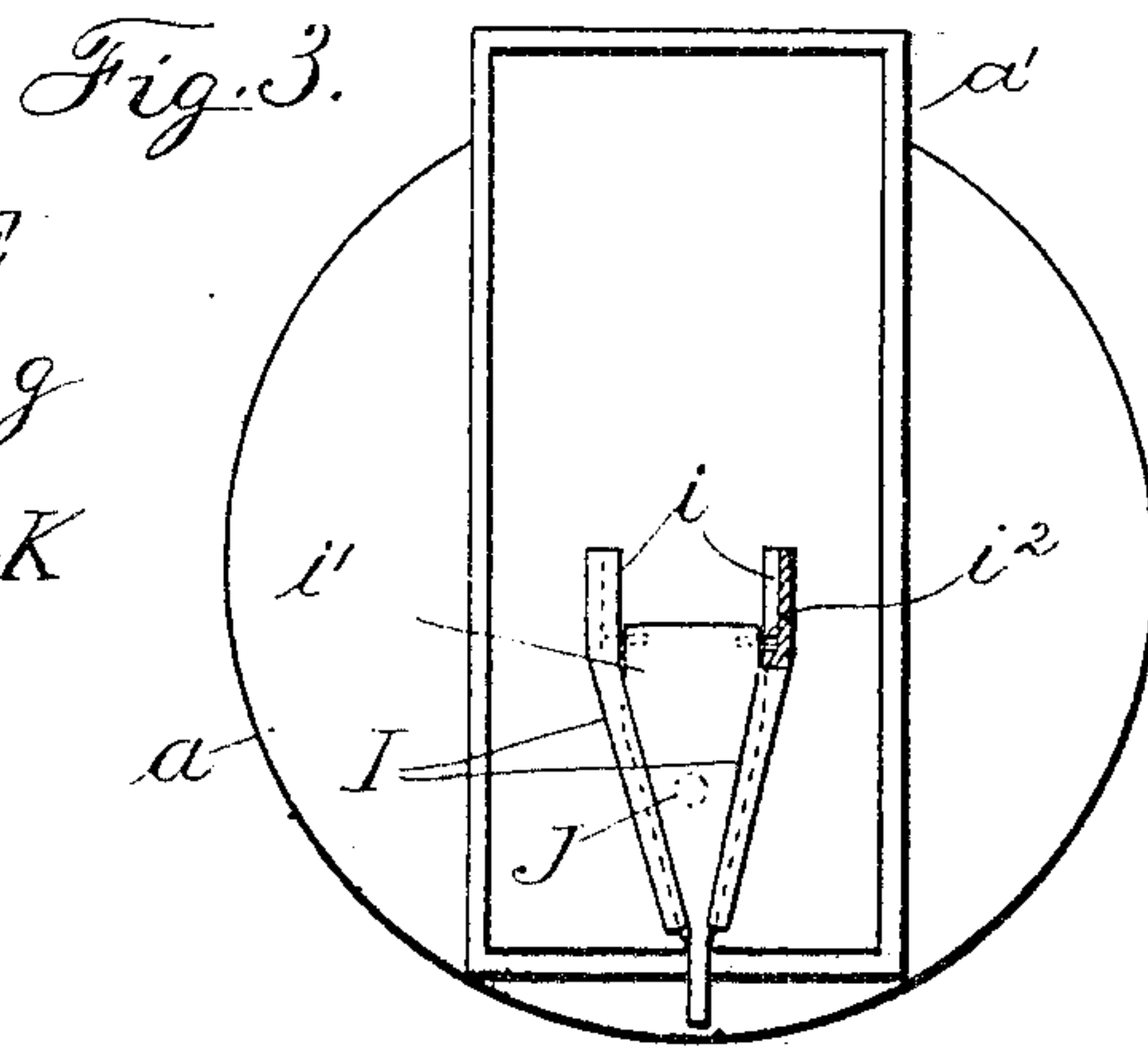
