

No. 668,054.

Patented Feb. 12, 1901.

E. L. SEIBERT, SR.

LUBRICATOR.

(Application filed May 4, 1900.)

(No Model.)

Fig. 1.

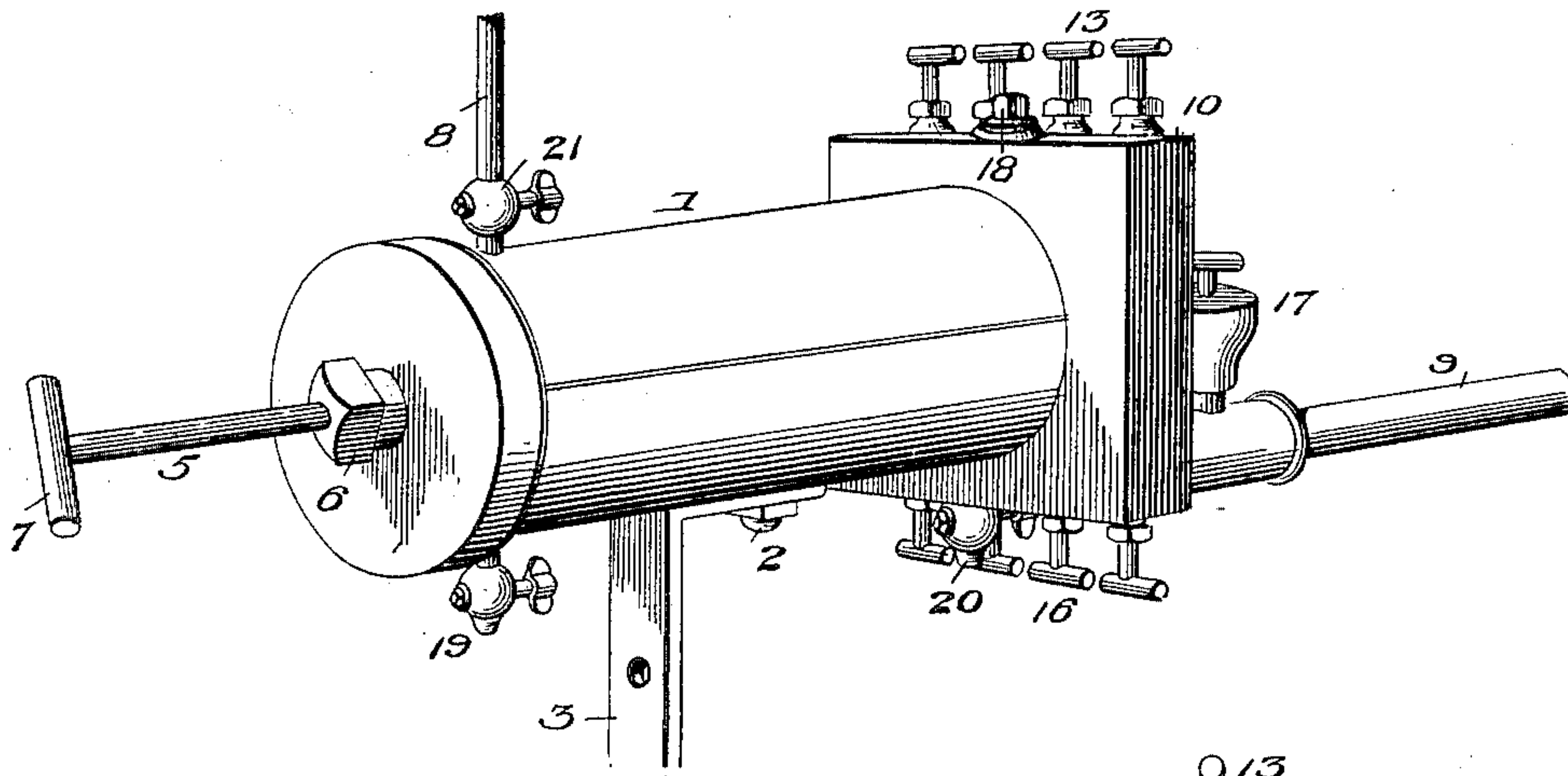


Fig. 2.

