G. H. BENTON.
Lubricator.

No. 214,087. Patented April 8, 1879.

Fig. 1.

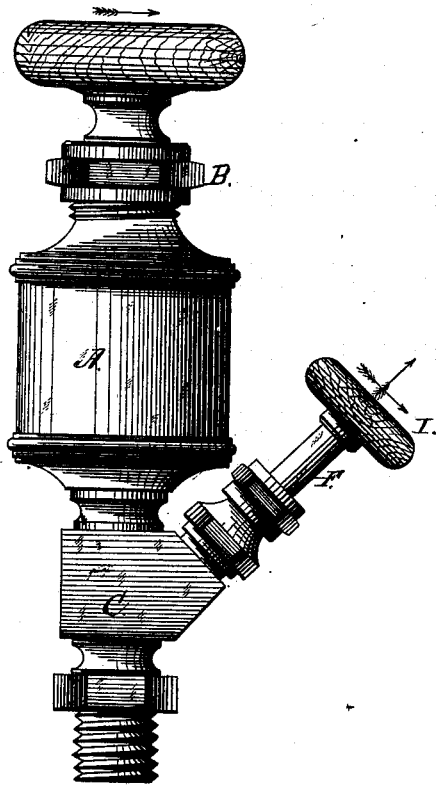
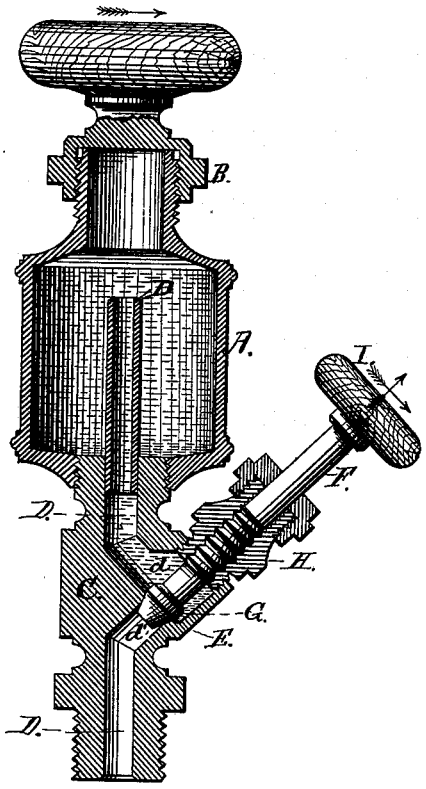


Fig. 2.



WITNESSES:

Jas. E. Hutchinson.

J. A. Rutherford.

INVENTOR.

George H. Benton,

by James L. Norris.

Attorney.

UNITED STATES PATENT OFFICE.

GEORGE H. BENTON, OF NEW YORK, N. Y.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **214,087**, dated April 8, 1879; application filed March 11, 1879.

To all whom it may concern:

Be it known that I, GEORGE H. BENTON, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Lubricators, of which the following is a specification.

This invention relates to certain improvements in that class of lubricators employed to hold lubricating material and supply it in proper quantities to the valves in the valve-chest of a steam-engine.

The invention has for its object to provide against the liability of burning the hands of the operator in manipulating the valve; and, further, to so construct the passage leading from the cup to the valve-chest of the engine and the valve-seat and valve of said cup that said valve-seat will be readily accessible when the valve is removed, in order to remove any obstructions and for repairs, and to provide for an unobstructed flow of oil to the valve-chest when the valve in the lubricator is opened, as more fully hereinafter specified.

To this end my invention consists in constructing the valve-cup with an angular passage leading to valve-chest of the engine to which it is attached, the valve-seat of the lubricator being located at the apex of the angle at the upper end of the lower bend of the same, and the valve-stem extending through a removable cap, as more fully hereinafter specified.

In the drawings, Figure 1 represents a side elevation of my improved lubricator, and Fig. 2 a vertical sectional view of the same.

The letter A indicates the cup or oil-receptacle of the lubricator, which is provided with a screw covering-cap, B, as usual. Said cup is provided with the usual screw-threaded supporting-standard C, by means of which it is attached to the valve-chest of an engine.

The letter D indicates the passage leading from the receptacle to the steam-chest through the standard. Said passage is formed with an angular bend, *d d'*, at the apex of which, in the upper opening of the lower bend, is formed the valve-seat E.

The letter F represents the valve-stem provided with a conical valve, G, on its end, which is screw-threaded and passes through a female screw-threaded cap, H, which is detachably secured in an inclined position in an opening leading into the passage D. The outer end of the valve-stem is provided with the usual hand-wheel I, by which the valve may be manipulated.

It will be seen that as thus constructed the valve-seat can be easily and conveniently reached for cleaning or repairs by simply removing the cap H, and a free and unobstructed passage for the lubricating material from the cup or receptacle is provided. The valve-stem being in an inclined position with respect to the lubricator, instead of in a horizontal position, as heretofore, relieves the hands of the operative from all danger or injury by coming in contact with the heated surfaces of the engine.

I am aware that a lubricator has heretofore been constructed with an inclined valve-stem passing through the cup or receptacle; but as thus constructed it is impossible to gain ready access to the valve-seat without removing the entire top of the cap or receptacle.

By my invention this inconvenience is entirely obviated. Moreover, owing to the peculiar position of the inclined valve-stem, a lubricator is produced infinitely better than any heretofore constructed. The valve being below the filling-opening is entirely out of the way, and at the same time possesses the advantage of an inclined position. Moreover, when the valve-handle passes through the cup or receptacle it is in such close proximity with the same as to expose the hands of the operative to the injury, which is one of the objections I seek to avoid.

What I claim is—

In combination with the cup or receptacle of a lubricator, the angular passage leading through the standard of the same, having a valve-seat at its apex, and the inclined valve-stem passing through a removable screw-cap, and provided with a valve at its inner end, substantially as and for the purposes specified.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

GEO. H. BENTON.

Witnesses:

F. G. FAULKNER,

JOHN F. SASS.