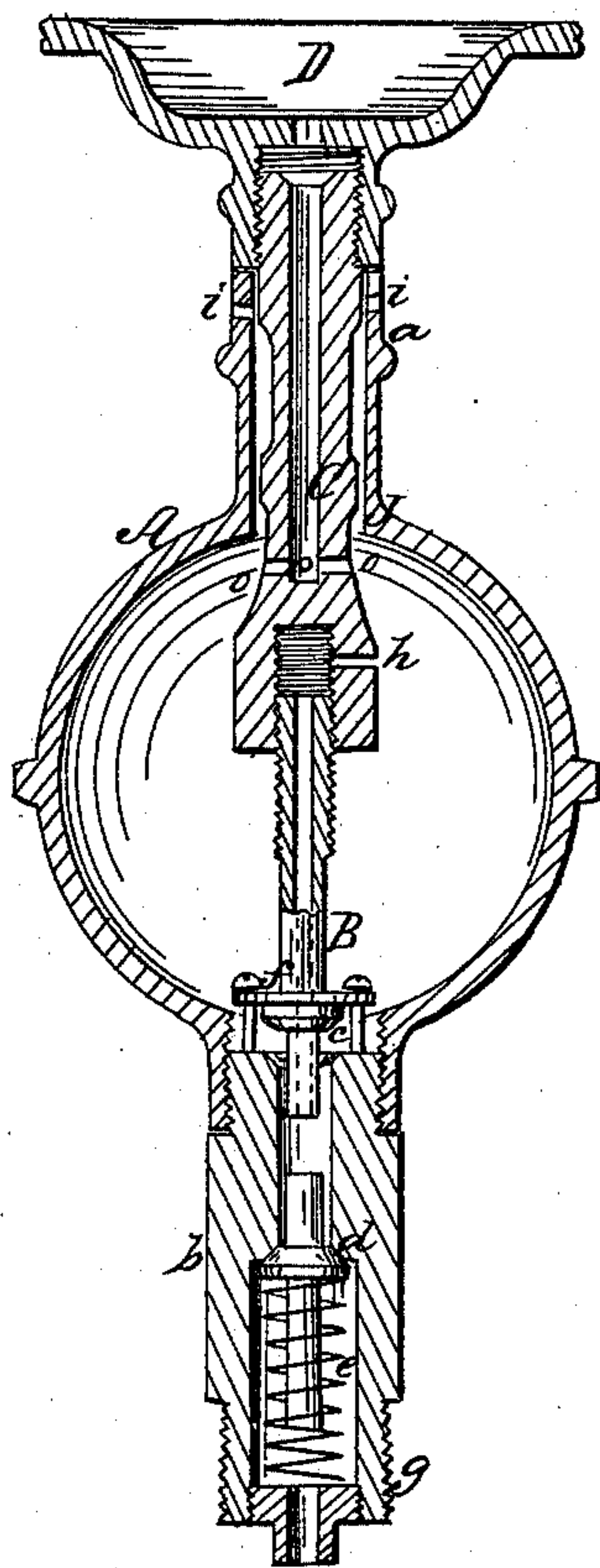


*C. W. Doten,*

*Lubricator.*

*N<sup>o</sup> 68,719.*

*Patented Sep. 10, 1867.*



*Witnesses*  
*Theo. Encke*  
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# United States Patent Office.

CLARK W. DOTEN, OF EAST BOSTON, MASSACHUSETTS.

*Letters Patent No. 68,719, dated September 10, 1867.*

## IMPROVEMENT IN STEAM-ENGINE LUBRICATORS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, CLARK W. DOTEN, of East Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and improved Lubricator for Steam Engines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved construction of lubricators for the steam-chests and cylinders of steam engines; and it consists in the construction of the valves with reference to a tubular feeding-spindle, and in the arrangement of parts, as will be hereinafter described.

The drawing represents a vertical section of the lubricator, showing the different parts of which it is composed, and the manner in which they are arranged.

Similar letters of reference indicate corresponding parts.

A represents the shell, which consists of a globe with tubes *a b* on opposite sides of it, as seen in the drawing. B represents a tubular valve-stem, which has two valves upon it, *c* and *d*. These valves have their seats in the tube *b*. In the lower portion of *b* there is a recess, *e*, in which there is a spiral spring which presses the valve-stem upward, and is designed to keep it in place when there is no pressure of steam to keep it up. *f* is a stop-bar which prevents the stem from rising above a certain point. The lubricator is attached to the steam-chest or cylinder by the screw *g*, at the lower end of the tube *b*. C is a hollow or tubular spindle which screws on to the top of the stem B, as seen. D is the cup. The oil is poured into the cup and passes down into the globe through the spindle C and apertures *o*. Steam is admitted into the globe through the tubular valve-stem B and apertures *h*, above the oil in the globe, and the oil, after an equilibrium of pressure is produced, will descend by its own gravity. The confined air and some steam will be blown out of the apertures *i* at first, but when the spindle C is drawn up this will be prevented, as it finds a seat in the globe at J, so that no steam can escape and no oil get in when the spindle is in that position. By turning the cup D, (which acts as hand-wheel in this arrangement,) the valve-stem B is raised and the quantity of oil discharged from the globe is regulated with the greatest nicety. The lateral apertures *o*, through which the oil is discharged into the globe, are closed when the spindle is drawn up, as before mentioned.

The construction and operation will readily be understood from the drawing.

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

The valve-stem B, with its valves *c* and *d*; the tubular spindle C, with its apertures *o* and *h*, connected with the valve-stem, as shown, the whole constructed, arranged, and operating substantially as set forth, in combination with the shell A.

CLARK W. DOTEN.

Witnesses:

ALVAN HAMILTON, Jr.,  
JAMES S. YOUNG.