No. 826,543. PATENTED JULY 24, 1906.

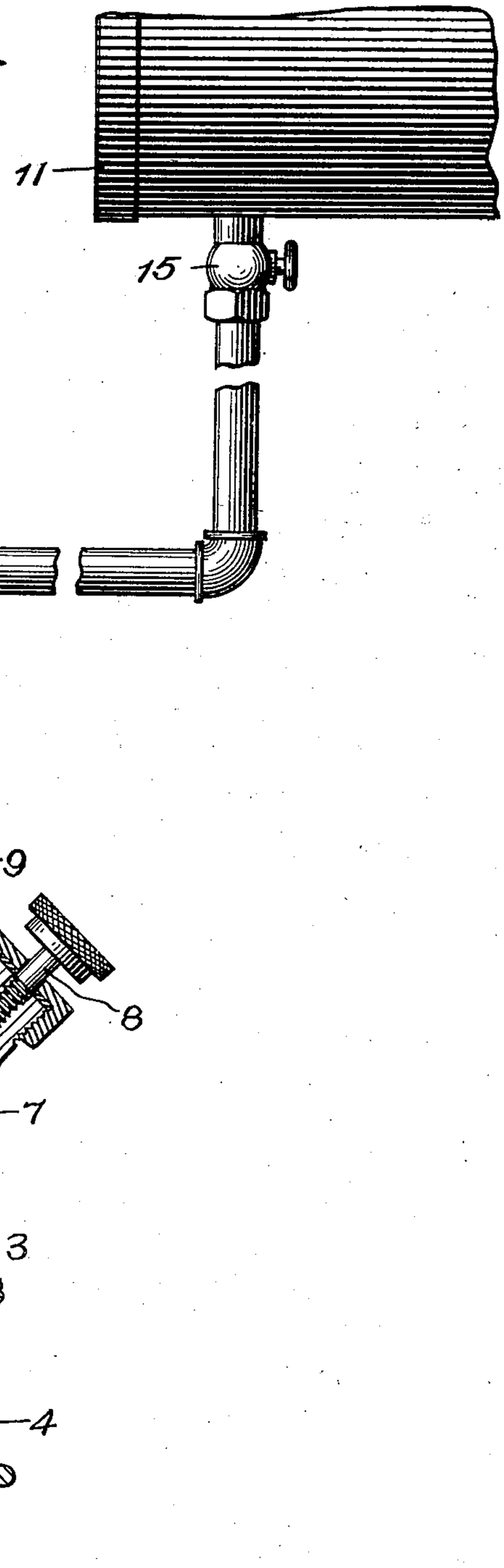
C. A. CONN.

LUBRICATOR.

APPLICATION FILED OCT. 23, 1905.

2 SHEETS—SHEET 1.

FIG. 1.



WITNESSES:

Herbert Bradley.

Carl Sidle

INVENTOR

Charles A. Conn,

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2 SHEETS—SHEET 2.

FIG. 2.

