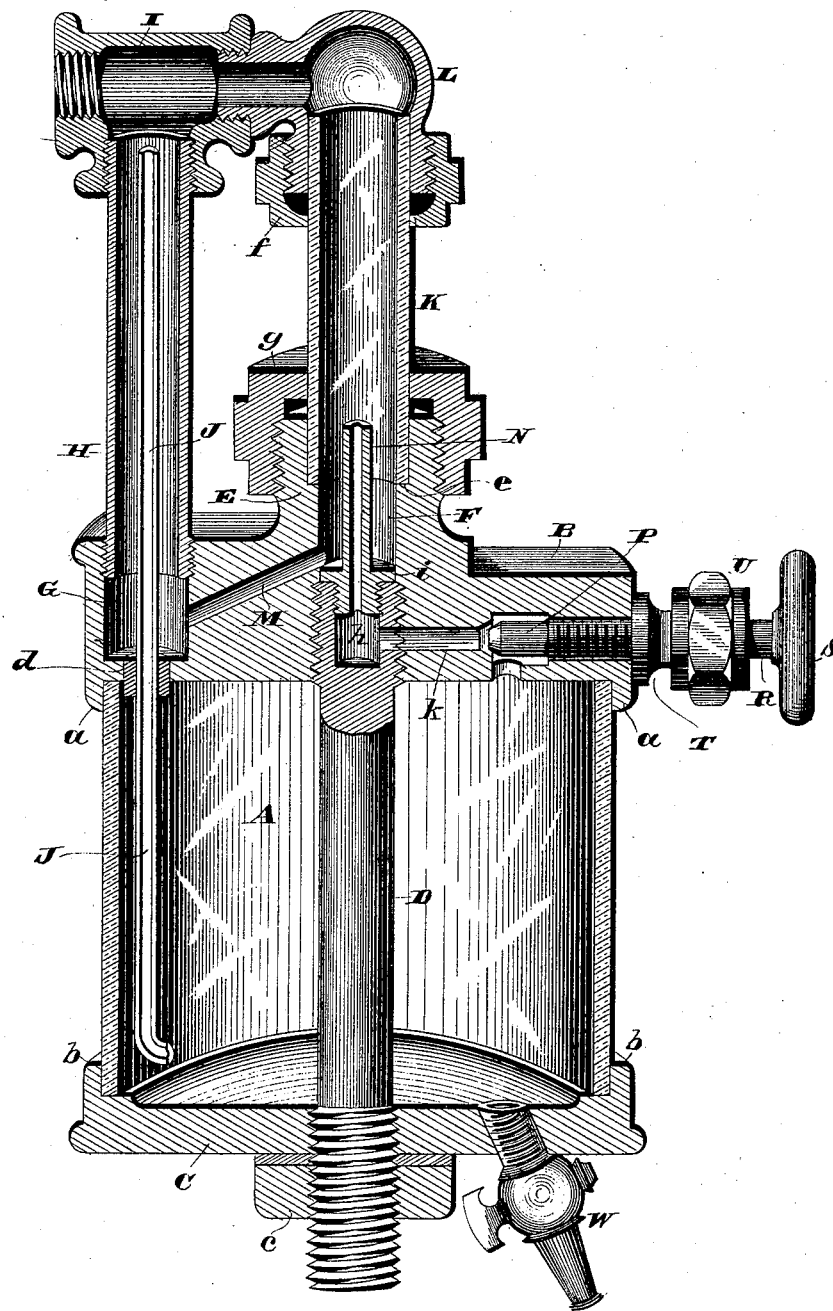


(No Model.)

W. A. STANTON.
LUBRICATOR.

No. 304,761.

Patented Sept. 9, 1884.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

WILLIAM A. STANTON, OF GENEVA, NEW YORK.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 304,761, dated September 9, 1884.

Application filed June 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. STANTON, of Geneva, in the county of Ontario and State of New York, 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.

