

H. Taylor

Lubricator

N^o 77,851.

Patented May 12, 1868.

Fig. 2.

Fig. 1.

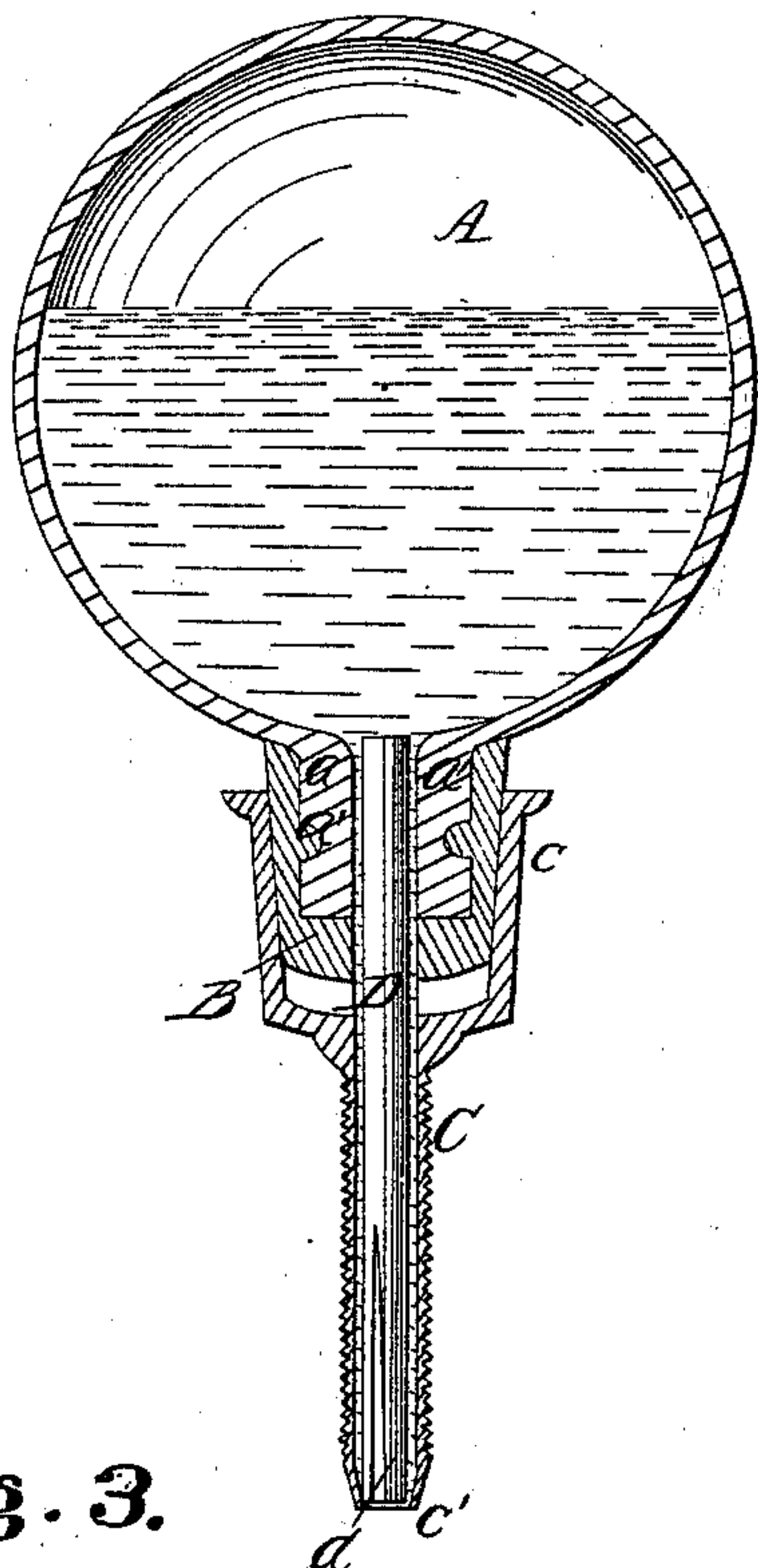
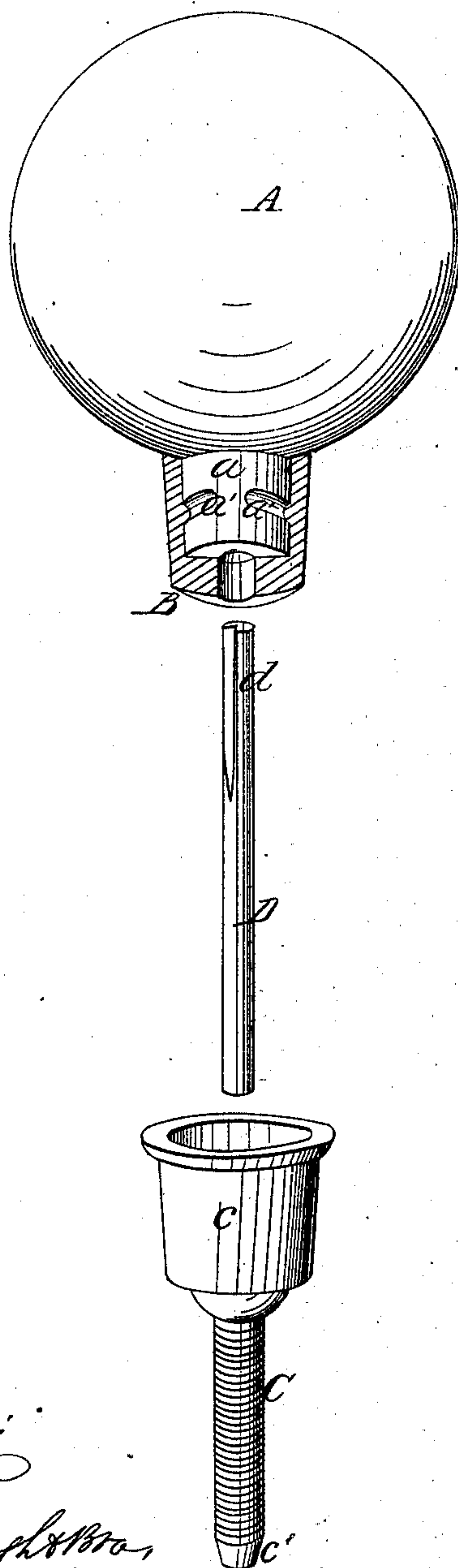


