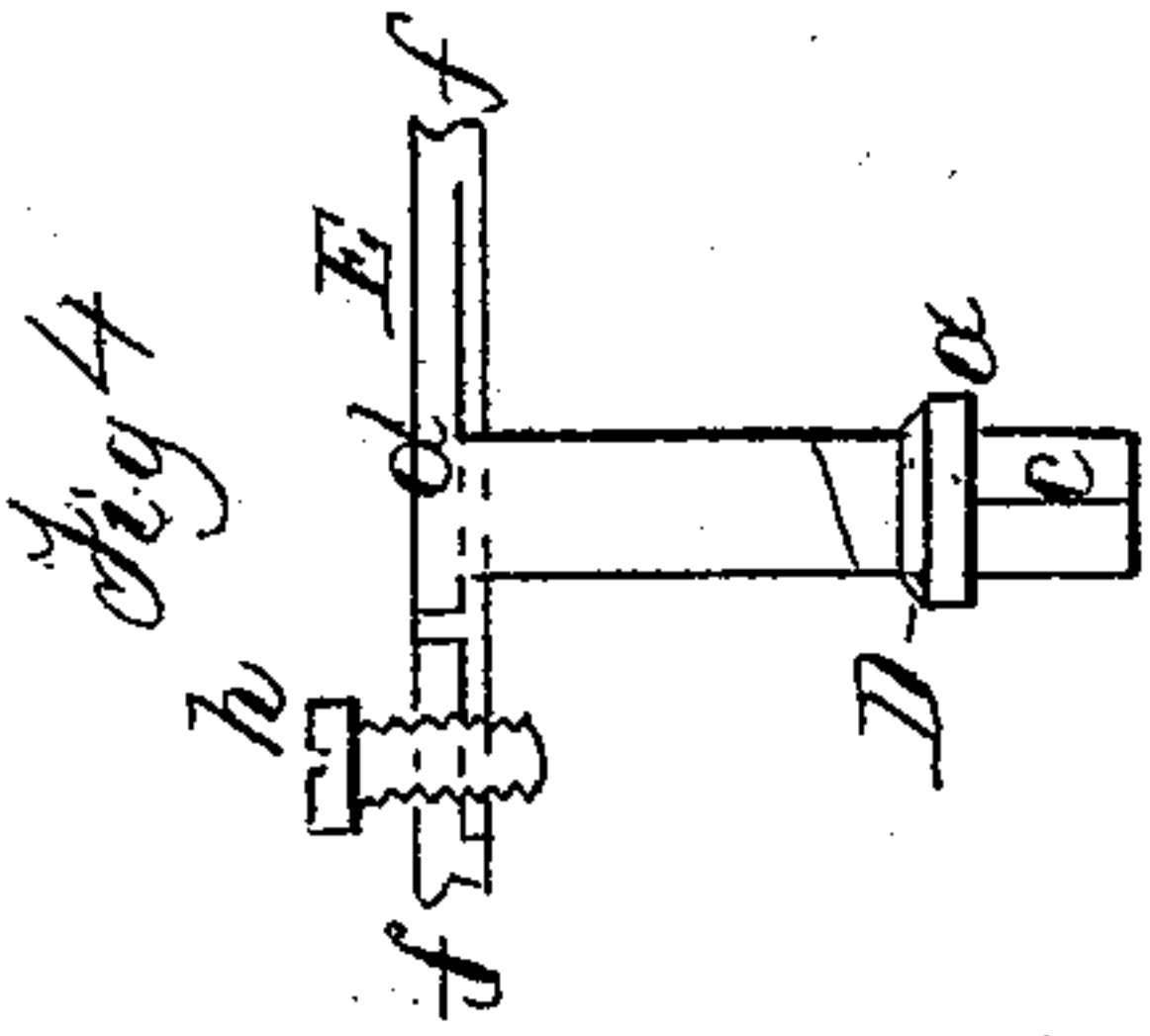
