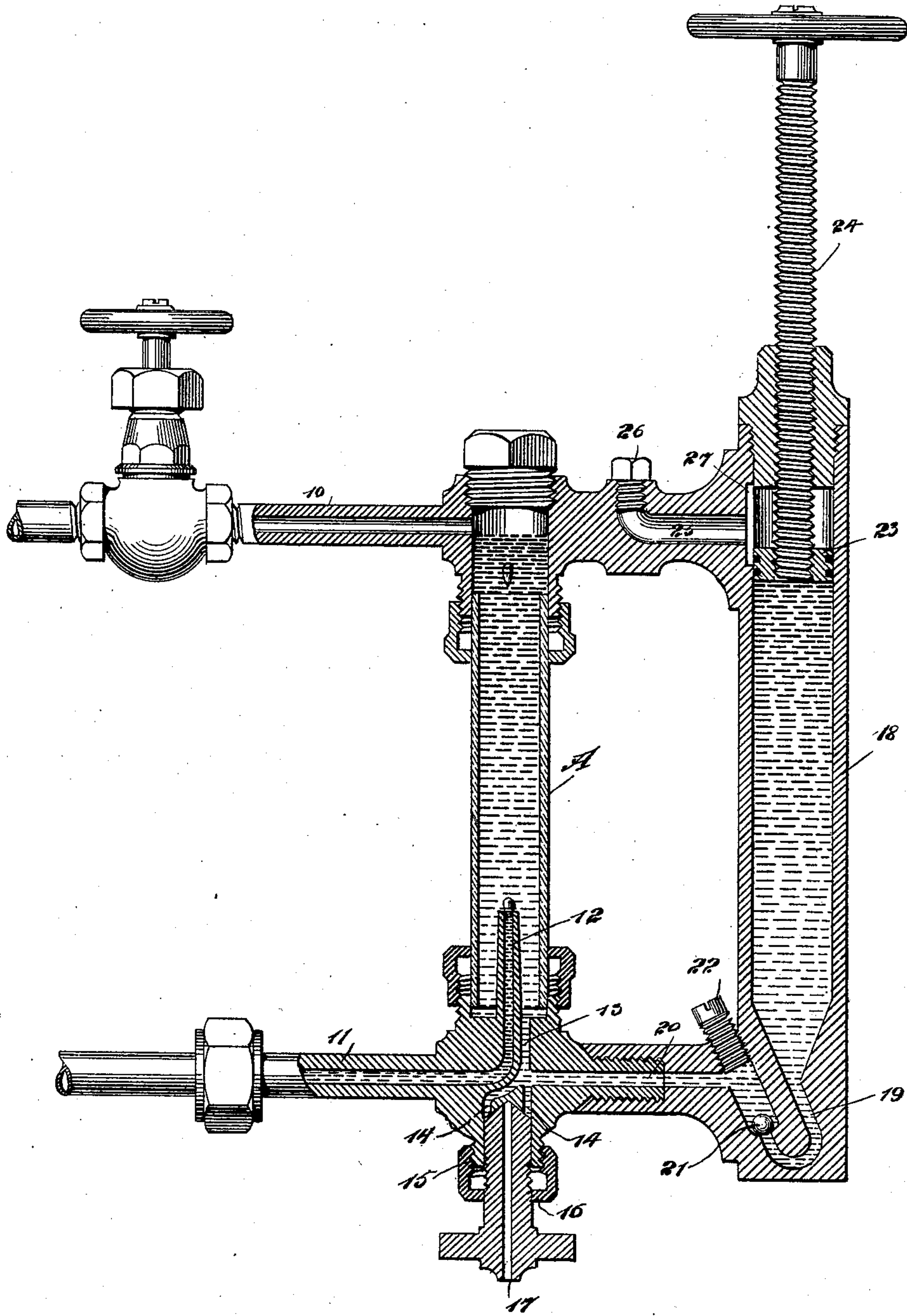


(No Model.)

A. A. DE WITT.
SIGHT FEED LUBRICATOR.

No. 584,990.

Patented June 22, 1897.



WITNESSES:
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ALEXANDER A. DE WITT, OF NEW YORK, N. Y.

SIGHT-FEED LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 584,990, dated June 22, 1897.

Application filed October 16, 1896. Serial No. 609,078. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER A. DE WITT, of New York city, in the county and State of New York, have invented a new and Improved Controlling Device for Sight-Feed Lubricators, of which the following is a full, clear, and exact description.

The object of my invention is to provide a reservoir through the medium of which liquid may be maintained in a convenient and expeditious manner at a proper level in the sight-tube of a lubricator, and, furthermore, to provide for the discharge of the liquid whenever desired from both the reservoir and the sight-tube.

