

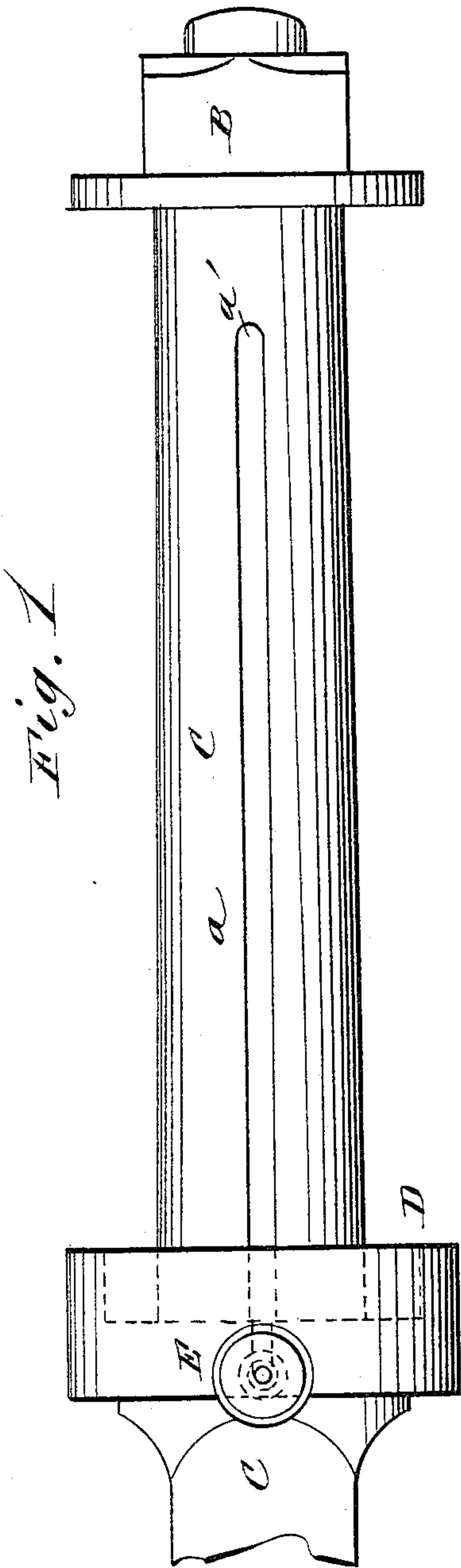
(No Model.)

C. M. REGAN.

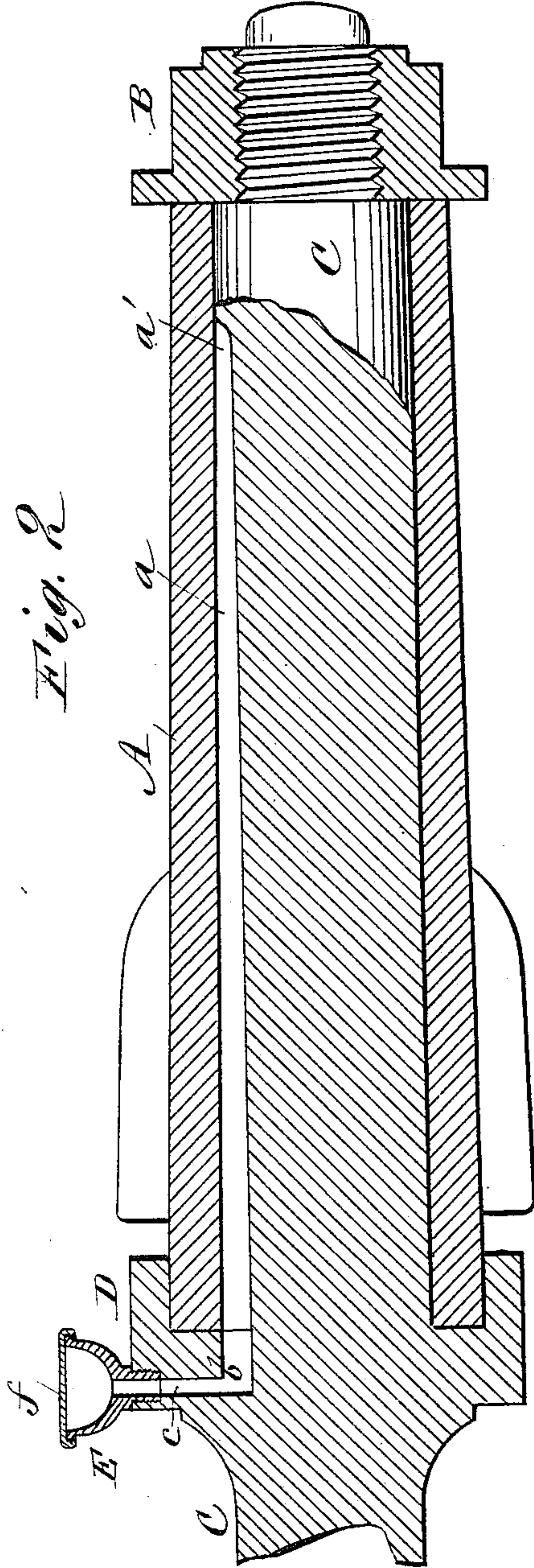
WAGON AXLE.

No. 362,659.

Patented May 10, 1887.



WITNESSES:
C. Nevada
L. Sedgwick



INVENTOR:
C. M. Regan
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UNITED STATES PATENT OFFICE.

CORNELIUS M. REGAN, OF BROOKLYN, NEW YORK.

WAGON-AXLE.

SPECIFICATION forming part of Letters Patent No. 362,659, dated May 10, 1887.

Application filed October 4, 1886. Serial No. 215,273. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS M. REGAN, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Wagon-Axle, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a plan view of one end of a wagon-axle made in accordance with my invention, the box being removed. Fig. 2 is a longitudinal sectional elevation of the same, the box being shown in place upon the axle.

The invention will first be described in connection with the drawings, and then pointed out in the claim.

The box A and point-nut B are of the usual construction. The axle C is formed with the flange D, which encircles the axle and overlaps the inner end of the box A, to exclude sand and dust from the axle, and thus prevent excessive wear of the box and axle. In the upper portion of the axle A is formed the oiling-groove *a*, which extends nearly to the point of the axle. This groove is made straight and from three-sixteenths of an inch deep at the point to five-sixteenths of an inch deep at the shank, to facilitate the distribution of oil and to prevent a too rapid flow of oil in the groove,

which, if the groove were the same taper as the axle, would cause the oil to be forced out past the axle-nut. The oil is admitted to the groove *a* through the horizontal opening *b*, made in the axle in line with the groove *a*, below the flange D, and through the vertical hole *c*, made in the axle back of the flange D, which latter hole communicates with the horizontal opening *b*.

In the vertical opening *c* is fitted the oil-cap E, to which oil may be supplied, and which is closed with the cap *f*, so that the axle may be conveniently lubricated without removing the wheel.

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

The axle C, formed with the oil-groove *a*, reaching nearly to the point of the axle, and formed with the surrounding collar D, undercut or flanged to overlap the end of the axle-box A, in combination with the oil-cap E, fitted in the vertical passage *c*, back of the flange D, and the oil-passage *b*, in line with the groove *a* and communicating with the vertical passage *c*, substantially as described.

CORNELIUS M. REGAN.

Witnesses:

A. M. LEVY,
THOMAS J. HULL.