

(No Model.)

H. A. TODD.

OIL CUP.

No. 354,845.

Patented Dec. 21, 1886.

Fig. 1.

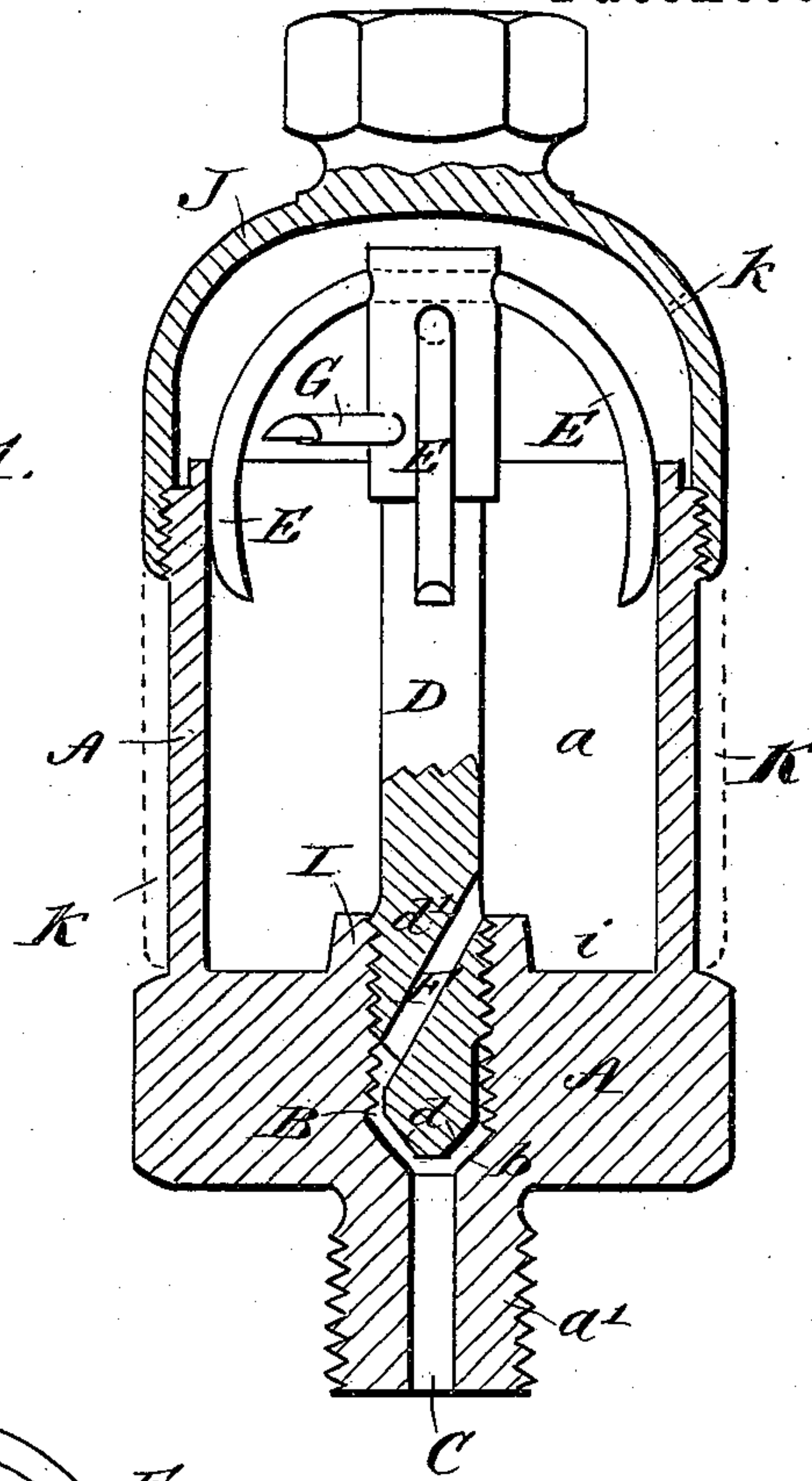


Fig. 2.

