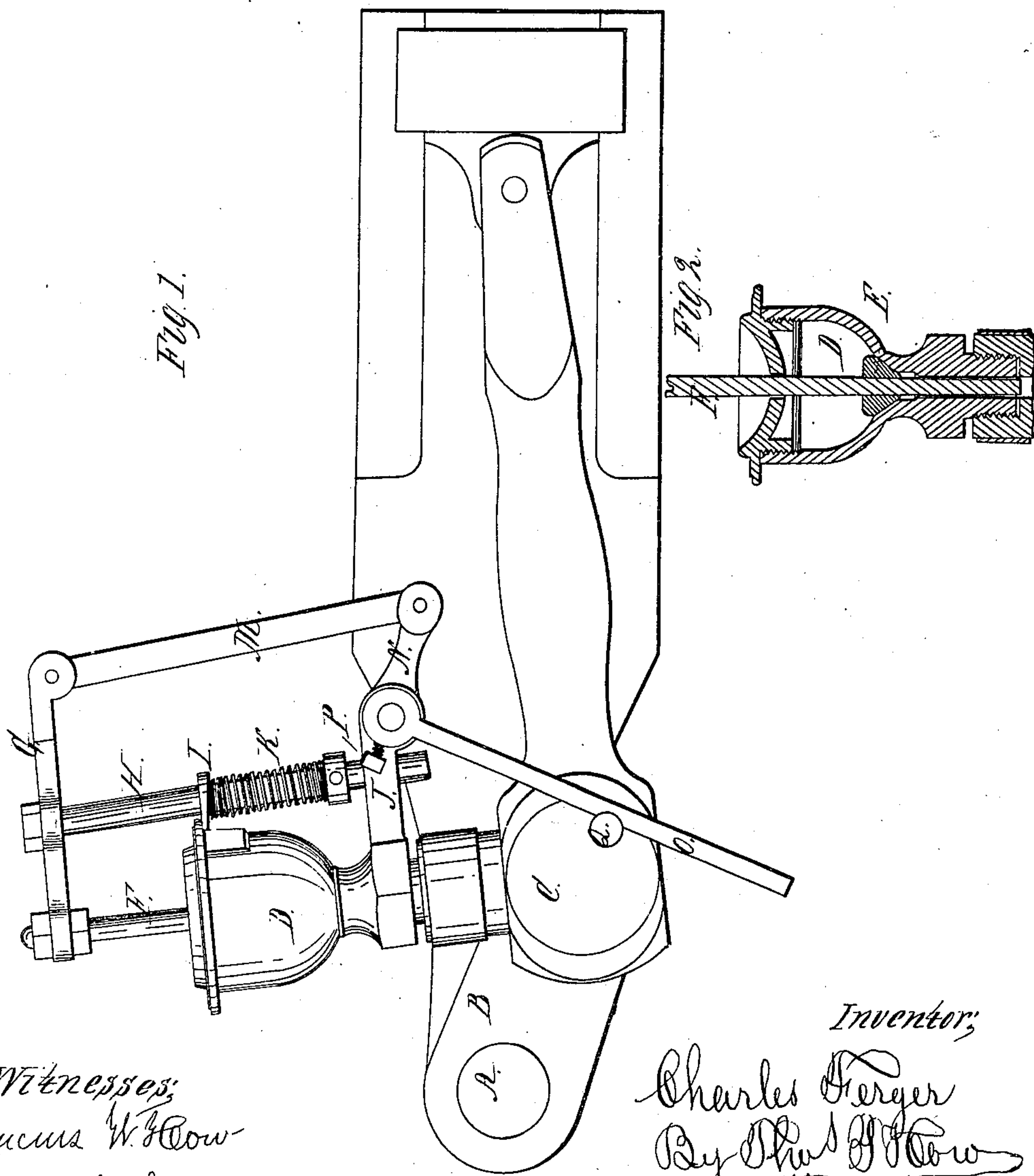


*C. Ferger,
Lubricator.*

N^o 76,616.

Patented Apr. 14, 1868.



*Witnesses:
Lucius W. How-
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*Inventor,
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United States Patent Office.

CHARLES FERGER, OF NEW YORK, N. Y.

Letters Patent No. 76,616, dated April 14, 1868.

IMPROVED OIL-CUP.

The Schedule referred to in these Letters Patent and making part of the same.

Specification of certain Improvements in Oil-Cups invented by CHARLES FERGER, of the city, county, and State of New York.

Nature and Object of the Invention.

This invention is designed to regulate the supply of oil to a crank-pin or other journal, so located that the supply may be conveniently regulated in the same manner; and consists in the combination, with the oil-cup, of a valve, fitted to the bottom of the said oil-cup, and appliances for operating the same, in the manner hereinafter described.

Description of the Drawings.

Figure 1 is a side elevation of a device embodying my invention.

Figure 2 is a vertical central section of the oil-cup and valve.

General Description.

A is the main shaft of an engine. B is the crank. C is the wrist or crank-pin. D is the oil-cup, from which oil is supplied to the crank-pin. This oil-cup is provided with a valve or plunger, E, the stem F of which is rigidly connected at the top to a bar, G, which latter is also attached to the sliding rod H, which last is supported in the hangers I and J attached to the oil-cup. This rod H is drawn downward by the spring K, shown in fig. 1, so as to hold the valve E firmly down to its seat, except when it is raised by the further appliances herein described. The pressure of this spring K may be adjusted by changing the position of the collar L on the rod H. M is a connecting-rod, which connects the outer end of the bar G to the end of the arm N, which forms a part of the bell-crank or bent lever by which the valve E is operated. This bell-crank, of which the arm N forms a part, is hung in the end of the hanger J, and has another arm, O, attached to it by the set-screw P. Q is a pin, set in the end of the crank-pin or wrist C, to give motion to the bell-crank N O, and through it, by means of the connecting-rod M and the cross-bar G, to the valve.

Operation.

The parts having been constructed as above described, the arm O is so adjusted, by means of the set-screw P, that the pin Q will come in contact with the arm O, and move it a short distance at each revolution. This motion is communicated, by means of the connecting-rod M and the cross-bar G, to the valve E, raising it a little from its seat at each revolution of the crank, and thus allowing a small portion of the oil to descend upon the crank-pin at each revolution of the crank. It is obvious that the distance to which the valve will be lifted from its seat, and the consequent quantity of oil supplied to the crank-pin, will depend upon the amount of motion given to the arm O, and as this may be exactly adjusted by the set-screw P, the amount of oil supplied to the bearing may be regulated with the utmost nicety. It is also obvious that this mode of regulating the supply of oil may be applied to other journals besides the crank-pin of an engine, the valve receiving the same motion from suitable connections.

Claim.

I claim as my invention the combination, with an oil-reservoir or oil-cup for oiling the bearings, of a valve closed by spring K, and raised at intervals by a positive motion, communicated by the pin Q, or its equivalent, the parts being constructed as herein set forth.

CHARLES FERGER.

Witnesses:

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THOS. P. HOW.