C. D. PAINE.

LUBRICATOR.

APPLICATION FILED MAY 16, 1907.

910,307. Patented Jan. 19, 1909.

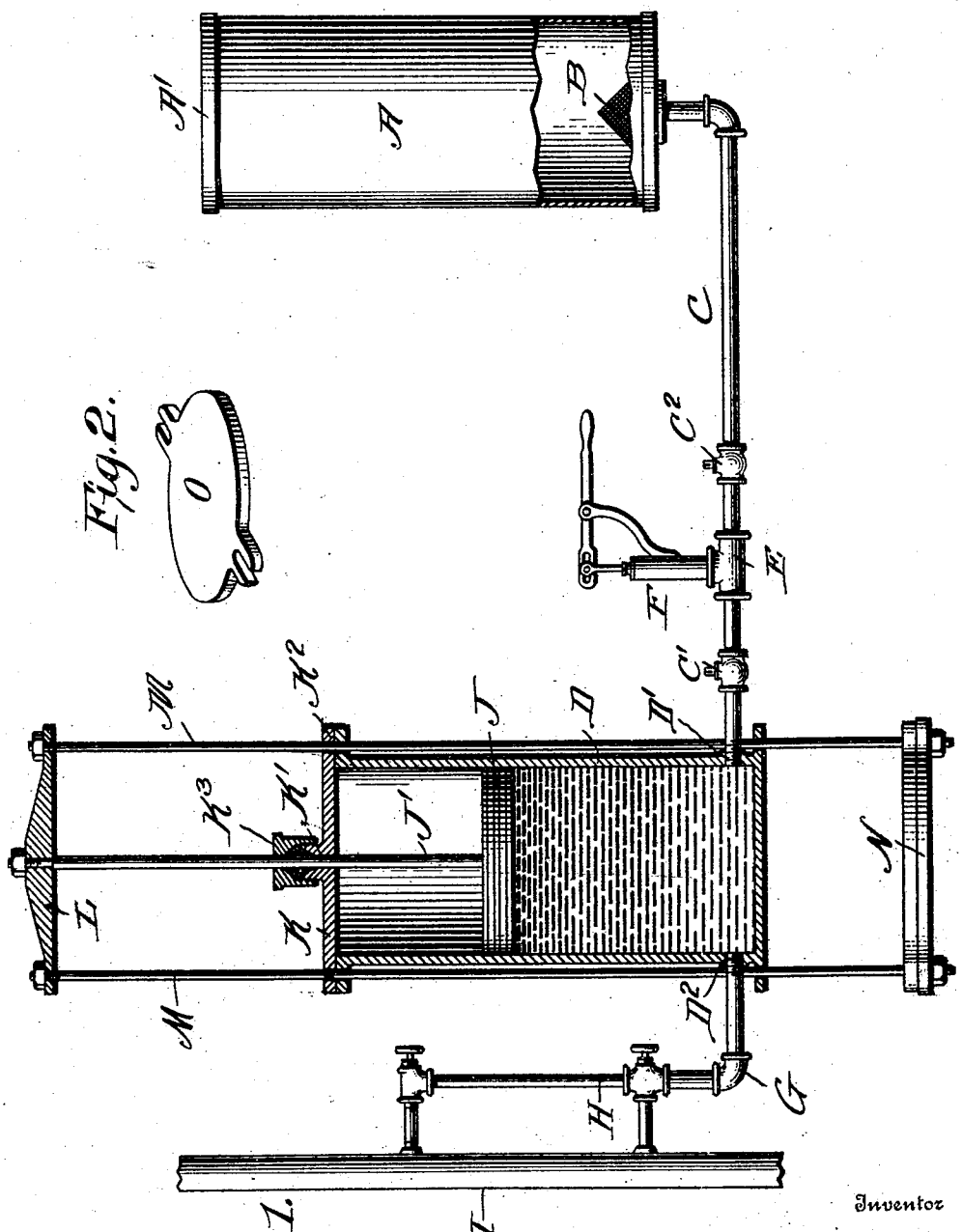


Fig. 1.

