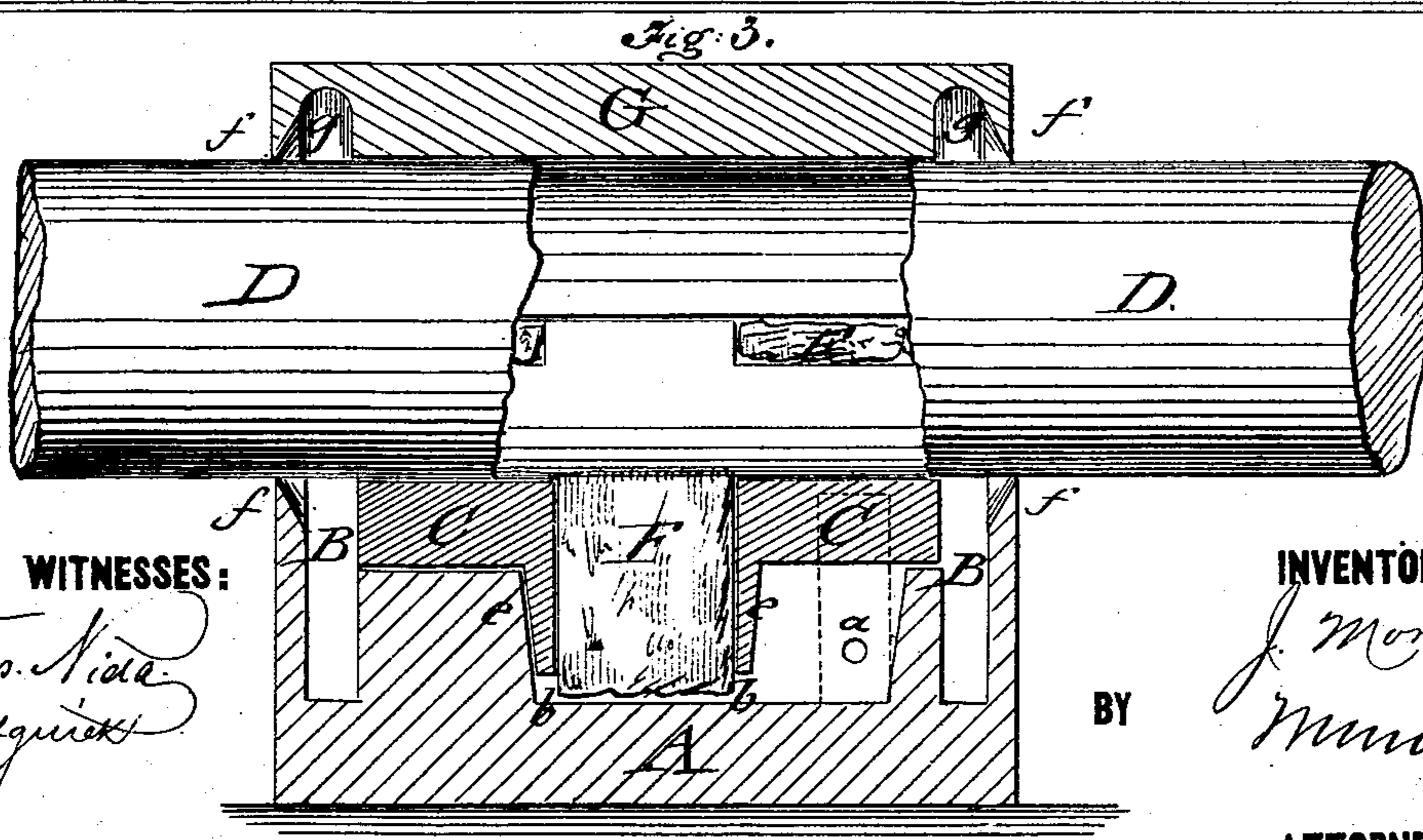
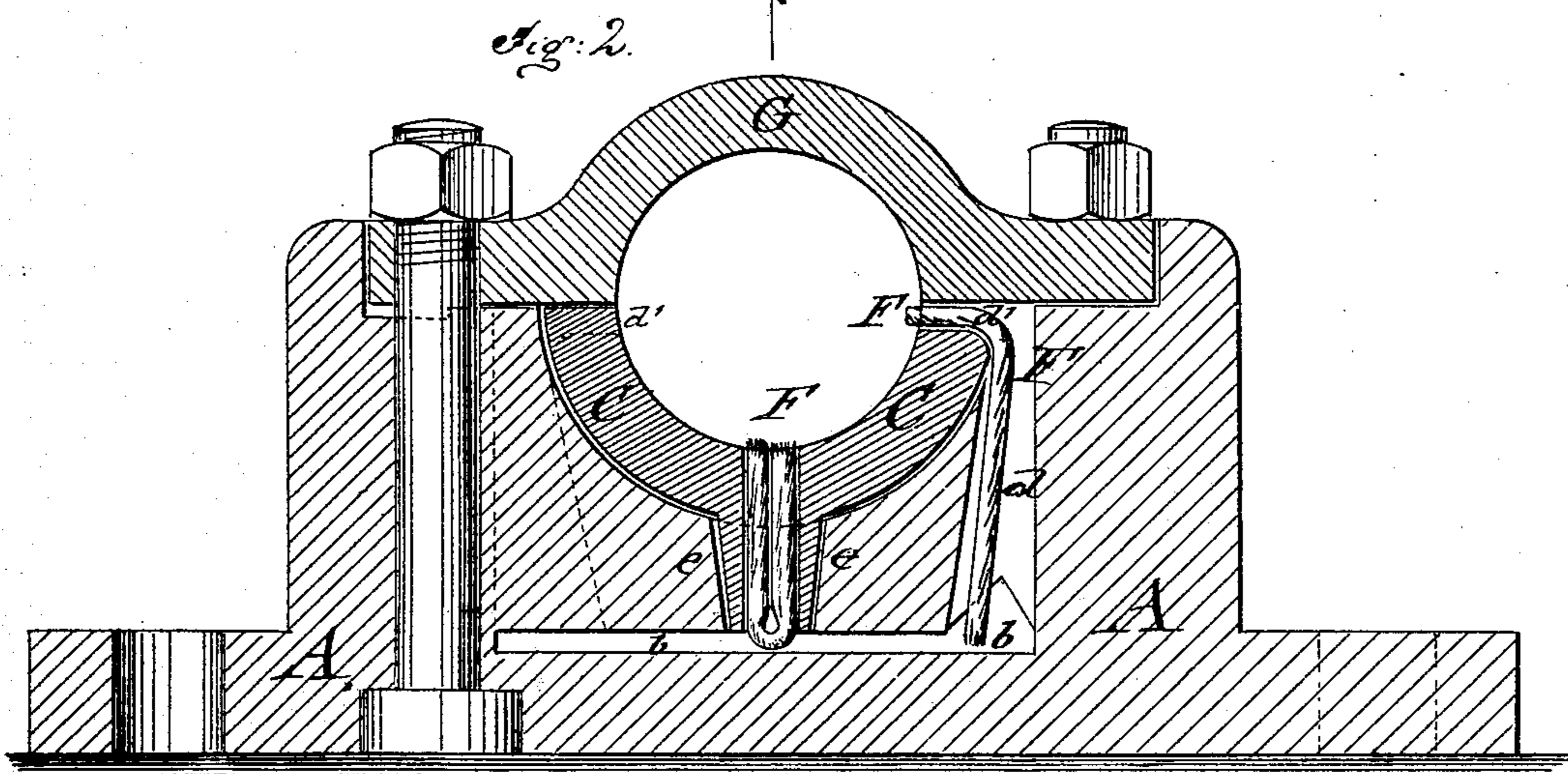
