(No Model.)

S. D. MERSHON.

VALVE OILER.

No. 324,574. Patented Aug. 18, 1885.

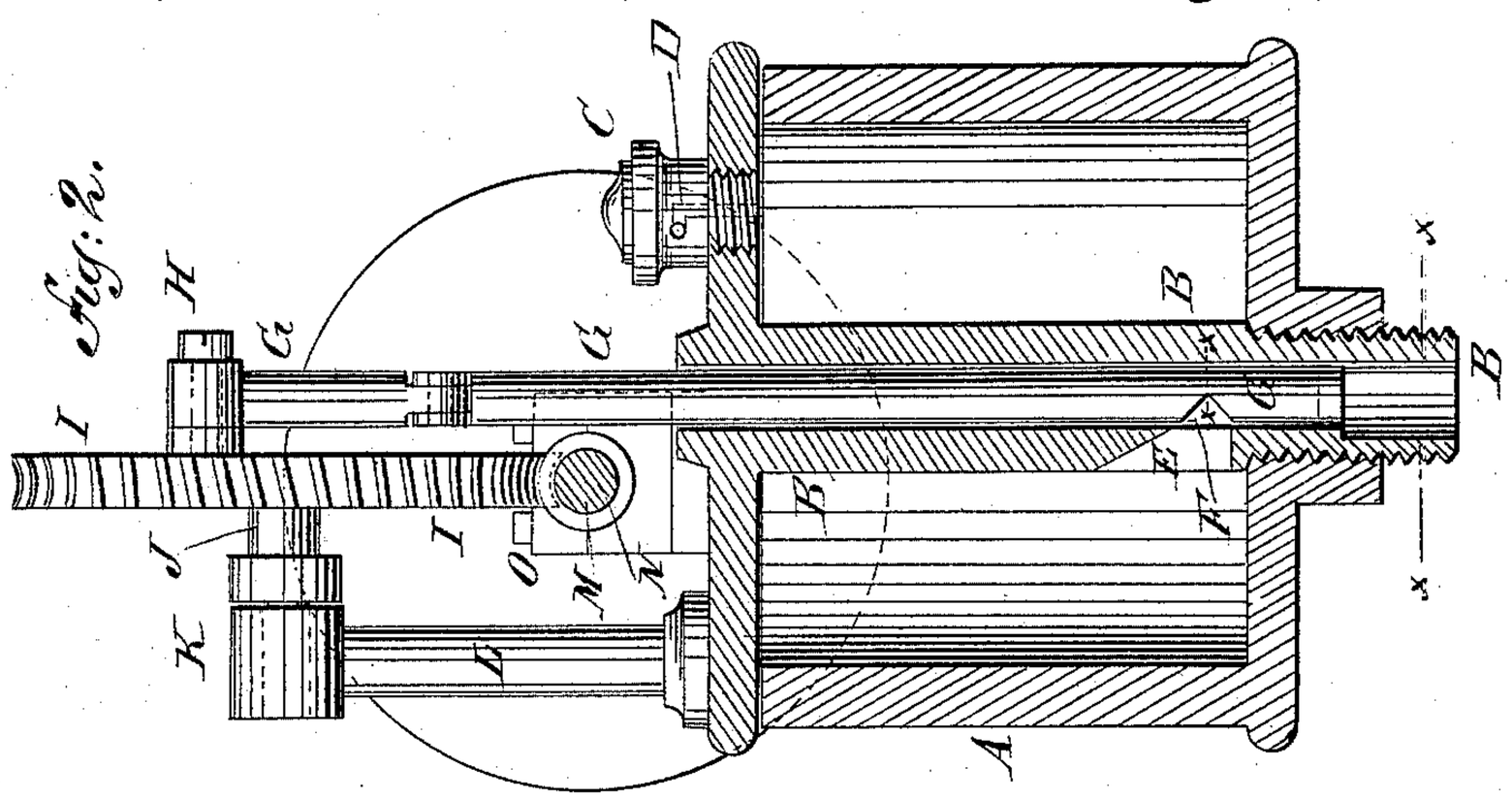

Fig: 2.