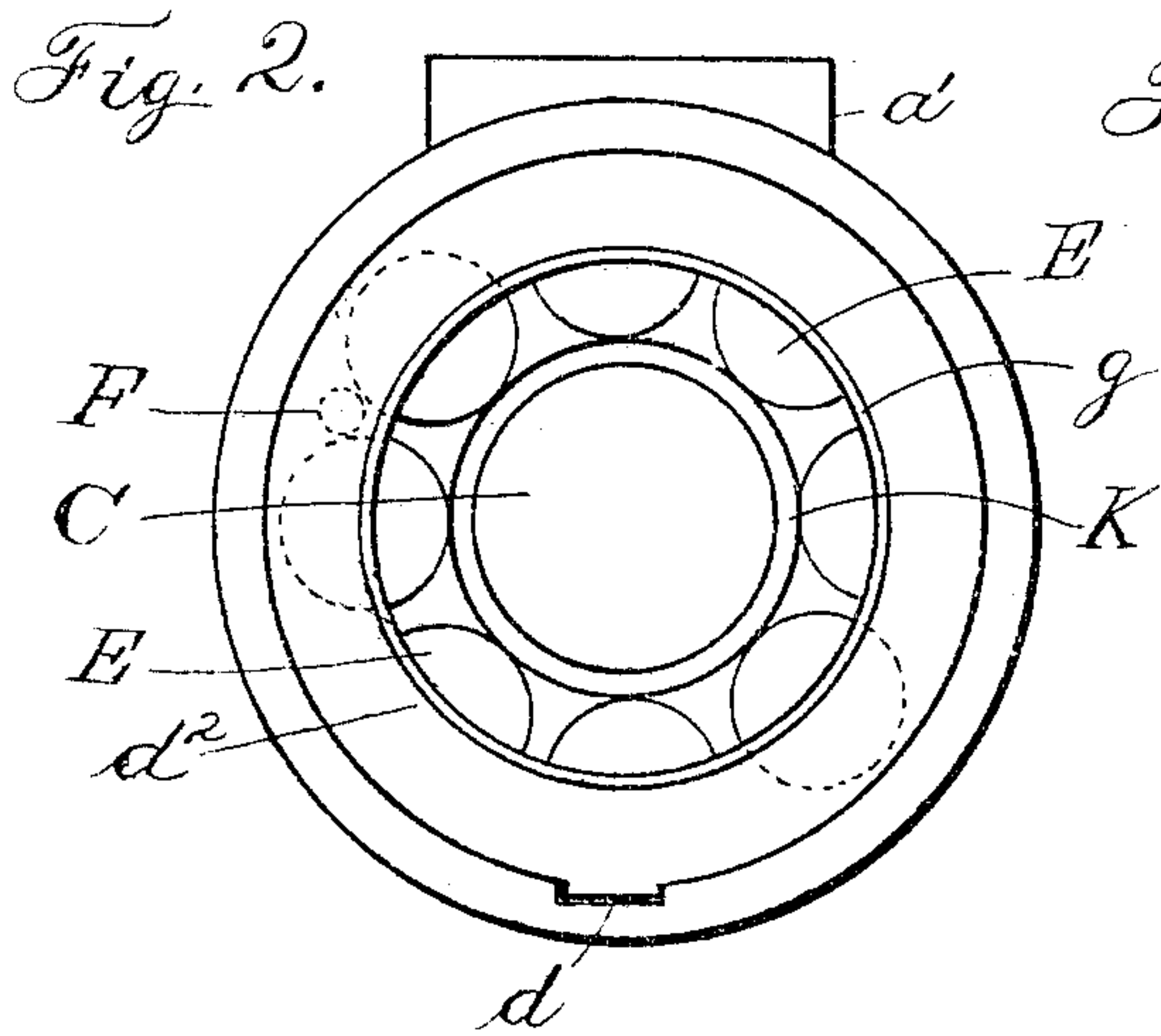
