(No Model.)

E. LUNKENHEIMER.

SIGHT FEED LUBRICATOR.

No. 386,596. Patented July 24, 1888.

Fig. 1.

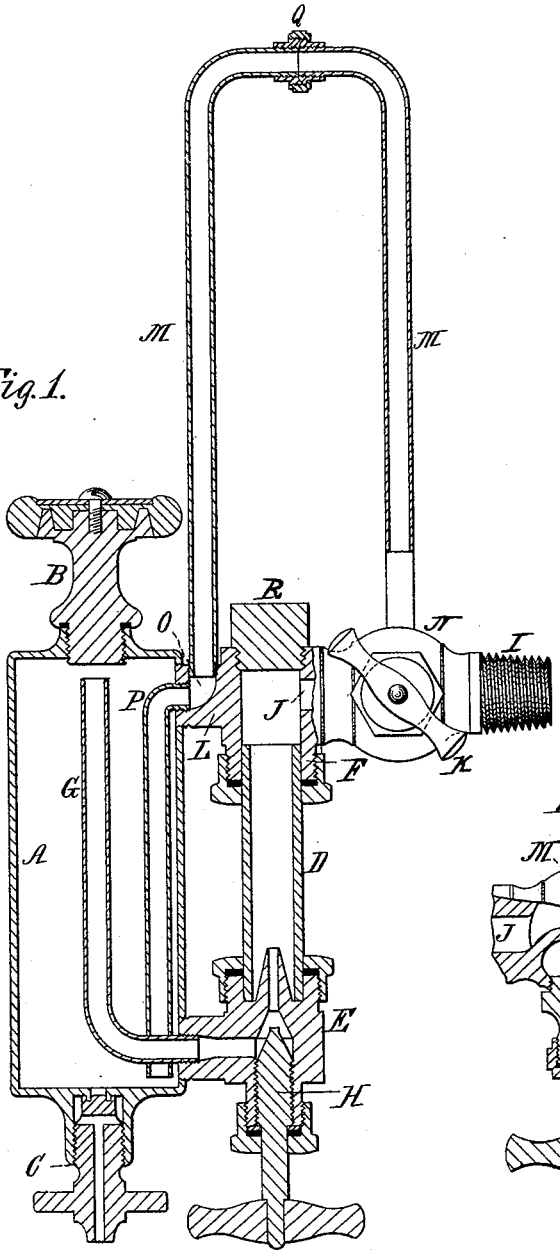
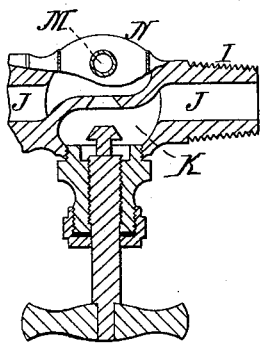


Fig. 2.



Witnesses:
W. C. Jirdinston.
Charles Billon.

Inventor:
Edmund Lunkenheimer.
by Peck & Rector.
his Attorneys.

UNITED STATES PATENT OFFICE.

EDMUND LUNKENHEIMER, OF CINCINNATI, OHIO.

SIGHT-FEED LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 386,596, dated July 24, 1888.

Application filed March 2, 1888. Serial No. 265,907. (No model.)

To all whom it may concern:

Be it known that I, EDMUND LUNKENHEIMER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Sight-Feed Lubricators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of lubricators which operate on the ascending sight-feed principle, and especially to those which have only a single connection with the steam-pipe or other source of steam supply. Its object is to simplify the construction of such lubricators, and its novelty will be herein set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved lubricator and connection, partly in section. Fig. 2 is a sectional detail in plan of the connection and the valve for controlling the channel therein.

The same letters of reference are used to indicate identical parts in all the figures.

A represents the oil reservoir or body of the lubricator, provided at its top with a filling-plug, B, and at its bottom with the usual drain-cock, C.

D is the sight feed glass, supported at its bottom in the fitting E and at its top in the fitting F.

G is the usual oil-discharge pipe, screwed into the fitting E, and H is the ordinary valve for controlling the passage between said pipe and the sight-feed glass.

