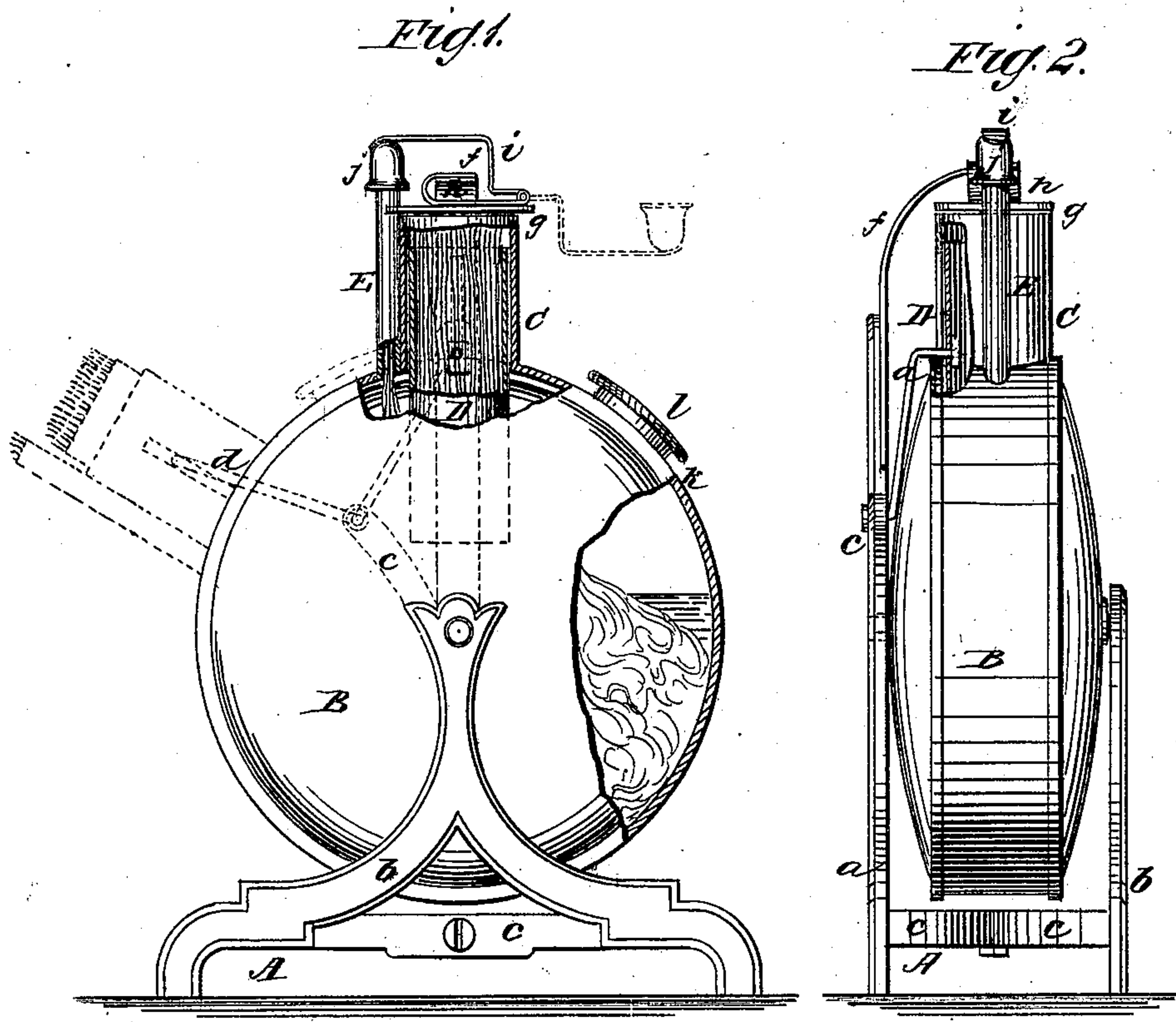


J. W. COOPER.  
Alcohol Lamp.

No. 201,913.

Patented April 2, 1878.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JOHN W. COOPER, OF SALEM, INDIANA.

## IMPROVEMENT IN ALCOHOL-LAMPS.

Specification forming part of Letters Patent No. **201,913**, dated April 2, 1878; application filed March 1, 1878.

*To all whom it may concern:*

Be it known that I, JOHN WILLIAM COOPER, of Salem, in the county of Washington and State of Indiana, have invented a new and Improved Alcohol-Lamp, of which the following is a specification:

Figure 1 is a side elevation, partly in section, of my improved lamp. Fig. 2 is a front elevation, having a part broken away to more clearly show the construction.

Similar letters of reference indicate corresponding parts.

My invention relates to alcohol-lamps for soldering and similar purposes; and it consists in a reservoir pivoted in a supporting-frame, and provided with two wick-tubes.

It also consists in an extinguisher secured to a spring-support, and capable of closing the larger wick-tube when it is in a vertical position, and in an independent extinguisher for the smaller wick-tube.

It also consists in a novel device for projecting the wick from the larger tube as it is moved out of a vertical position.

Referring to the drawing, A is a frame consisting of two similar side pieces, *a b*, connected by the curved bars *c*. In this frame a cylindrical reservoir, B, having convex heads, is pivoted axially.

A tube, C, projects from one side of the reservoir B, and to it is fitted a wick-tube, D, which projects downward into the reservoir. One side of the tube C is slotted, and one end of a wire, *d*, projects through the slot into the side of the tube D. The other end of the wire *d* is bent in the opposite direction, and is jointed to an arm, *e*, that projects from the side piece *a*.

A small wick-tube, E, is secured in the side of the reservoir near and parallel to the tube C. The tube E projects above the tube C.

A curved arm, *f*, is attached to the side piece *a*, and a plate, *g*, which is fitted to the

tube C, is connected with the said arm by a spring, *h*. An arm, *i*, is hinged to the plate *g* and attached to a cap, *j*, that is fitted to the small wick-tube E.

The reservoir B is provided with a filling-aperture, *k*, which is closed by the screw-cap *l*.

The wick in the smaller tube may be kept constantly burning. When the larger wick is to be used the reservoir B is turned on its pivots until the tube C is removed from under the plate *g*, and the wick-tube D is projected from the tube C by the action of the wire *d*, when the larger wick will be lighted from the smaller one.

As the tube C is returned to a vertical position the wick-tube D is drawn into the tube C, and the larger flame is extinguished, while the smaller one continues to burn.

When it is desired to extinguish the smaller flame the cap *j* is placed over the end of the smaller wick-tube. The smaller flame may be used independently of the larger one for the smaller kinds of work.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An alcohol-lamp having a pivoted reservoir, a movable wick-tube, and a fixed wick-tube, substantially as shown and described.

2. The combination of the stationary extinguishing-plate *g* and the lamp having the pivoted reservoir B, as shown and described.

3. The combination of the supporting-frame A, pivoted reservoir B, having the fixed tube C, sliding wick-tube D, and wire *d*, substantially as shown and described.

4. The combination of the hinged arm *i*, cap *j*, and wick-tube E, substantially as shown and described.

JOHN WILLIAM COOPER.

Witnesses:

G. L. NEAL,

JOHN P. KYTE.

750  
wms