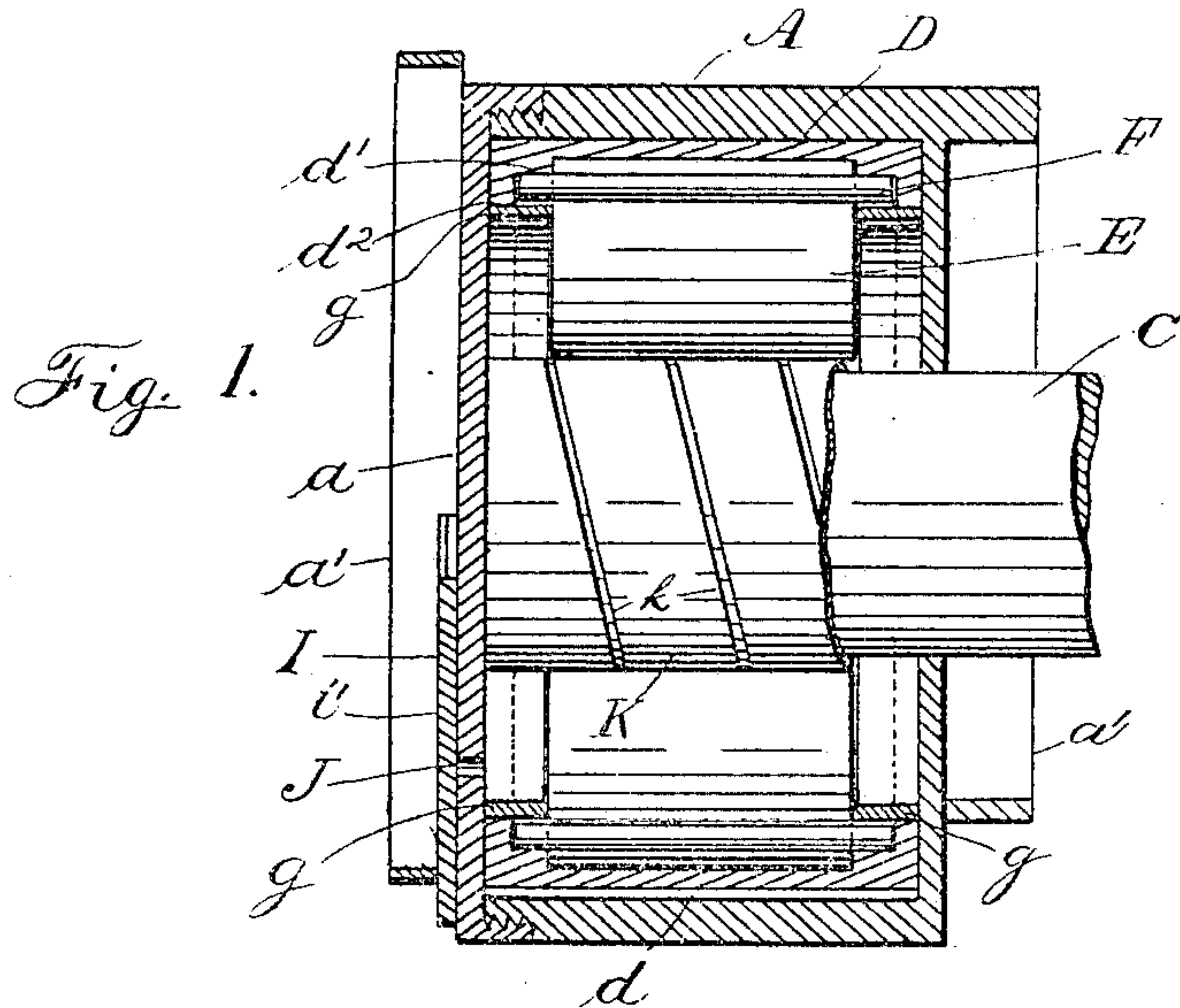


