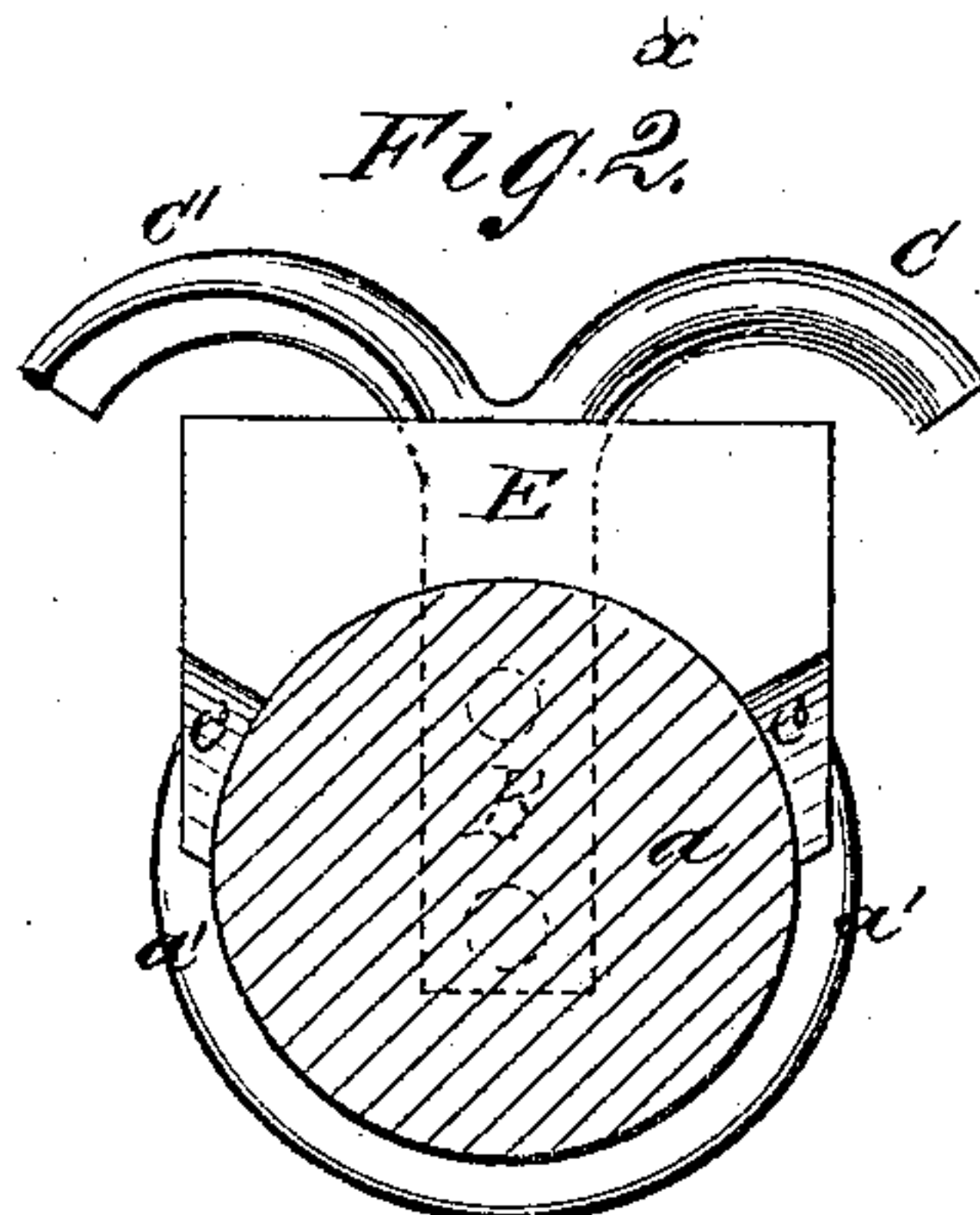
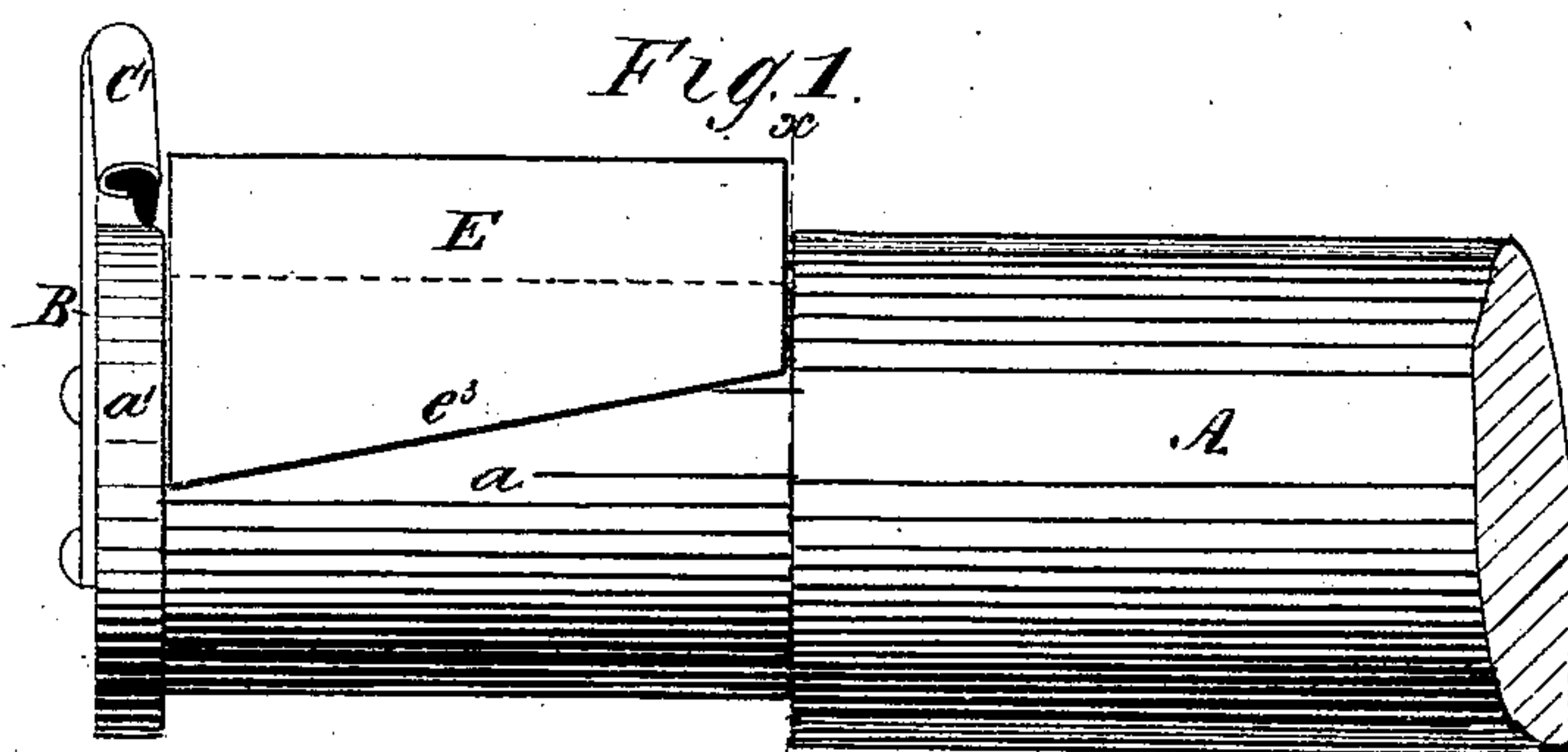


