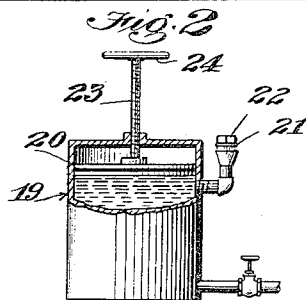
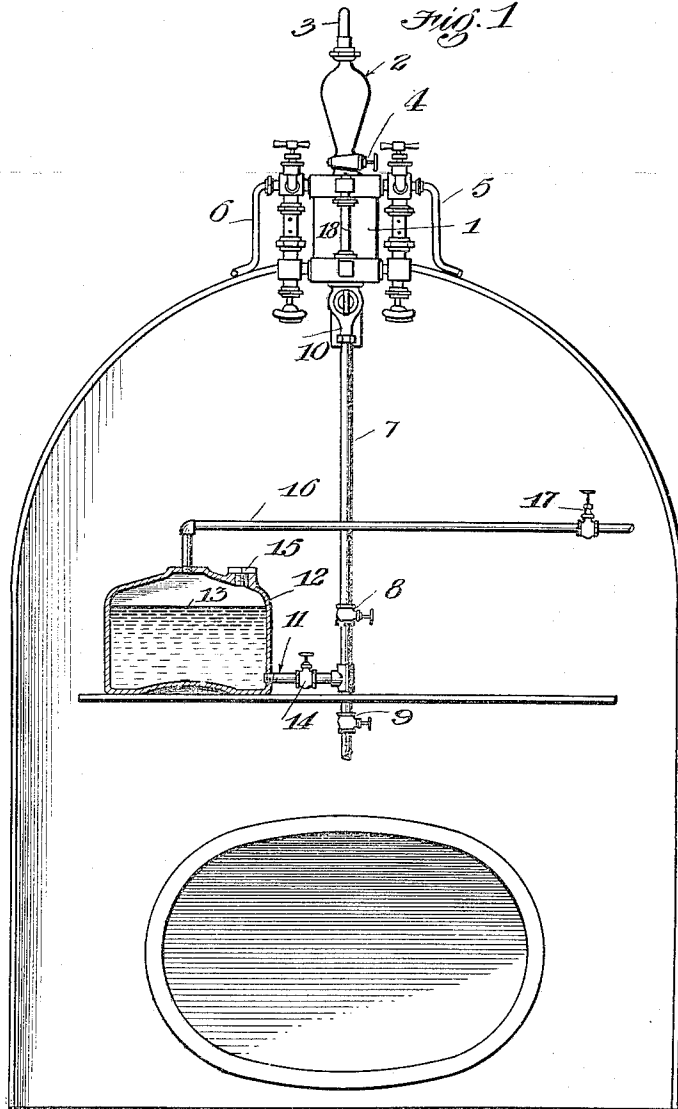


No. 848,246.

PATENTED MAR. 26, 1907.

E. C. JORDAN.
MEANS FOR FILLING LUBRICATORS.
APPLICATION FILED NOV. 25, 1904.



Witnesses
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UNITED STATES PATENT OFFICE:

ELMORE C. JORDAN, OF LOS ANGELES, CALIFORNIA.

MEANS FOR FILLING LUBRICATORS.

No. 848,246.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed November 25, 1904. Serial No. 234,256.

To all whom it may concern:

Be it known that I, ELMORE C. JORDAN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Means for Filling Lubricators, of which the following is a specification.

My invention relates to improvements for filling the central reservoir of the lubricating apparatus of locomotive or other engines, in which reservoir there is sufficient pressure to force the lubricant to its place of use in the steam-cylinder against the pressure therein; and the object thereof is to provide a device by means of which the central reservoir can be filled at any time while the engine is hot and without any waste of lubricating-oil and without any danger to the operator from leaking valves. I accomplish these objects by the mechanism described herein and illustrated in the accompanying drawings, in which—

Figure 1 shows a portion of an engine provided with a regulation lubricator with my filling device attached thereto. Fig. 2 shows a modified form.