No. 799,309.

PATENTED SEPT. 12, 1905.

C. G. DEMING.
ROLLER BEARING.
APPLICATION FILED DEC. 3, 1904.



Witnesses
E. Lewis
C. P. Smith.

Inventor
Charles G. Deming
By
Chas. D. Sweet, Attorney

UNITED STATES PATENT OFFICE.

CHARLES G. DEMING, OF KINGSTON, NEW YORK.

ROLLER-BEARING.

No. 799,309.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed December 3, 1904. Serial No. 235,318.

To all whom it may concern:

Be it known that I, CHARLES G. DEMING, a citizen of the United States, residing at Kingston, in the county of Ulster and State of New York, have invented new and useful Improvements in Roller-Bearings, of which the following is a specification.

This invention relates to improvements for roller-bearings adapted to be used on shafts, journals, and the like, but is especially adapted for use on the axles of railway-cars, and is shown in this application to be so applied.

The invention includes novelty in the housing in the inner lining or shell, protection for the axle and rollers, bearings for the rollers, and means for lubricating all movable parts.

The accompanying drawings illustrate the invention, its various parts being referred to by letters, similar letters denoting corresponding parts in the several views.

Figure 1 is a side view of the device, partly in section. Fig. 2 is an end view with the cap of the housing removed. Fig. 3 is a front view of the cap and showing its lubricating attachment.

The letter A designates the box or housing, and *a* the cap at the front end thereof. This cap has an angular frame *a'*, to rest in the saddle of the car-truck, and a similar frame is provided for the other end of the housing, which has an opening to admit the axle. The exterior of the housing may be of any preferred shape; but the inner surface is cylindrical and is provided with a tubular lining D, keyed at *d* to the housing to prevent rotation.

A flange *d'*, projecting inwardly, on each end of the lining D affords end bearings for the rollers E E, disposed around the axle C, and an outer bearing for the terminal portions of the separating-rollers F F, while its further projection *d''* affords an end thrust for the rollers F F. This projection *d''* extends slightly beyond the ends of the rollers F, so that the ring *g* when put in place forms a guide for the rollers F F. Thus the rollers F are confined to a track *d'* by the ring *g* and maintain spacing between the rollers E E.

K is a removable sleeve fitted upon the axle C and rotating with it. It is provided with a spiral oil-channel *k*.

On the outer cap *a* are vertical beveled cleats I I, having parallel recesses *i i* at their

upper part and below said recesses inclining bodily toward each other. They are adapted to hold a beveled slide *j'*, which has the lateral pins *j'' j''* to engage said recesses *i i*.

J is an oil-inlet through the housing A and located between the cleats I I. The inlet is uncovered by pushing up the slide *j'* until it is clear of the cleats and then turning up the outer end on its sustaining-pins *j''*. The oil is delivered into the space at the ends of the bearing-rollers E and settles in the bottom of the housing, whence it is carried to all parts of the mechanism as the rollers revolve.

All the rollers, as well as the box-lining, the axle-sleeve, and the ring, are easily removable and renewable when worn, and since there is substantially no wear on the housing or the axle, these parts may be used an indefinite time.

Having now described my invention, what I claim is—

1. A roller-bearing comprising a housing having an open end, a cap on said end, a lining having at each end an inwardly-inclining flange disposed at a right angle to the major axis of said lining, and a ring on the inner edge of said flange extending within and parallel to said lining, an axle in said housing, bearing-rollers disposed around said axle having end bearings against said flange and separating-rollers between said bearing-rollers having end bearings against said flange and running between said flange and said ring as described.

2. In a roller-bearing the combination with a housing of a lining therefor, a flange on said lining at a right angle thereto, a ring on the inner edge of said flange extending into and parallel with said lining, a shoulder on said flange, separating-rollers movable in a track formed by said shoulder and said ring, bearing-rollers having their end thrust against said shoulder and said ring, an axle in said housing, and a sleeve on said axle, said bearing-rollers moving in contact with said separating-rollers and said sleeve, substantially as herein described.

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

CHARLES G. DEMING.

Witnesses:

W. J. HILLIS,
DAVID A. DYER.