

T. Holland,

Lubricator.

No. 99,894.

Patented Feb. 15. 1870.

Fig. 2.

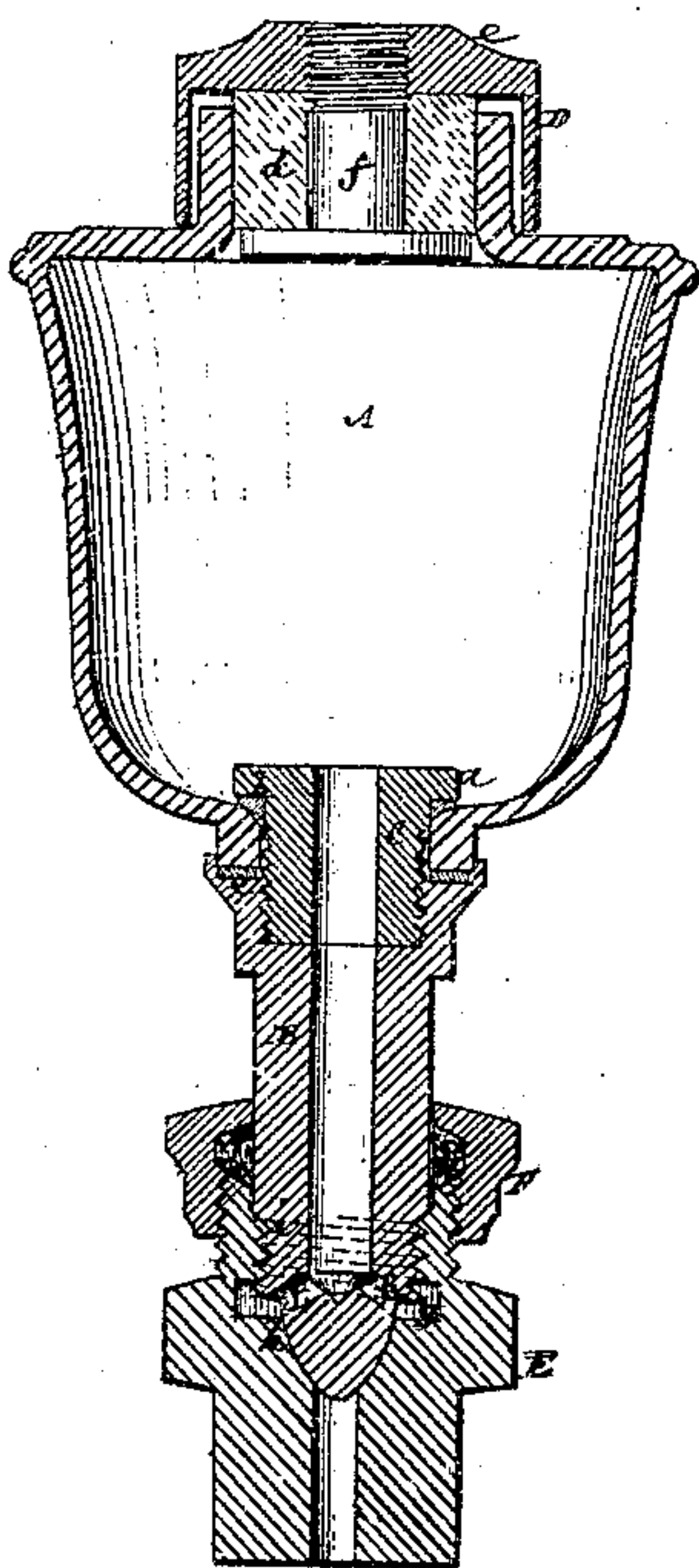
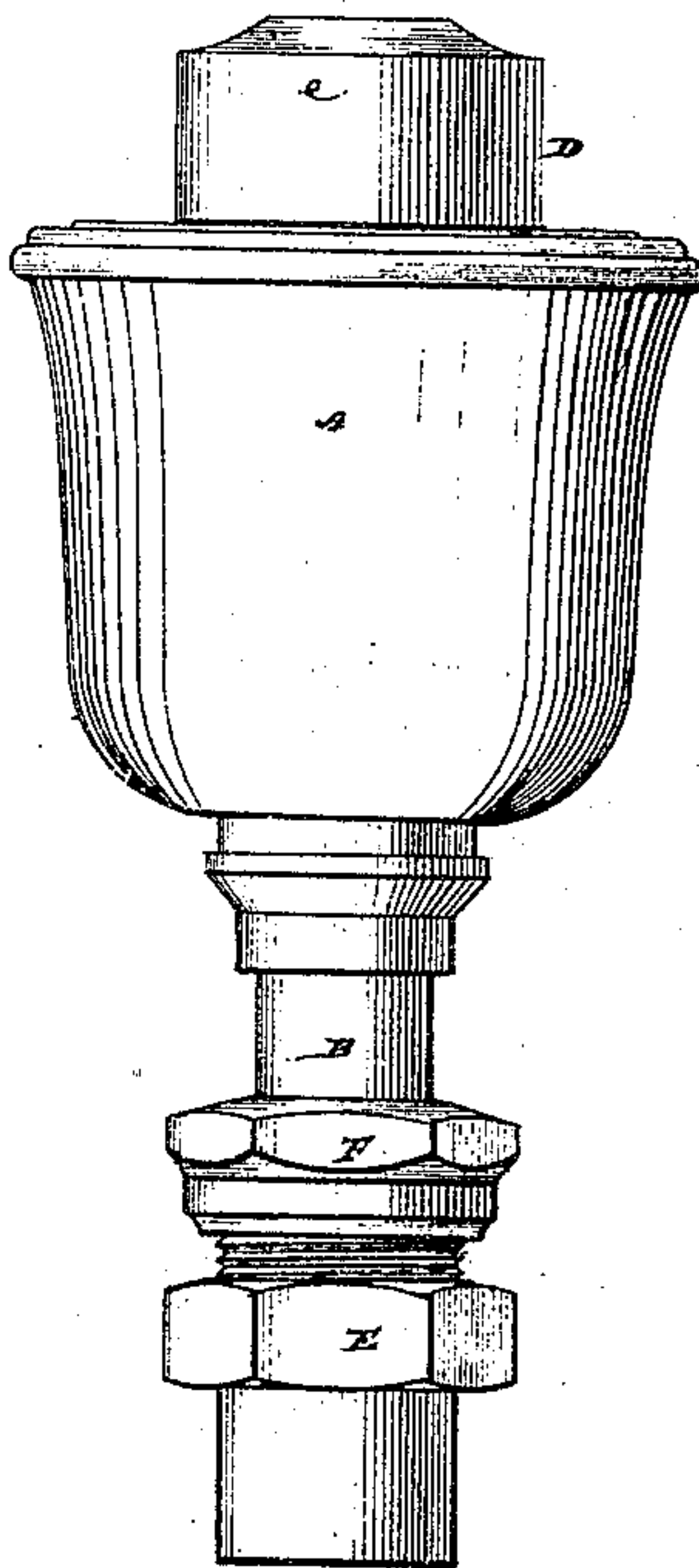