My invention relates to an improvement in lubricators, and more especially those adapted to be connected with the cylinder or steam-pipe of an engine, the object being to provide a device of this character which shall be simple and economical in construction, and at the same time durable and efficient in use; and with these ends in view my invention consists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

The accompanying drawing represents a view of my improved lubricator in vertical section, in which—

A represents a glass oil-tank, on the top of which fits the cover B, provided on its lower edge with a downwardly-extending flange, *a*, fitting around the cylinder A, and assisting in keeping the latter in position. On the lower end of the tank fits the bottom plate, C, having a flange, *b*, to aid in securing the tank in position. The cover B is provided with an upwardly-extending neck, E, having a central opening, F, passing down through it, into the lower end of which is screwed the upper end of a bolt, D, the lower end of which latter is screwed into and projects beyond the bottom C, and is provided with a lock-nut, *c*, the said bolt D being adapted to keep the top B and the bottom C in their proper positions against the cylinder or tank A. If desired, rubber gaskets may be inserted between the end of the tank and the top and bottom, and also between the bottom C and the nut *c*, for the purpose of making tight joints. The cover or top B is also provided with a recess, G, into the upper end of which is screwed the lower end of the condensing tube or pipe H, the upper end of the latter being screwed into the coupling I, connected to a cylinder or steam-pipe leading thereto. In the tube H is located a smaller pipe or tube, J, which passes through the re-

cess G, and also through an opening formed in the cover B, and extends within a short distance of the bottom C, both ends of the tube J being open. A packing, *d*, is placed around the tube J where it passes through the cover B, and makes a water-tight joint between the recess G and the oil-tank A. The upper portion of the opening F is somewhat larger in diameter than the lower portion, thereby forming a shoulder, *e*, upon which rests the lower end of the glass tube K, the upper end being inserted in a coupling, L, connecting the pipe K with the coupling I, the lower portion of said coupling L being screw-threaded and provided with a packing-nut, *f*. A similar nut, *g*, is secured on the neck E of the cover B, and prevents leakage between the tube K and the neck E. From the recess G in the top B is drilled a passage, M, leading into the opening F, immediately above the top of the bolt D. In the top of the bolt D is formed a recess, *h*, the upper end of which is screw-threaded, and in which is secured the lower screw-threaded end of the tube N, which is provided with a collar or laterally-projecting flange, *i*, adapted to bear on the upper end of the bolt D, the upper end of said tube extending up within the glass tube K. From the recess *h* is drilled a passage, *k*, which is formed horizontal, and then passes down and leads into the oil-tank A, the opening *k* being adapted to be opened or closed by means of a valve, P, formed on or secured to the end of a screw, R, screwed into the end of the cover, and provided with knob S, for turning it. On the end of the cover is formed a lug, T, through which the screw passes, and which is externally provided with a screw threaded to receive a packing-nut, U.

Having fully described my invention, I will now describe its operation. The steam enters the coupling I and is condensed in the tube H, filling the said latter tube, and also the tube K, the water flowing from the tube H into the tube K through the passage M. The valve P is closed, and the water in the tube H gradually rises until it reaches the top of the tube J, whereupon it will pass down the latter and out in the tank A, which is partially filled with oil. The valve P is now opened, and the specific gravity of the water being greater than that of the oil, the latter will gradually be lifted.

ed and passed through the tube or passage *h*, and out through the tube *N* into the tube *K*, the water in the latter raising it to the top thereof and allowing it to pass out of the couplings *I* and *L* into the cylinder, the passage of the oil being regulated by means of the valve *P*. After the oil has been used up in the tank *A*, the water may be drawn off through a petcock, *W*, fastened on the bottom *C*, and the tank again filled.

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

1. The combination, with an oil-tank, of a condensing-tube connected with a cylinder or steam-pipe, and having its lower end secured in the cover of the tank, a tube passing down through the condensing-tube and tank-cover, and means for conveying the oil from the tank to said cylinder or pipe, substantially as set forth.

2. The combination, with an oil-tank, of a condensing-tube connected with a cylinder or steam-pipe, and secured to the cover of the tank, a feed-water pipe passing down through the condensing-tube and cover, a tube secured in the cover and connected with the condensing-tube and adapted to receive oil from the

tank, and means for regulating the flow of the oil from the tank, substantially as set forth.

3. The combination, with an oil-tank, of a condensing-tube secured to the cover thereof, of a tube secured to the cover of the tank and connected at its lower end with the condensing-tube, a feed-water tube passing down through the condensing-tube and into the oil-tank, and a small tube secured in the cover of the oil-tank, and extending up into the said tube connected to the cover, the cover being provided with a passage from the oil-tank leading into said small tube, substantially as set forth.

4. The combination, with an oil-tank, of a cover, *B*, secured thereto, a condensing-tube secured to the cover, a feed-water tube passing through the condensing-tube and with the oil-tank, the tubes *K*, *N*, couplings *L*, *I*, and a valve for regulating the flow of the oil from the tank, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

W. A. STANTON.

Witnesses:

CORNS. C. MASTEN,

D. E. DEMPSEY.