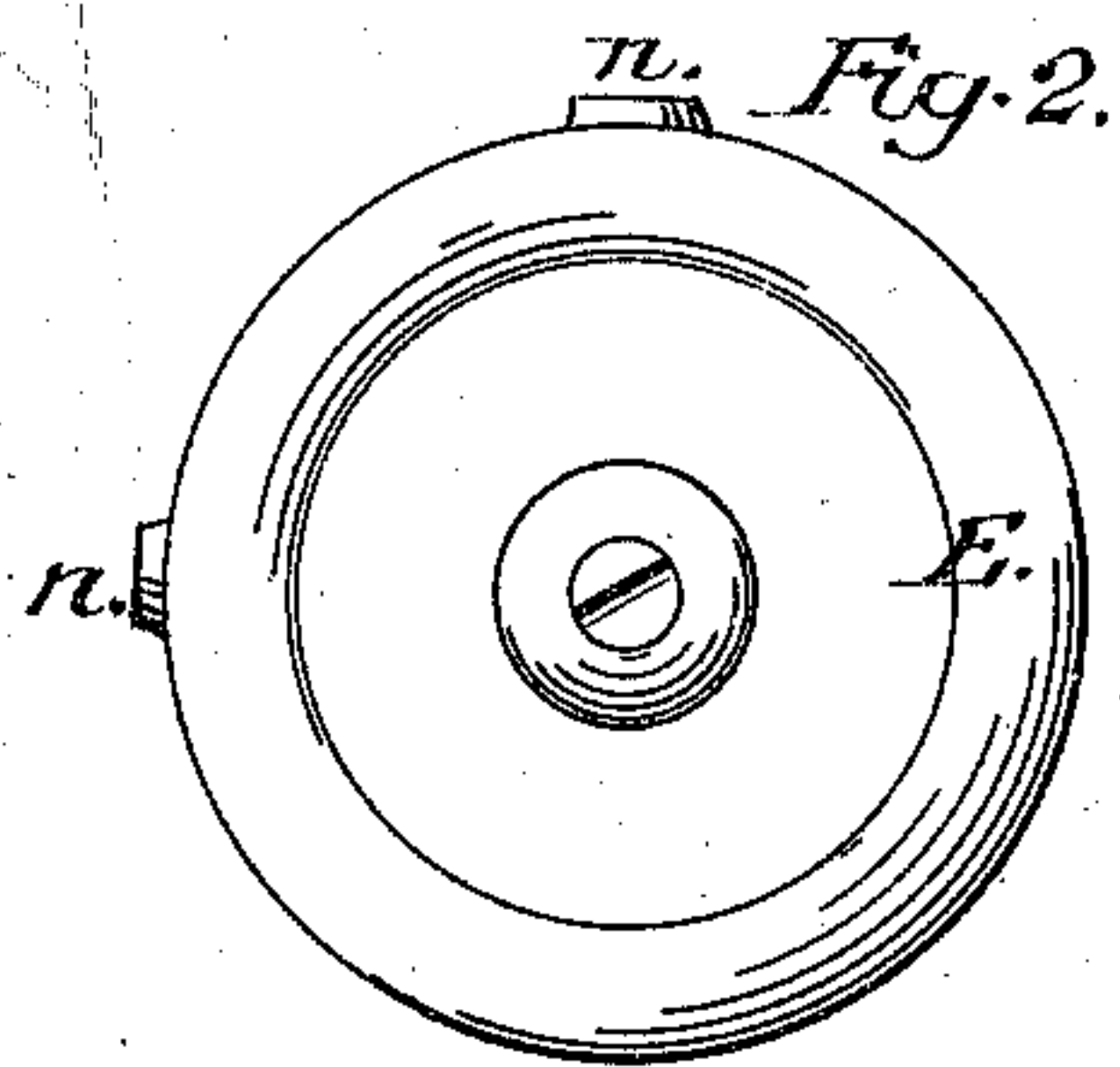
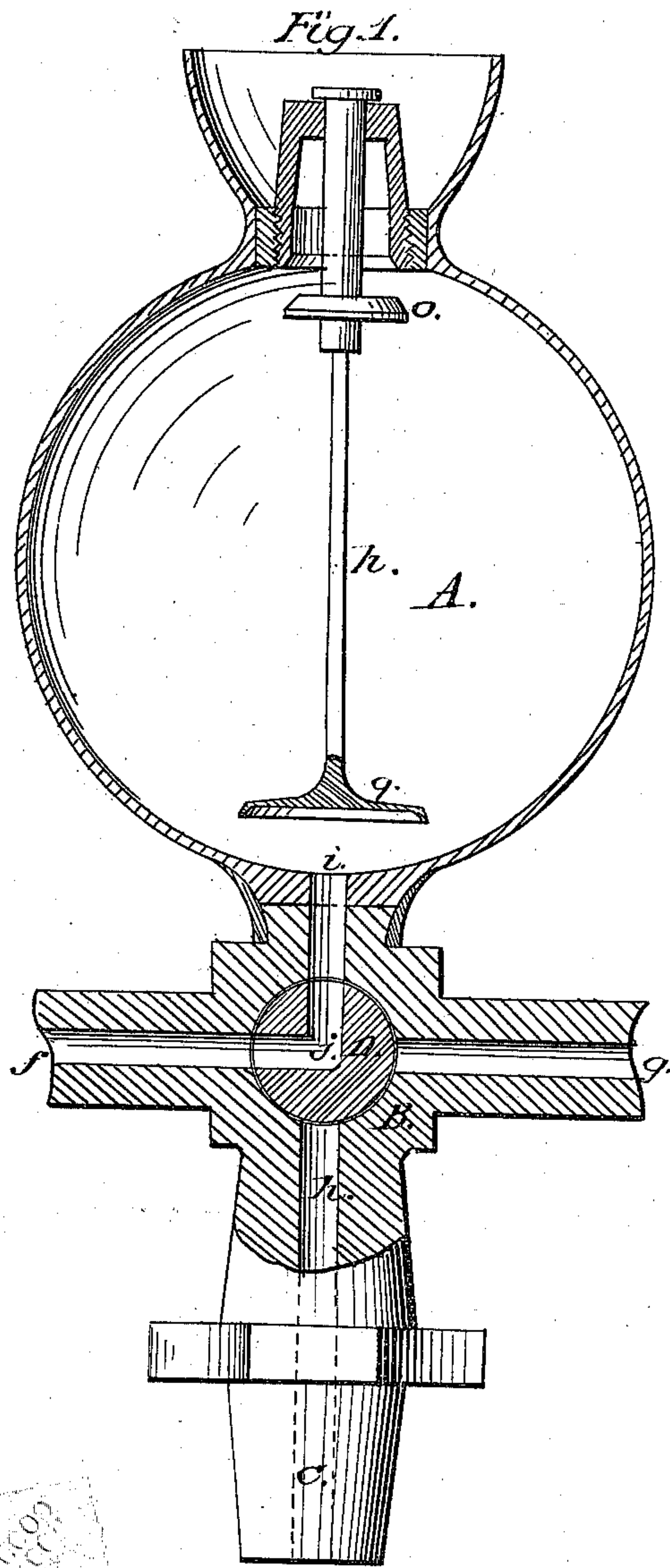


