

(No Model.)

W. A. MAHAN & C. ROSSETTER.

OIL CUP.

No. 339,441.

Patented Apr. 6, 1886.

Fig. 1

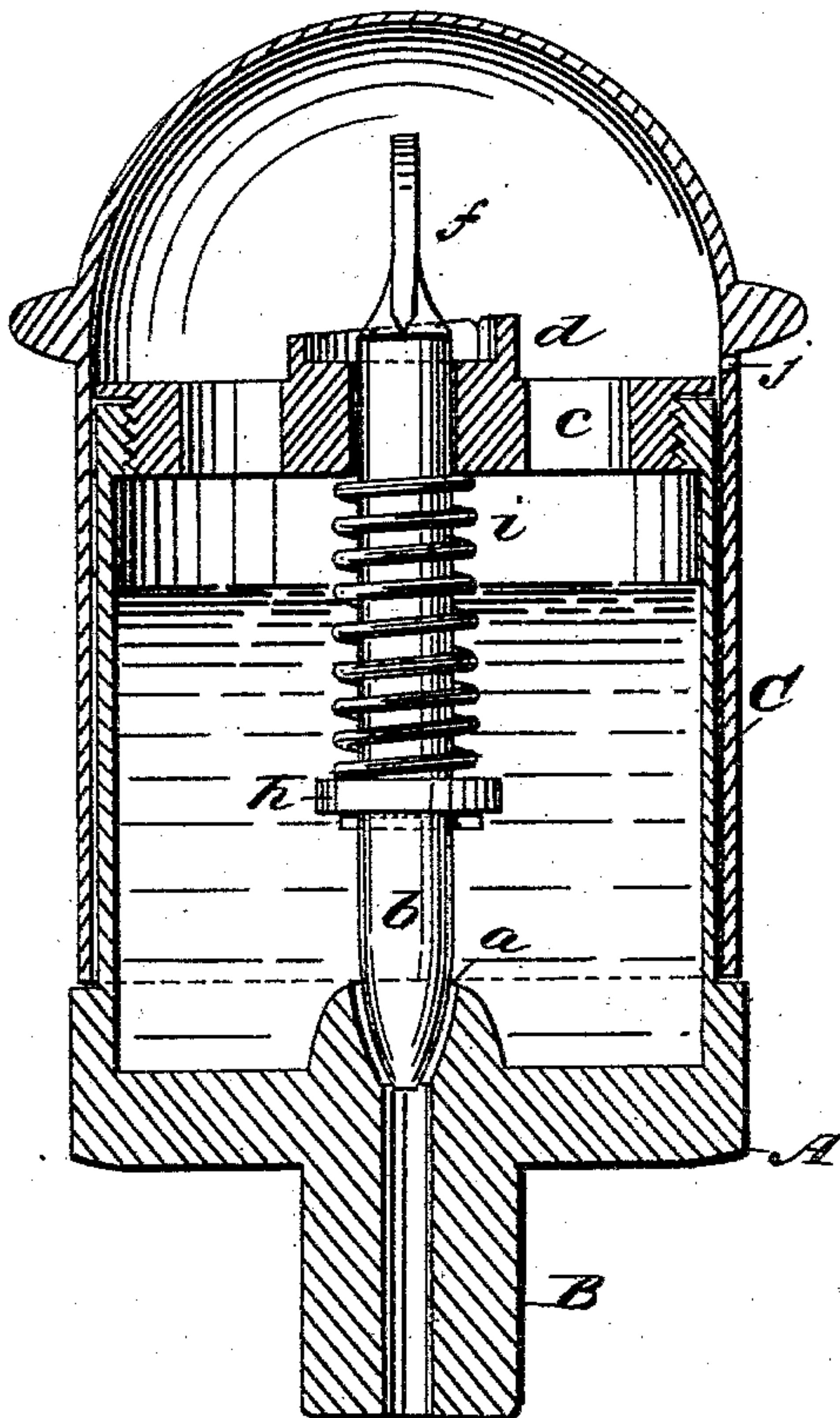


Fig. 2

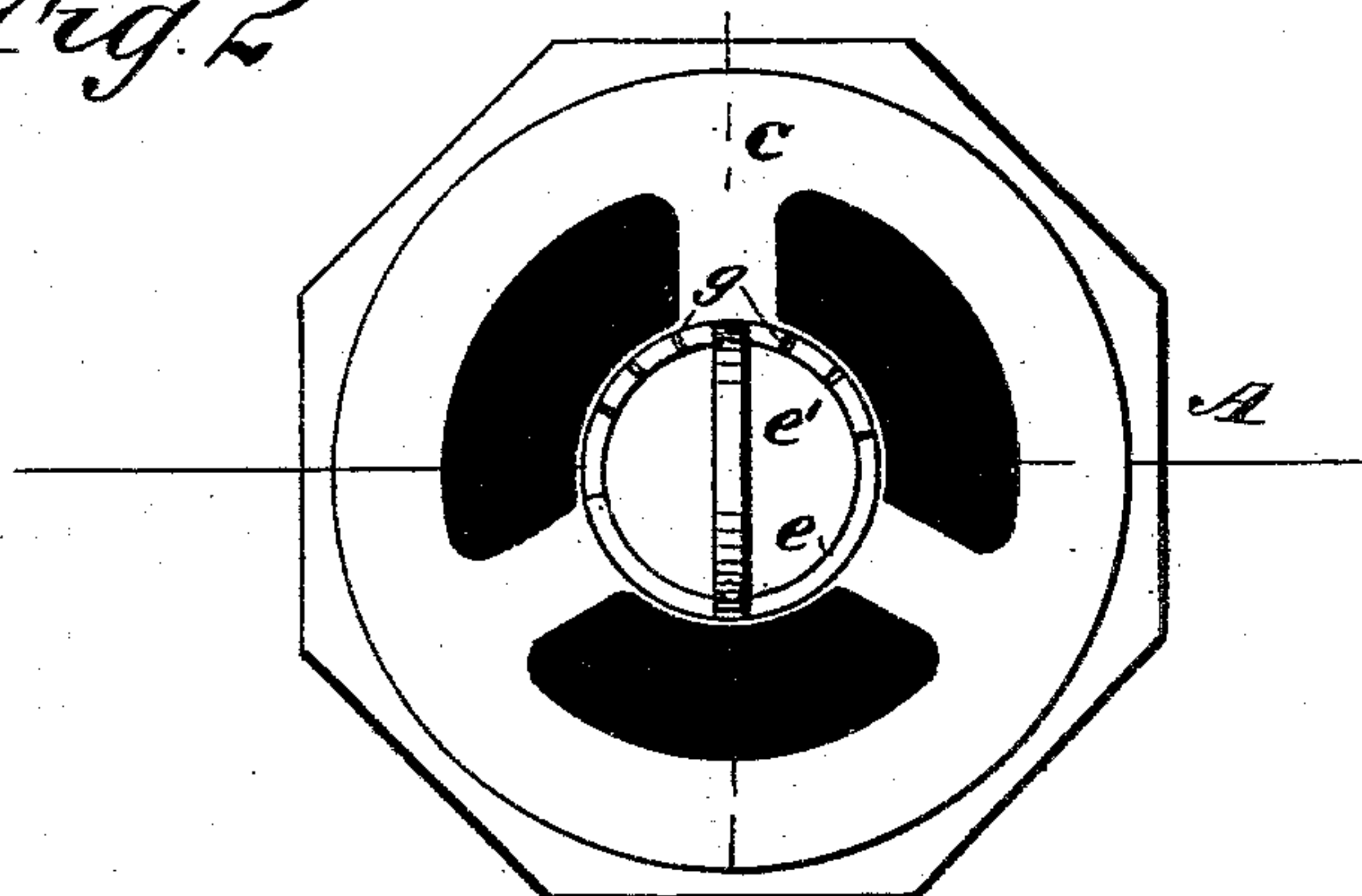
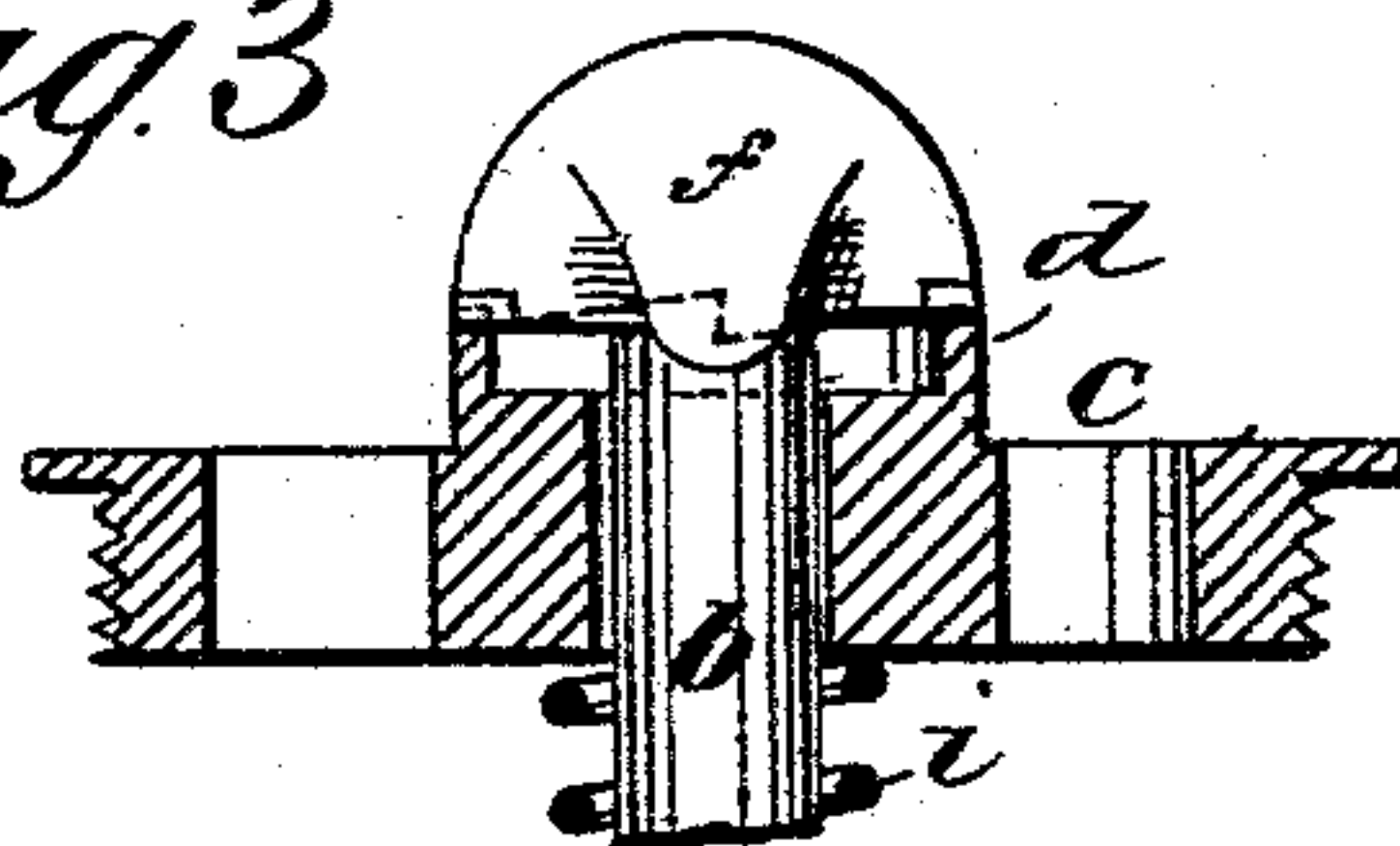