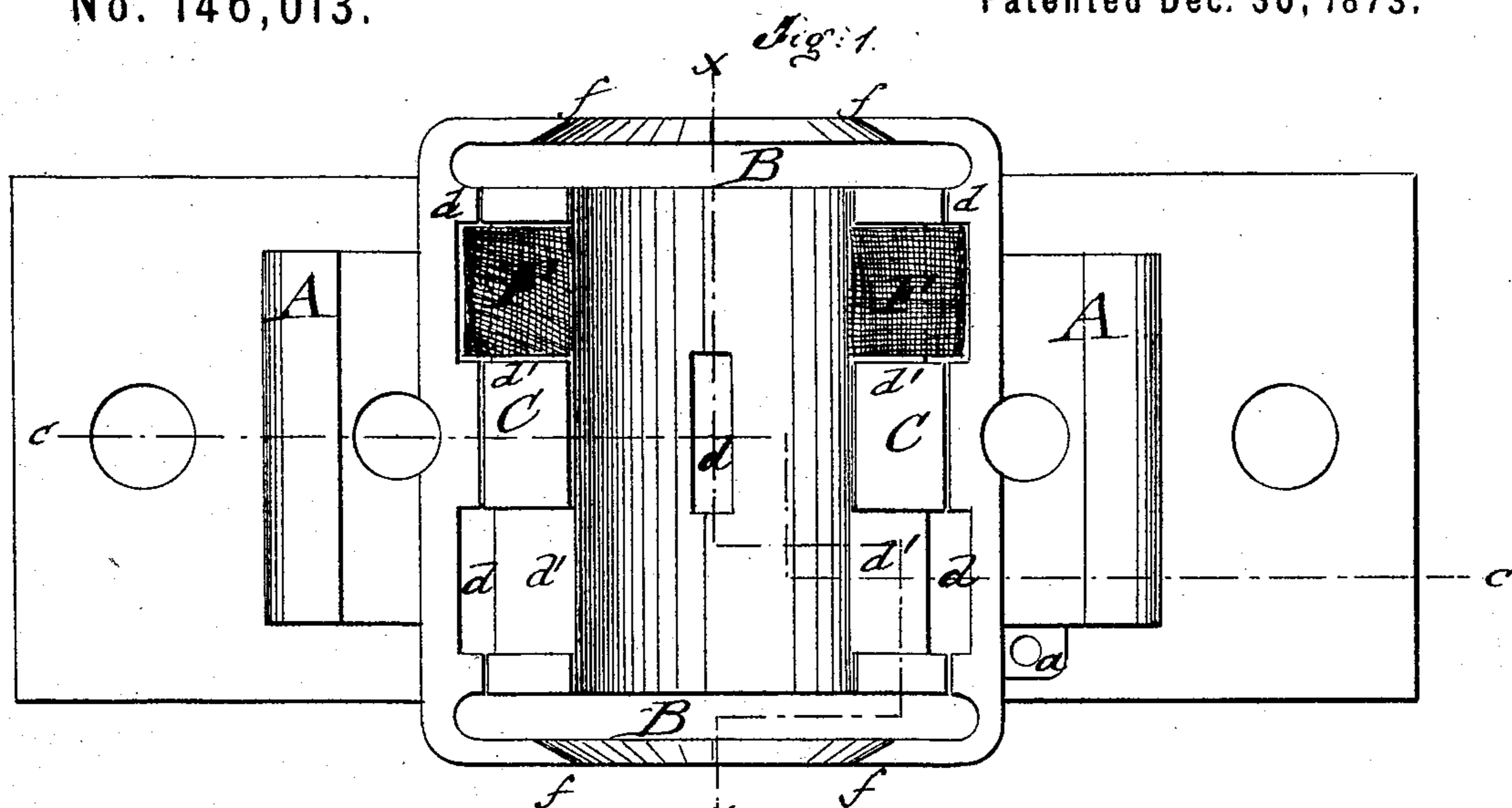