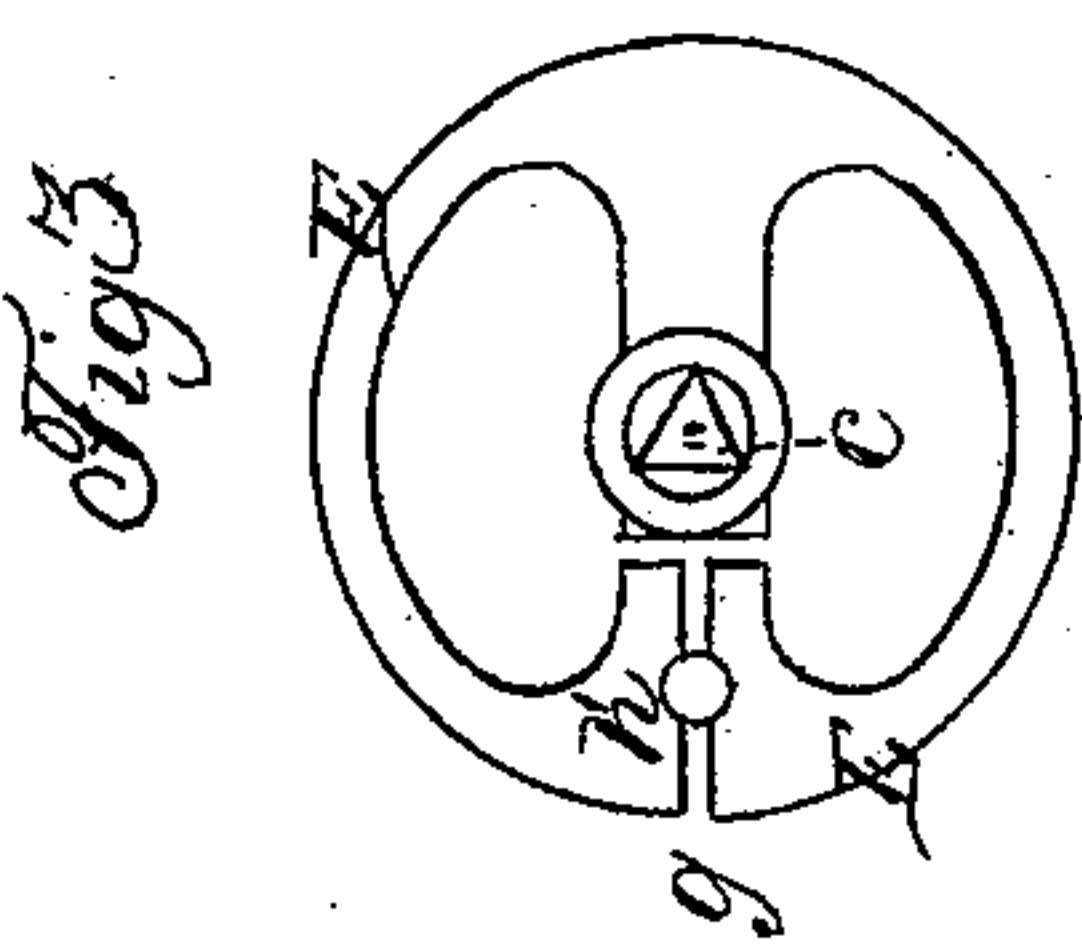
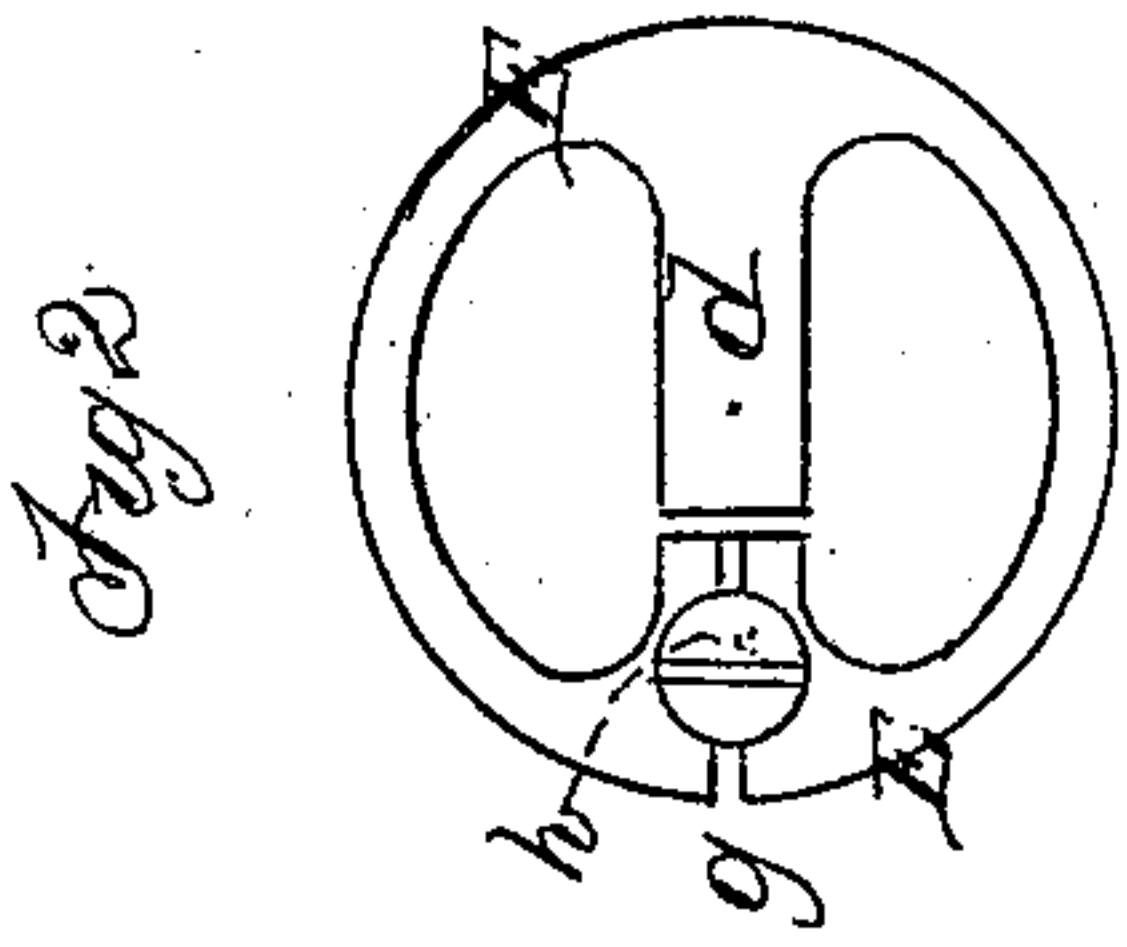
