

(No Model.)

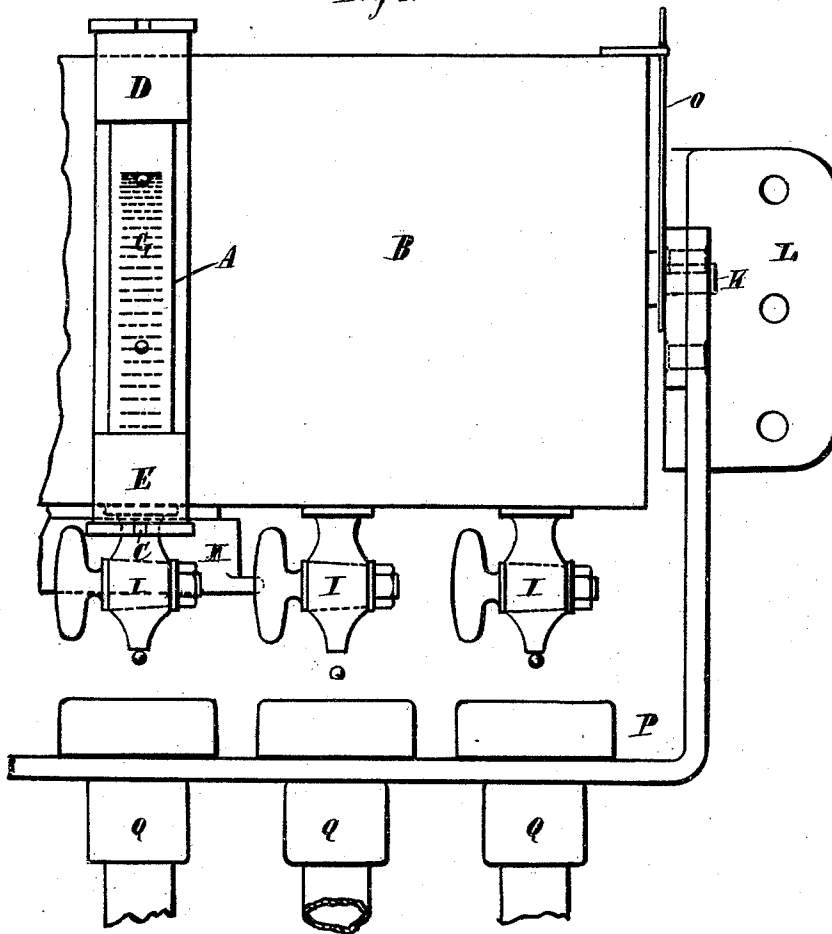
2 Sheets—Sheet 1.

N. FOLEY.
LUBRICATOR.

No. 473,921.

Patented May 3, 1892.

Fig. 1.



Witnesses:

Charles S. Thomson
James Caulfield.

Inventor:

Nelson Foley.

by Richards & Co.
attys

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Fig. 2.

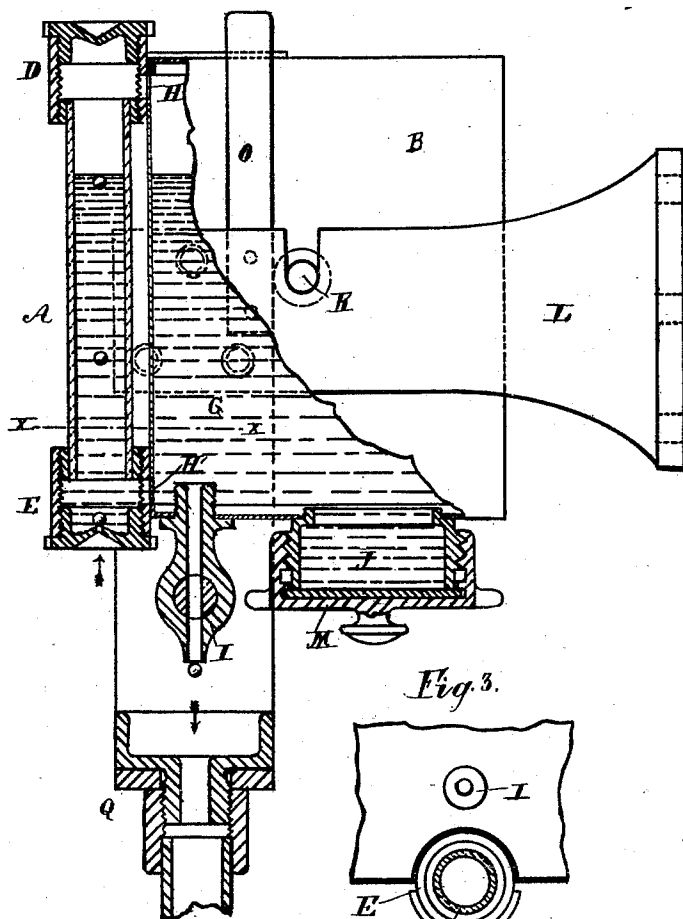
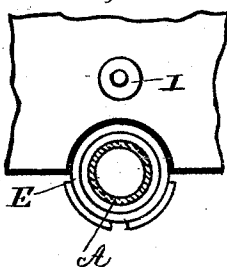


Fig. 3.



