

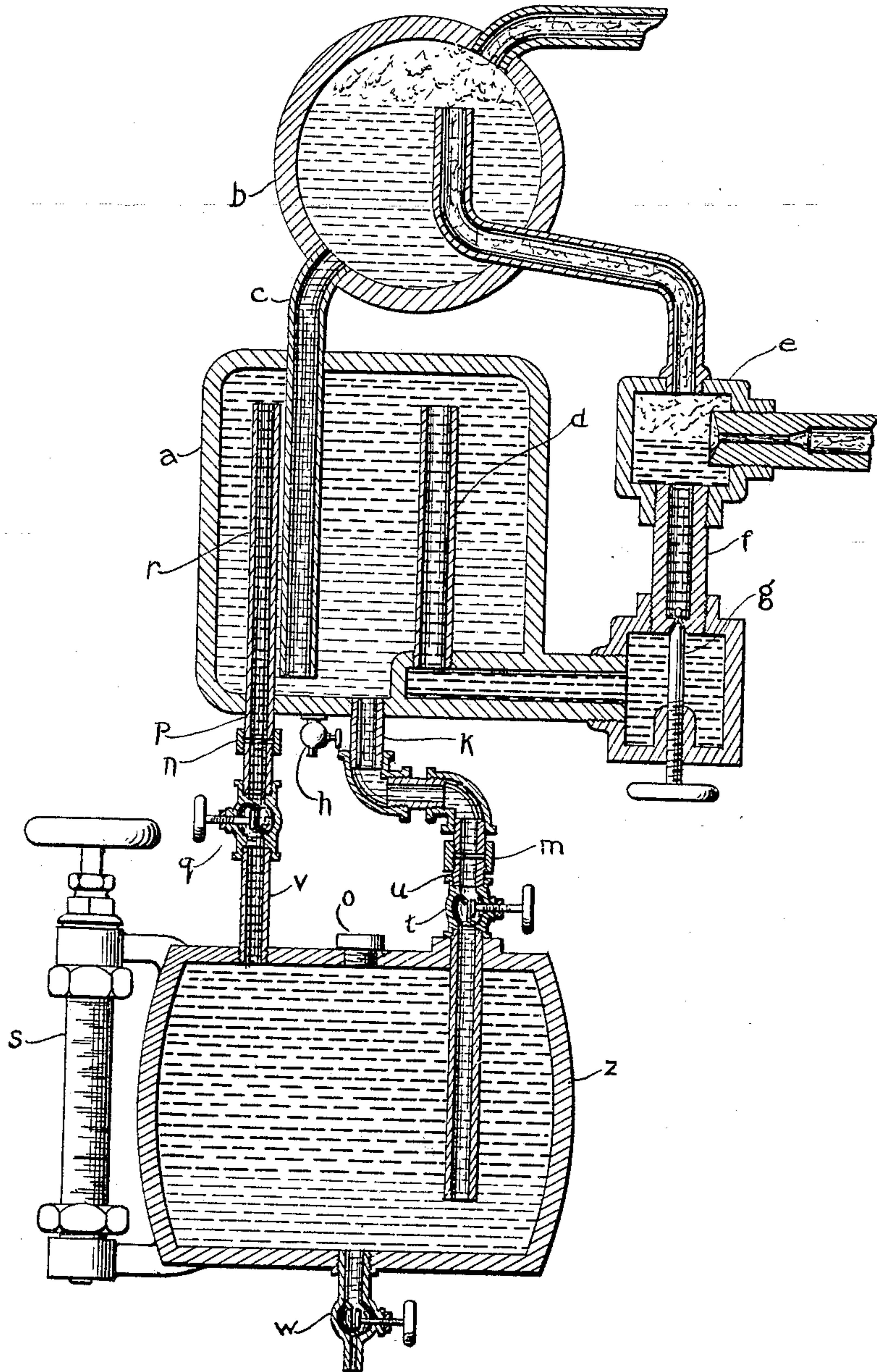
No. 843,366.

PATENTED FEB. 5, 1907.

E. REBER & E. C. CLARK.

LUBRICATOR.

APPLICATION FILED JUNE 13, 1903.



Witnesses

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UNITED STATES PATENT OFFICE.

EDWARD REBER AND EVERETT C. CLARK, OF SAN BERNARDINO,
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LUBRICATOR.

No. 843,366.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed June 13, 1906. Serial No 321,532.

To all whom it may concern:

Be it known that we, EDWARD REBER and EVERETT C. CLARK, citizens of the United States, residents of San Bernardino, in the county of San Bernardino and State of California, have made a certain new and useful Invention in Lubricators; and we declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawing, and to letters or figures of reference marked thereon, which form a part of this specification.