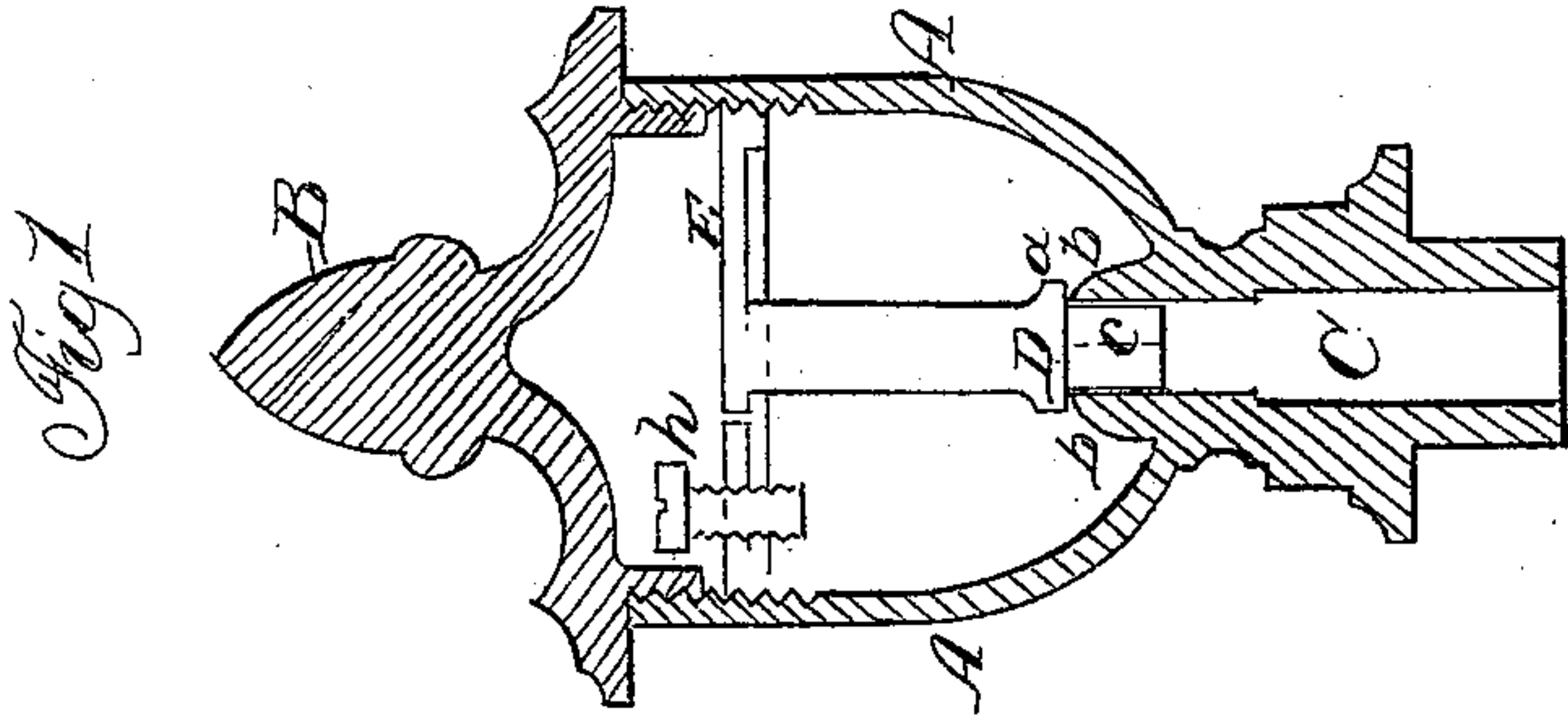


