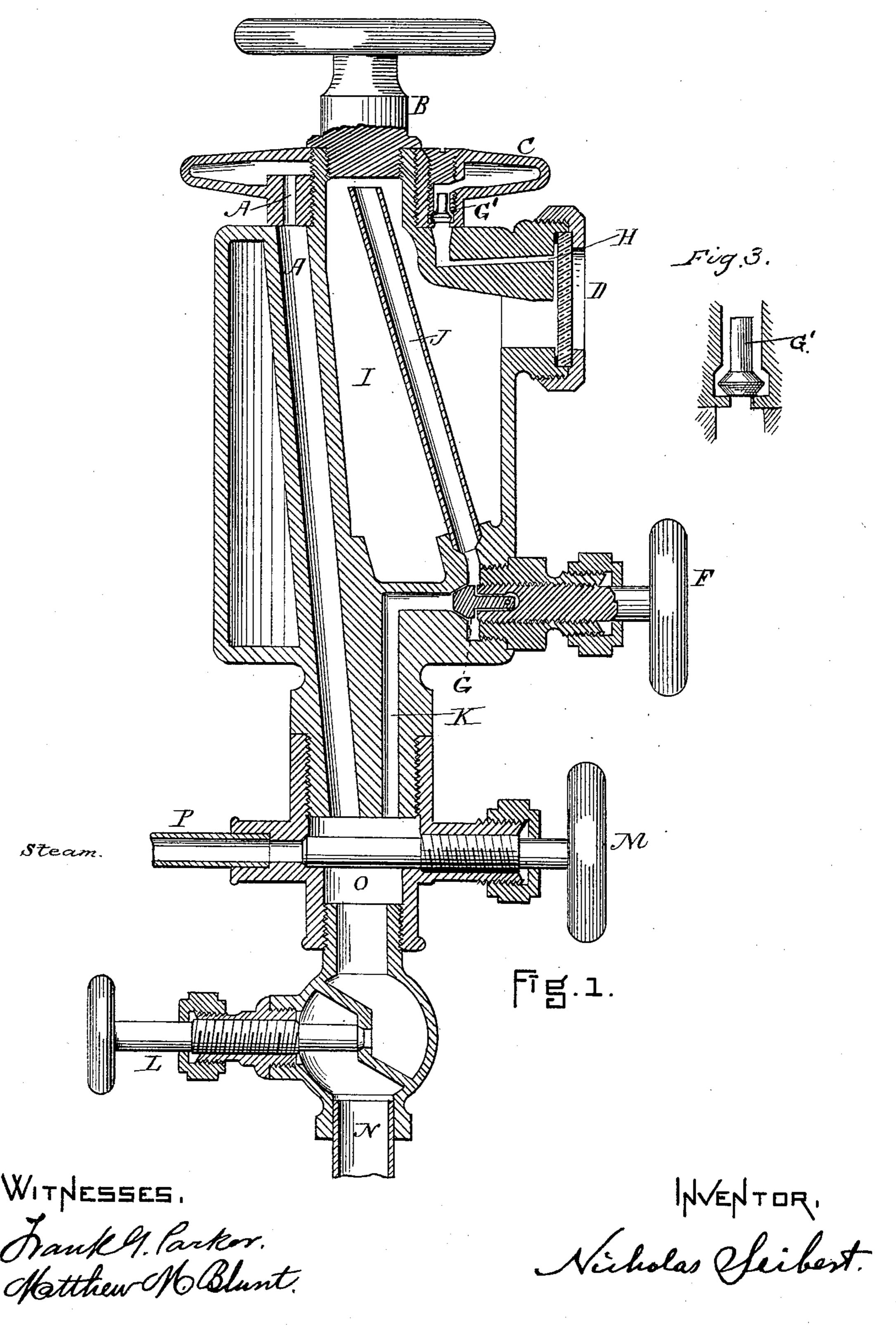
N. SEIBERT. OIL FEEDER.

No. 379,733.