Fig. 1.



Witnesses:

Fred. Haynes

R. A. Kavanagh

Inventor.

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TIMOTHY HOLLAND, OF NEW YORK, N. Y.

Letters Patent No. 99,894, dated February 15, 1870.

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, TIMOTHY HOLLAND, of the city, county, and State of New York, have invented a new and useful Improvement in Oil-Cups, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents an outside elevation of an oil-cup constructed in accordance with my improvement, and

Figure 2 a central vertical section of the same.

Similar letters of reference indicate corresponding parts.

In my improved oil-cup, as represented in the accompanying drawing, the reservoir or cup proper is secured to its place or the stem which carries it by a hollow screw-clamp, provided with an overlapping projection or collar arranged to bear on the inside of the cup, thereby dispensing with the usual and less reliable cemented attachment of it on the outside.

It also embraces, as applicable to an oil-cup not exposed to internal pressure, a stopper made up of a rigid cap, with a cork or other like filling secured to the cap by a screw-pin that is provided with an internal head, and which serves to compress and expand the cork, to secure its close fit within the mouth of the reservoir. Likewise said cup includes a valvular construction of the stem which carries it, the same being made to form a part or extension of the reservoir, and so that on turning the reservoir the valve is opened or closed, to secure and regulate or shut off the flow; and in this latter connection, the invention embraces a peculiar construction of the valvular stem by making it of a taper form at its seat, and with a longitudinal passage down it terminating in side orifices or outlets; also, in providing it with a reverse screw-thread, so that on turning the reservoir, as in the act of taking off the stopper, it closes the valve.

In further description of the improvement—

A in the annexed drawing represents the reservoir, which may be made of glass or other suitable material.

Said reservoir is secured to its stem B by means of a hollow screw-clamp, C, provided with an upper collar, *a*, arranged to bear through an interposed soft washer or packing, *b*, on the inside of the reservoir, and screwing on the outside into the stem B, in which the lower end of the reservoir may also enter and rest on a soft or flexible packing, *c*.

This mode of attachment dispenses with the usual cement joint, and forms a firmer and more reliable union, with every facility for detaching the reservoir.

The stopper D is made up in part of a plug, *d*, of cork or other soft and flexible material, but it will suffice here to refer to the same under the term of a cork.

This cork is secured to a metal or other rigid outside cap, *e*, by a pin, *f*, provided with a lower head, and after passing through the cork, screwing into the cap, whereby said cork is not only securely attached

to the cap, with facility for its removal when requiring to be renewed, but whereby, on screwing up the pin, the cork may be expanded to secure its close fit within the mouth of the reservoir.

In cases where the oil-cup is exposed to internal pressure, as in its application to a steam chest, a screw cap may be substituted for this stopper; that, however, may be advantageously employed in oil-cups for journal-boxes and many other purposes.

The stem B forms a part of or extension from the reservoir, and is of valvular construction, so that on turning the reservoir it is turned with the latter, and made to open or close, or adjust the flow of oil from the reservoir. To this end said stem is made with a longitudinal passage through it, in communication with the oil in the reservoir, and terminating below in a side orifice or orifices, *f*, arranged to communicate with an enlarged opening, *g*, immediately above the seat *h* in the base-plug E, which seat it is preferred to make of conical form, to receive within it a tapered and valvular termination to the stem for opening and closing the discharge orifice through the base-plug E, that carries the oil-cup and its attached stem, and that may be provided with a stuffing-box and gland F, to prevent outside leakage around the stem.

On the stem B, where it passes through the upper portion of the base-plug, is cut a reverse screw-thread, *i*, fitting a female thread in the plug, so that on turning the reservoir, as in the act of taking off the stopper or screw-cap, as the case may be, the valvular stem B is closed against the seat *h*; and on turning the reservoir in the opposite direction is opened to establish flow. This is important in the application of an oil-cup exposed to internal pressure, as on a steam chest, for instance, inasmuch as in taking off the cap to renew the supply of lubricating material to the cup, the egress of steam is by such means automatically shut off.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination and arrangement of the hollow screw-clamp C, having an overlapping projection or collar, *a*, on or near its upper end, with the reservoir A and stem B, substantially as specified.

2. The stopper D, formed of a cork, *d*, screw pin *f*, provided with a lower head and rigid cap *e*, arranged in relation to each other, essentially as shown and described.

3. The stem B, constructed to operate as a valve, when turned with the reservoir A, as specified.

4. The construction, substantially as shown and described, of the valvular stem B of the reservoir A, with a longitudinal passage down it, and side orifices *f*, and with a reverse screw-thread, *i*, on it, for operation in relation to the cap or stopper of the reservoir, as specified.

Witnesses:

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