

No. 795,455.

PATENTED JULY 25, 1905.

E. L. SEIBERT, SR.  
LUBRICATOR.

APPLICATION FILED MAR. 7, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

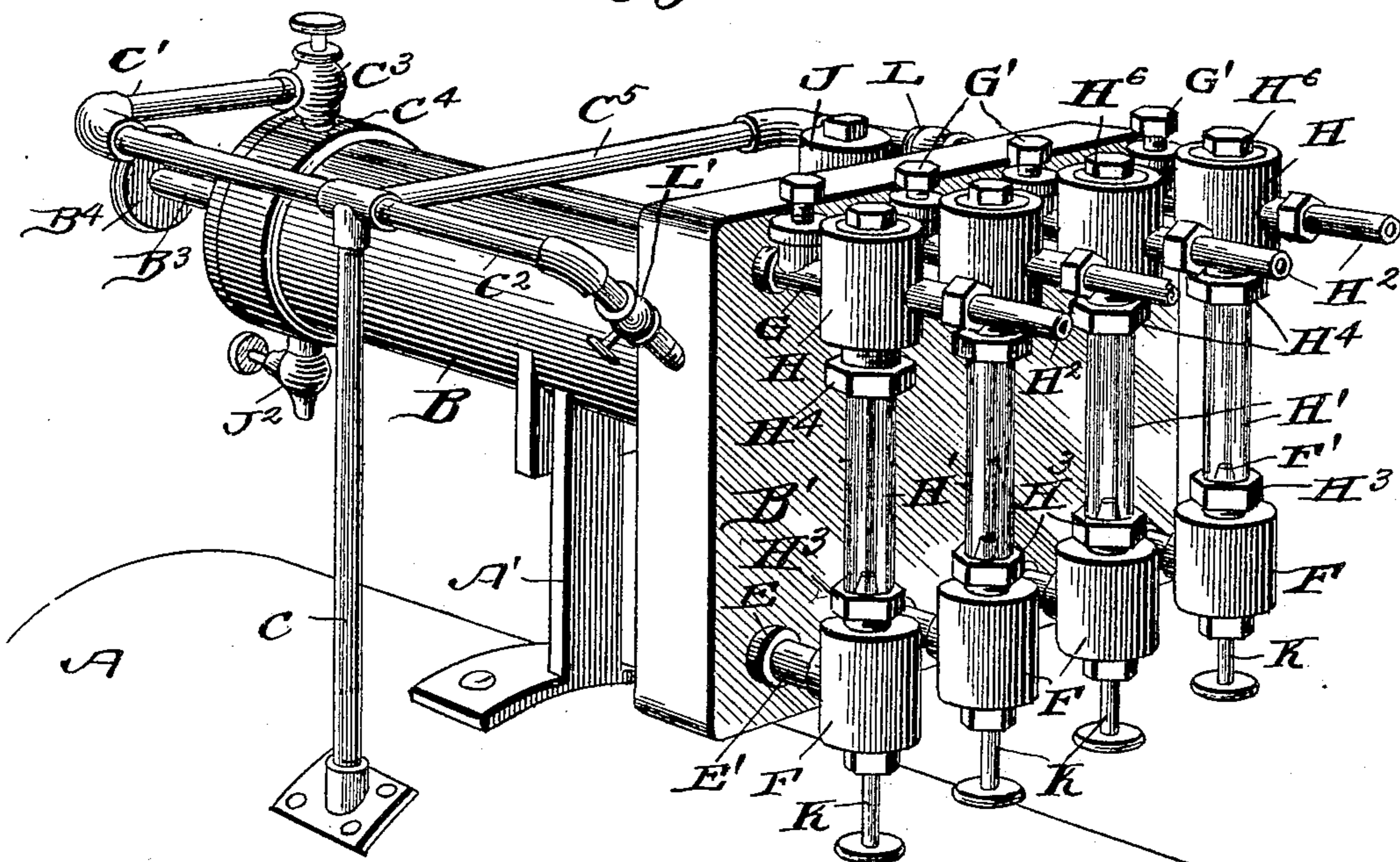
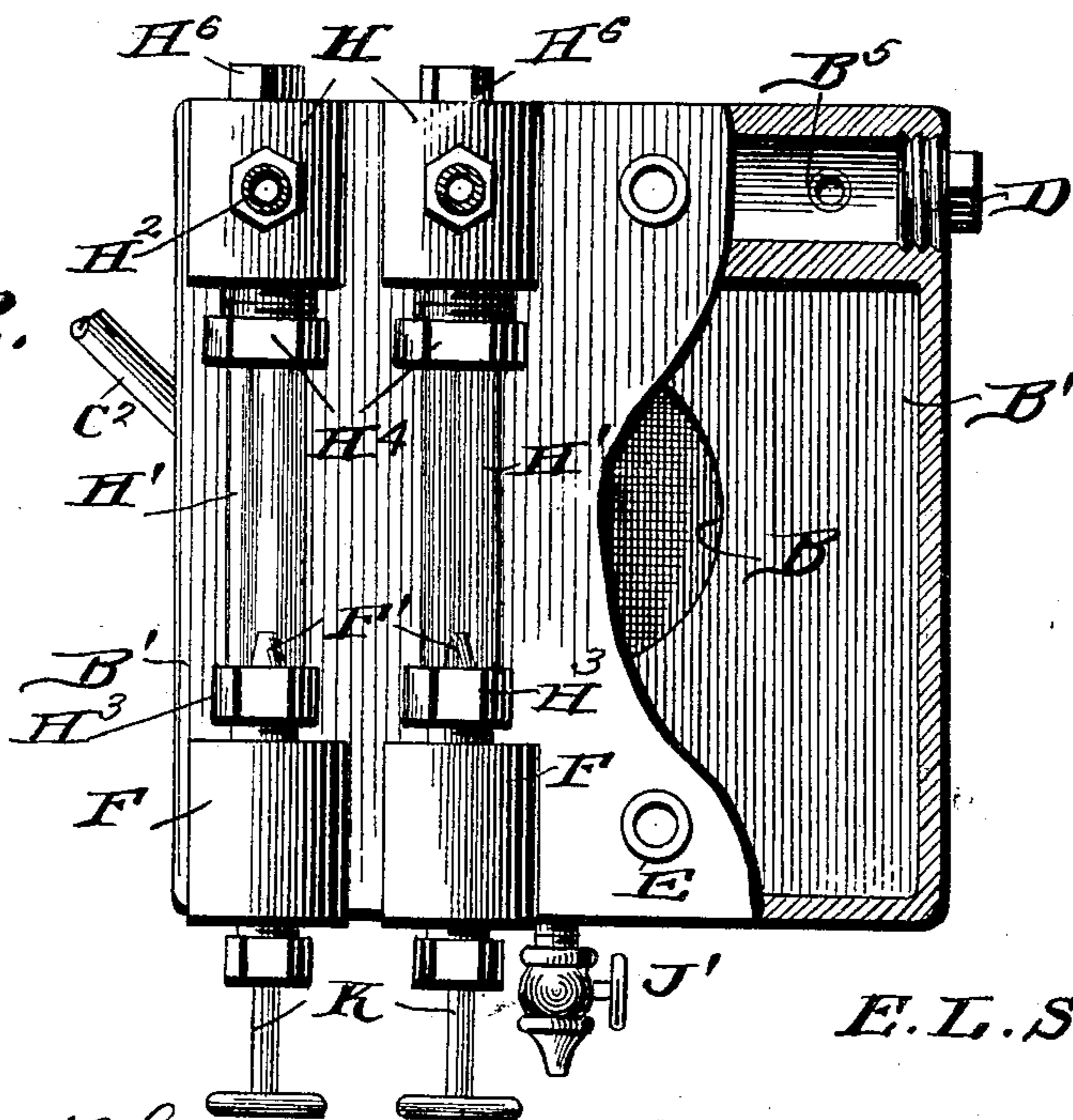


