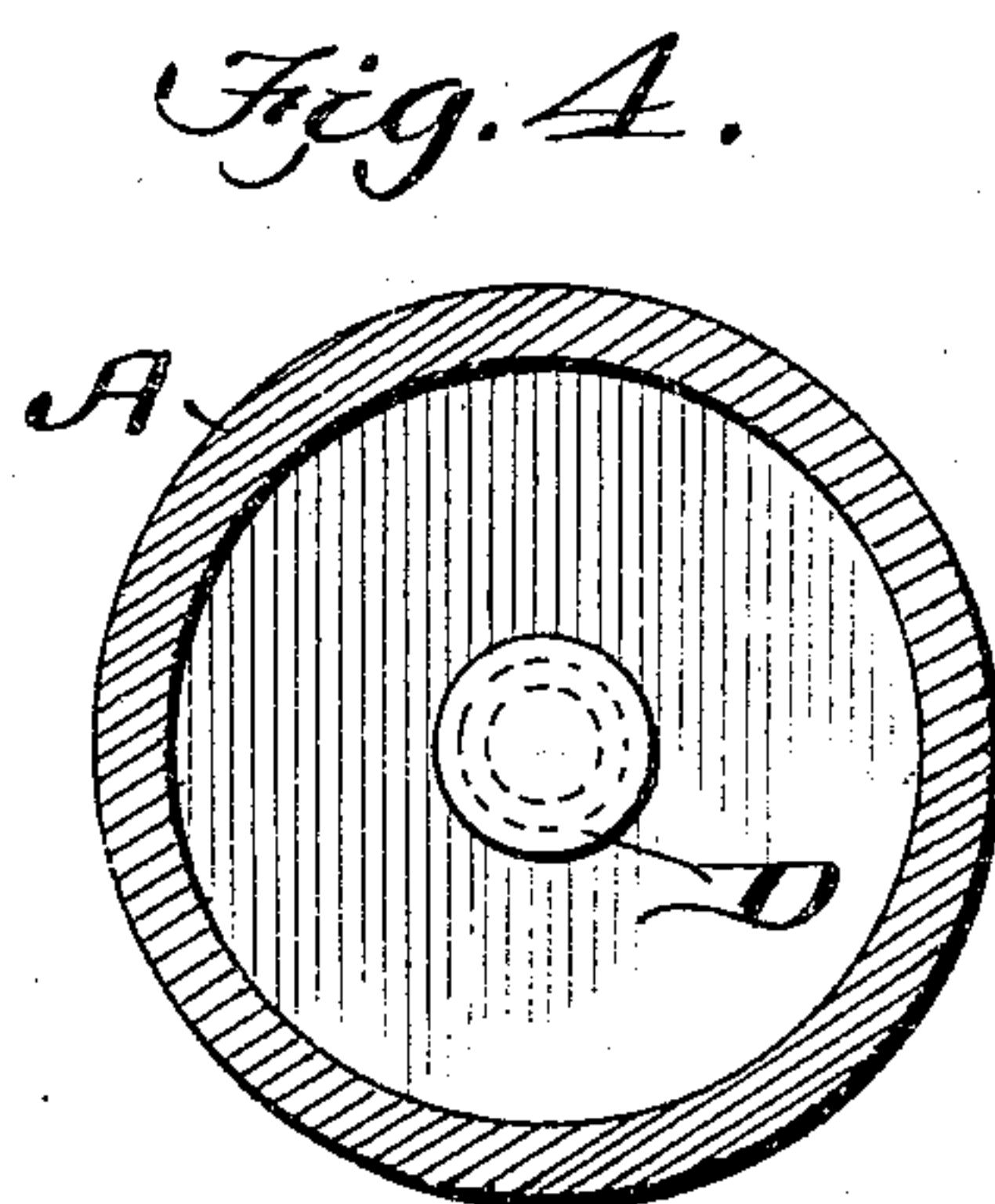