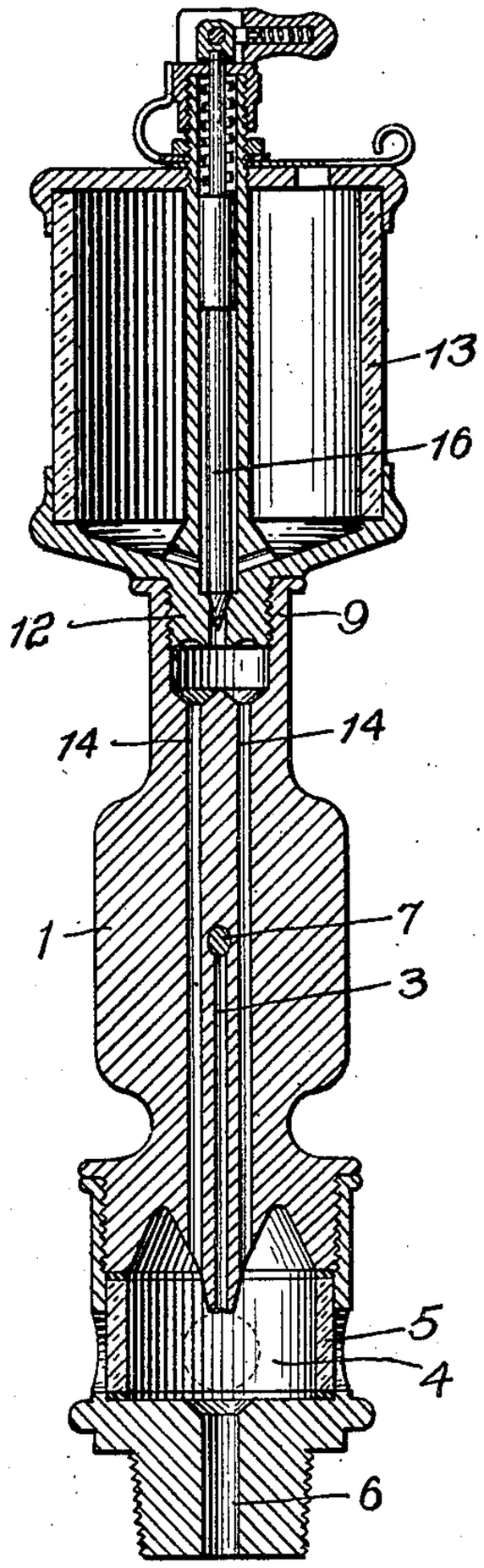
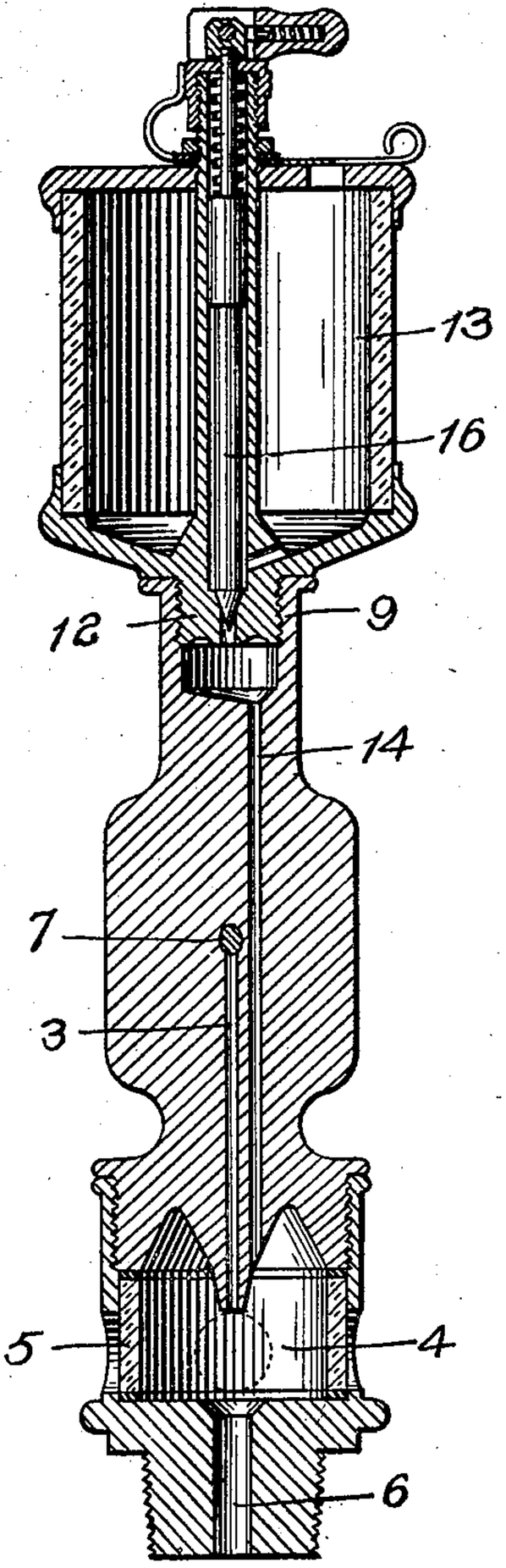


FIG. 3.



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UNITED STATES PATENT OFFICE.

CHARLES A. CONN, OF PITTSBURG, PENNSYLVANIA.

LUBRICATOR.

No. 826,543. Specification of Letters Patent. Patented July 24, 1906.

Application filed October 23, 1905. Serial No. 284,005.

To all whom it may concern:

Be it known that I, CHARLES A. CONN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Lubricators, of which improvements the following is a specification.