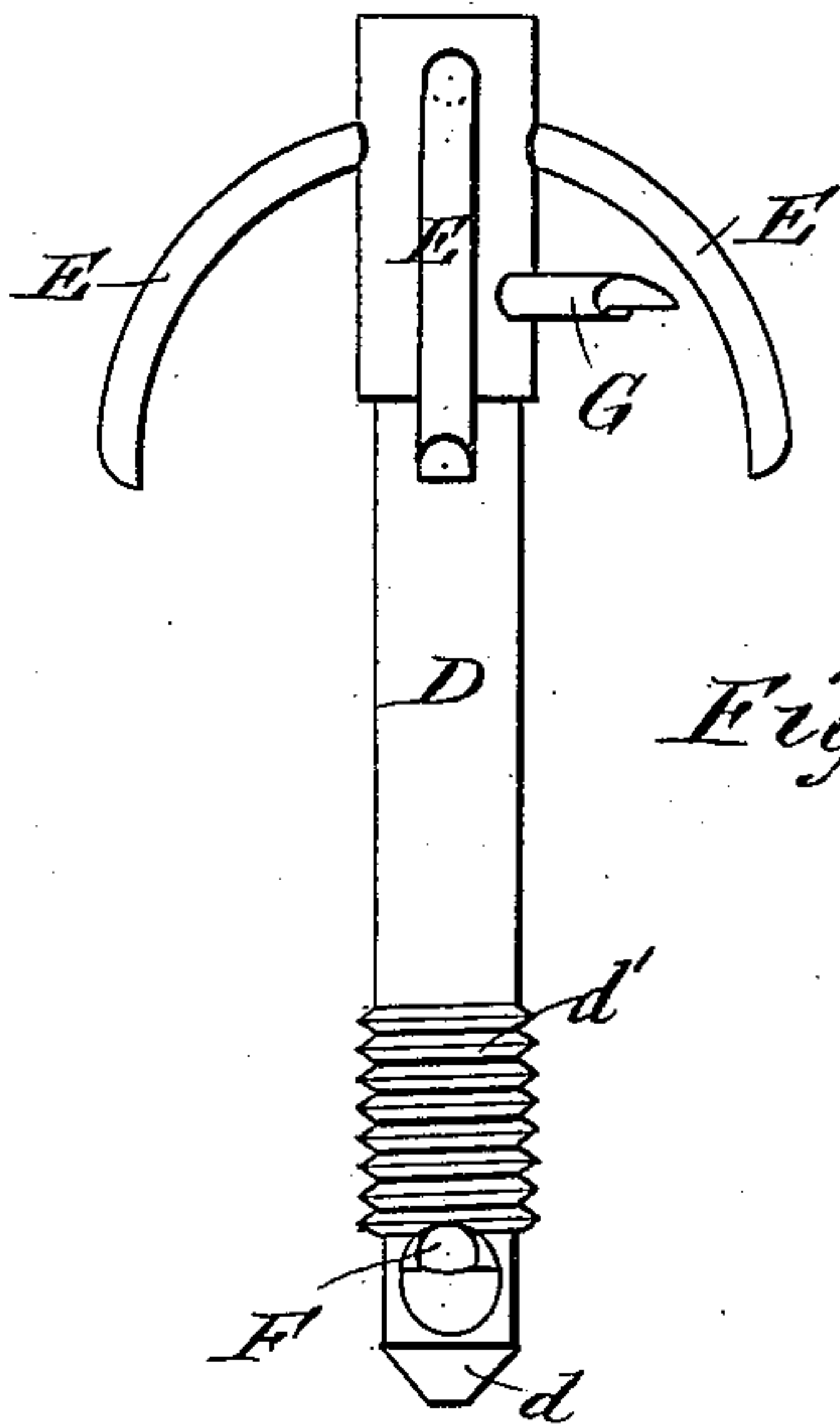
