

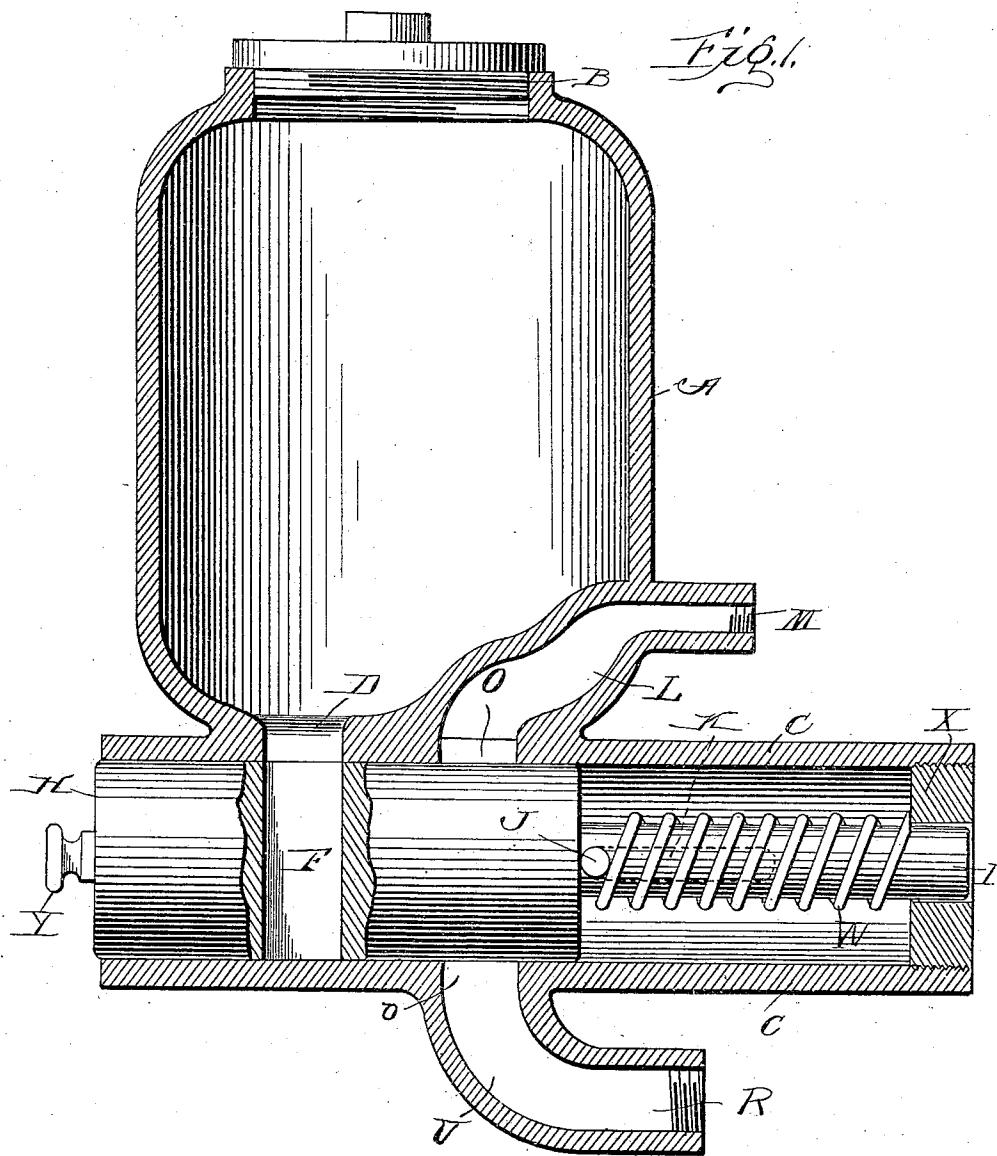
W. O. TURNER.
LUBRICATOR.

APPLICATION FILED JUNE 16, 1908. RENEWED SEPT. 1, 1909.

935,948.

Patented Oct. 5, 1909.

2 SHEETS—SHEET 1.



Witnesses

J. F. Tolson.
R. C. Barkley.

Inventor,
William O. Turner,

By *Frank. Appleman,*

Attorney.