The invention described herein relates to certain improvements in lubricators of the class or kind in which provision is made for the feed of the lubricating material, as oil, by pressure or gravity, or both. In this class or kind of lubricator as heretofore constructed passages for the oil from the two sources—*i. e.*, pressure and gravity—were connected in the body of the casing, the point of junction being formed by a chamber connected by another passage to the outlet-chamber. In such a construction it is practically impossible to determine from which source the oil is being fed if the valves from both sources are open, and, further, a sufficient space is afforded in this construction to permit of the backing up of the oil in this common chamber and passages leading therefrom, thus accumulating a supply of oil due to the stoppage of the outlet-passage or other cause, which will suddenly gush out when the stoppage is removed, thus causing an irregularity of feed, so that at times machine parts are not fully lubricated and at other times too much lubricant is applied.

The invention described herein has for its object a construction in which provision is made for the feeding of the oil to what might be termed the "outlet" or common oiling-chamber, provided with glass walls or other means permitting of the inspection of the feed. The invention is hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a sectional elevation of the lubricator embodying my improvements, showing connections to the gravity and pressure feed. Fig. 2 is a sectional elevation of the lubricator having my improvements applied thereto and provided with an ordinary cup as a source of the gravity feed and also having two passages connecting the cup with the delivery-chamber of the lubricator. Fig. 3 is a view similar to Fig. 2, illustrating a modification.

In the practice of my invention the shell or casing 1 is connected in any suitable manner, as by a pipe 2, to a source of lubricating material under pressure, and from the point of junction of this pipe 2 with the casing extends the passage 3 to the delivery or outlet chamber 4, preferably provided with glass walls 5, so as to permit of the observation of the feed of the oil to this chamber, which has an outlet 6, leading to the part to be lubricated. The flow of oil along the passage 3 is controlled by a valve 7, operated by the valve-stem 8, the stem and valve being so arranged that in the flow of oil along the passage 3 there will be no liability of the oil passing up along the stem of the valve, thus avoiding the necessity of a stuffing-box on the valve-stem. The source of gravity feed of lubricating material is preferably connected to the upper end of the shell or casing, which is provided with a threaded socket 9 for the reception of the end from the tank 11 of the feed-pipe 10 or the nipple 12 on the feed-cup 13. From this socket extends one, two, or more passages 14 to the outlet-chamber 4, said passages entering said chamber preferably adjacent to the point of entrance of the passage 3 thereinto. The flow or oil from the gravity-tank 11 is controlled by a valve 16, while the flow of oil from the cup is controlled by a valve 16. It will be observed that as the passages conducting the lubricating material to the outlet-chamber are independent of each other both pressure and gravity feed may be employed at the same time and that the regularity of such feed can be observed through the transparent walls of the outlet-chamber. The walls of the shell or casing adjacent to the exit-points of the passages 3 and 14 are cut back or inclined upwardly, so that there will be no liability of the oil flowing outwardly into contact with the glass walls of the outlet-chamber, thereby so clouding said walls as to render impossible an inspection of the feed.

It is characteristic of my improvement that there cannot be any backing up of the oil with pressure feed into chambers or recesses in the valve-casing and that the stoppage of one of the sources of supply will not in any way affect the other source of supply.

I claim herein as my invention—

1. A lubricator having in combination a case or shell, provided with means for connecting the case or shell to sources of feed under pressure and gravity feed, a sight-feed or outlet-chamber, and independent passages extending to said chamber from the points of connection of such sources to the lubricator.

:. A lubricator having in combination a
e or shell, provided with means for con-
;ting the case or shell to sources of feed
ler pressure or gravity feed, independent
ssages extending to the outlet-chamber
m the points of connection of the sources
the lubricator, and valves controlling said
ssages located intermediate of the ends of
d passages.

3. A lubricator having in combination a
ell or case, means for connecting the shell
case to independent sources of pressure
ıd gravity feed, there being independent
ıssages extending from the points of con-
;ction of said sources to the outlet-chamber
ıd a valve having an upwardly-inclined
em controlling the pressure-feed through
ıe passages, and an outlet-chamber located between the valves and discharge-outlet and connected to said passages.

4. A lubricator having in combination a shell or case having an outlet-chamber, means for connecting the source of supply to the shell or case, said case being provided with a passage from said point of connection to the outlet-chamber, the upper wall of the outlet-chamber having an annular recess surrounding the discharge end of the passage whereby a lateral flow of the oil from the end of such passage is prevented.

In testimony whereof I have hereunto set my hand.

CHARLES A. CONN.

Witnesses:
CHARLES BARNETT,
HERBERT BRADLEY.