J. E. BERING.  
Car-Axle Lubricators.

No. 145,834.

Patented Dec. 23, 1873.



Witnesses.  
G. Hartings.  
C. A. Pettit

Inventor:  
James E. Bering  
Per *[Signature]*  
Attorneys.

# UNITED STATES PATENT OFFICE.

JAMES E. BERING, OF NEWBURG, NEW YORK.

## IMPROVEMENT IN CAR-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **145,834**, dated December 23, 1873; application filed August 13, 1873.

*To all whom it may concern:*

Be it known that I, JAMES EDWARD BERING, of Newburg, in the county of Orange and State of New York, have invented a new and Improved Car-Axle Lubricator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

The invention relates to means for lubricating thoroughly, uniformly, and cheaply all the parts of a car-axle journal. It consists in peculiar devices, by which the surface of flange and of the body of journal are automatically provided with a graduated supply of oil or lubricating substance, as hereinafter described.

Figure 1 is a side elevation of the end of a car-axle. Fig. 2 is a cross-section through line *x x*. Fig. 3 is a side elevation of a modification.

A represents the car-axle, having the journal *a* and end flange *a'*. To the end of journal *a* I fixedly and radially attach a plate, B, having the curved end-open tube C, or open channel-way C'. As the axle revolves, this is caused to revolve in an oil-chamber, and receive the oil as it passes therethrough, the oil flowing backward as the tube rises, and finally discharging itself upon the flange. The oil thus keeps the flange in a condition to create as little friction as possible, while some then works its way down on the front of the jour-

nal. D is a disk, preferably placed against the middle of journal *a*, and revolving in oil. The oil thus being supplied is carried round by the journal, and brought into contact with a point, *e*, of bearing E, which is upwardly inclined toward front and rear at *e*<sup>1</sup> *e*<sup>2</sup>. This serves to conduct the oil where it will lubricate the whole of the journal.

The disk D may be placed at the end of axle, and in that case the inclined excision of the bearing will be on a long incline, as shown at *e*<sup>3</sup>, extending obliquely or diagonally across the journal.

These sloped bearings E may be used in connection with any means for supplying oil to the axle, and I therefore do not design to confine myself to disks or to any particular device for that purpose.

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

1. The curved tube C, attached to the end of journal *a*, combined as and for the purpose described.

2. The bearing E, having one or more slopes, *e* *e*<sup>1</sup> *e*<sup>3</sup>, in combination with the disk D, in the manner and for the purpose described.

JAMES EDWARD BERING.

Witnesses:

JOHN B. KERR,  
JAS. W. MILLER.