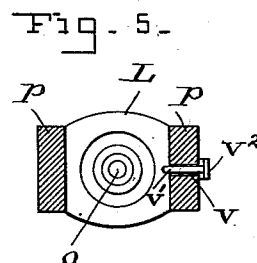
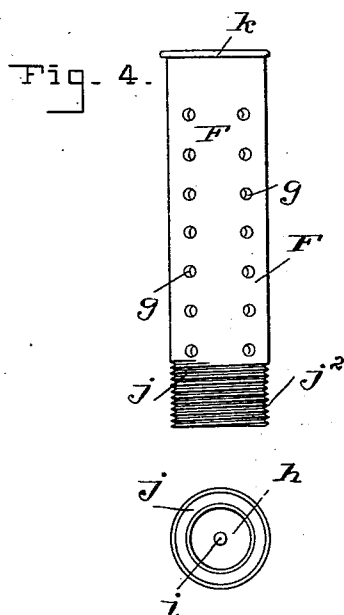
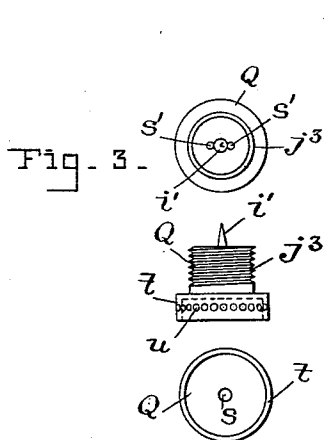
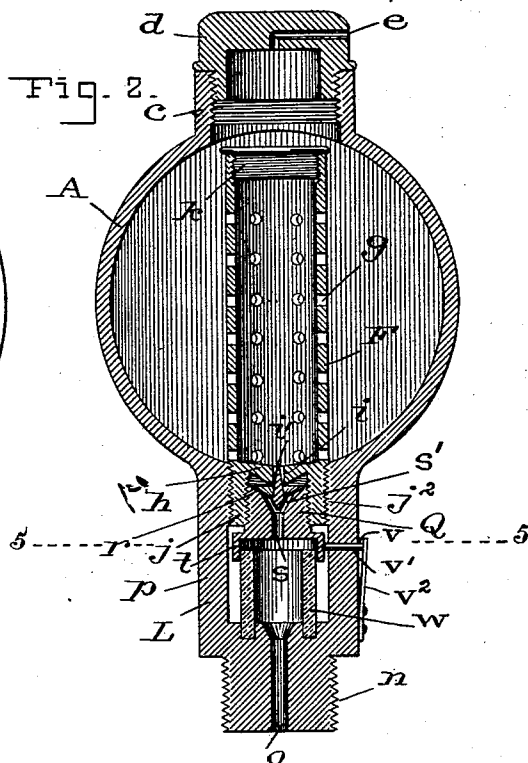
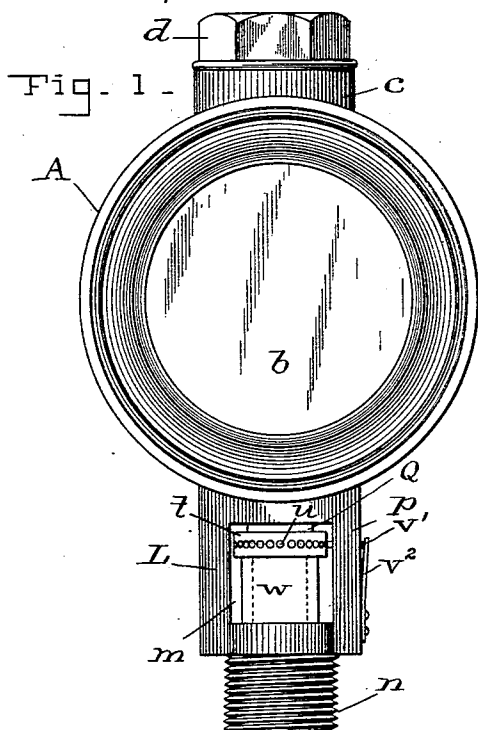


(No Model.)

W. J. FERGUSON.
LUBRICATOR.

No. 563,224.

Patented June 30, 1896.



WITNESSES :-

Lee J. Vandoren.
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UNITED STATES PATENT OFFICE.

WILLIAM JOHN FERGUSON, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO WILLIAM G. H. STUMP, OF SAME PLACE.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 563,224, dated June 30, 1896.

Application filed February 20, 1896. Serial No. 580,091. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHN FERGUSON, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Automatic Oilers, of which the following is a specification.

This invention relates to an automatic oiler for machinery and engines.

