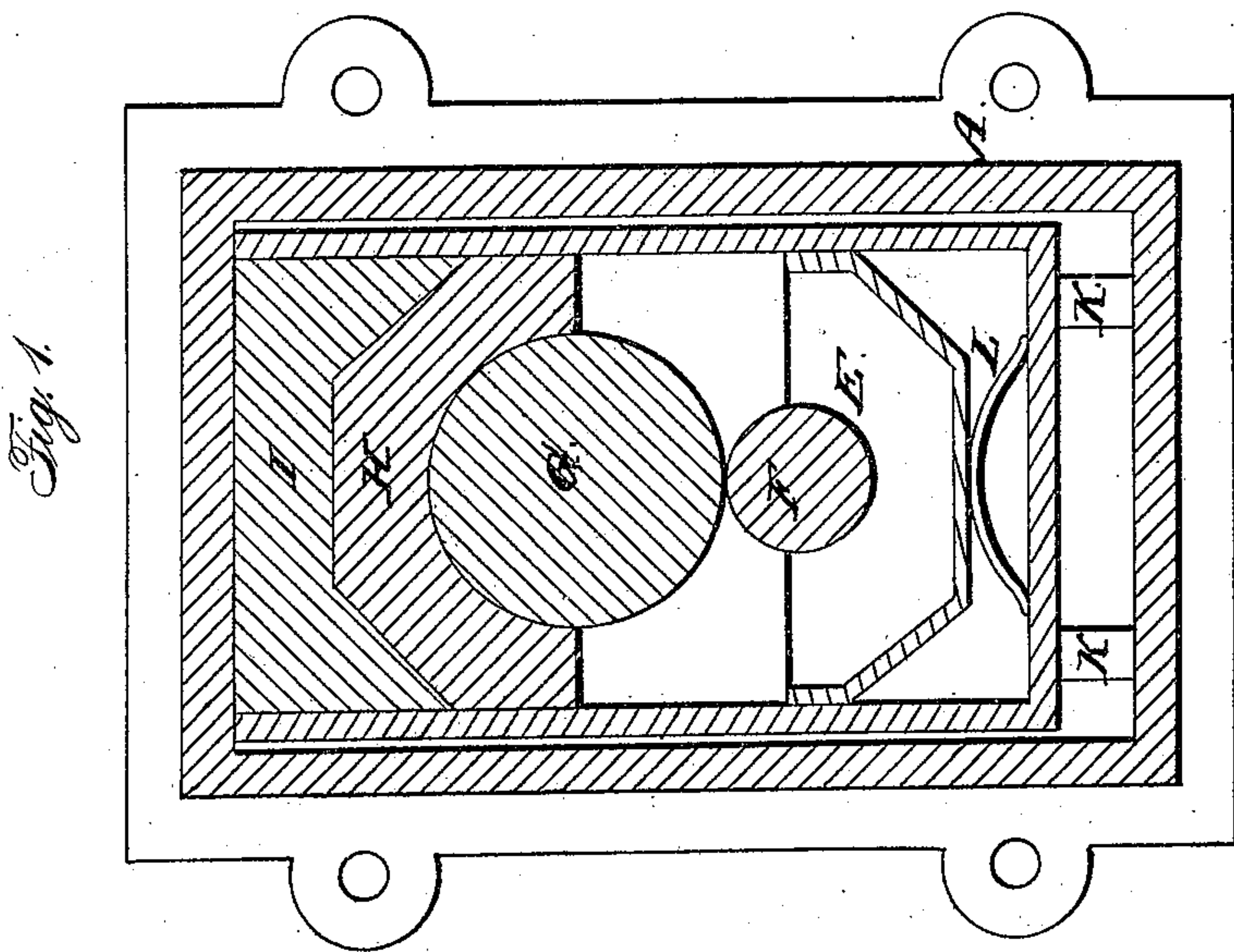
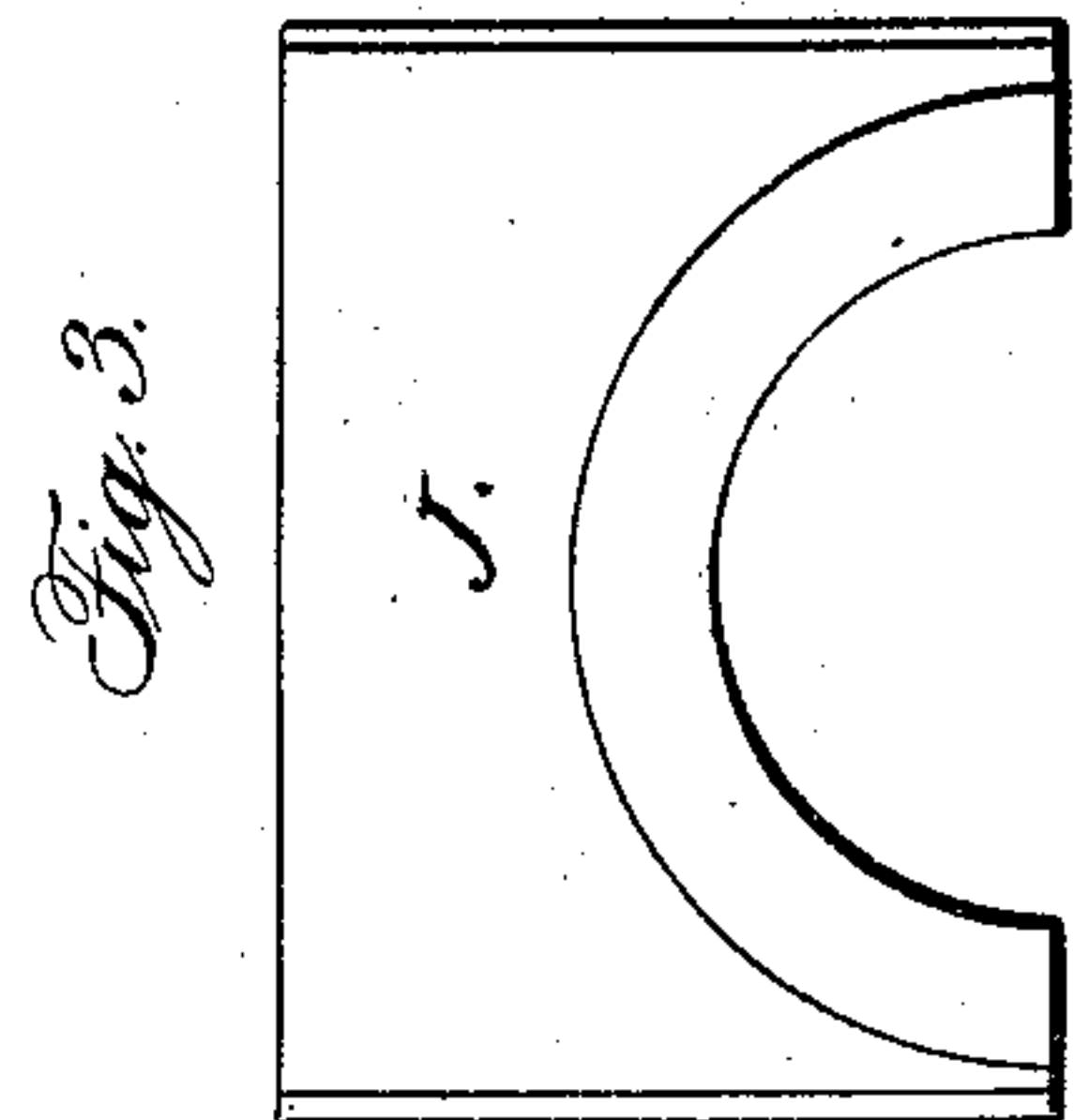
