(No Model.) 2 Sheets—Sheet 1.

# F. P. UNGER.

## LUBRICATOR.

No. 457,683. Patented Aug. 11, 1891.

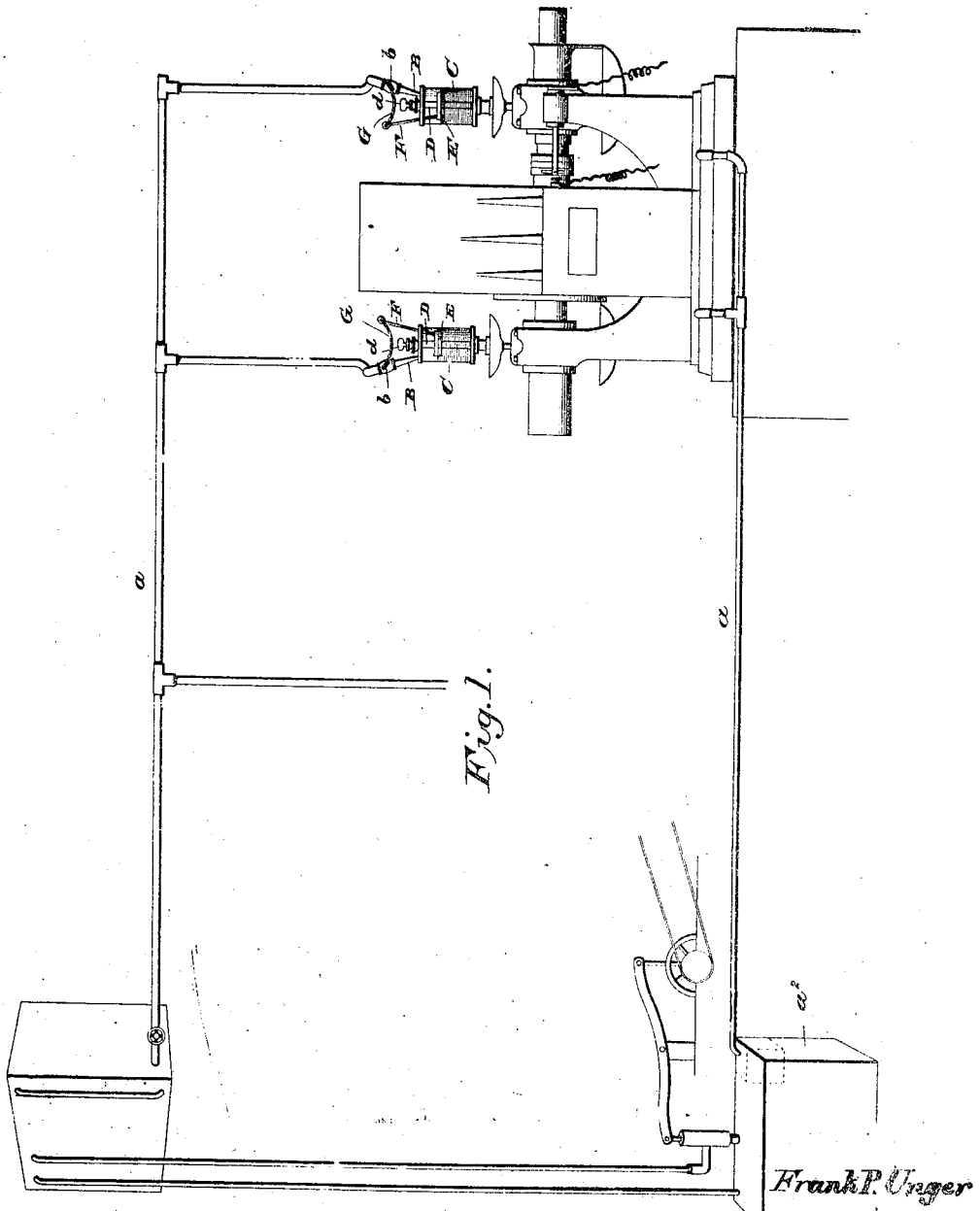

Fig. 1.

Witnesses
L. S. Elliott.
E. M. Johnson.

Frank P. Unger
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By his Attorney

(No Model.)

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2 Sheets—Sheet 2.