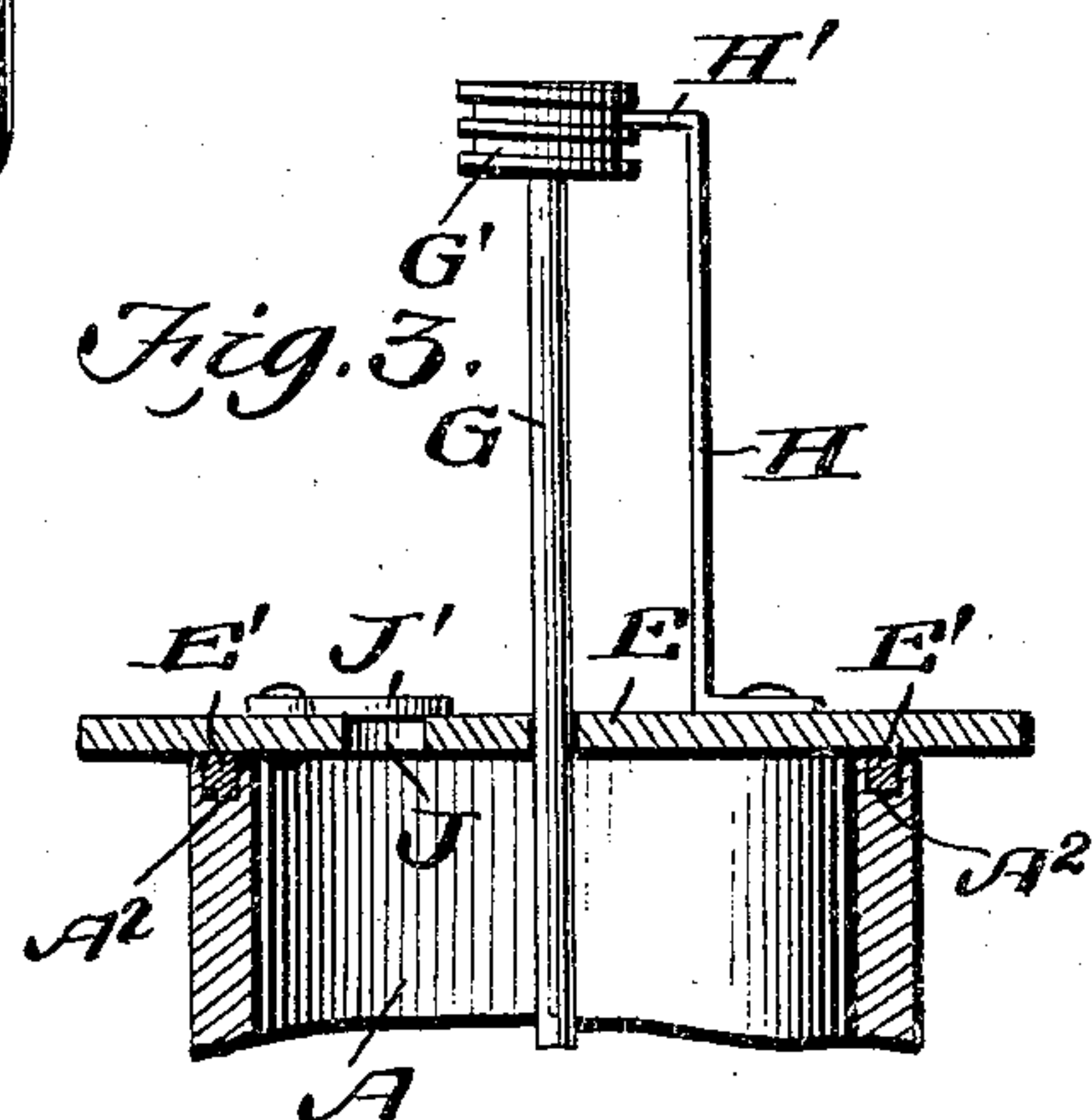
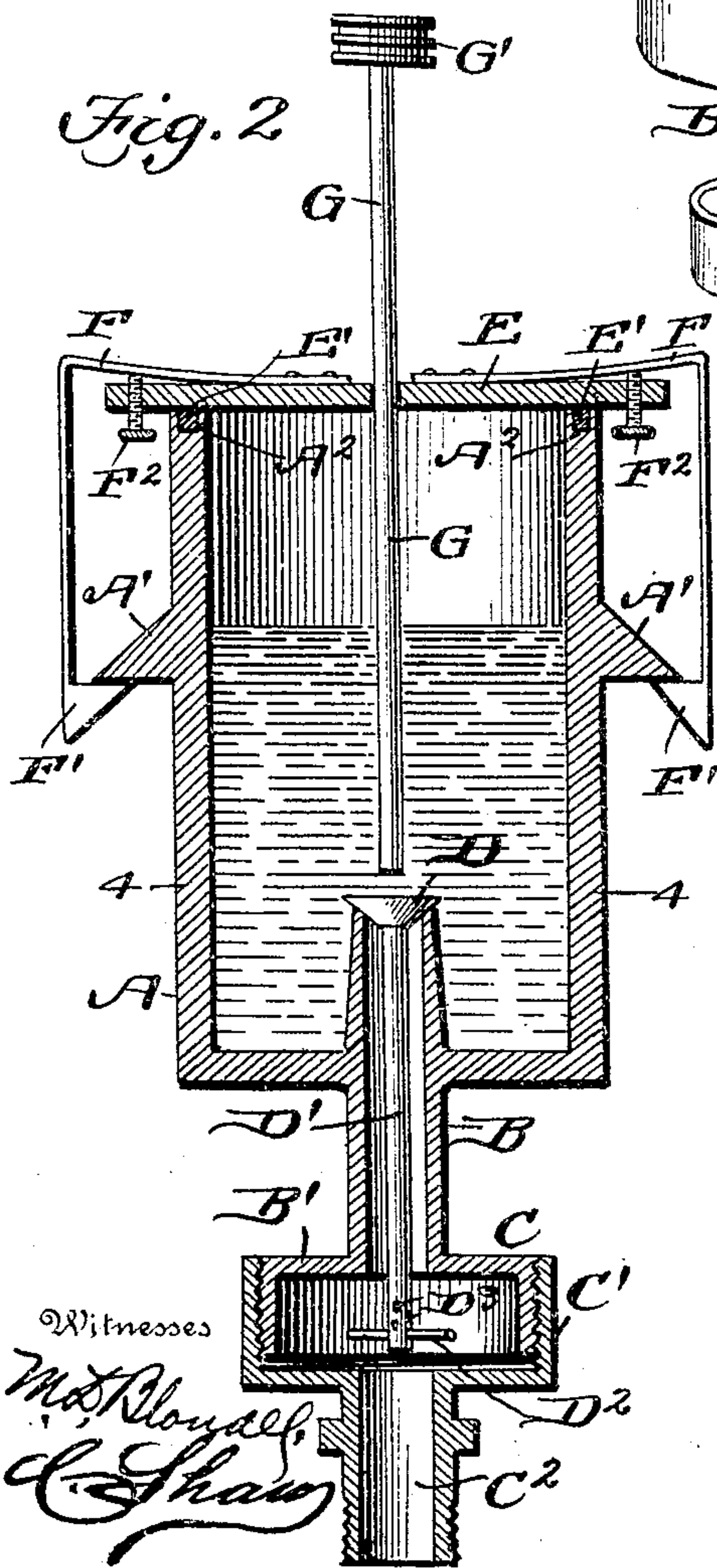