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

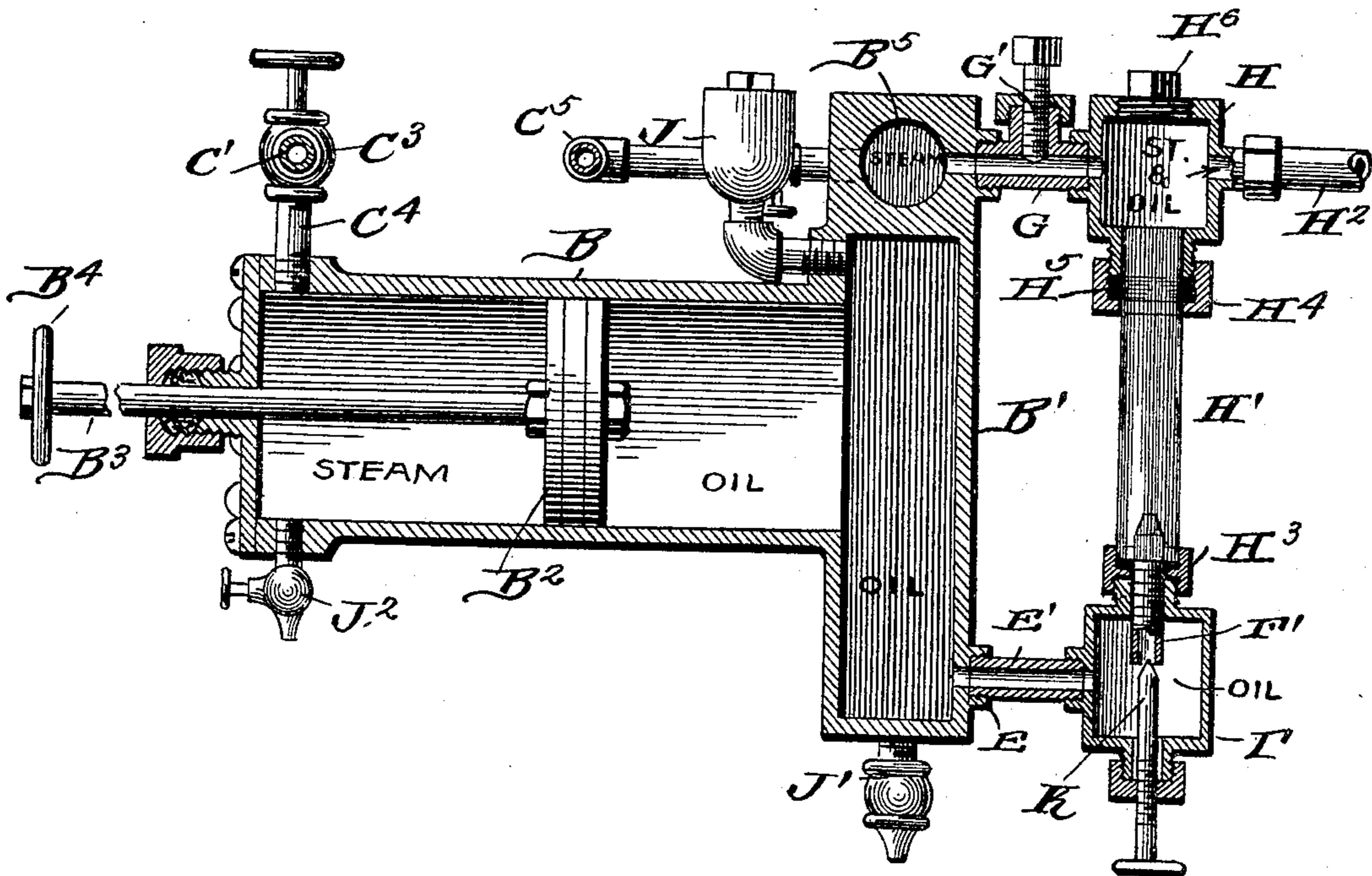
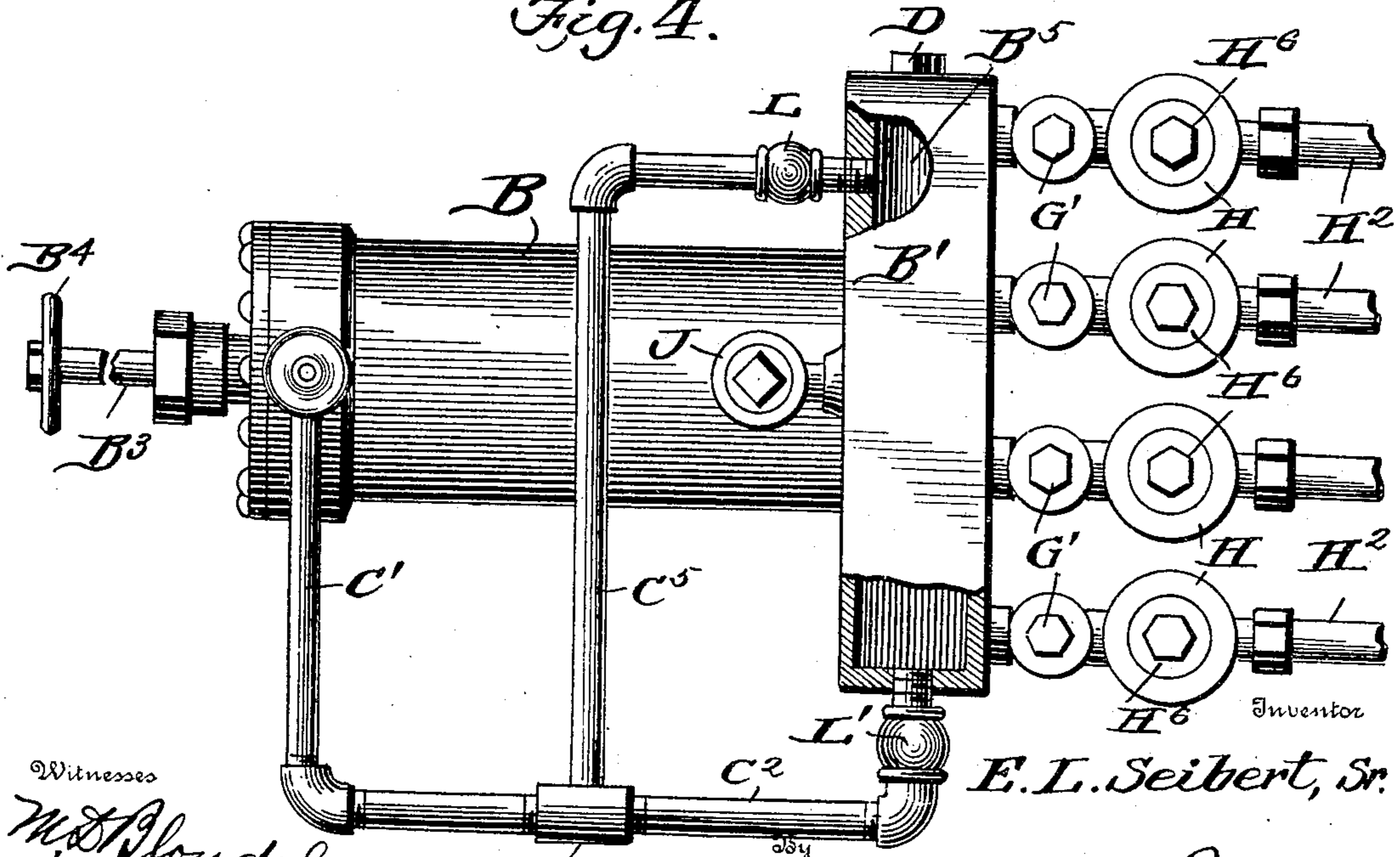


Fig. 4.