Fig. 2.

Witnesses

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LUBRICATOR.

No. 910,307. Specification of Letters Patent. Patented Jan. 19, 1909.

Application filed May 16, 1907. Serial No. 374,002.

To all whom it may concern:

Be it known that I, CHARLES DUDLEY PAINE, a citizen of the United States, residing at Donner, in the parish of Terrebonne and State of Louisiana, have invented a new and useful Improvement in Lubricators, of which the following is a specification.

This invention relates to lubricators and more particularly to force feed lubricators for lubricating steam pumps and steam engines; the object being to provide a lubricator which is very simple and cheap in construction and one which is very effective in use.

With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts all hereinafter fully described and pointed out in the claims.

In the drawing forming a part of this specification: Figure 1 is a side elevational view of my improved lubricator partly in section, and Fig. 2 is a perspective view of one of the weights.

In the drawing A indicates a reservoir mounted on any suitable support adapted to contain oil and provided with a flanged top A′ and a filter B, in its bottom, to which is connected an outlet pipe C, the end of which is secured in a threaded boss D′ of a tank D, adapted to be mounted on a suitable support. The pipe C is provided with check-valves C′ C^2 having a T-coupling E arranged between the same, on which is secured a pump F for pumping the oil out of the tank A into the tank D. The tank D is provided with a threaded boss D^2 in which is secured an outlet pipe G which is connected to the bottom of a sight glass H secured on the steam-pipe I leading from the boiler to the engine.

Mounted in the tank D is a piston J provided with a piston-rod J′ which extends up through the boss K′ of the top K, and is provided with a reduced threaded end which is secured in a cross-head L carrying rods M which extend down through apertured ears K^2 formed on the top K and guideways formed on the top and bottom of the tank D. A platform N is secured on the lower end of the rods under the tank, on which a sufficient number of weights O are adapted to be placed so that the oil in the tank will be subject to a greater pressure than the pressure of the steam in the boiler. The boss K is provided with a recess in its top over which is secured a cap K^3 forming a chamber in which cotton waste saturated with oil is placed so as to lubricate the piston rod as it works through the boss.

The operation is as follows: The top of the tank A is removed and the tank is filled with oil and the pump is operated which sucks the oil out of the tank A and forces it into the tank D, raising the piston J, the check-valves preventing the oil from being forced back. A number of weights are placed on the platform N, to overcome the boiler pressure, and the oil will be gradually fed into the steam-pipe.

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

1. In a device of the kind described, the combination with a pair of tanks connected together, of a piston mounted in one of said tanks and provided with a piston rod, said tank being provided with an outlet pipe and a weighted platform connected to said piston rod.

2. In a device of the kind described, the combination with a tank provided with an outlet pipe, of a piston mounted in said tank, a piston rod connected to said piston, a cross head secured on said piston rod, rods secured in said head, and a platform carried by said rods adapted to receive weights.

3. In a device of the kind described, the combination with a pair of tanks, of a pipe connecting said tanks, one of said tanks being provided with an outlet pipe, a pump arranged on said pipe and a weighted piston mounted in the tank with the outlet pipe.

4. In a device of the kind described, the combination with a pair of tanks, of a pipe connecting said tanks provided with check valves, a pump arranged on said pipe between said valves, an outlet pipe secured in one of said tanks, a piston mounted in said tank and a weighted platform supported by said piston.

5. In a device of the kind described, the combination with a tank, a filter arranged in its bottom, of a pipe connected to said filter provided with check-valves, a pump

secured on said pipe, between said valves, a tank connected to said pipe, the last mentioned tank being provided with an outlet pipe, a piston mounted in said tank a piston-rod connected to said piston, a cross-head secured on the end of said rod, rods carried by said cross-head, a platform carried by said rods, and weights adapted to fit on said platform, for the purpose described.

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Witnesses:
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