The invention consists of certain new features of construction and new combinations of parts, which are hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of the oiler. Fig. 2 is a vertical section of the oiler. Fig. 3 shows three views of the adjustable cone-plug. Fig. 4 is a side elevation and bottom view of the central tube. Fig. 5 is a horizontal cross-section on the line 5 5 of Fig. 1.

The letter A designates the oil case or receptacle, which may be of any desired shape. This case preferably has a mica side *b*, and at the top has a neck *c*, which is closed by a screw-cap *d*. This cap has an air-vent *e*, which opens to the atmosphere at the side of the cap.

In the center of the oil-case is a vertical tube F, which has holes or perforations *g* in its side; a bottom *h*, cone-shaped on its lower side, with a round discharge-orifice *i* in the center, and a neck or tubular extension *j* below said bottom, screw-threaded exteriorly, as at *j*¹. The upper end of this tube is closed by a screw-cap *k*. The bottom *h*, containing the discharge-orifice *i*, while here shown in the tube F, is coincident with and may be made part of the bottom of the oil-receptacle.

The oil-case A has at its lower side, diametrically opposite the neck *c*, a shank L. This shank has a lateral opening *m* through it, and on it has a screw-nozzle *n*, which latter has an oil-passage *o* extending through it. The formation of the said lateral opening provides two side bars *p*. A throttling screw-plug with a tapered point is employed to enter the discharge-orifice *i* in the bottom of the tube F, and said plug is vertically adjustable and is adapted to increase or diminish the size of the oil-discharge opening. The said screw-plug Q has a concaved or dished top *r*

to correspond with the cone-shaped bottom of the tube. At the center of this dished top is a tapered plug-point *i'*, and a passage *s* is below the point and extends down through the plug. Two branch passages *s'* open at said dished top—one branch on each side of the point—and the two branches join the said passage *s*. This screw-plug is interposed between the bottom of the oil-receptacle and the screw-nozzle *n*. On the exterior the plug has a screw-thread *j*³, which screws into the interior tubular extension *j*. This enables the screw-plug to be vertically adjusted. This plug also has a flange *t*, provided on the exterior with circumferential pits *u*. It will be seen that by turning the plug Q its tapered point *i'* may be entered more or less into the discharge-orifice *i* (see Fig. 2) and thereby diminish or increase the capacity of said orifice, so that the amount of oil it will discharge may be regulated to a nicety. The said orifice may be entirely closed, very nearly closed, or may be left wide open.

One of the side bars *p* of the shank has a lateral hole *v*, and a pin *v'* plays in this hole. This pin is attached to the free end of a leaf-spring *v*², fixed on the side of the shank. The spring normally presses the pin *v'*, so as to keep its end in engagement with one of the pits or indentations on the plug Q, and thereby the said plug is prevented from turning after it has been set. By pressing the spring outward the end of the pin will disengage from the pit and then the plug Q may be turned.

A short glass tube *w* connects from the flange *t* of the plug to the oil-passage *o*, or around said oil-passage. This glass tube passes down the lateral opening *m* in the shank. The feed-oil which drops from the orifice *i* can be observed by inspecting the glass tube. The glass tube may be dispensed with, if desired.

The perforated tube F is intended to be packed with absorbent material, such as cotton or wool, or sponge.

From the foregoing description the operation of the device will be understood.

Having thus described my invention, I claim—

1. In an oiler, the combination of an oil-re-

ceptacle having a discharge-orifice; a screw-
nozzle having an oil-passage in line with said
orifice; two side bars integrally connecting
the oil-receptacle and said nozzle and holding
5 said two parts relatively immovable—said
two bars forming an open space between said
oil-receptacle and nozzle; and a plug located
in said open space and having a screw by
which it is vertically adjustable and an up-
10 ward-projecting tapered point which enters
said discharge-orifice and provided with an
oil-passage which conducts the oil from said
orifice.

2. In an oiler, the combination of an oil-re-
15 ceptacle having a discharge-orifice; a screw-
nozzle having an oil-passage in line with said
orifice; two side bars integrally connecting

the oil-receptacle and said nozzle and holding
said two parts relatively immovable—said
two bars forming an open space between said 20
oil-receptacle and nozzle; a plug located in
said open space and having a screw by which
it is vertically adjustable and an upward-pro-
jecting tapered point which enters said dis-
charge-orifice and provided with an oil-pas- 25
sage which conducts the oil from said orifice;
and a glass tube which connects the said plug
with the oil-passage in the nozzle.

In testimony whereof I affix my signature
in the presence of two witnesses.

WILLIAM JOHN FERGUSON.

Witnesses:

THOS. C. BAILEY,

CHARLES B. MANN, Jr.