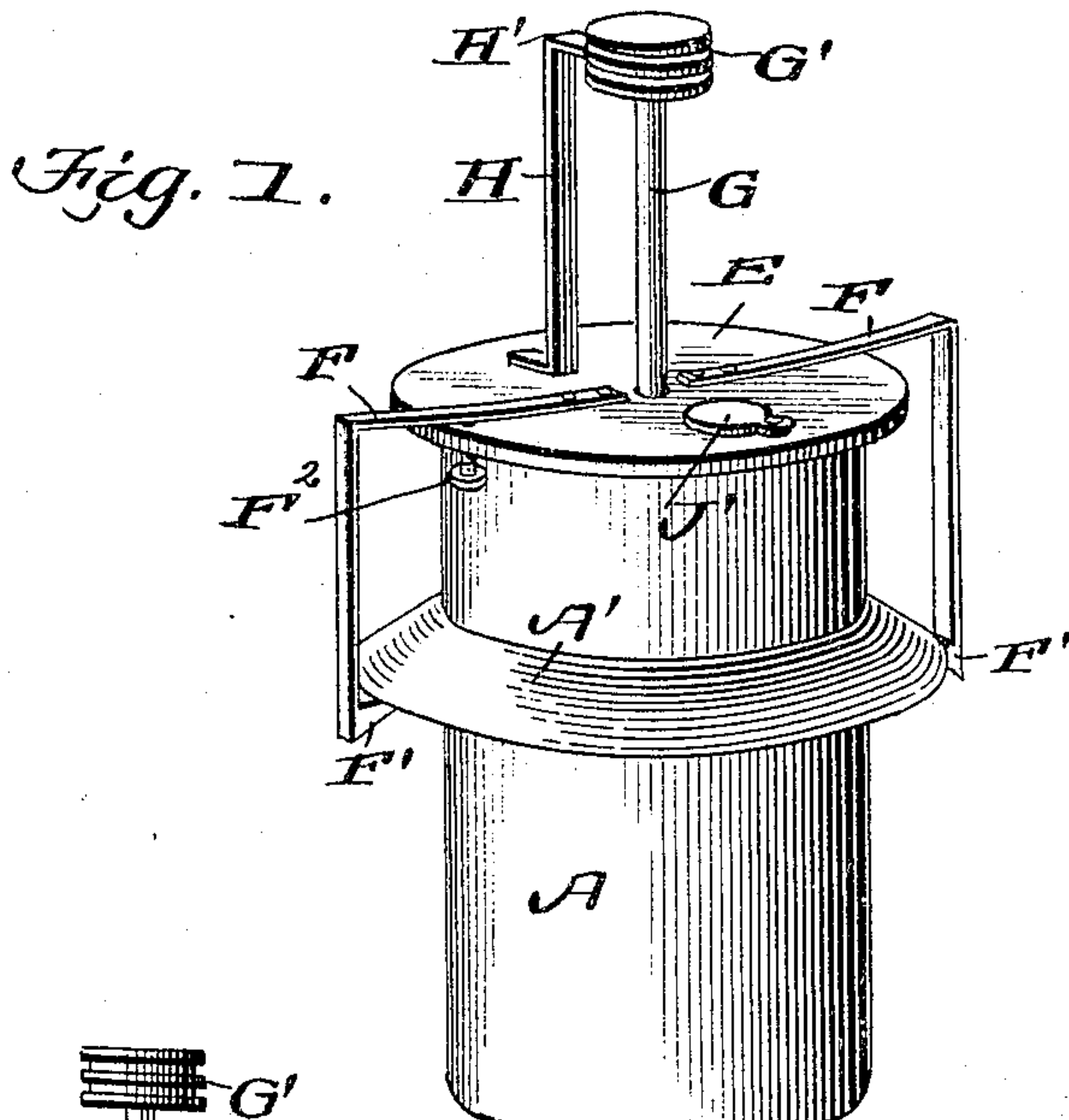


