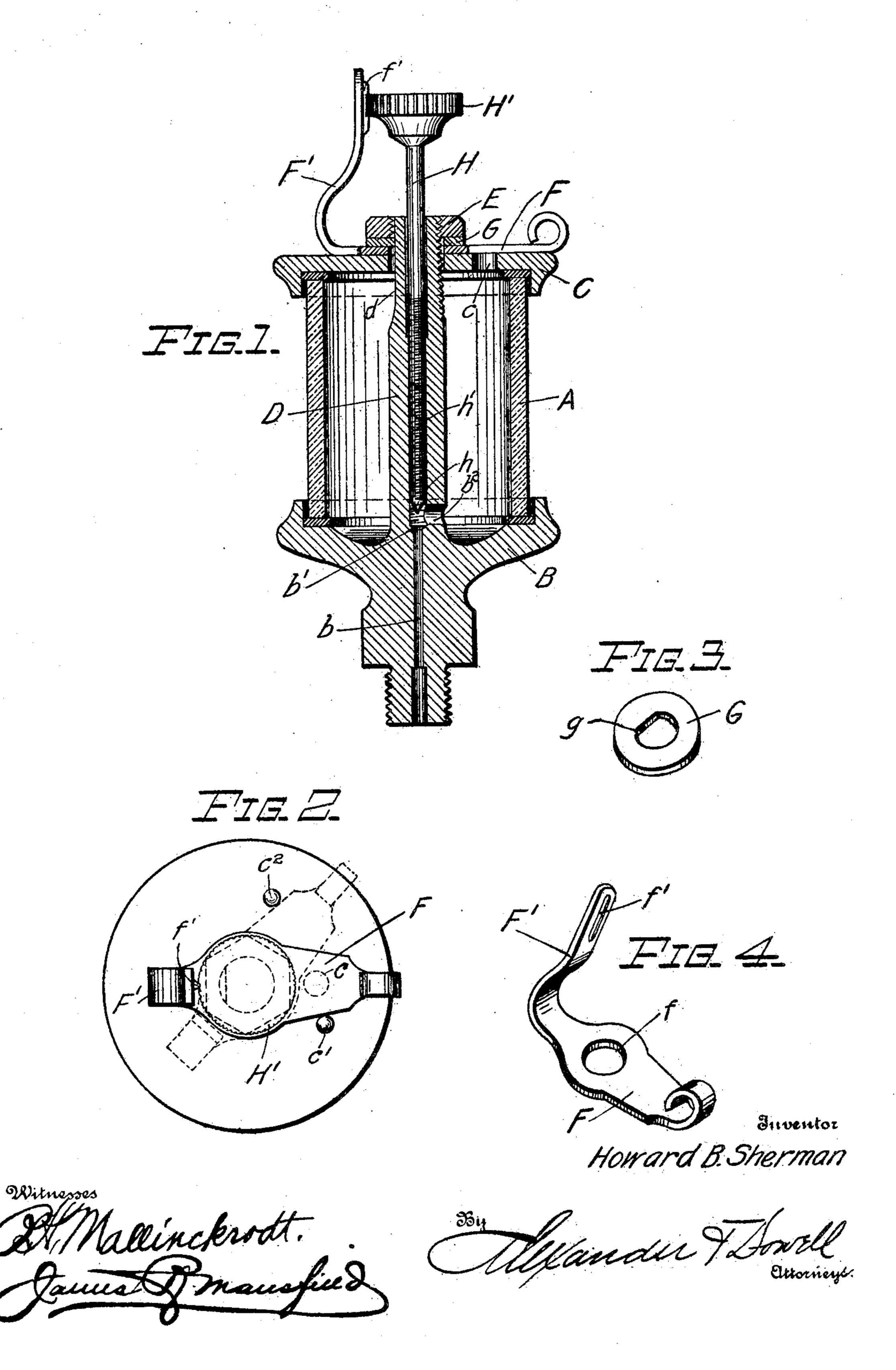
H. B. SHERMAN. OIL CUP. APPLICATION FILED SEPT. 21, 1904.



STATES PATENT OFFICE.

HOWARD B. SHERMAN, OF BATTLECREEK, MICHIGAN.

OIL-CUP.

No. 797,922.

Specification of Letters Patent.

Patented Aug. 22, 1905.

Application filed September 21, 1904. Serial No. 225,372.

To all whom it may concern:

Be it known that I, Howard B. Sherman, of Battlecreek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Oil-Cups; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in oilcups; and it consists principally in the improved construction whereby the scutcheon which closes the oil-filling hole in the cup carries a spring-finger which locks the adjustingvalve. One of the advantages of this construction is that the scutcheon is less liable to jar open and allow oil to spill and the valve is kept from jarring out of position or adjustment.