A. W. Harris,

Lubricator.

No. 92,307.

Patented July 6. 1869.



Wm A Harris, }
Charles S. Whittem, } Witnesses

Inventor.
Abraham W Harris

United States Patent Office.

ABRAHAM W. HARRIS, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 92,307, dated July 6, 1869.

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, ABRAHAM W. HARRIS, of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Oil-Cups; and I do hereby declare that the following specification, taken in connection with the drawings, making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a sectional view of an oil-cup, with the improvement.

Figures 2, 3, and 4 are details.

The oil-cup herein described acts upon the principle of delivering the oil or lubricating-fluid to the bearing to be oiled, through a graduated opening between two metallic surfaces.

The improvement resides in the means by which the regulating-valve is secured, after the size of the opening has been determined, so as to prevent its subsequent displacement by the jarring of the machine to which the cup is attached.

A is a cup of suitable form, which may be furnished or not with a cap, B;

C is the duct for delivering the oil to the bearing; and

D is the regulating-valve.

The valve D is formed by a shoulder, *a*, upon the valve-stem, the face of which is grooved to fit the edge of the raised annular seat *b*, and when such shoulder is brought to the seat, the flow of oil will be cut off.

The plug *c*, or that portion of the stem below the valve, which enters the mouth of the delivery-duct, is made, by preference, in the form of a prism of three sides, the oil-passages being formed between the interior cylindrical surface of the duct and the several planes constituting the faces of the prism.

The advantage of thus constructing the plug is, that its sharp angles, when the valve is turned, will act as scrapers to remove the sediment, which becomes encrusted upon the surface of the duct.

The top of the valve-stem is furnished with an annular disk, E, attached to the valve-stem by the central cross-tongue *d*.

The edge of the disk is provided with a screw-thread, *f*, which fits a corresponding thread, cut for a short distance in the interior surface of the cup.

The annular disk E is severed, as seen at *g*, and a tapering screw-plug, *h*, is fitted to a threaded hole, *h'*, fig. 3, made through the disk, and divided by the cross-slit *g*.

It is obvious that the effect of turning the screw-plug *h* will be to spring apart the rim, and cause its screw-threaded edge to bind against the threads of the female screw in the side of the cup, and thereby clamp the valve D securely in any position in which it may have been adjusted with reference to its seat *b*.

It is not necessary that a tapering screw-plug should be employed to spread apart the annular disk-rim E, attached to the valve-stem. Any equivalent device, or structure of parts, which will enable the disk to be expanded, and thereby hold the valve in any determined position, will accomplish the result.

I wish it to be understood, that I do not claim, broadly, a method of regulating the flow of oil from an oil-cup, by means of an adjustable plug to vary the size of the discharge-orifice; but

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

1. Constructing the stem of the regulating-valve D, of an oil-cup A, with an expansible disk-rim head, E, substantially as described, for the purposes specified.

2. The combination of the oil-cup A, regulating-valve D, expansible rim E, and tapering plug *h*, or equivalent device, substantially as described.

ABRAHAM W. HARRIS.

Witnesses:

R. H. PERRY,

CHAS. W. GREENE.