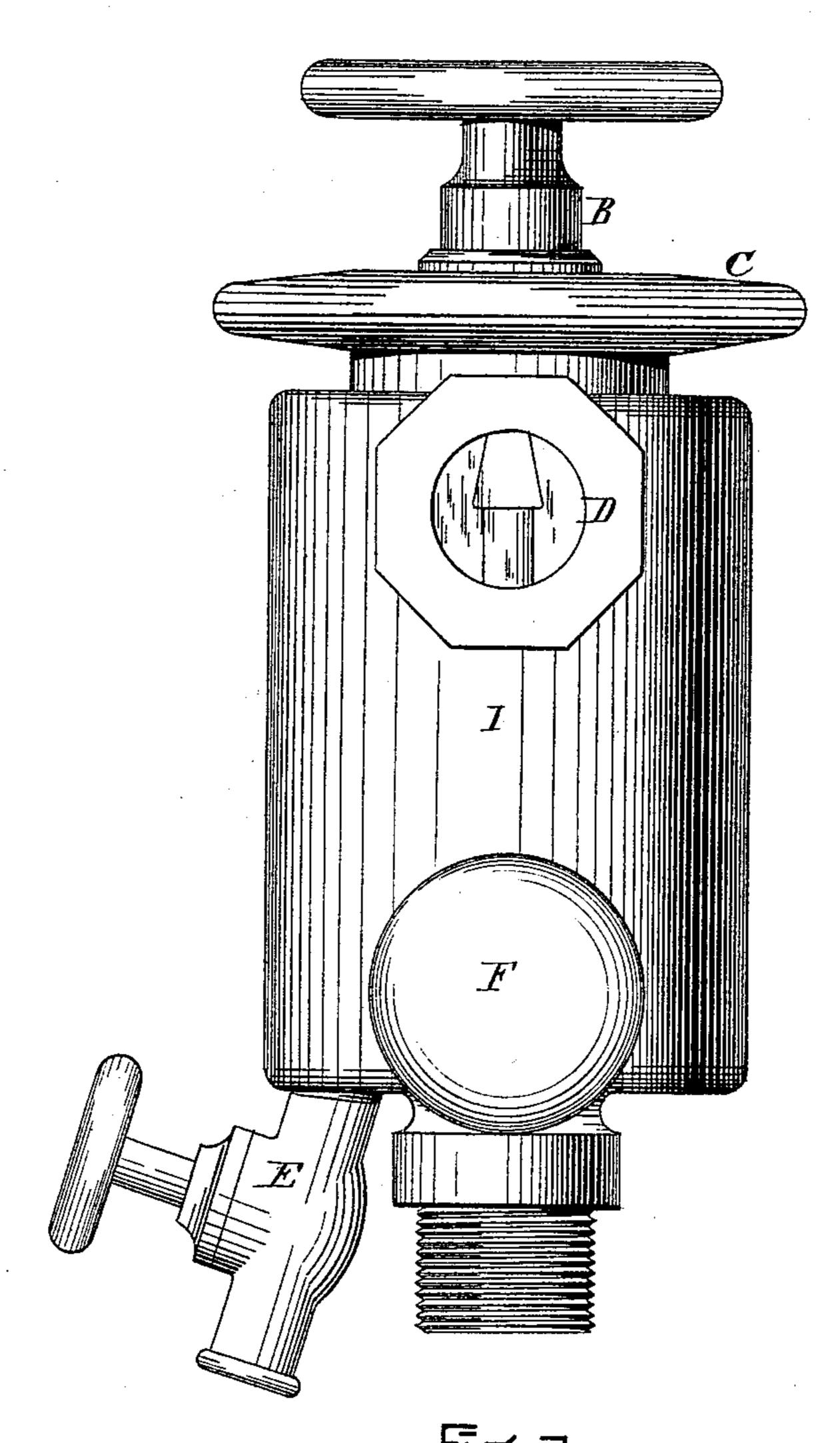
Patented Mar. 20, 1888.



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WITNESSES. Frankler Charker Hatthew Moblust.

INVENTOR. Vicholas Chibert.

UNITED STATES PATENT OFFICE.

NICHOLAS SEIBERT, OF BOSTON, MASSACHUSETTS.

OIL-FEEDER.

SPECIFICATION forming part of Letters Patent No. 379,733, dated March 20, 1888.

