

J. B. Wickersham,

Lubricator.

No. 105,750.

Patented July 26, 1870

Fig. 1.

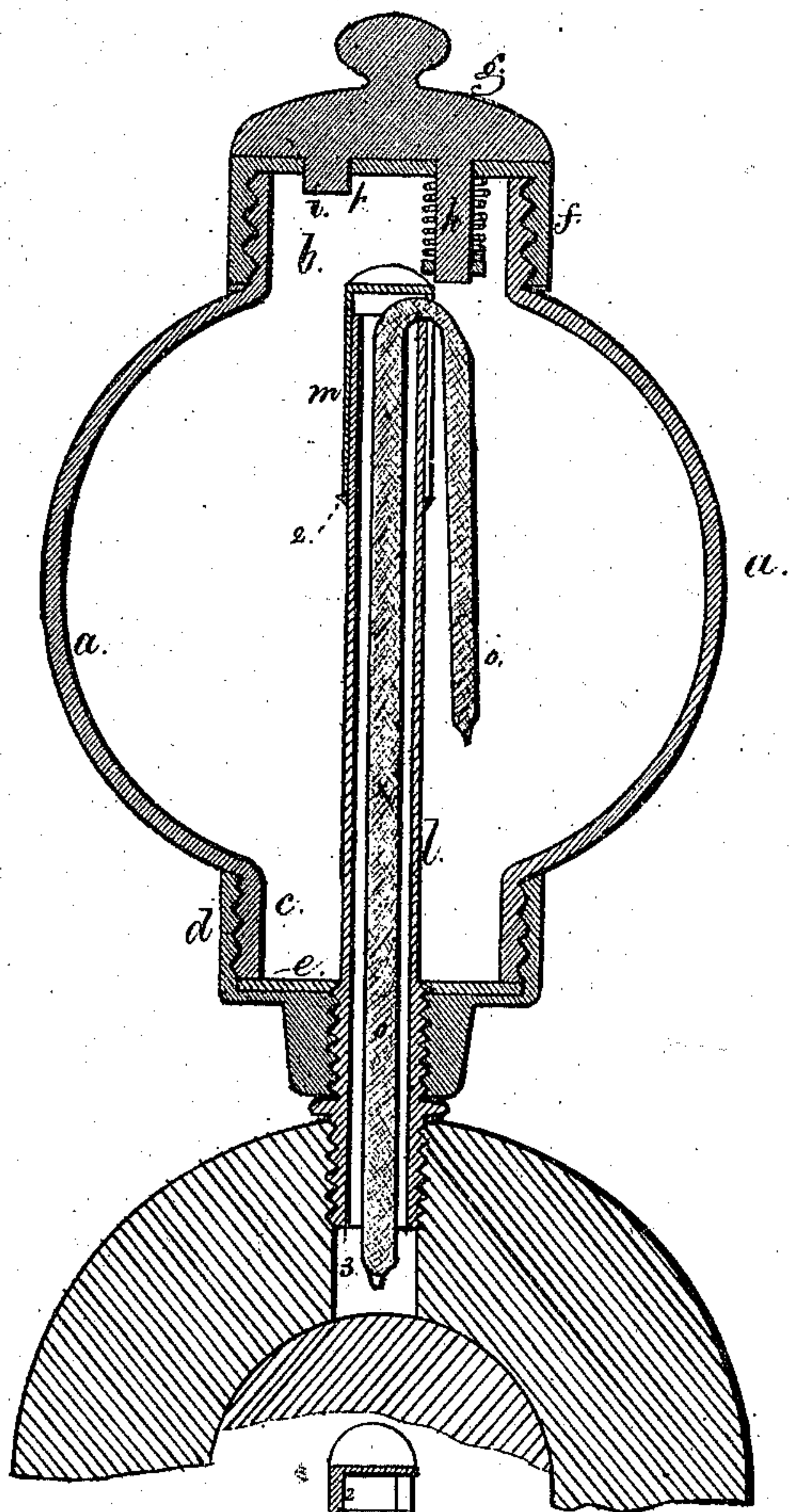
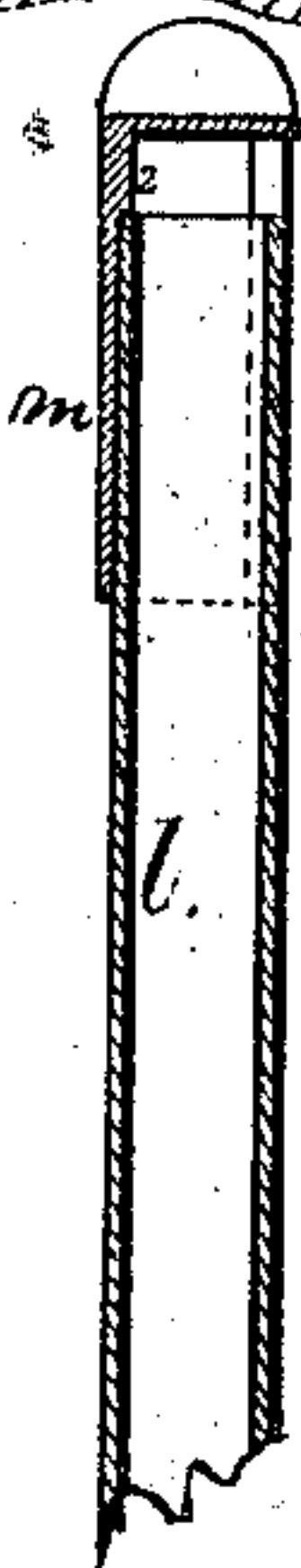