Witnesses:

Louis S. Thompson
James Caulfield

Inventor

Nelson Foley
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UNITED STATES PATENT OFFICE.

NELSON FOLEY, OF NAPLES, ITALY.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 473,921, dated May 3, 1892.

Application filed June 24, 1891. Serial No. 397,318. (No model.) Patented in England September 24, 1890, No. 15,085.

To all whom it may concern:

Be it known that I, NELSON FOLEY, a subject of the Queen of Great Britain, and a resident of Villa Beatrice, Parco Grifeo, Naples, Italy, have invented certain new and useful Improvements in and connected with Lubricators, (for which I have obtained Letters Patent in Great Britain, No. 15,085, dated September 24, 1890,) of which the following is a specification.

My invention consists in improvements in the construction of lubricators for purposes such as oiling shafting and journals. It can also be applied to the oiling of cylinders by connecting it with a small force-pump for forcing the oil against the steam-pressure. When applied in the latter way, the oil from the lubricator drops into the suction-pipe of the pump. My lubricator is an adjustable siphon, the short leg of the siphon being composed of a gage-glass similar to that which is used for ascertaining the water-level in steam-boilers. The long leg is a metallic reservoir, to which the gage-glass is attached. The reservoir is, if desirable, open at the top for filling; but the hole is provided with an air-tight plug or cap. The reservoir, however, may also be filled by inverting it and filling through a hole sufficiently large in the bottom. A small air-hole is provided in the bottom of the short siphon-leg to allow of the siphonic action taking place, a small air-bubble, ascending through the oil and an adjustable orifice is provided at the bottom of the long leg to permit the oil to come out and by which the siphonic action is set going. The head of oil which causes the siphonic action to take place is the difference of level between the air-hole at bottom of short leg and the bottom of reservoir-orifice. This head is constant and independent of the amount of oil in the receiver, and therefore the rate of feed is constant when once adjusted. The quickness of the feed can be regulated either by lengthening or shortening the long leg or by enlarging or constricting the orifice by a cock, a valve, or any other such method; or the lubricator may be made in the shape of a plain closed reservoir, the same action taking place; and in order that my said invention may be properly understood I have hereunto appended drawings

showing, by way of example, a device for carrying my invention into effect or practice.

In the drawings, Figure 1 is a front elevation of a lubricator broken away at the left hand. Fig. 2 is a side view, partly in section, of the lubricator, Fig. 1. Fig. 3 is a part-sectional plan on the line X X, Fig. 2.

Referring to the drawings, on which the same reference-letters wherever repeated indicate the same parts, A is a gage-glass, which may be similar to an ordinary water-gage glass and which forms the short leg of the siphon.

B is a closed reservoir or vessel, which serves as the long leg of the siphon and to which the glass A is attached. The glass A has caps E D at its upper and lower ends, the lower cap E being perforated by a small hole C for admission of air.

G represents the oil or other lubricants.

H H' are passages leading from the glass A into, respectively, the air-space and oil-space of the reservoir.

I are small drip-cocks.

J is the filling-hole, preferably made at the bottom, as shown, for the reason that as the lubricator can turn on the arms K, supported in bearing-brackets L at each side, it can be inverted and filled without altering the regulation of the drip cock or cocks, if there are more than one, as shown; also, if the filler was on top the air-hole C would have to be closed while the lubricator was being replenished. By making the lubricator reversible it can be easily and readily turned over for inspection or other purpose without alteration or regulation of any of the parts. The filler is closed by a screw-cap M. The lubricator is retained in its normal upright position by the spring-arm O.

P is a bracket supporting connections Q for leading the lubricant to wherever it is required.

The principal advantages of this lubricator are its simplicity, certainty of action, sight-feed, and a constant feed.

The action is as follows: The weight of oil in the difference of length between the two legs A B causes air to enter through the air-hole C while the oil drops out through the drip cock or cocks I at the bottom of the reservoir A or the long leg. The quickness of

the feed can be regulated either by lengthening or shortening the long leg or by enlarging or constricting the dropper-orifices. As the head of oil due to the difference in length of the siphon-legs is constant and independent of the amount of oil in the cup, the rate of feed is therefore constant when once adjusted.

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

1. In a lubricator, the combination, with the closed reservoir, serving as the long leg of the siphon, of a gage-glass attached to said reservoir and serving as the short leg, and

trunnions on which the reservoir is mounted, whereby it may be inverted.

2. In a lubricator, the combination, with the closed reservoir serving as the long leg of the siphon and adapted to be inverted, of a gage-glass attached to said reservoir and serving as the short leg, said reservoir having a cap at its lower end provided with an air-hole.

Dated this 16th day of May, 1891.

NELSON FOLEY.

Witnesses:

HUGH FITZPATRICK,

DUNCAN DEWAR,

Both of 70 Wellington Street, Glasgow.