The spring and scutcheon are formed, preferably, in one piece, which greatly simplifies the construction and lessens the cost of the complete cup.

The accompanying drawings illustrate a cup embodying my improvements, which I will now describe with reference to said drawings.

Figure 1 represents a central vertical section through the complete cup. Fig. 2 is a plan view thereof, showing the scutcheon closed in full lines and open in dotted lines. Fig. 3 is a detail view of the D-shaped washer, and Fig. 4 is a detail view of the scutcheon and spring attached.

The cup proper may be formed of a glass cylinder A, a base-plate B, and a top plate C, connected by a central hollow spindle D. These parts may be of ordinary construction.

The spindle D extends through an opening in the top plate C and slightly above the latter and is exteriorly threaded and engaged by a jam-nut E, by which the parts of the cup are held tightly together. The scutcheon F is pivoted on or around the upper end of the spindle D, having an opening f for this purpose, and a washer G is interposed between the nut E and the scutcheon, said washer preferably having its aperture flattened at one side, as at g, to engage a corresponding flattened side d of the spindle, so that the washer cannot rotate. Consequently the oscillating movements of the scutcheon necessary to open and close the filling-opening c in the top plate will not affect the adjustment of the nut E. The scutcheon will be held between the plate C and washer G with considerable frictional contact sufficient to prevent its being jarred loose by the mo-

tion of the machinery to which the cup is connected.

The opening in the spindle D communicates at bottom with a feed-passage b, leading through the part B, which passage b communicates at the base of the spindle with the oilchamber through a lateral passage b^2 just above a valve-seat b', and this passage b is adapted to be closed by a valve h on the lower end of a stem H, which extends through the spindle D and has a screw-threaded engagement therewith above the valve, as at h', so that by rotating the stem H the valve can be forced to close against the seat b', or it can be adjusted so as to regulate the feed of oil to

the passage b.

The stem H has a disk or head H' on its upper end, which is provided with shallow vertical corrugations, as shown, on its edge, which corrugations are adapted to be engaged by a tooth or projection f' on a lockingspring F', which is attached to and preferably formed integral with the scutcheon F, as indicated in the drawings. This spring F', having its tooth f' engaging the serrated edge of the disk H', will lock the valve-stem and valve in any position in which they are adjusted and will prevent any displacement thereof by jarring movements, and the slight lateral movement of the scutcheon necessary to cover or uncover the opening c will not change the adjustment of the valve sufficiently to perceptibly alter the feed of the oil, even if the scutcheon should be carelessly left open. The movement of the scutcheon may be limited by protuberances or pins c' c^z on the plate C, if desired, as shown in Fig. 2.

The tooth f' is sufficiently long to allow the valve to be adjusted or even entirely closed without disengaging the disk from the locking-finger, and while the bite of the tooth on the disk is sufficient to prevent casual rotation thereof it will not prevent forcible rotation of the disk by hand in adjusting the valve, and this adjustment of the valve is not sufficient to displace the scutcheon, as the friction between the disk and the tooth f' is less than the friction between the scutcheon

and the washer and top plate.

Moreover, the valve-stem being yieldingly locked to the scutcheon by the finger, the valve will in turn prevent casual displacement of the scutcheon, and if the valve be firmly closed the scutcheon will be practically locked and cannot be opened except by exerting considerable force until the valve is

loosened. Thus the valve and scutcheon are yieldingly interlocked by the finger F', and one cannot be readily moved without moving the other. The scutcheon normally retains the valve in its adjusted position when the valve is opened, and in turn the valve assists in retaining the scutcheon closed when the valve is closed.

From the foregoing description it will be seen that I have a very simple cup provided with all necessary adjustments and with means for locking the valve in any adjusted position and for holding the scutcheon securely in its closed position and that no complicated or delicate adjustments are necessary in assembling the parts.

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

In combination an oil-cup having a central tubular spindle projecting through the top plate of the cup and exteriorly threaded, a scutcheon pivoted around the projecting end of the spindle and closing the filling-opening in the top plate, a securing washer and nut on the upper end of the spindle, a regulating-valve having its stem projecting above the spindle, and having an adjusting-head on its upper end, said scutcheon having an integral locking-finger engaging such head to yieldingly lock the stem and scutcheon together.

In testimony that I claim the foregoing as my own I affix my signature in presence of two

witnesses.

HOWARD B. SHERMAN.

In presence of—
Frank M. Andress,
Edith M. Barnes.