

F. C. VON HAXTHAUSEN.
LUBRICATOR.
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976,076.

Patented Nov. 15, 1910.

Fig. 1.

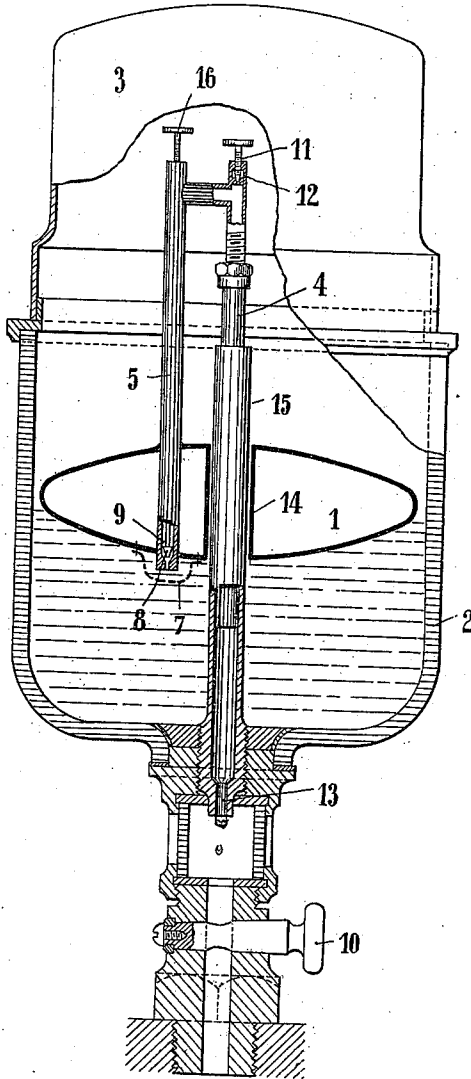
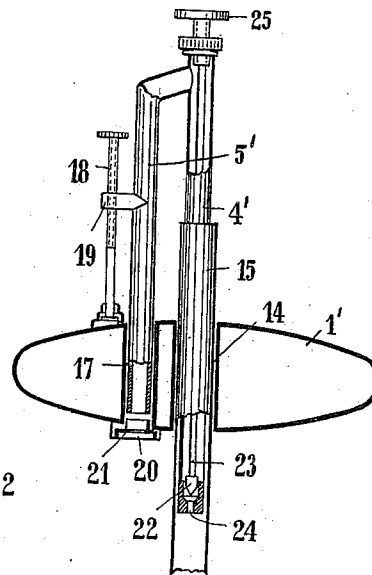


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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LUBRICATOR.

976,076.

Specification of Letters Patent.

Patented Nov. 15, 1910.

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To all whom it may concern:

Be it known that I, FREDERIC CHARLES VON HAXTHAUSEN, a subject of the Czar of Russia, and resident of St. Petersburg, Russia, have invented a certain new and useful Improvement in Lubricators, of which the following is a specification.

This invention relates to improvements in lubricators and consists in certain features of construction as hereinafter more particularly described.

The invention is shown in the accompanying drawing in which like reference letters indicate like parts, and in which—

Figure 1 is a sectional elevation of one embodiment of the invention; while Fig. 2 shows a modified construction.

In the interior of the container 2 which is adapted to be closed by the cap 3 (Fig. 1) is a float 1 having a central opening 14 for the passage of the outlet pipe 15, having a discharge end 13 through which the oil flows. To this float is connected a siphon the adjustable limb 4 of which projects into the pipe 15 while the other limb 5 is rigidly connected with the float 1. It is clear that by adjustment of the limb 4 the distance between the open ends of the limbs and thereby the siphonic action can be increased or diminished. The open end of the limb 5 is formed as a valve seat which is protected from impurities by a gauze 7, and is controlled by a valve 8 mounted on a rod 9 which can be adjusted by a screw 16 to correspond to the viscosity of the oil. The rod 9 is formed of a material having a high coefficient of expansion so that on the temperature rising the valve 8 closes the limb 5 more and more in order to keep the flow of oil constant as the viscosity decreases. An air escape opening 12 may be provided and the same may be closed by a screw 11, as clearly shown in Fig. 1.

In the construction shown in Fig. 2 the limb 5' projects into a suitable opening 17 in the float 1'. At the lower end of said opening 17, the float carries a support 20 on which a filter screen 21 is mounted and which, as shown, projects somewhat into the opening 17. In this construction the limbs 4' and 5' are made integral and the limb 4'

projects into the pipe 15 loosely, and the limb 5' is provided with a lug 19 with which a rod 18 has threaded connection. The rod 18 is revolvably connected with the float 1' and is provided with a thumb screw so that when the rod 18 is adjusted a relative change of the position of the float 1' with respect to the lower ends of the limbs 4' and 5' will result. It will be seen from the foregoing that the opening 17 is designed to form an extension of the limb 5' so that when the float 1' is adjusted downwardly the limb 5' will be lengthened and when the float 1' is adjusted upwardly the limb 5' will be shortened. It will thus be seen that the siphonic action can be increased or decreased by this adjustment of the float with respect to the limb 5'. In this construction the regulation of the passage to correspond to different temperatures is preferably effected by a valve 22 actuated by a rod 23 of high coefficient of expansion which on the temperature rising closes more or less of the opening 24 in the limb 4 which is formed as a valve seat. The adjustment of this valve 22 to correspond to the varying viscosity of the oil is effected by a set screw 25.

When the lubricator is first started the container 2 is completely filled with oil, the screw 16 (Fig. 1) or 25 (Fig. 2) is unscrewed and the float pressed to the bottom of the container so that the siphon is completely under oil. After the tubes are filled with oil and all the air expelled, the screw 16 or 25 is screwed on again, and the cock 10 opened so that the siphon commences to act and the float which is now released rises to the surface.

Having now described my invention what I claim and desire to secure by Letters Patent of the United States is:—

1. In a lubricator adapted to deliver lubricant continuously, the combination with a lubricant container of an outlet tube, a float movable in the container, an adjustable siphon having one limb connected to the float and the other guided in the outlet tube, a valve for controlling the outflow, and a thermostatic device for regulating the position of the valve.

2. In a device of the character described,

a receptacle, means to feed a liquid from the same, including a siphon, a valve arranged within said siphon to control the passage of liquid therethrough, thermo-
5 static means to regulate the position of the valve, and a float with which said siphon is connected.

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

FREDERIC VON HAXTHAUSEN.

Witnesses:

WOLDEMAR HAUPT,
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