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# UNITED STATES PATENT OFFICE.

EDWARD L. SEIBERT, SR., OF LOUISVILLE, KENTUCKY.

## LUBRICATOR.

No. 795,455.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed March 7, 1904. Serial No. 196,994.

*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 Improvement in Lubricators, of which the following is a specification.

This invention is an improvement on the lubricator for which Letters Patent were granted to me February 12, 1901, and numbered 668,054.

In my improved construction the oil is delivered from the upper end of the sight-tube and blown out by steam through a pipe to the engine-cylinder or air-pump, as the case may be.

My invention consists in the novel arrangement of the various parts, as hereinafter described, particularly pointed out in the claims, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of my device. Fig. 2 is a detail front view, a portion of the sight-tubes being removed and the front wall of the oil-reservoir being partly broken away. Fig. 3 is a vertical longitudinal section, the sight-tube being in elevation. Fig. 4 is a plan view.

In the drawings, A represents a boiler; A', a suitable bracket supporting the lubricator-cylinder B, and at one end of the said cylinder is vertically arranged a rectangular casing B', formed integral with the cylinder, the cylinder opening into the said casing. In the cylinder is arranged a piston B<sup>2</sup>, having a piston-rod B<sup>3</sup>, a hand-wheel B<sup>4</sup> being arranged on the outer end of the piston-rod.

Rising vertically from the boiler is a steam-pipe C, terminating at its upper end in a three-way coupling, from which lead steam-pipes C', C<sup>2</sup>, and C<sup>5</sup>. The pipe C' leads to a valve-casing C<sup>3</sup>, from which a short pipe-section C<sup>4</sup> leads to the end of the cylinder B opposite the casing B'. In the upper portion of casing B' above the plane of the cylinder B is arranged a steam-dome B<sup>5</sup>, having the form of a cylindrical bore extending transversely to the cylinder B. The steam-pipe C<sup>5</sup> leads to the steam-dome B<sup>5</sup>, the dome being closed at the ends and a threaded plug D being arranged in one end of the dome B<sup>5</sup>. The pipe C<sup>2</sup> leads to the interior of the casing B' below the steam-dome. In the front of the casing B' and below the plane of the cylinder B are a plurality of vents surrounded by threaded bosses E, in each of which is secured an end

of a short pipe E'. Supported by the outer end of each pipe E' is a cylindrical receptacle F, and a short tube F', tapering at its upper end, extends downwardly through the top of the receptacle. Along the front of the steam-dome B<sup>5</sup> are vents surrounded by bosses carrying ends of pipe-sections G, in each of which works a needle-valve G' transversely to the pipe. At the outer ends of the pipes G are arranged receptacles H, similar in size to those carried by the pipes E and in vertical alinement with them. Arranged vertically between the receptacles F and H and communicating with both of them are the sight-tubes H', held by suitable nuts and their lower ends inclosing the upper end portions of the pipes or feed-tubes F'.

From each of the receptacles H in alinement with the pipes G extend the supply-pipes H<sup>2</sup>, which convey the commingled oil and steam to the engine-cylinder, air-pump, or other part to be lubricated.

Oil is introduced into the casing B' through the oil-cup J and may be drained off through the vent J'. Condensed steam is drained off from the cylinder B through the vent J<sup>2</sup>, and the oil-feed is regulated by a needle-valve K, working upwardly through the bottom of the receptacle F and adapted to close partially or entirely the lower end of the feed-tube F', there being a valve K for each receptacle, so that should one of the sight-tubes H' become broken the flow of oil through same can be shut off without disturbing feed of oil to the remainder of the tubes and their connecting parts.