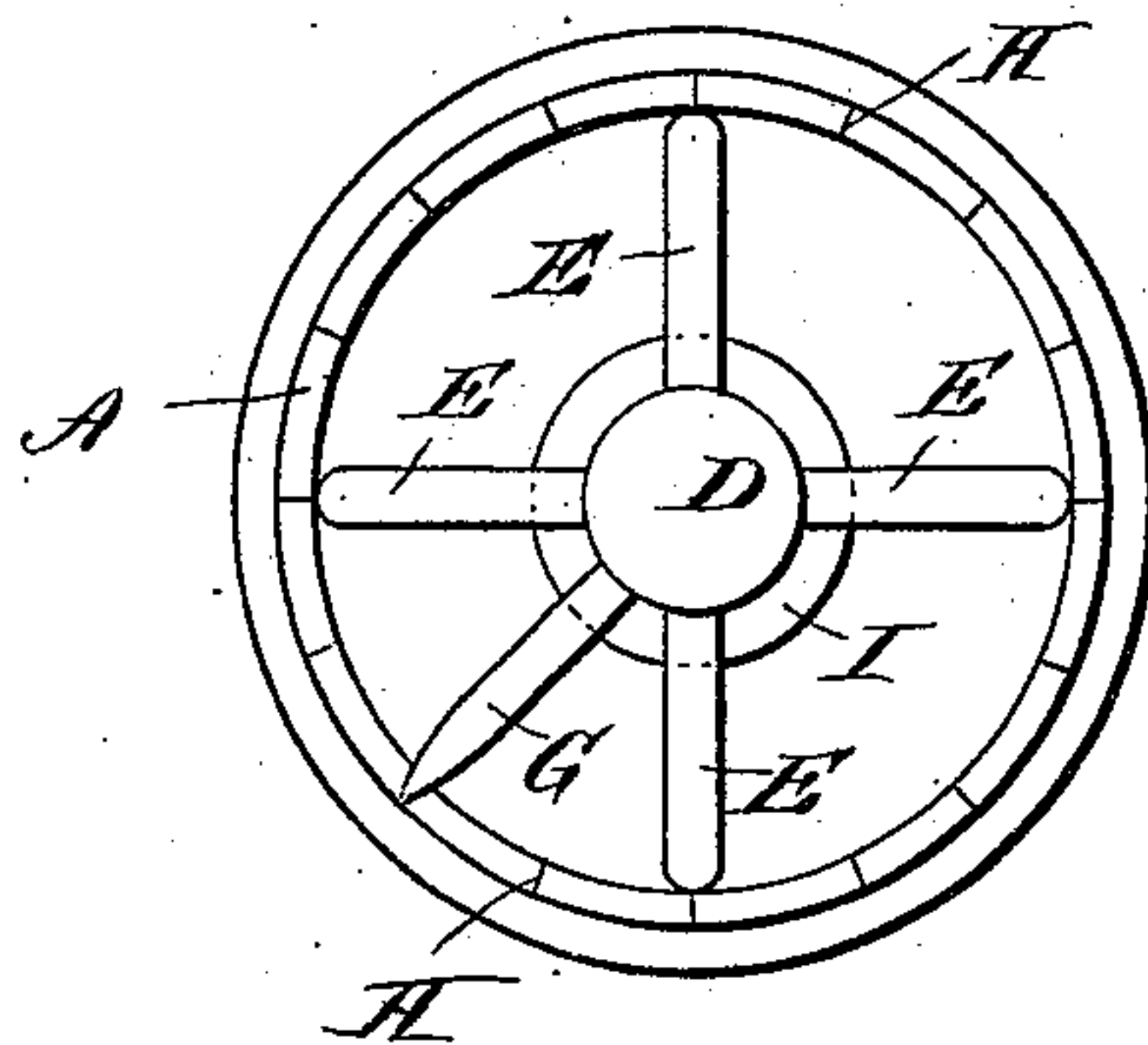