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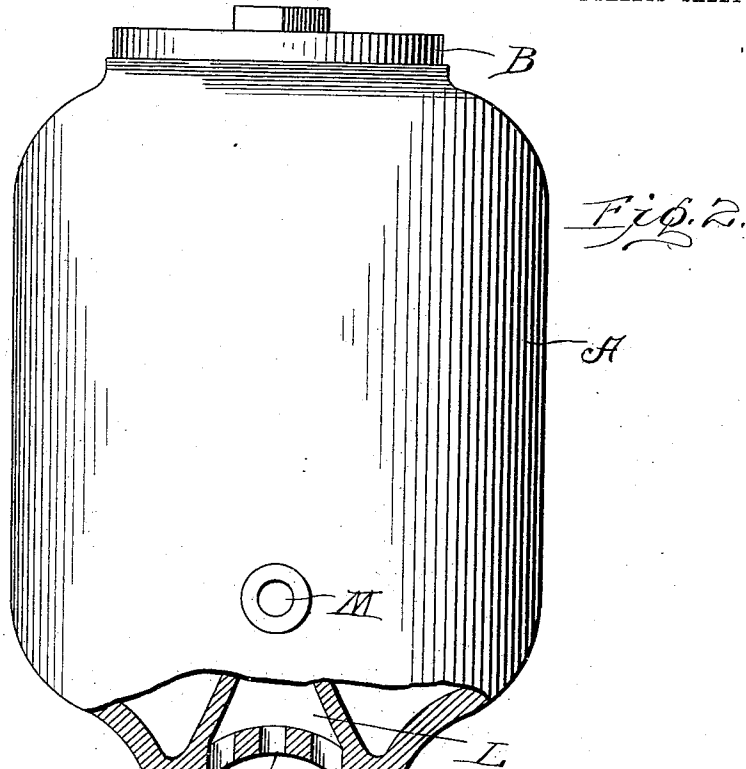
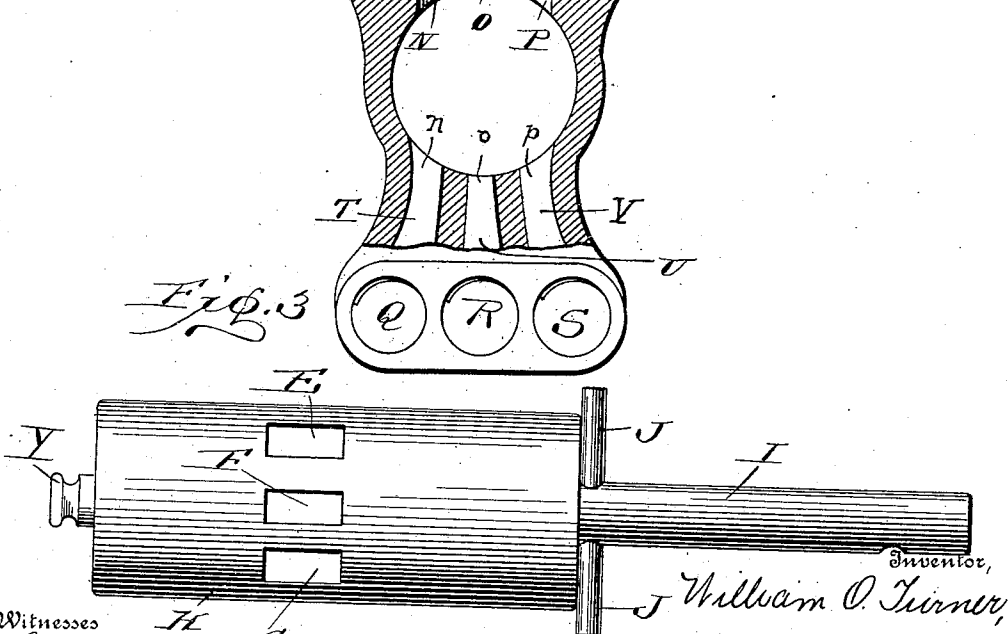


Fig. 3



Witnesses

E. J. Tolson.
R. C. Barkley.

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Inventor,
William O. Turner,
James Appleman,
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM ORRIS TURNER, OF BEAUMONT, TEXAS.

LUBRICATOR.

935,948.

Specification of Letters Patent.

Patented Oct. 5, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM ORRIS TURNER, a citizen of the United States of America, residing at Beaumont, in the county of Jefferson and State of Texas, have invented certain new and useful Improvements in Lubricators, of which the following is a specification.

This invention relates to lubricators and particularly to a device designed for use in feeding graphite the same being utilized in connection with the air pressure of an air brake system, although the pressure for operating the device may be obtained from any suitable source.