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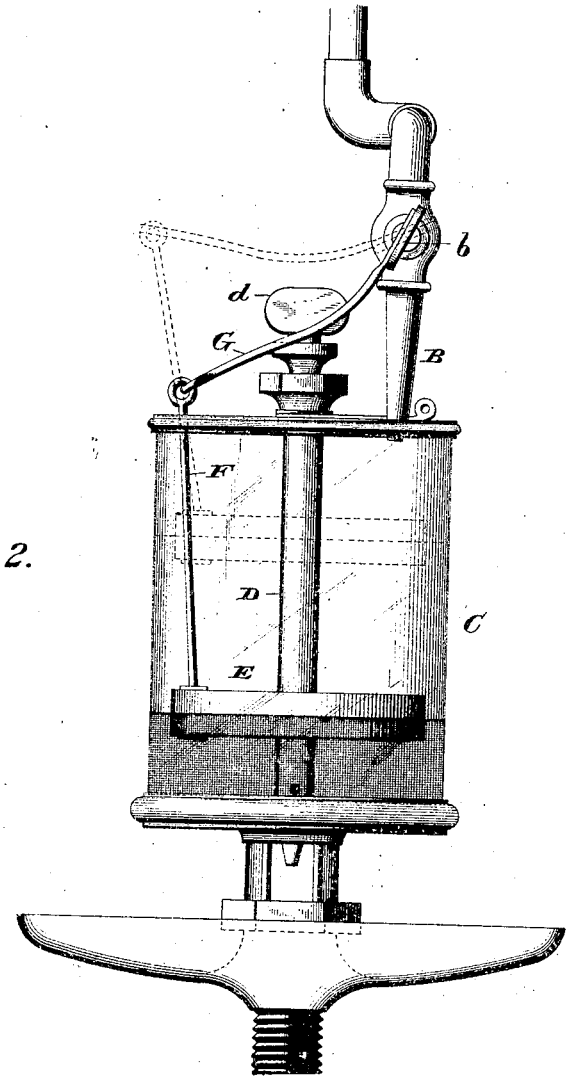
Fig. 2.




Witnesses
G. S. Elliott
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Frank P. Unger.
Inventor
by
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# UNITED STATES PATENT OFFICE.

FRANK P. UNGER OF HAGERSTOWN, MARYLAND.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 457,683, dated August 11, 1891.

Application filed March 27, 1890. Serial No. 345,558. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK P. UNGER, a citizen of the United States of America, residing at Hagerstown, in the county of Washington and State of Maryland, have invented certain new and useful Improvements in Lubricators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in lubricators, the object being to provide a continuous-supply lubricator with means so that a normal and predetermined level of the oil may be automatically maintained in a chamber through the tendency of the oil-level to lower, the invention being adapted for use with fast-running machinery, as dynamos, where it is desirable to present a continuous flow of oil around the bearings.

The invention consists in providing a lubricator with a supply-pipe having a valve connected to a float maintained in the lubricator, so that a constant level of the lubricating-fluid may be established, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is view showing the application of my improved lubricator, and Fig. 2 is a side view showing the float in one position in full lines and in another in dotted lines.

In practice in carrying out my invention, when the same is applied to a dynamo or other fast-running machinery, I provide a tank, which is located above the machinery to be lubricated, and to said tank is connected a supply-pipe, as *a*, having depending branches, upon which are secured discharge-nozzles B, having valves *b*. The nozzles are preferably connected to a jointed arm, so that when they are not in use they may be swung up out of the way.

*a'* refers to a pipe which leads from a tank formed in the body of the machine or dynamo, which carries away the oil used in lubricating the shaft thereof, and this pipe leads to a filter of suitable material, located in a tank $a^2$. A pump is provided, as shown, for elevating the oil from the tank $a^2$ to the supply-tank, and the supply-tank may be connected by an overflow-pipe to the waste-tank. The pump is driven by any suitable means. By the arrangement hereinbefore described a constant supply or circulation of oil will be provided.

The lubricator C is made up of an outer casing and a central feed-pipe D, which has a valve which can be raised and lowered, so as to regulate the discharge from said pipe D, this valve being operated by a turn-button or thumb-screw, as *d*. Upon the pipe D is placed a float E, of any suitable material, and to one side of the same is connected a rod F, the upper end of which engages with an arm G, said arm being attached to the valve *b* of the nozzle B. The ends of the rod and arm are loosely connected to each other to provide for the movement of the parts as the float rises and falls. The end of the discharge-nozzle B is passed into a perforation in the upper plate of the lubricator, and may be held securely in place by a suitable clamp. Below the lubricator proper is located an ordinary drip-cup having a central opening through which the oil passes.

In practice the valve is first adjusted by turning the stem D, which gives the desired supply of oil, and the oil is let into the casing, so as to give a constant supply equal to what passes to the machinery. The valve will be operated by the float upon the oil, which will automatically find the proper level in the lubricator and maintain it, as when the oil falls the float will fall therewith and turn the valve *b* to increase the supply.

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

1. The combination, in a continuous-feed lubricator having a central feed-pipe, of a float mounted thereon, and a rod connected to the float and to an arm, so as to operate a valve located in the supply-pipe, substantially as set forth.

2. The combination, in a continuous-feed

lubricator having a central feed-pipe, of means for closing the discharge-aperture in said pipe, a float located within the casing and provided with a central aperture through which the feed-pipe passes, a valved inlet-pipe, and rods for connecting the valve thereof with the float, substantially as set forth.

3. In a gravity-feed lubricator having an automatic cut-off, a vertical discharge-pipe located centrally therein, an apertured float mounted on said discharge-pipe, rods F and G, connecting the float to a turning valve, and a discharge pipe or nozzle leading into the casing above the float, the top of the casing being apertured for the passage of the rod F and entrance of the nozzle B, substantially as set forth.

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

FRANK P. UNGER.

Witnesses:
D. M. BREMER,
GEO. T. LEITER.