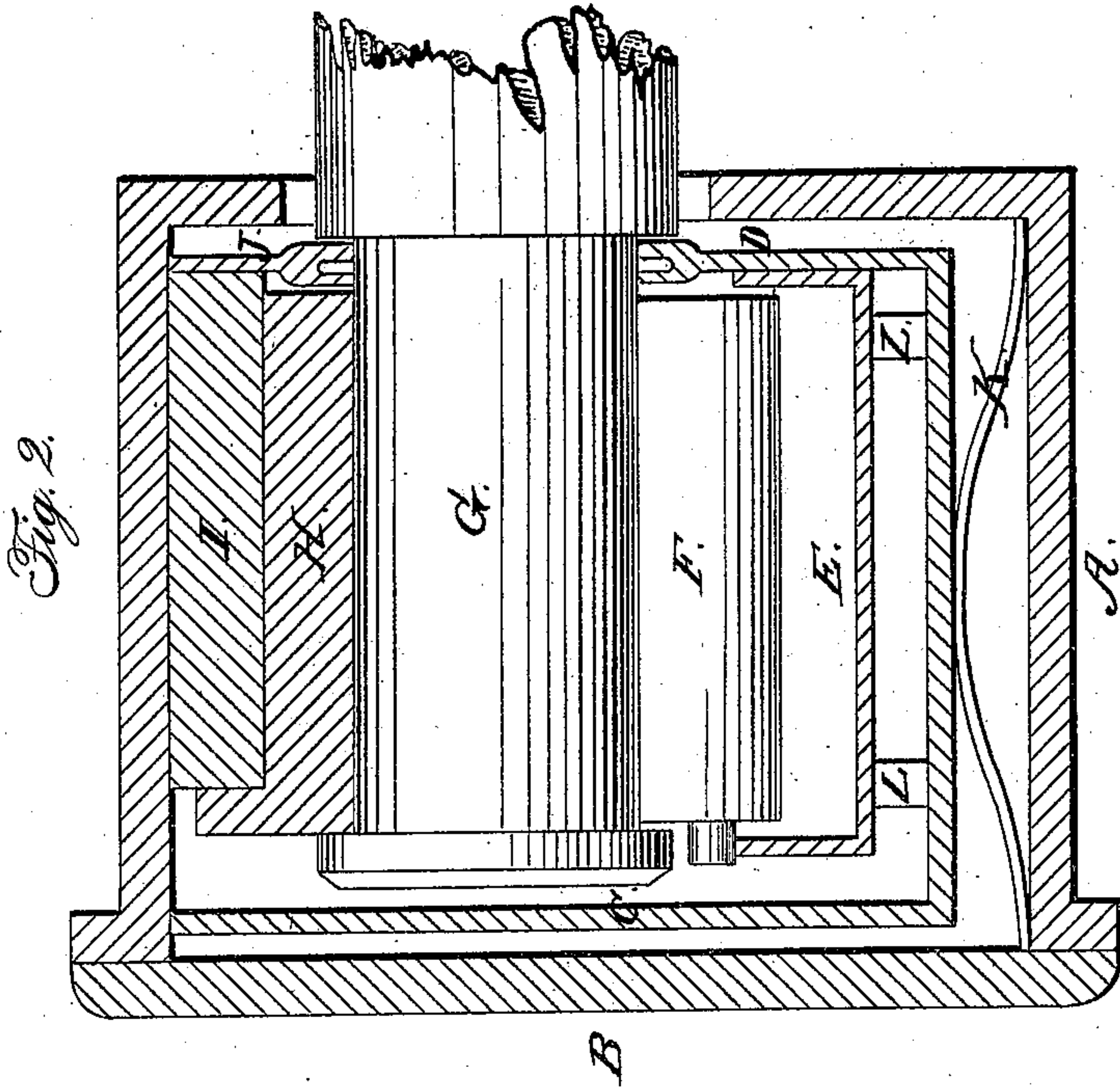