1 is the central distributing-reservoir of the ordinary lubricator, having a dome 2, into which steam is admitted through pipe 3 from the steam-dome of the engine. (Not shown.) The communication between the dome and the central reservoir is controlled by valve 4. Pipes 5 and 6 convey the lubricating-oil to the cylinders of the engine (not shown) in the usual manner. Pipe 7, provided with cocks 8 and 9, is preferably attached to the drain-cock 10 of the distributing-reservoir. Intermediate these cocks is a branch pipe 11, which connects pipe 7 with the storage-reservoir 12, in which a quantity of lubricating-oil 13 may be kept to fill the central reservoir from time to time as needed. Branch pipe 11 is provided with cock 14, which controls the communication between the storage-reservoir and pipe 7. In the top of the storage-reservoir is a filling-plug 15, which may be removed when it is desired to replenish the storage-reservoir. A pipe 16 having a cock 17 thereon, connects the top of the storage-reservoir with a suitable pressure-supply, preferably with the air-pressure reservoir (not shown) on the engine. If desired, pipe 16 could connect with the steam-dome.

In the operation of my device, assuming that the engine is on the road and it is desired to replenish the lubricating-oil in the distributing-reservoir, cock 4 will be first closed to cut off the steam-pressure from the central reservoir, cock 9 will also be closed, and cocks 8, 10, 14, and 17 will be opened, when the pressure upon the top of the lubricating-oil in the storage-reservoir will force the same up into the distributing-reservoir until the same is filled, which can be ascertained by looking at the sight-glass 18 with which the distributing-reservoir is provided. Cock 14 is then closed to cut off communication between the distributing and the storage reservoir. Cock 17 is then closed. The steam that condenses in the distributing-reservoir passes down into pipe 7. When it is again desired to replenish the distributing-reservoir, before the same is accomplished, as before stated, the condensed moisture is drawn out of the pipe 7 by opening cock 9. As soon as the water is all out cock 9 is closed and the distributing-reservoir is filled, as before explained.

In the modified form the storage-reservoir 19 is a cylinder provided with a piston 20 and a filling-spout 21, which is closed by plug 22. Piston 20 is operated by the screw-threaded stem 23, rotatably connected thereto, which passes in threaded contact through the top of the cylinder, a hand-wheel 24 providing means to rotate the screw. In this construction the connection is made from the bottom of the cylinder to any part of the distributing-reservoir. In my preferred form the connection may also be made to any part of the distributing-reservoir; but I prefer to connect to the ordinary drain-pipe, because the connecting-pipe then acts as a reservoir to hold the water and the same can be easily drawn off when desired. By closing cock 8 and opening cocks 9 and 14 the storage-reservoir can be emptied when desired.

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

1. In a lubricator, the combination with a distributing-reservoir, of a storage-reservoir, a pipe connecting the two reservoirs, means secured to the top of the storage-reservoir for conveying compressed air or steam thereinto for forcing the lubricant in the storage-reservoir into the distributing-reservoir.

2. In a lubricator, the combination with a

distributing-reservoir, of a storage-reservoir, a pipe connecting the two reservoirs, and means secured to the top of the storage-tank for conveying thereinto pressure means for forcing lubricant into the distributing-reservoir.

3. In a lubricator, the combination with a distributing-reservoir, of a storage-tank, a pipe connected with the distributing-reservoir, and a supplemental pipe connected to the first-named pipe and the bottom of the storage-tank, and means connected to the top of the storage-tank for conveying thereinto pressure means for forcing the oil from the storage-tank into the distributing-reservoir.

4. In a mechanism for filling lubricators, the combination with a storage-reservoir, a

distributing-reservoir, and a pipe connecting the two, of means secured to the top of the storage-reservoir for conveying thereinto pressure means for forcing the contents of the storage-reservoir into the distributing-reservoir, independent means for forcing the contents of the distributing-reservoir therefrom and means for cutting off the communication between the two reservoirs while the contents of the distributing-reservoir is being discharged therefrom.

In witness that I claim the foregoing I have hereunto subscribed my name this 17th day of November, 1904:

ELMORE C. JORDAN.

Witnesses:

G. E. HARPHAM,
EDMUND A. STRAUSE.