The drawing represents a vertical sectional view of the lubricator.

The invention has relation to that class of lubricators which feed by displacement of the oil by the water of condensation; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

The object of the invention is to provide means for filling the oil-chamber of the lubricator, whereby this operation will be materially facilitated and some of the objections to the ordinary mode of filling avoided.

In the accompanying drawing, illustrating the invention, the letter *a* designates the oil-chamber of a lubricator, having the condensing-chamber *b*, from which a pipe *c* extends nearly to the bottom of the oil-chamber. A pipe *d*, opening in the upper part of the oil-chamber, communicates with the feed-chamber *e* and feed-passage *f*, which is provided with a regulating-valve *g*. The bottom of the oil-chamber is provided with a waste-plug *h*.

To the bottom of the oil-chamber is secured an outlet-pipe *k*, which opens at said bottom into said chamber. This pipe is provided at its lower end with a union *m*, and to said bottom is also secured an inlet-pipe *p*, said pipe having an upward extension *r*, opening in the upper portion of the oil-chamber, and being provided at its lower end portion with a union *n*.

z represents an oil-tank of proper capacity to provide oil for filling the oil-chamber of the lubricator. To the top of the tank is secured the upward-extending valved inlet-pipe *u* and the upward-extending valved outlet-pipe *v*, these pipes having threaded ends and being designed, respectively, to be at-

tached to the lower ends of the outlet-pipe *k* and the inlet-pipe *p* of the oil-chamber by means of the unions *m* and *n*. This tank is therefore removable from the oil-chamber of the lubricator. It is provided with a glass gage at one end, as indicated at *s*, and with a waste-plug *w*. The valve of the pipe *u* is shown at *t* and the valve of the pipe *v* at *q*. The top of the tank is provided with a filling-passage and plug, as indicated at *o*.

The supply-tank having been filled with oil and attached to the lubricator by means of the unions is ready for use. Its valves are normally closed. When the oil is exhausted from the lubricator and it is full of water, the valve *t* is first opened to equalize the pressure, and then the valve *q* is opened. The water from the lubricator descending through its outlet-pipe *k* forces the oil from the feed-tank rapidly upward into the oil-chamber through the inlet-pipe *p* and its extension *r*, and when the gage *s* indicates that the oil-chamber is full the lubricator is ready for action.

The supply-tank can be kept filled, the water of condensation being drawn off by means of the valved waste-passage in its bottom, or it may be detached from the lubricator and replaced by a filled tank kept in reserve. This filling-tank is readily applied to a lubricator and is designed to save time and prevent waste of oil and accidents from the escape of hot oil. It is also of importance in preventing the breakage of gage-glasses, which is often caused by irregular cooling or heating, and in avoiding delay in waiting for a lubricator to cool before filling.

Having thus described the invention, what we claim, and desire to secure by Letters Patent, is—

1. In a lubricator, the combination with an oil-chamber having an oil-inlet pipe extending through its bottom wall, and a water-outlet pipe extending through its bottom wall, of a filling-tank having an upward-extending valved oil-pipe having detachable means of connection with said oil-inlet pipe of the oil-chamber, and an upward-extending valved water-pipe having detachable means of connection with said water-outlet pipe of the oil-chamber.

2. A lubricator having an oil-chamber provided with oil inlet and outlet pipes extending upward within the same to near the top

thereof, a lateral feed-passage having communication with the lower end of said oil-outlet pipe and provided with a valve, said oil-inlet pipe having a lower extension 5 through the bottom of the oil-chamber threaded at its lower end, said oil-chamber having a water-outlet pipe threaded at its lower end, and means for supplying the oil-chamber with water of condensation having 10 connection with a steam-supply.

3. In a lubricator, the combination of a filling-tank, an oil-chamber having inlet and outlet pipes for oil extending upward within the chamber to near the top thereof, said 15 inlet-pipe having a bottom extension to the filling-tank provided with a valve, a feed-passage at one side of said oil-chamber having communication with the lower end of said outlet-pipe and having a valve in its 20 lower end portion, a water-outlet-pipe connection between the oil-chamber and the filling-tank having a valve, a water-supply

chamber communicating with a steam-supply from the boiler, and having a pipe extending to near the bottom of the oil-chamber and a pipe communicating with the upper 25 portion of said feed-passage.

4. In a lubricator, the combination with an oil-chamber having an oil-inlet pipe and a water-outlet pipe, of a filling-tank having an 30 upward-extending valved oil-supply pipe having detachable means of connection with said oil-inlet pipe, and an upward-extending valved water-inlet pipe having detachable means of connection with the water-outlet 35 pipe of the oil-chamber.

In testimony whereof we affix our signatures in presence of two witnesses.

EDWARD REBER.
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Witnesses:

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