A. P. ALLEN.
Car-Axle Box.

No. 36,133.

Patented Aug. 12, 1862.



Witnesses:

J. Johnson
B. G. Hackett

Inventor:

A. P. Allen

UNITED STATES PATENT OFFICE.

ARANDAL P. ALLEN, OF NIAGARA, NEW YORK.

IMPROVEMENT IN RAILROAD-JOURNAL LUBRICATORS.

Specification forming part of Letters Patent No. 36,133, dated August 12, 1862.

To all whom it may concern:

Be it known that I, ARANDAL P. ALLEN, of Niagara, in the county of Niagara and State of New York, have invented a new and useful Improvement in the Manner of Lubricating Journals of Railroad-Car Axles, which is simple and not liable to get out of order, it effects a great saving in oil, besides possessing advantages over those in present use, the nature of which in the following specification will be clearly shown.

The nature of my invention consists of inclosing within an ordinary journal-box a chamber closed at the bottom and open at the top to receive the cap and brass within which the journal or bearing of the axle revolves. A reservoir to receive the oil is placed directly under said journal or bearing, and is provided with one or more rollers, which come in contact with it, and when revolving carries up the oil to the journal, thereby thoroughly lubricating it. The reservoir is kept up to its proper position by means of two springs placed on its under side, which also bear against the bottom of the chamber, the elasticity of said springs being just sufficient to bring the roller or rollers in contact with the journal or bearing. A space is left between the bottom of the chamber and the outside casing of the journal-box. In this space two springs are placed, which press up the inner chamber and keep it in its proper position. One end of said chamber has an opening to receive the journal or bearing, and is made with a recess or groove, into which leather or other suitable material, is inserted which bears against it and forms a stuffing-box and makes the chamber oil-tight and prevents the dust and dirt from penetrating, thereby preserving the oil from grit and preventing the liability to cut or heat, besides effecting a great saving in the quantity of oil used. The upper part of the stuffing-box end of the chamber is separate and slides in grooves to facilitate the taking on or off the same.

I have tested my invention and find that after running a long time the bearings were in perfect order, and the oil was found to be pure.

Having thus set forth the nature of my invention, and to enable others skilled in the art to make and use the same, I will now proceed to describe it, and certify that the accompanying drawings are a full and correct representation of the same, like letters corresponding with like parts.

Figure 1 represents a transverse section through the center of journal-box. Fig. 2 is a longitudinal section of the same. Fig. 3 is the stuffing-box cap.

A, Figs. 1 and 2, is the outside or journal-box; B, the cover for the same; C, the inclosed chamber, into which oil is admitted in the ordinary manner; D, the end of same, which forms a stuffing-box and is packed with leather or other suitable material. J is the movable cap, forming the upper half of the same and sliding in grooves in the sides of chamber C. The packing in the same prevents the dirt or dust from penetrating into the said chamber, and also makes it perfectly oil-tight.

E is the oil-reservoir, placed within the chamber C; F, the roller, which revolves in a bearing in each end of the same; G, the journal or bearing of the axle; H, the brass or box in which it revolves; I, a cap which rests on the top of same and bears against the under side of the top of journal-box A.

K K are springs between the bottoms of the outside journal-box and inclosed chamber C to press it up.

L L are springs secured to the under side of the oil-reservoir to press it up, together with roller F, against the journal or bearing G, and as it revolves the oil is carried onto it, thereby lubricating in the most perfect manner.

I claim—

The use of one or more rollers revolving in the reservoir E, together with the springs L L, or their equivalent, when used in combination with the oil-tight chamber C, substantially as and for the purpose specified.

A. P. ALLEN.

Witnesses:

J. C. JOHNSON,
BART. G. HACKETT.