I is the connection for securing the lubricator to the steam-pipe, and is provided with a single channel, J, for the admission of steam and delivery of oil, said channel communicating with the top of the sight-feed glass and being controlled by any suitable valve, K. The connection I, fitting F, and the shank L, which secure them to the oil-reservoir, are preferably made of one casting.

M is a steam-condensing pipe, whose right-hand branch communicates with the channel J at a point between the valve K and the sight-feed glass, in this instance by being screwed into the globe N, surrounding the valve, and whose left-hand branch is screwed into the shank L and communicates with a duct, O, which in turn communicates with the water-pipe P, which is screwed into the shank L and extends down to the bottom of the interior of the oil-reservoir to form a trap, as shown. The two branches of the pipe M are shown secured together at their top by an ordinary union, Q, though this may be done in any convenient manner.

R is a screw-plug which closes the opening in the top of the fitting F, said opening being of such size that when the plug is removed it will furnish easy access to the sight feed glass for the purpose of cleaning the same or replacing it with a new one.

The operation of the lubricator, supposing both of the valves H and K to be closed, is as follows: The valve K is first slowly opened, thereby admitting steam to both the sight feed glass and the pipe M. The former becomes filled with water of condensation, while the water formed in the latter flows down through the duct O and pipe P into the bottom of the oil-reservoir. Upon opening the valve H the oil in the reservoir will be forced down the pipe G, and pass in drops up through the water in the sight-feed glass D, and thence out through the channel J to the steam-pipe and parts to be lubricated, its rate of feed being regulated by the valve H, in the usual manner.

It will be seen from the above construction that I have produced a thoroughly practical lubricator of the utmost simplicity of construction, which may be made very cheaply and at the same time perform all the work of more complicated and expensive devices. It has only two valves, H and K, the latter of which controls both the admission of steam and the emission of oil, so that by closing it communication with the source of steam-supply is entirely cut off and the lubricator may be drained and refilled and the sight-feed glass cleaned or replaced with a new one, as desired.

While I prefer to connect the left-hand branch of the pipe M with the shank L, as shown, in order to give more room for the filling-plug B, and allow it to be located in the center of the top of the reservoir in small lubricators, as well as to avoid the necessity for an additional opening in the top of the reservoir, yet, if desired, it may be connected di-

rectly to the top of the reservoir and have the pipe P screwed into its lower end, in which event the shank L would be cast solid, as usual.

Having thus fully described my invention, I claim—

1. In an ascending sight-feed lubricator having a single connection with the source of steam-supply, the combination of the oil-reservoir A, sight-feed glass D and its fitting E, oil-pipe G, connection I, provided with shank L, fitting F, and a single channel, J, for admitting steam and delivering oil, valve K, controlling said channel, water-pipe P, and steam-condensing pipe M, communicating at one end with the channel J at a point between the valve K and the sight-feed glass, and at the other end with the water-pipe P on the opposite side of the sight-feed glass, substantially as and for the purpose described.

2. In an ascending sight-feed lubricator having a single connection with the source of steam-supply, the combination of the oil-reservoir A, sight-feed glass D and its fitting E, oil-pipe G, connection I, provided with shank L, fitting F, and a single channel, J, for admitting steam and delivering oil, valve K, controlling said channel, water-pipe P, secured to the shank L, and condensing-pipe M, communicating at one end with the channel J at a point between the valve K and sight-feed glass, and at the other end with the water-pipe P through the duct O in the shank L, substantially as and for the purpose described.

3. In an ascending sight-feed lubricator having a single connection with the source of steam-supply, the combination of the oil-reservoir A, sight-feed glass D and its fitting E, oil-pipe G, valve H, screw-plug R, connection I, provided with shank L, fitting F, and a single channel, J, for admitting steam and delivering oil, valve K, controlling said channel, water-pipe P, screwed into the shank L, and the condensing-pipe M, communicating at one end with the channel J at a point between the valve K and sight-feed glass, and at the other screwed into the shank L and communicating with the pipe P through the duct O, substantially as and for the purpose specified.

EDMUND LUNKENHEIMER.

Witnesses:
EDWARD W. RECTOR,
CHARLES BILLON.