Application filed November 1, 1886. Renewed December 6, 1887. Serial No. 257,103. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS SEIBERT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Mas-5 sachusetts, have invented certain new and useful Improvements in Oil-Feeders for Steam-Valves, (which is an improvement upon my application for Letters Patent for Oil-Feeders filed October 7, 1886, Serial No. 215,561,) of to which the following is a specification.

My invention relates to that class of oilfeeders commonly called "displacement lubricators," wherein the water of condensation is fed into the oil contained in a reservoir and 15 by its own gravity sinks to the bottom, displacing an equal amount of oil.

I disclaim constructions wherein are used a column of water or hydrostatic pressure.

Heretofore it has been very difficult to oil 20 uniformly the valves and pistons of locomotive. cylinders, for the reason that when the steam was shut off from the cylinders the oil was sucked out of the oil-feeders by the suction of the engines.

25 My invention is designed to overcome this difficulty.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 represents a vertical section through 30 the oil-feeder; Fig. 2, a front view. Fig. 3 is an enlarged detail view of the valve G' and its seats.

In the said drawings, I represents a reservoir for containing the lubricating material, 35 and A is a steam-pipe passing preferably through said reservoir, and communicating at its lower end with a steam-pipe, P, leading from the boiler. The upper end of the pipe A communicates with a chamber or condenser, 40 C, on the top of the reservoir and surrounding

the filling-plug B.

From this description it is evident that the steam entering the chamber is condensed, the water of condensation passing from the said 45 chamber or condenser through the water-passage H and into the oil-reservoir, and by its own gravity sinks to the bottom, displacing an equal amount of oil. An oil-passage, K, communicates with the oil tube J in the reservoir, and 50 conveys the displaced oil to the steam-chamber · O, from whence it is discharged upon the valves

and pistons of the locomotive, as I shall hereinafter set forth.

F represents a valve located, preferably, beneath the lower end of the oil-tube J, and hav- 55 ing a check-valve, G, a similar valve, G', being placed in the discharge end of the condenser, these valves being designed to prevent the oil from being sucked out of the reservoir by the suction of the engines when the 60 steam is shut off from said reservoir. By thus controlling the feed of oil, it is manifest that a uniform lubricating of the valves and pistons of the locomotive is obtained. A valve, M, closes the entrance of the steam-pipe P to the steam- 65 chamber O, and when opened the inflowing steam not only rises through pipe A to the condenser, but also mingles with the oil as it passes from the passage K, and is forced through oil and steam pipe N, leading to the steam chest 70 or valve.

L represents a valve for controlling the passage of steam and oil through pipe N, and D represents the usual sight-feed, the reservoir being also provided with the usual valve, E, 75 for drawing off the contents of the reservoir.

My oilers are placed one on each side of the steam-gage in the cab, where the light used for the steam-gage may be directed upon each sight-feed of the oilers at night.

The operation of my invention is as follows: Plug B is removed and reservoir I filled with lubricant. Steam is let on at M, which condenses in C, the water passing through H into the oil-reservoir, displacing the oil. The feed- 85 valve F is now opened to give the required amount of oil. I then open valve L a very little to carry off the oil through pipe N upon the valves and pistons.

What I claim is—

1. The combination, with the oil-reservoir having an oil and water passage, respectively, and a condenser communicating with the water-passage, of an upwardly-moving checkvalve within the water-passage and a horizon- 95 tally-moving valve within the oil-passage for checking the feed of oil when the steam is shut off, substantially as herein described.

2. The oil-reservoir I, the steam-pipe A, passing through said reservoir, and the water-pas- 100 sage H, in combination with a condenser communicating with both the steam-pipe and water-passage, the oil-passage K, and a steampipe adjacent to the discharge of said oil-passage, substantially as herein described.

3. An improved oil-reservoir, comprising a steam-pipe, a water passage, H, and an oil-passage, K, formed therein, a condenser communicating with the steam-pipe and water-passage, check-valves within said water and oil passages, a steam-chamber, O, beneath the

oil-passage, a steam-pipe and controlling-valve ro adjacent thereto, and a discharge-pipe and controlling-valve leading from said oil-chamber to the valves and pistons, substantially as herein described.

NICHOLAS SEIBERT.

Witnesses:

OLIVER E. SIMMONS, C. E. HASKELL.