An object of this invention is to produce a lubricating apparatus in which the feeding action takes place at the will of the engineer or other operator, a suitable valve being provided which, when actuated, will cause an adjustment of the parts, which will permit the air pressure to feed the lubricant, means being also provided for directing the lubricant and delivering it to points of consumption.

A further object of the invention is to provide novel means for automatically returning the lubricating feeding device to its normal position for a repetition of the operation.

Finally it is an object of the invention to produce a novel device of the character noted, which will possess advantages in points of simplicity, efficiency and durability proving at the same time comparatively inexpensive to produce and maintain.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1, is a longitudinal vertical sectional view approximately centrally of the lubricating device; Fig. 2, is a rear elevation of the device partly in broken section. Fig. 3, is a top plan view of the valve.

In these drawings A, illustrates a receptacle designed for the purpose of receiving graphite, and the said receptacle is provided with a screw threaded cap B for the purpose of closing the opening in the top of said

receptacle. A valve casing C, is preferably formed integral with the receptacle, there being an opening D, between the receptacle and the valve casing through which the graphite is discharged into the ports E, F, and G, of the valve H, it being understood that the opening D is large enough to communicate with all the said ports in the filling position of the valve. The valve has a valve stem I, with a cross pin J, therein. The valve casing C, is provided with oppositely disposed longitudinally extending slots K, in which the cross pin is slidable, the movement of the valve in the valve casing being limited by the ends of the slots K, as the cross pin J, contacts therewith.

Interposed between the receptacle and the valve casing is a channel L, terminating at its outer end in a threaded nipple M, designed to connect to an air pipe which may lead to the main reservoir of an air brake system, or it may lead to any suitable source of pressure. The walls of the channel L, overlie ports N, O, and P, in the valve casing, with which the ports G, F, and E, register respectively. Ports *n*, *o*, and *p*, are formed in the bottom of the valve casing in line with the ports N, O, and P, so that when the ports of the valve and the ports of the valve casing heretofore referred to, are in registry, a passage will be formed from the channel L to the pipes Q, R, and S, through the ports of the valve and valve casing and the ducts T, U, and V, so that the pressure from any suitable source may force the graphite which has lodged in the ports into the pipes Q, R, and S.

It is my purpose to have the pipes Q and S, tapped into the cage of the release valves of the steam chest and the pipe R, connected to the intercepting valve when used on a compound locomotive. Where, however, the lubricator is applied to a simple engine the pipe R, will be provided with a plug.

A spring W, is interposed between the cross pin J and bushing X, which is threaded in one end of the valve casing, said bushing having an aperture therein to permit the valve stem I, to slide therethrough. By reason of the fact that the spring W, exerts pressure against the cross pin J, the valve is held normally with its ports under the discharge opening of the receptacle A, so that the ports of the valve are supplied with graphite or other lubricant by gravity and when the operator desires to operate the

lubricator, pressure on the knob Y, on the end of the valve, sufficient to overcome the pressure of the spring W, will cause the valve to slide longitudinally of the casing until the ports register with the discharge openings or ports heretofore referred to, when, as stated, the graphite or lubricant which is lodged in the ports E, F, and G, will be forced therefrom by the pressure heretofore referred to.

I claim—

1. In a lubricator, a receptacle having a discharge opening, a valve casing in communication therewith, said casing having a series of upper and lower ports, said upper ports terminating in a common channel, a valve slidable in the casing, said valve having a series of ports communicating simultaneously with said discharge opening and being movable to cause an alinement of its ports with the corresponding ports of the casing.

2. In a lubricator, a receptacle having a discharge opening, a valve casing having a series of upper and lower ports, said upper ports being in communication with a common channel, a valve having a series of ports

adapted to receive the lubricant, said valve being capable of sliding movement in the casing to cause all of its ports to be placed in alinement with the corresponding ports of the casing.

3. In a lubricator, a receptacle having a discharge opening, a valve casing in communication therewith, said casing having a series of upper inlet and lower outlet ports, said upper ports terminating in a common channel, said lower ports being provided with separate ducts, a valve having a series of ports adapted to communicate simultaneously with said ports in the casing, a valve stem, a cross pin carried thereby, slidable in suitable slots in the casing and limited thereby, and a spring for retaining the valve with its ports under the discharge opening of the receptacle.

In testimony whereof I affix my signature in the presence of two witnesses this 3rd day of June, 1908.

WILLIAM ORRIS TURNER.

Witnesses:

M. A. FLEMING,

L. J. CUNNINGHAM.