W. M. Cully,

Lubricator.

No. 87,423.

Patented Mar. 2. 1869.



Witnesses:
A. W. Almqvist
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United States Patent Office.

WILLIAM McCULLY, OF PATERSON, NEW JERSEY.

Letters Patent No. 87,423, dated March 2, 1869.

IMPROVEMENT IN 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, WILLIAM McCULLY, of Paterson, in the county of Passaic, and State of New Jersey, have invented a new and useful Improvement in Lubricators; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to a new and useful improvement in the method of oiling the cylinders of locomotive-engines, but which is adapted to other uses, and consists in providing a single cock in combination with an oil-reservoir, and suitable oil-passages, by which the oil or other lubricating-material is distributed to each of the cylinders, as will be hereinafter more fully described.

The accompanying drawing—

Figure 1, represents a vertical section of a lubricator constructed according to my invention.

Figure 2 is a front view of the hand-wheel on the outer end of the cock, by which the cock is operated.

Similar letters of reference indicate corresponding parts.

This lubricator is attached to the end of the boiler, or the steam-space thereof, so that steam may be used for forcing the lubricating-material into the cylinder.

Hitherto a separate cock has been employed for lubricating each cylinder, and also for admitting steam thereto, for the purposes before named.

By my improvement, the engineer is enabled to oil both cylinders by turning a single cock, besides admitting the necessary quantity of steam.

A represents a glass or transparent oil-reservoir.

B represents the shell or body of the cock to which the globe or reservoir A is attached in any suitable manner. This shell is attached to the boiler by the tubular shank C.

D is the cock.

E is the wheel on the end of the cock, for turning it to any desired position.

It will be seen that the shell B is provided with apertures, which place it in communication with each cylinder, as *f g*, and with the boiler, as at *h*, and with the oil-reservoir, as at *i*.

In the cock D there is a right-angled orifice, *j*, which is made, by turning the cock, to register with either two of the orifices *f*, *g*, *h*, and *i*. The position of the cock with regard to those orifices is indicated by the projections *n n* on the wheel E, which correspond with the orifice *j*.

On some occasions there will be a back pressure of steam from the cylinder, through the pipes *f* or *g*, into the oil-holder A.

To prevent unpleasant consequences should this back flow of steam occur, I provide the valve O on the rod *p*, which valve is operated by the steam which will strike the disk *q* as it enters the reservoir, and close the valves.

Oil is admitted into the left-hand cylinder by turning the cock, as seen in the drawing.

To make sure that the oil is carried to the required point, the cock will be turned to the left, one-fourth of a revolution, when steam will flow from the boiler into the tube *f*, and force the oil into the cylinder, and the same with the right-hand cylinder.

It will be seen that the engineer, instead of turning three or four cocks, to oil his cylinders, turns only one, and that, when he takes hold of the wheel E, he knows, by the projections *n n*, just how to turn the cock, even in the darkest night.

The advantages of this arrangement will be readily understood by all who are acquainted with the management of locomotive-engines.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The cock D, in combination with the shell B and oil-reservoir A, arranged either with or without connections, with the steam-boiler, substantially as and for the purposes described.

2. In combination with the cock D, the valve O in the oil holder A, substantially as and for the purposes herein shown and described.

The above specification of my invention signed by me, this 21st day of December, 1868.

WM. McCULLY.

Witnesses:

FRANK BLOCKLEY,
ALEX. F. ROBERTS.