Fig. 3.



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OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 354,845, dated December 21, 1886.

Application filed August 4, 1886. Serial No. 210,006. (No model.)

To all whom it may concern:

Be it known that I, HERMAN A. TODD, of Evanston, in the county of Uinta and Territory of Wyoming, have invented a new and Improved Oil-Cup, of which the following is a full, clear, and exact description.

My invention relates to oil-cups for lubricating journal-bearings or other moving parts of machinery, and has for its object to provide a simple, inexpensive, efficient, and durable device of this character, which may be easily adjusted to regulate the feed of oil and avoid waste of it, and is especially adapted to the lubrication of the rod and wrist-pin connections of locomotive and other engines.

The invention consists in certain novel features of construction and combinations of parts of the oil-cup, all as hereinafter fully described and claimed.

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 all the figures.

Figure 1 is a vertical sectional elevation of my improved oil-cup. Fig. 2 is a side elevation of the feed-spindle and attached springs and index-finger, and Fig. 3 is a plan view of the oil-cup with the cap removed.

The body A of the oil-cup is chambered at a to receive the oil, and has a neck, a', by which it may be attached to a journal box or bearing. A central hole, B, is made in the base of the body A, and at the bottom of this hole there is formed a tapering seat, b, below which a passage, C, is provided for outflow of oil from the cup.

The hole B is screw-tapped to receive the lower screw-threaded end, d', of a spindle, D, which is chamfered or beveled at its extremity, as at d, to fit on the tapering seat b of the oil-cup. The fit of the spindle in the base of the cup-body A steadies the spindle at its lower end, and at its upper end the spindle is held and steadied by bent arms, or, preferably elastic wires E E, which are passed through the spindle and bear by their extremities against the inner upper part of the body A, as shown clearly in Fig. 1. These springs E allow a free vertical motion or adjustment of the spindle.

The end or plug d' of the spindle D is provided with an inclined or oblique passage, F,

which communicates with the oil-chamber a of the cup and with the lower part of the hole B in the cup-body, and below the lower opening of the passage F the screw-threads of the spindle end d' are cut away to allow free escape of oil through passages F B C when the extremity d of the spindle is raised from the seat b.

An index-finger or pointer, G, fixed in the spindle D, in connection with a graduated scale, H, marked in any approved way on the top of the oil-cup body A, indicates the extent of opening of the spindle at the seat b, and whereby the spindle may be adjusted vertically by screwing it in or out to allow any predetermined quantity of oil to flow from the cup in a given time upon the part to be lubricated.

A boss or projection, I, formed on the body A at the bottom of the oil-chamber and around the hole B, forms a pocket, i, in the oil-chamber to hold sediment and prevent its passage from the cup to the parts to be oiled, and thus avoid cutting of the journals and their bearings.

When the cup is to be used on a wrist-pin journal, as on the end of an engine connecting-rod, I prefer to provide the cup with a screw-cap, J, fitting air-tight, the bodily swing of the cup then insuring proper feed of the oil from it; but when the cup is to be used on cross-head guides or on ordinary stationary journal-boxes I will fit it with a slip cap or cover, K, having a vent-hole, k, to insure flow of the lubricant, and as indicated in dotted lines in Fig. 1 of the drawings.

It is obvious that as the springs E support the top of the spindle D independently of the cap J or K of the cup, the cap may be removed to replenish the oil or clean the cup without altering the adjustment of the spindle when set to feed the oil properly to any particular bearing, and the index-finger G and scale H provide for almost instantly resetting the spindle to continue the same feed or flow of oil, should the spindle be removed for any purpose; and the flow of oil may be stopped at any time by screwing the spindle down onto the seat b of the cup, as will readily be understood.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In an oil-cup, the combination, with the cup-body having a passage for outflow of oil, 5 and a spindle provided with an oilway and screwed into said passage, of arms or springs held to the top of the spindle and bearing on the cup-body to hold and steady the top of the spindle independently of the cap of the oil-cup, substantially as described, for the purposes set forth.

2. The combination, with the oil-cup body A, provided with passages B C and a seat, b, of a spindle, D, having an oilway, F, and 5 threaded into passage B, and adapted to close onto seat b, and arms or springs E, fitted to the head of the spindle and bearing on the cup-body, substantially as herein set forth.

3. The combination, with the cup-body A, having an oil-outlet, and a spindle screwed to 20 said outlet and adjustable lengthwise and provided with an oilway, of an index-finger, G, on the spindle, substantially as herein set forth.

4. The combination, with the oil-cup body A, having oil-outlet, and a graduated scale, H, 25 of a spindle screwed to said outlet and adjustable lengthwise and provided with an oilway, as at F, and an index-finger, G, substantially as described, for the purposes set forth.

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Witnesses:

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