J. MORIN.
Lubricating Journal-Boxes.

No. 146,013.

Patented Dec. 30, 1873.



WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

JEAN MORIN, OF NEW YORK, N. Y.

IMPROVEMENT IN LUBRICATING JOURNAL-BOXES.

Specification forming part of Letters Patent No. **146,013**, dated December 30, 1873; application filed November 22, 1873.

To all whom it may concern:

Be it known that I, JEAN MORIN, of the city, county, and State of New York, have invented a new and Improved Self-Lubricating Journal-Box, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my improved self-lubricating journal-box, with axle and cap piece detached, and Figs. 2 and 3, respectively, vertical longitudinal and transverse sections of the same on the line C C and *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish a self-lubricating journal-box for axles and shafts of all kinds, which secures an even and regular supply of oil to the bearings, reducing the friction of the axle, and economizing the consumption of the lubricating material.

The invention will first be fully described, and then be pointed out in the claims.

In the drawing, A represents the outer case or supporting part of the journal-box, which is cast, of suitable material and shape, in the usual manner. Chambers B extend vertically at the sides of case A, and contain the lubricating oil, which is filled in by means of a tube, *a*, from the outside, which also indicates the quantity of oil in the chambers B, by the height of the oil therein, so that the requisite supply can easily and readily be regulated and kept up. Tube *a* is required to be of less height than the lowermost point of the axle to prevent a too abundant supply of oil to the same. The side chambers or oil-receptacles B connect with each other by means of flat, lateral, and longitudinal channels *b*, at some distance below the axle, which channels are connected by central and symmetrically arranged side channels *d* with the bearing C and axle D. The side channels *d* are wider at the base, narrowing toward the upper end, and contain the wicks F, which touch with their upper ends the axle, and feed the oil evenly to the same. The semi-cylindrical axle-

bearing C is cast of bronze or other suitable material, and provided with top recesses *d'*, and a downward-projecting central guide-tube, *e*, which fits into central channel *d* of case A. The wicks F extend to the flat lateral channels *b*, take up the lubricating oil and convey it by capillary attraction to the lower part and sides of the journal in proportion to the number of rotations of the same. The wicks may be retained in their channels by some suitable clamping device, by which a regular supply of oil is kept up to all parts of the journal. The cap-piece G is applied to the seats or standards of case A by bolts, in the usual manner, and serves to keep the side wicks F in position in recesses *d'* of bearing C, and therefore in contact with the axle. The outer or end walls of the oil-chambers B are tapering from the inside to a sharp edge, *f*, which fits closely around axle D. The cap-piece G is provided with annular grooves *g*, and similar tapering edges *z*, by means of which any surplus of oil fed to the journal is taken up and carried along grooves *h* and edges *z*, back into the oil-chambers, utilizing thereby completely every particle of the lubricating material.

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

1. The self-lubricating journal-box, consisting of case A, with oil-chambers B, and wick-channels *d*, bearing C, central and side wicks F, and cap-piece G, and connected substantially as and for the purpose described.

2. The surrounding case A, having flat, central, and lateral base channels *b*, for establishing the connection of oil-chambers B and wick-channels *d*, and provided with a supply-tube, *a*, in the manner and for the purpose described.

3. The axle-bearing C, having side recesses *d*, for the wicks and downwardly-extending wick-tube *e*, as set forth.

JEAN MORIN.

Witnesses:

PAUL GOEPEL,
EMILE FISCHER.