Fig. 3.



Witnesses:
 Frank Millward
 C. F. Fickley

Inventor:
 H. Taylor
 By *Amos A. Briggs*

United States Patent Office.

HIRAM TAYLOR, OF CINCINNATI, OHIO.

Letters Patent No. 77,851, dated May 12, 1868.

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, HIRAM TAYLOR, of Cincinnati, Hamilton county, State of Ohio, have invented new and useful Improvements in Lubricators; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention consists, first, in supporting the regulating-rod of a lubricator by a contraction or inward projection in the lower end of the hollow stem, so as to keep it from contact with the journal; second, in the employment of a rod of peculiar construction, the reversing of which will vary or graduate the rapidity or freedom of delivery of oil. In the accompanying drawings—

Figure 1 is an axial section of a lubricator embodying my invention.

Figure 2 exhibits the parts detached.

Figure 3 is a section on an enlarged scale of the lower end of the stem and its accompanying notched rod, which regulates the flow of oil.

A is a hollow glass sphere designed to serve as the oil-reservoir. It is constructed with a perforated shank, *a*, over which a conical stopper or plug, B, is cast, of soft or fusible metal. Previously to casting the metallic collar or plug, I bring the reservoir to a nearly red heat, and, having inserted a wooden spile in its neck, and placed the whole in a suitable mould, I pour in the metal.

The shank *a* is provided with notches, *a'*, into which the metal of the plug B runs, as it is cast around the shank, so as to serve as an anchor, together with the contraction of the metal, as it cools, which permanently and tightly secures the plug B to the globe A.

C is the hollow cup-shaped stem, whose shank is chased to fit into the journal-box, the lower end thereof fitting close to the revolving shaft. The cup *c* on the upper end of shank C fits tightly over the plug B, the parts being ground together.

D is a solid rod, which serves as the oil-feeder. It passes loosely through the shank *a*, plug B, and stem C, and is supported on the contracted end *c'* of the stem C. The oil is drawn by the revolving shaft or other moving part requiring lubricating from the globe through the space between the rod D and the holes through which it passes, the notch *d* in the rod D allowing it to pass through the contracted end *c'*. Should this arrangement give too free an allowance of oil, the rod can be reversed, as in fig. 2, and the unnotched end rest on the contracted mouth *c'*, the incompleteness of the fit allowing the oil to sup through the mouth *c'* in the quantity desired.

The rod D may be furnished with a notch at each end, instead of a single one, as shown at *d*, and these two notches should be of different dimensions, so as to permit of a greater or less flow of oil from the globe A.

In an inferior modification of the above, an entirely unnotched rod, D, may be used, and an opening made for a sufficient passage of the oil by a notch, *c'*, of the stem C. The quantity of oil fed to the shaft may also be regulated to an indefinite extent by varying the size of the rod D or notch *d*.

The oil-globe can be readily removed for filling, and, when returned, will resume its former relation to the stationary portion without adjustment.

In all lubricators of this class which have heretofore been constructed, the glass reservoirs have been attached to the stems by means of cement of some kind, which, being liable to crack by inequalities of temperature and contact of the oil, or by the act of screwing or unscrewing the lubricator from the journal-box or other mechanical violence, would admit air to the interior of the globe, causing it to deliver its contents all at once, or even loosen and detach the globe entirely so as to spill and waste the contents about the room or shop.

Although I have here shown a lubricator formed in two separable parts, it is evident that my soft-metal collar is well adapted for use with those which are in one piece and screw directly into the journal-box.

I claim herein as new, and of my invention—

1. Supporting the rod D by the lower end *c'* of the hollow stem out of contact with the journal, substantially as set forth.

2. The notched or grooved rod D *d*, adapted, by reversing end for end, to change or graduate the freedom of delivery of oil, as herein explained.

In testimony of which invention, I hereunto set my hand.

HIRAM TAYLOR.

Witnesses:

GEO. H. KNIGHT,

JAMES H. LAYMAN.