Fig. 2.



Witnesses

Chas. H. Smith

Geo. A. Warner

John B. Wickersham

per L. W. Serrell
Att'y.

United States Patent Office.

JOHN B. WICKERSHAM, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 105,750, dated July 26, 1870; antedated July 11, 1870.

IMPROVED LUBRICATOR.

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, JOHN B. WICKERSHAM, of Philadelphia, in the State of Pennsylvania, have invented and made a new and useful Improvement in Oil-Feeders for Machinery; and I do hereby declare the following to be a correct description of the same.

My invention is especially intended for the oil-cups of loose pulleys, in which the oil-cup itself describes a circle as the pulley revolves. My oil-cup, however, may be used under other circumstances.

In the drawing—

Figure 1 is a vertical section of my oil-cup; and—

Figure 2 is a section of the capillary tube and cap detached.

Lubricators have before been made of a glass cylinder, mounted in metal base and cap. These are difficult to keep tight, and the metal mountings are costly. Glass globes with a stem have been employed, the stem being inverted into the hole to be filled with oil. This rendered it necessary to remove the glass globe, and invert it, previous to filling the reservoir.

In Letters Patent granted to me September 29, 1868, a lubricator is shown made of a glass vessel with metallic necks. My present invention is an improvement upon the aforesaid lubricator, and consists in a valve applied to the cap, and acted upon by a spring, so as to close the hole through which oil is introduced after the cup has been filled.

I make use of a peculiarly constructed bonnet to prevent the oil falling into the tube or stem, and allow space for the capillary feeder where it passes said bonnet.

The oil-holder, *a*, is contracted to the necks *b* and *c*, and this is formed of glass, and set into the lower socket, *d*, and secured and rendered tight by a packing, *e*, or otherwise. I have shown a screw upon the outside of the glass neck.

f is the upper cap, also of metal, secured in place so as to be tight.

Above the cap *f* is the top *g*, having two projections, *h* and *i*, passing through the cap *f*. The projection *i* acts as a valve, and the projection *h* has a spiral spring around it, by means of which the top *g* and valve *i* are drawn sufficiently tight upon the cap *f*, but, by lifting the top *g* so as to clear the valve *i* from its

seat, the top *g* can be turned aside, and the lubricator filled with oil, and then the top *g* is to be turned back to place.

This construction allows easy access to the lubricator, and prevents the risk of the top being lost if it were disconnected.

The hollow stem *l* passes up into the lubricator, and is provided with a bonnet, *m*, that slips over the said stem *l*, and there is a shoulder, *2*, either upon the stem *l*, as in fig. 1, or within the bonnet *m*, as in fig. 2, to prevent the bonnet being pushed too far upon the stem *l*, thereby the necessary space is always left for the capillary *o*, and its action is not interfered with as it would be if the bonnet pressed tightly upon said capillary *o*.

This capillary *o* is made of a wire or wires, with a covering of fibrous material, as in my patent of October 22, 1867.

By this construction the oil can be observed, the feed of the oil will be regular, the capillary cannot be obstructed in its operation, the oil will not run out of a cup while on a loose pulley, in consequence of being either inverted, inclined, or upright, and the quantity of oil can be seen sometimes while the pulley is being revolved; hence the same requires but little attention except to refill when the oil is exhausted.

The metal socket *d* lessens the risk of the glass oil-holder being broken when exposed to centrifugal action or sudden stopping or starting.

What I claim, and desire to secure by Letters Patent, is—

1. The combination of the bonnet *m* with the shoulder *2* and stem *l*, substantially as and for the purposes specified.

2. The spring valve *i*, fitted to the cap *f*, substantially as and for the purposes set forth.

3. The bonnet *m* and shoulder *2*, in combination with the tube *l*, substantially as and for the purposes set forth.

In witness whereof I have hereunto set my signature this 9th day of October, A. D. 1869.

J. B. WICKERSHAM.

Witnesses:

GEO. D. WALKER,
CHAS. H. SMITH.