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

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OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 339,441, dated April 6, 1886.

Application filed January 12, 1886. Serial No. 188,379. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM A. MAHAN and CHARLES ROSSETTER, of Marquette, in the county of Marquette and State of Michigan, have invented a new and useful Improvement in Oil-Cups, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a vertical transverse section of our improved cup. Fig. 2 is a plan view with the cover removed. Fig. 3 is a detail sectional view of the feed-regulating device.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of our invention is to provide a simple, easily adjusted, and reliable automatic oil-cup for use upon locomotive-guides and other machinery requiring continuous oiling.

Our invention consists in an oil-cup provided with a discharge-aperture in the bottom thereof, an adjustable valve fitted to the discharge-aperture, and novel means for regulating the adjustment of the valve and holding it in any position in which it may be placed, as hereinafter more fully described.

The cup A is provided with a nipple, B, which is threaded for attachment to the guides of a locomotive or other mechanism in connection with which the oil-cup is used. At the top of the opening of the nipple and inside of the cup A is formed a valve-seat, a, to which is fitted a valve, b, whose stem extends upward through a spider, c, inserted into or formed in the top of the cup A.

On the top of the spider c, and concentric with the stem of the valve b, is formed an annular rim, d, on the upper edge of which there are two inclined surfaces or cams, e e', and to the top of the valve-spindle is attached a cross-bar, f, whose lower edge is V-shaped and rests upon the inclined cams e e', formed on the upper edge of the annular rim d. The cross-bar f is made in the form of a thumb-piece, for convenience of handling, and when the bar is above the lower ends of the inclined cams e e' the valve b will be on its seat, and when the cross-bar f is turned so as to cause it to ride upward on the inclined cams e e' the valve b will be raised, (more or less,) allowing the oil to escape from the cup through the nipple B to the bearing or surface to be lubricated.

To cause the cross-bar f to remain in the position in which it is placed, notches g are formed in the inclined cam e' of the annular rim d. A collar, h, is formed on or attached to the spindle of the valve b, and between the collar h and the spider c a spiral spring, i, is placed loosely on the valve-spindle, and tends to force the valve b down upon its seat.

The oil-cup A is provided with a cover, C, which fits over the exterior thereof and excludes dust and moisture.

To prevent air-pressure or the formation of a vacuum in the oil-cup, the cover C is provided with a vent, j.

Our improved oil-cup may be furnished with the sight-feed arrangement, which would be connected with the nipple B in the usual way.

The valve of the oil-cup may be regulated to feed at any required rate by the adjustment of the cross-bar f, as before described, and the oil-cup may be adjusted at night or in the dark by listening to the clicks of the cross-bar f as it comes into engagement with the notches g in succession.

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

1. In an oiler, the combination, with the cup A, provided with the nipple B and valve-seat a, of the valve b, the flange h, and cross-bar f, the rim d, having the inclined surfaces or cams e e' formed thereon, the cross-bar f, arranged to engage the inclined surfaces, the spring i, surrounding the valve-spindle and arranged to press the valve to its seat, and the cover C, inclosing the oil-cup and valve-operating devices, substantially as herein shown and described.

2. In an oiler, the combination, with the cup A, provided with the nipple B and valve-seat a, of the valve b, having the cross-bar f, the rim d, having formed thereon the inclined surfaces or cams e e', one or both of the inclined surfaces or cams being provided with notches g, and the cover C, inclosing the oil-cup and valve-operating devices, substantially as herein shown and described.

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Witnesses:

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