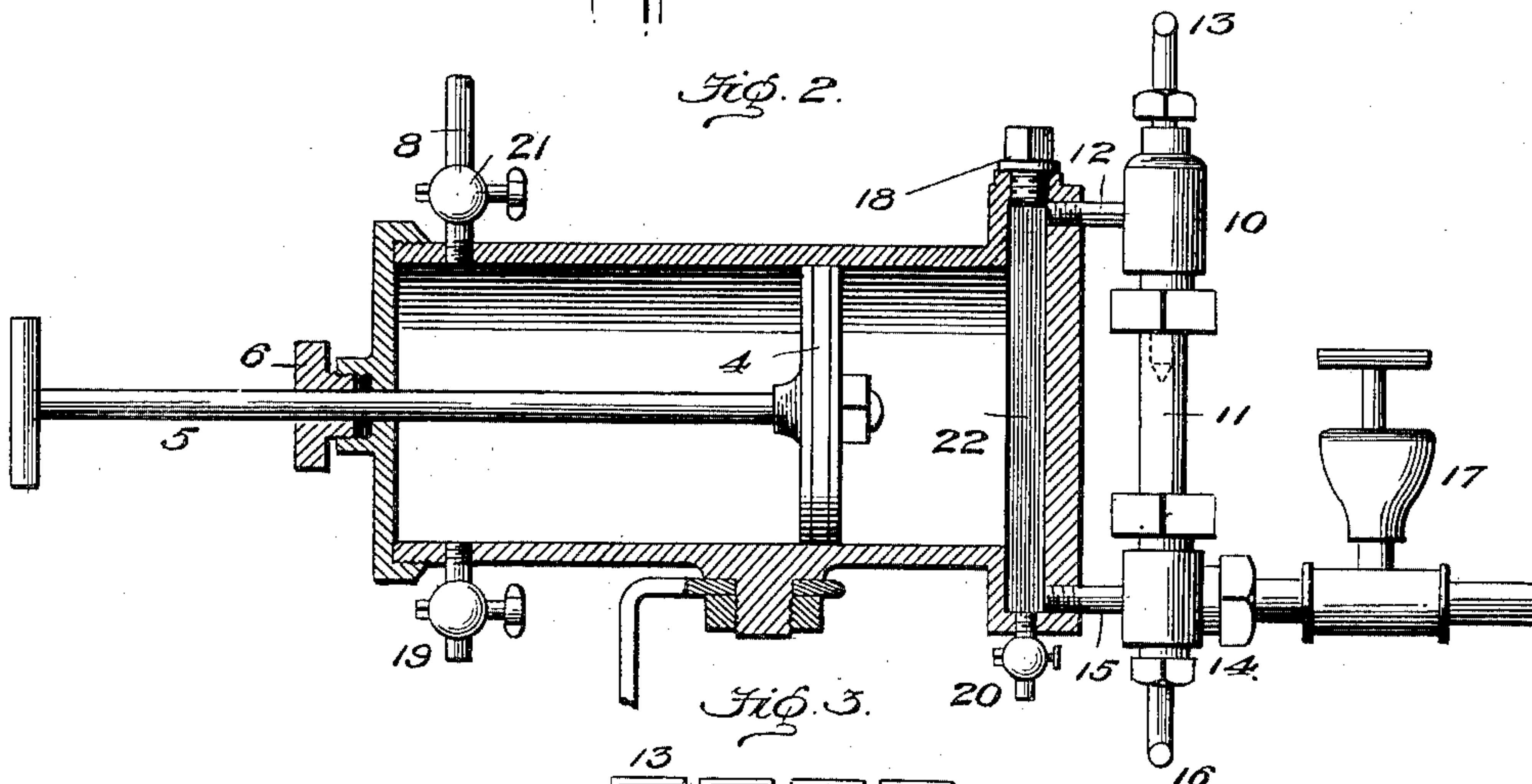
