(No Model.)

No. 256,609.

A. WEBER.

LUBRICATOR.

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Patented Apr. 18, 1882.



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UNITED STATES PATENT OFFICE.

ADOLPH WEBER, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF AND HENRY W. ROOD, OF SAME PLACE.

LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 256,609, dated April 18, 1882.

Application filed January 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH WEBER, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Im-5 provements in Lubricators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification.

The nature of my invention relates to cer-IO. tain new and useful improvements in that class of lubricators for steam machinery known as "displacement-lubricators," or those wherein the oil is displaced and forced out of the de-15 vice by the condensation of the steam.

The object of my invention is to provide such a device which will deliver the oil in certain quantities, such quantities being variable at pleasure, without the employment of valves 20 to regulate the flow, by means of a condensingchamber, which may be enlarged or diminished at will by the turning of a knob attached to a threaded stem projecting above the body of the device. The invention consists in the peculiar con-25 struction and operation of parts and their combination, as more fully hereinafter described. In the accompanying drawing, which shows an elevation partly in vertical central section 30 of my improved lubricator, A represents the oil-chamber proper, into the bottom of which is screwed the plug B, by means of which connection is made to the steam-pipe, or the part to be lubricated. This plug is hollow and pro-35 vided with a valve, C, to regulate the flow of steam through the plug and pipe D, with which said plug is connected. This pipe D communicates with the pipe D', which projects into the chamber A nearly to its top, as shown. \mathbf{E} 40 is another hollow plug and internally provided with a coarse thread, and this plug is screwed into the top of the chamber immediately above

plug E, and J is an L-shaped index sleeved upon the stem just below the knob in such a manner as not to turn with the stem, but to follow its vertical motion. This index is pro- 55 vided on its outer vertical face with a series of notches, and it passes through a slot in the overhanging end a of the guide.

M is a discharge-cock, through which the contents of the chamber A may be drawn off 60 when desired, and N is a plug closing an opening through which oil is filled into said chamber.

In practice, the device being ready for use, the oil in the chamber stands upon the level 65 of the top of the tube D'. Now, if a small supply of oil is wanted to overflow through said tube, the stem G is screwed down, carrying with it the chamber F, which enters the oil and embraces the top of the tube D. The 70 valveC is then opened and steam flows through tube D into the chamber F, which is now of a very small area for condensing purposes. Hence the condensation will be slow, and the water of condensation will drop into the oil- 75 chamber slowly, and displacing drop by drop a like quantity of oil, which escapes down through the tube. To increase the outflow it is only necessary to raise the chamber F by means of its screw-stem, thereby affording 80 more room for condensation. The index above described will show the capacity of the condensing-chamber at all times. What I claim as my invention is— 1. The pipe D, having valve-seat and plug 85. B, formed of one casting, and having a channel connecting with pipe D', combined with the valve C, vessel A, condensing-chamber F, and means for raising and lowering the same at will, as and for the purpose specified. 90 2. The vessel A, having inlet-aperture N, the plug B, having channel connecting with pipe D', the pipe D, and valve-seat, the valve C, the outlet m through the plug B, the condensing-chamber F, and means for adjusting 95 its capacity at will, combined with means, I J, for indicating said capacity, all as and for the purposes set forth. ADOLPH WEBER.

- the end of the tube D.
- F is an inverted chamber, the bottom being 45 open, while the top is secured to the lower end of the stem G. The upper part of this chamber is provided with a coarse thread to engage with the female thread in the plug E, and the knob H enables the operator to turn 50 the stem at will and with ease.
 - I is a fixed guide secured to the neck of the

Witnesses: H. S. SPRAGUE, E. SCULLY.