No. 792,060.

PATENTED JUNE 13, 1905.

E. G. MOORE.
AUTOMATIC OIL CUP.
APPLICATION FILED JAN. 30, 1904.



Inventor

E. G. Moore.

Witnesses
M. A. Russell,
C. Shaw

By
O'Meara & Brock,
Attorneys

UNITED STATES PATENT OFFICE.

EARNEST G. MOORE, OF FORT WAYNE, INDIANA, ASSIGNOR OF ONE-HALF
TO CHARLES R. DANCER, OF FORT WAYNE, INDIANA.

AUTOMATIC OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 792,060, dated June 13, 1905.

Application filed January 30, 1904. Serial No. 191,331.

To all whom it may concern:

Be it known that I, EARNEST G. MOORE, a citizen of the United States, residing at Fort Wayne, in the county of Allen and the State of Indiana, have invented a new and useful Improvement in Automatic Oil-Cups, of which the following is a specification.

My invention is an improvement in oil-cups designed to be attached to the wrist-pin of an engine and to feed oil thereto only when the engine is running, the oil being automatically cut off from the feed-pipe when the engine stops.

A further object of my invention is to provide a snap-catch fastener for the top of the cup, adapted to hold the top securely and not to work loose and fly off, as is the case with tops simply screwed on the cup proper.

My invention consists of the novel features of construction and combination of parts hereinafter shown and described, particularly pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my oil-cup. Fig. 2 is a vertical section therethrough. Fig. 3 is a detail view of the upper portion of the cup, the cup being in section and seen at a right angle to Fig. 2. Fig. 4 is a section on the line 4 4 of Fig. 2.