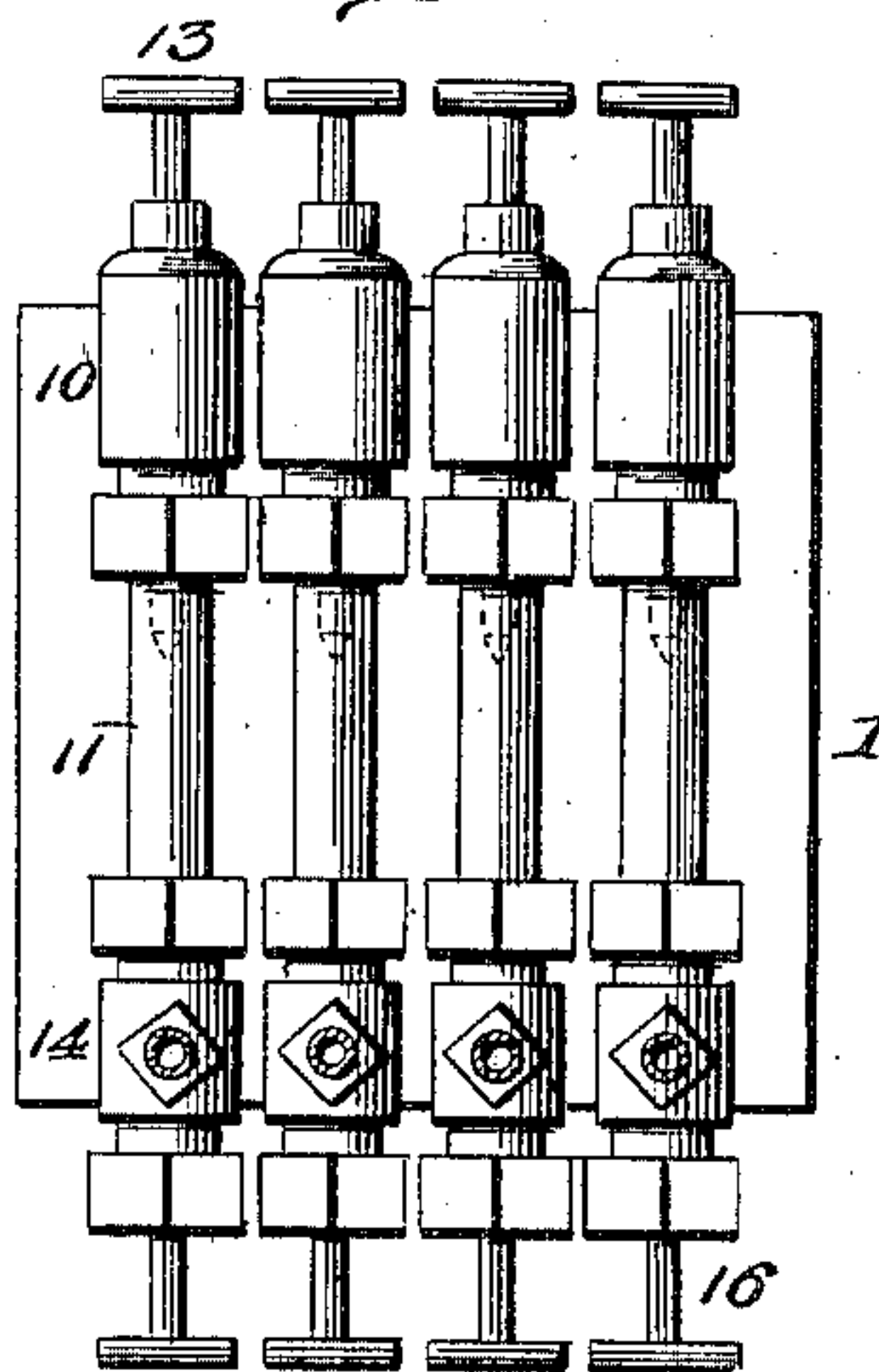