A further object of the invention is to provide a means whereby any desired amount of pressure may be applied upon the column of liquid contained in the reservoir, so as to make the feed of the reserve column in a measure automatic.

Another object of the invention is to provide an attachment of the character above set forth which will be exceedingly simple, durable, and economic in its construction.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

The figure of the drawing is a sectional view through the sight-feed lubricator and the improved attachment to the same.

In carrying out the invention the tube A of the sight-lubricator is secured at the top and bottom in the usual bearings and is connected at the top with an offtake-pipe 10, adapted to receive a lubricant, and at the bottom the sight-tube is connected with a supply-tube 11, which is in direct communication with a nozzle 12, which nozzle extends back within the sight-tube A. In the lower bearing for the sight-tube A a main channel 13 is made, which connects with the sight-tube at its bottom, and this channel is bifurcated at its lower end, forming two branches 14, while a valve 15 is carried by the lower bearing and is normally seated at a point between the two branches 14 and the channel 13, the valve when in its seat effectually preventing the discharge of liquid from the bottom of the sight-tube.

The valve is provided with the usual gland 16

and is further provided with a single orifice 17, extending longitudinally from end to end, so that when the valve is loosened from its seat the liquid from the sight-tube flowing through both of the channels 14 may find an exit through the orifice 17 of the valve.

Parallel with the sight-tube A a reservoir 18 is located, which is ordinarily in the nature of a sleeve, and at the bottom of the said reservoir an outlet-channel 19 is produced, which is shown as of the gooseneck pattern, but which may be otherwise formed, and the channel 19 is connected with a channel 20, which is formed in the connecting medium between the connecting portion of the reservoir and the lower setting for the sight-tube A, and the said channel 20 is in direct communication with the channel 13 in the said setting and its branches 14.

A ball-valve 21 normally closes the outlet of the channel 19 for the reservoir, and where this valve is located the channel 19 is enlarged; but the said channel 19 is closed at the top through the medium of an adjusting-screw 22, which is passed through the connecting medium between the setting of the sight-tube at its bottom and the lower portion of the reservoir.

In the upper end of the reservoir 18 a plunger 23 is mounted, and this plunger is given movement through the medium of an applied screw 24, which may be operated by a hand-wheel, and a channel 25 is made in the connecting medium between the upper bearing for the sight-tube and the upper portion of the reservoir 18, through which channel 25 the liquid is introduced into the aforesaid reservoir, and this channel 25 is normally closed by a plug 26 or the equivalent of the same.

A canal 27 is formed in the upper connection between the sight-tube and the reservoir, the said canal being at one side of and in direct communication with the space in which the plunger 23 moves, the canal being likewise in connection with the inlet-channel 25 and the interior of the reservoir 18 below the said inlet, so that in the event of any liquid finding its way on the top portion of the plunger when the plunger is screwed downward to place the column of liquid in the reservoir under pressure such liquid may find an

exit through the canal 27 to the main chamber of the reservoir when the plunger is again elevated.

In the event that the liquid in the sight-tube A should by any possibility fall lower than the desired level by forcing downward the plunger 23 the column of liquid in the reservoir will be forced to supply the column of liquid in the sight-tube, raising the latter to such a level that the lubricating material will flow readily into the outlet 10.

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

1. The combination, with the sight-feed tube in a sight-feed lubricator, of a reservoir forming a portion of the lubricator, the reservoir being connected at its lower end with the lower portion of the sight-feed tube, and means, substantially as described, for exerting pressure on the column of liquid contained in the said reservoir, as and for the purpose set forth.

2. The combination, with the sight-tube of a sight-feed lubricator, of a reservoir having its lower end connected with the lower portion of the sight-tube, the connection between the sight-tube and reservoir including a valve, a plunger located at the upper portion of the reservoir, means for operating the plunger,

and a device whereby the liquid in either the reservoir or the sight-tube may be drawn off, substantially as described.

3. The combination, with a sight-tube of a sight-feed lubricator, of a reservoir supported from the bearing of the sight-tube, the said reservoir being provided with a channel in its lower end in communication with its interior and leading to the interior of the sight-tube, a valve located in the said channel, a plunger located in the upper portion of the reservoir, and a second valve arranged to empty the reservoir or the sight-tube, as and for the purpose set forth.

4. A lubricator having a sight-feed tube, a reservoir in communication with the sight-feed tube, and a plunger in the reservoir and serving to regulate the height of the liquid in the sight-tube, substantially as described.

5. A lubricator having a sight-feed tube, a reservoir communicating with the sight-feed tube, a check-valve between the feed-tube and reservoir and opening toward the feed-tube, and a plunger in the reservoir and serving to regulate the height of the liquid in the feed-tube, substantially as described.

ALEXANDER A. DE WITT.

Witnesses:

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