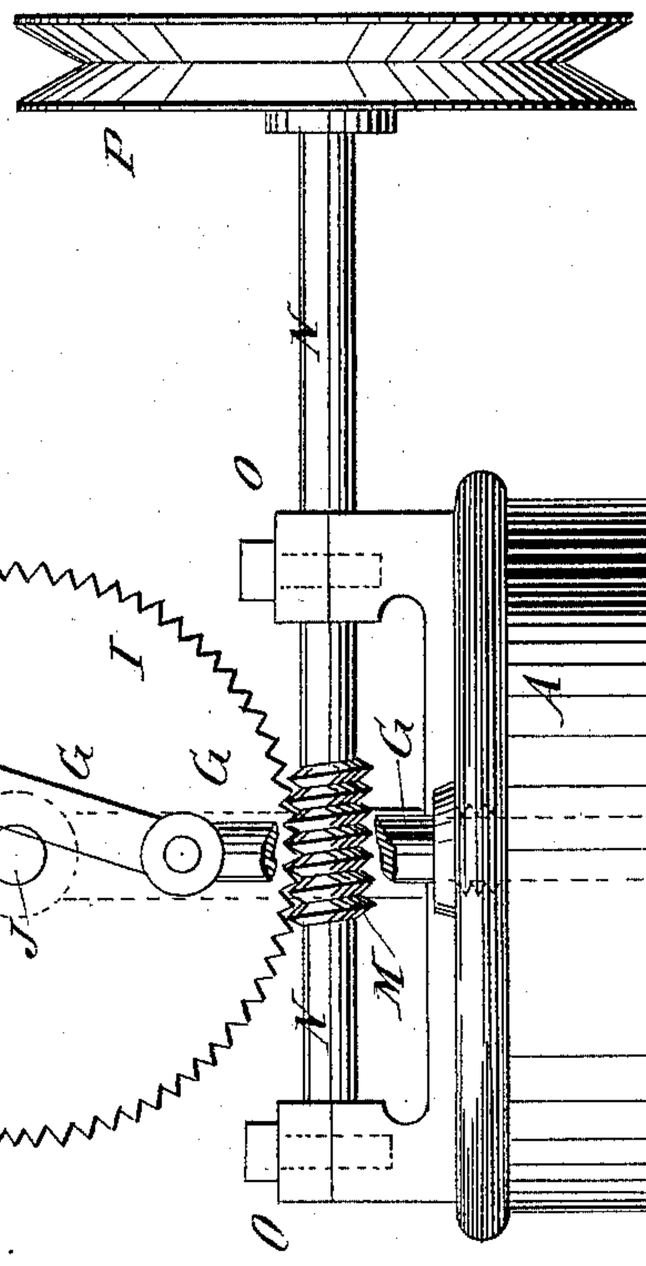

Fig: 1.

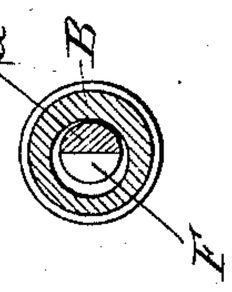

Fig: 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL DAVIES MERSHON, OF RAHWAY, NEW JERSEY.

VALVE-OILER.

SPECIFICATION forming part of Letters Patent No. 324,574, dated August 18, 1885.

Application filed January 20, 1885. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL DAVIES MERSHON, of Rahway, in the county of Union and State of New Jersey, have invented a new and useful Improvement in Valve-Oilers, of which the following is a full, clear, and exact description.

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 front elevation of one of my improved oilers, part being broken away. Fig. 2 is a sectional side elevation of the same, taken through the line *y y*, Fig. 1. Fig. 3 is a sectional plan view of the tube and the discharge-rod, taken through the broken line *x x x x*, Fig. 2.

The object of this invention is to improve the construction of the valve-oilers for which Letters Patent No. 294,898 were issued to me March 11, 1884, in such a manner as to make them more reliable in operation.

The invention relates to a valve-oiler constructed with its jointed discharge-rod connected with a crank-pin attached to a screw-wheel meshing into an endless screw, the shaft of which is provided with a pulley to receive a driving-band, whereby the oiler will be made to discharge oil with certainty at regular intervals of time, as will be hereinafter fully described and then claimed.

A represents the oil reservoir or cup, through the center of which passes a tube, B. The tube B may be formed solid with the top of the reservoir A, and screwed into a screw-hole in the bottom of the said reservoir, or secured in place in any other suitable manner. Oil is introduced into the reservoir A through an opening in its top, which opening is closed by a screw-plug, C, having a perforation, D, formed through it to admit air to the said reservoir to take the place of the oil as it is discharged.

In one side of the tube B is formed an opening, E, through which oil can pass into the interior of the said tube and enter the recess or pocket F, formed in the side of the rod G, fitted accurately into the said tube. The pocket F is formed in such a position as to come opposite the opening E when the rod G is raised, and thus become filled with oil. As the rod G moves downward, the oil in the recess F is carried with it and flows out through the lower part of the tube B to the surface to be oiled. The bore of the lower part of the tube B is enlarged or made eccentric from its lower end to the point opposite the recess F when the rod G is at the lower end of its stroke, as shown in Fig. 2, so that the oil can flow out of the said recess F freely. The upper part of the rod G is jointed, and its upper end is pivoted to a crank-pin, H, attached to the screw-wheel I, the journal J of which revolves in a bearing, K, attached to or formed in the upper end of the standard L, attached at its lower end to the top of the reservoir A, so that the rod G will be moved down and up at each revolution of the screw-wheel I, and will thus discharge the contents of the recess F to the surface to be oiled at each of the said revolutions.

The teeth of the screw-wheel I mesh into the threads of an endless screw, M, formed upon or attached to the shaft N, which revolves in bearings O, attached to the top of the reservoir A. To one end of the shaft N of the endless screw M is attached a pulley, P, to receive a band passing around the shaft of the engine or some other convenient revolving part of the machinery.

The amount of time between the successive discharges of oil can be regulated by increasing or diminishing the number of teeth in the screw-wheel I, or by using a smaller or larger pulley, P.

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

In an oiler, the combination, with the jointed discharge-rod G, of the screw-wheel I, having crank-pin H, and the endless screw M, having a pulley, P, attached to its shaft to receive a driving-band, substantially as herein shown and described, whereby the oiler will be made to discharge oil with certainty at regular intervals of time, as set forth.

SAMUEL DAVIES MERSHON.

Witnesses:

G. H. HOBART,

JOHN C. WETMORE.