Fig. 3.



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LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 668,054, dated February 12, 1901.

Application filed May 4, 1900. Serial No. 15,493. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. SEIBERT, Sr., a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Lubricator, of which the following is a specification.

My invention relates to lubricators, and more particularly to that class which is used upon steam-engines, and is especially adapted for locomotive-engines.

The object of the invention is to construct a lubricator in such a manner as to avoid the use of complicated parts which are likely to become clogged by reason of incrustations from boilers, and thereby rendered inefficient or inoperative.

With this object in view my invention consists in the improved construction and novel arrangement of parts of a lubricator, as will be hereinafter more fully set forth.

In the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which they occur, Figure 1 is a perspective view of my improved lubricator. Fig. 2 is a longitudinal sectional view of the same, and Fig. 3 is an end view.

Referring more particularly to the drawings, 1 indicates the body of my improved lubricator, which is made cylindrical in the usual manner and is preferably provided with a stud or support 2, by means of which it can be secured to the boiler or other desired object through the instrumentality of a bracket 3. A reciprocatory plunger is provided with a piston-head 4, which is packed in the usual manner, so as to fit steam-tight within the casing or cylinder 1, and the stem 5 projects through the usual stuffing-box 6 at the end and is provided with a handle 7, by means of which it may be drawn back against the head of the cylinder. The steam-pipe 8 communicates with the rear of the cylinder for the purpose of admitting steam to the rear of the piston and drive it forward. A delivery-pipe 9 extends from the forward end of the cylinder and communicates with the cylinder of the engine or the air-pump of the locomotive, as may be desired. Communication between the cylinder and the delivery-pipe is established through the oil-

feeder 10 and the sight-glass 11. The feeder 10 communicates with the upper portion of the cylinder by means of a short tube 12 to avoid the introduction into the feeder of any sediment that might be in the oil, and by locating the sight-tube between the feeder and the delivery-tube it can always be seen whether the oil is being delivered or not. The amount of oil being delivered or fed through the lubricator can be adjusted by means of an ordinary needle-valve 13 within the feeder 10. The coupling 14 may be connected with the head of the cylinder by means of a short bracket 15 and is provided with a valve 16, which can be closed in case it is desired to cut off connection between the feeder and the delivery-pipe. The head of the cylinder may be made rectangular and have more than one feeding device connected with the top and bottom, four being shown in the drawings. In this manner the pressure behind the piston is applied to the oil to force it through all of the feeding devices alike.

An auxiliary lubricator 17 is preferably placed upon the delivery-pipe to be used in case of emergency—as, for instance, upon the breaking of the sight-tube 12. Upon the breaking of the tube 12 the valves 13 and 16 are closed and the auxiliary lubricator opened until a new glass can be inserted. The auxiliary feeder is preferably an ordinary force-feed, although it may be constructed in any suitable manner to deliver the oil at the desired point during the temporary stoppage of the regular feed. The main lubricator is fed through an opening in the top, which is normally closed by a suitable plug 18, and it is provided at its bottom with a water-outlet 19 upon one side of the piston and with an oil-outlet 20 upon the other side.

As above described, my improved lubricator is secured in position and the piston drawn back as far as desired and the plug 18 is removed and the lubricator filled with oil. The plug is then reinserted, the valves 13 and 16 opened, and steam admitted through the pipe 8 by means of a suitable valve 21. As the steam enters to the rear of the piston the piston is driven forward, thereby forcing the oil through the feeder 10, the sight-tube 12, and into the delivery-pipe 9, which discharges it where needed. By opening the valves at the

bottom of the cylinder the water or sediment may be removed and the lubricator thereby cleansed for continued operation.

When constructed in this manner, it will be seen that my lubricator can be made of any desired capacity and that it can be readily attached in any convenient position and having no pipes or other small passages upon its interior is not liable to be clogged in any manner. There is no water within the glass below the oil-feeder to interfere with the oil, and therefore the oil passes directly from the feeder to the cylinder or air-pump.

If desired, the forward end of the cylinder may be enlarged, so as to form a groove or channel 22, within which the sediment from the oil will collect and can be readily removed through the outlet 20. By placing the cylinder and piston in a horizontal position the water of the condensation can escape through the cock to the rear of the piston-head when the head is drawn back, and the sediment will be forced into the groove as the piston is driven forward, from whence it may be removed through the outlets communicating therewith. It is evident that further slight changes or modifications can also be made in

the construction of my lubricator, and I reserve the right to make such changes and alterations therein as will come within the scope of my invention.

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

In a lubricator, the combination, with a horizontally-arranged cylinder, the forward end of which is enlarged at the top and bottom to form a groove, said cylinder being provided with openings in the top and bottom adjacent its ends, the openings at the forward end communicating with said groove, of valved outlets communicating with the bottom openings, a piston in the cylinder provided with a handle which projects through the rear end, an oil-feeder and a valved coupling communicating with the top and bottom, respectively, of the forward end of the cylinder, a glass tube communicating with the feeder and the coupling, and a delivery-pipe leading from the coupling, substantially as described.

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Witnesses:

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