In the drawings, A represents the oil-cup, and the cup is formed with an annular shoulder A' a short distance below its upper end. Extending upwardly into the cup and through the bottom of the same is a sleeve B. The sleeve extends a short distance below the bottom of the cup and at its lower end is enlarged and exteriorly threaded, the enlargement forming one section of a cylindrical casing C. The lower and remaining section of the casing is formed by the enlargement C' of the upper end of the feed-pipe C², the part C' being internally threaded, and therefore adapted to be screwed over the enlargement B' on the sleeve. A cone-valve D is arranged at the upper end of the sleeve B, the said upper end forming a seat for the valve, and the valve has a stem D', which extends downward through the sleeve into the casing C. The valve when seated entirely

closes the sleeve at the upper end, but the stem works loosely in the sleeve and does not obstruct the downward flow of oil when the valve is lifted. Adjacent its lower end the stem D' has a plurality of transverse apertures formed in it one above the other, and a pin D² is adapted to fit in any of these apertures, which are shown at D³, and thereby regulate the upward movement of the valve, the pin coming in contact with the top of the casing.

The detachable top E fits over the cylindrical cup A and has a greater diameter than the cup. The rim of the cup is grooved, as at A², and a gasket or packing-ring E' fits in the groove and prevents leakage of oil between the upper edge of the cup and the top E. Leaf-springs are secured at one end upon opposite sides of the top E, the said springs being fastened inward some distance from the periphery of the top and extending outward away from the top. The springs are then bent downward, clearing the shoulder A', and at their lower ends carry hook members F', which are adapted to engage the under side of the shoulder A'. Suitable screws having milled heads work upwardly through the projecting marginal portion of the top E and bear against the under face of the leaf-springs F, and by adjusting the screws F² the tension of the hook members F' on the shoulder A' can be regulated. A rod G is arranged vertically and centrally in the oil-cup A, the rod extending upwardly through the top E and being adapted to have vertical movement with reference to the top and cup. A worm-gear G' is carried by the rod G at its upper end, and on the top E is arranged an angled bar H, the lower angled portion being riveted to the top E and the upper angled portion H' being in position to engage the worm-gear G' and prevent vertical movement of the rod except through rotation of the said gear. The lower end of the rod terminates directly above the cone-valve D and limits upward movement of the valve. By turning the worm-gear the distance between the lower end of the rod and the valve can be regulated, thus regulating the travel or throw of the valve.

The operation of my device is obvious. The movement of the wrist-pin will throw the valve D in unison therewith, and as the valve opens oil will be admitted to the sleeve B and flow through the casing C to the feed-pipe C². The extent to which the valve will open can be regulated by turning the worm-gear G' and also by the arrangement of the pin D² in the apertures D³. Should the angled portion H' become broken or in any way accidentally disengaged from the worm-gear G', the adjustment of the pin D² will still serve to limit the movement of the valve, and it will be seen that I therefore provide a double check and provide means for regulating the movement of the valve from both below and above the oil-cup. It is also obvious that a glass panel may be inserted in the cup, if desired, to serve as a sight-gage, the use of such gages being common.

A feed-vent J is formed in the cover E and is closed by a plate J', pivoted to the top and adapted to be moved to cover or uncover the feed-vent, through which the cup may be filled without taking off the top E.

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

1. An oil-cup having a sleeve extending

through the bottom of same, a valve adapted to seat itself on the upper end of the sleeve, a valve-stem projecting through the sleeve, said sleeve having an enlarged lower portion and the stem extending into said lower portion and having a plurality of apertures formed adjacent its lower end, a pin adapted to fit within and extend beyond any of said apertures and limit upward movement of the stem, a detachable top, a rod extending through the top and terminating a short distance above the valve, and means for adjusting the position of said rod relative to the valve.

2. In an oil-cup, a sleeve extending upwardly into the cup and downwardly below the cup and enlarged at its lower end, a feed-pipe connected to said lower end, a valve adapted to seat on the upper end of the sleeve, a stem extending downwardly into the enlargement, said stem having a plurality of perforations in vertical alinement, and an adjustable pin adapted to fit and project from said perforations.

EARNEST G. MOORE.

Witnesses:

GUSTAVE A. SELLE,
CHAS. R. DANCER.