In operation the casing B' is filled with oil, which in turn fills the cylinder B, the piston being drawn to the end opposite the casing B'. A suitable valve L' is arranged in the pipe C<sup>2</sup>. By opening this valve and the valve in the casing C<sup>3</sup> steam will be admitted to the side of the piston opposite the casing B' and to the steam-dome B<sup>5</sup>, from whence it will pass through the pipes G, receptacles H, and pipes H<sup>2</sup>, carrying with it the oil which will be forced by the piston B<sup>2</sup> through the pipes E' into the receptacles F, and thence up the sight-tubes, through any water from condensed steam that may be therein, into the receptacles H, and thence into the pipes H<sup>2</sup>, through which it will be carried by the steam from the dome B<sup>5</sup>. When all of the oil has been forced from the cylinder, the piston can be drawn back by the hand-wheel B<sup>4</sup>. It is not, however,

necessary that the piston be drawn back by hand, as by opening the valve L' in the pipe C<sup>2</sup> steam will be admitted into the lower portion of the casing B' and the piston forced back by steam-pressure to its original position. This also serves to force the water out of the drain-cock J<sup>2</sup> by reason of the rearward movement of the piston B<sup>2</sup>.

By reference to Fig. 3 of the drawings it will be seen that the sight-tubes H' rest at their lower ends within sockets or recesses formed in the nuts H<sup>3</sup> and that at their upper ends they project within the threaded nipples formed upon the lower sides of the receptacles H and are held firmly in place by the jam-nuts H<sup>4</sup>, which screw upon the nipples and press the packing material H<sup>5</sup> tightly against the tubes, so that the said tubes are held rigidly in place. These tubes are usually inserted or arranged in position after my device has been set up, and for this purpose I provide the receptacles H with openings at their upper ends, through which the tubes are passed until they rest in their proper positions. These openings are closed by screw-plugs H<sup>6</sup>, and after the jam-nuts have been tightened the tubes are firmly locked in position. By this arrangement it will also be understood that should any of the tubes be broken they could be removed and other tubes replaced without affecting or disturbing the operation of the others, and it will of course be further understood that the valves G' and K are first closed, the plugs H<sup>6</sup> removed, and the new tubes inserted, after which the jam-nuts are tightened, the valves opened, and the oil and steam will readily pass through the new tubes as before.

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

1. In a lubricator, the combination with the cylinder and casing, of the receptacles communicating with the casing, sight-tubes arranged between the receptacles, the upper receptacles having openings in their upper ends of greater diameter than the tubes, plugs for closing said openings, the jam-nuts for locking the tubes in place, pipes leading from the upper receptacles and means for forcing the oil through

the said sight-tubes and pipes, all arranged substantially as shown and described.

2. A device of the kind described comprising a casing adapted to contain a lubricant, a steam-dome formed in the upper portion of the casing, upper and lower receptacles arranged adjacent the casing, a sight-tube arranged between the receptacles and opening into the same, the lower receptacle having communication with the lower portion of the casing and the upper receptacle having communication with the steam-dome, a valve adapted to control flow of oil through the sight-tube, and a steam and oil pipe leading from the upper receptacle.

3. A device of the kind described comprising a casing having a steam-dome formed in its upper portion, a cylinder opening at one end into the said casing, a plurality of sight-tubes arranged in advance of the casing, receptacles at each end of the sight-tubes, a piston in the cylinder, steam-pipes leading to the cylinder and opening into opposite ends thereof, respectively, a third pipe leading to and opening into the steam-dome, steam-pipes leading from the receptacles carried at the upper ends of the sight-tubes, steam-pipes leading from the dome to the said receptacles, and means for introducing oil into the casing and cylinder.

4. The combination with a cylinder adapted to contain oil, a piston, a casing arranged in advance of the cylinder and having free communication therewith, a plurality of sight-tubes arranged in advance of the casing, means for feeding oil to the lower ends of the sight-tubes, receptacles arranged at the upper ends of the sight-tubes, a steam-dome arranged in the upper portion of the casing, straight pipes leading from the dome to each of said upper receptacles, needle-valves arranged in the lower ends of the sight-tubes, needle-valves arranged in the steam-pipes between the dome and the receptacles, means for admitting steam into each end of the cylinder, and means for admitting steam into the dome.

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Witnesses:

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