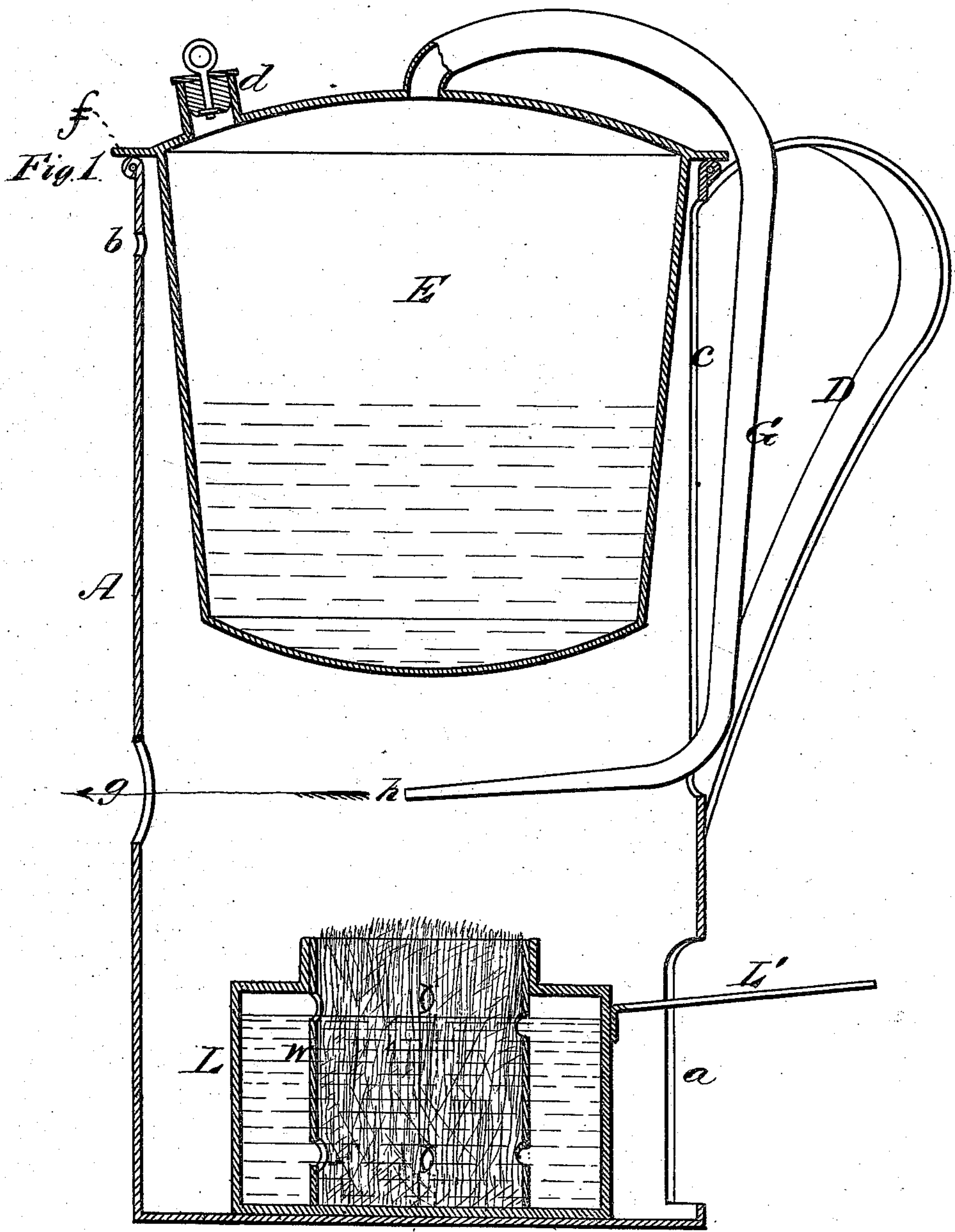


F. REITZ.
Soldering Lamps.

No. 154,618.

Patented Sept. 1, 1874.



WITNESSES
E. H. Bates
Robert Everett

INVENTOR
Ferdinand Reitz
Chipman & Sonner & Co

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Fig. 2.

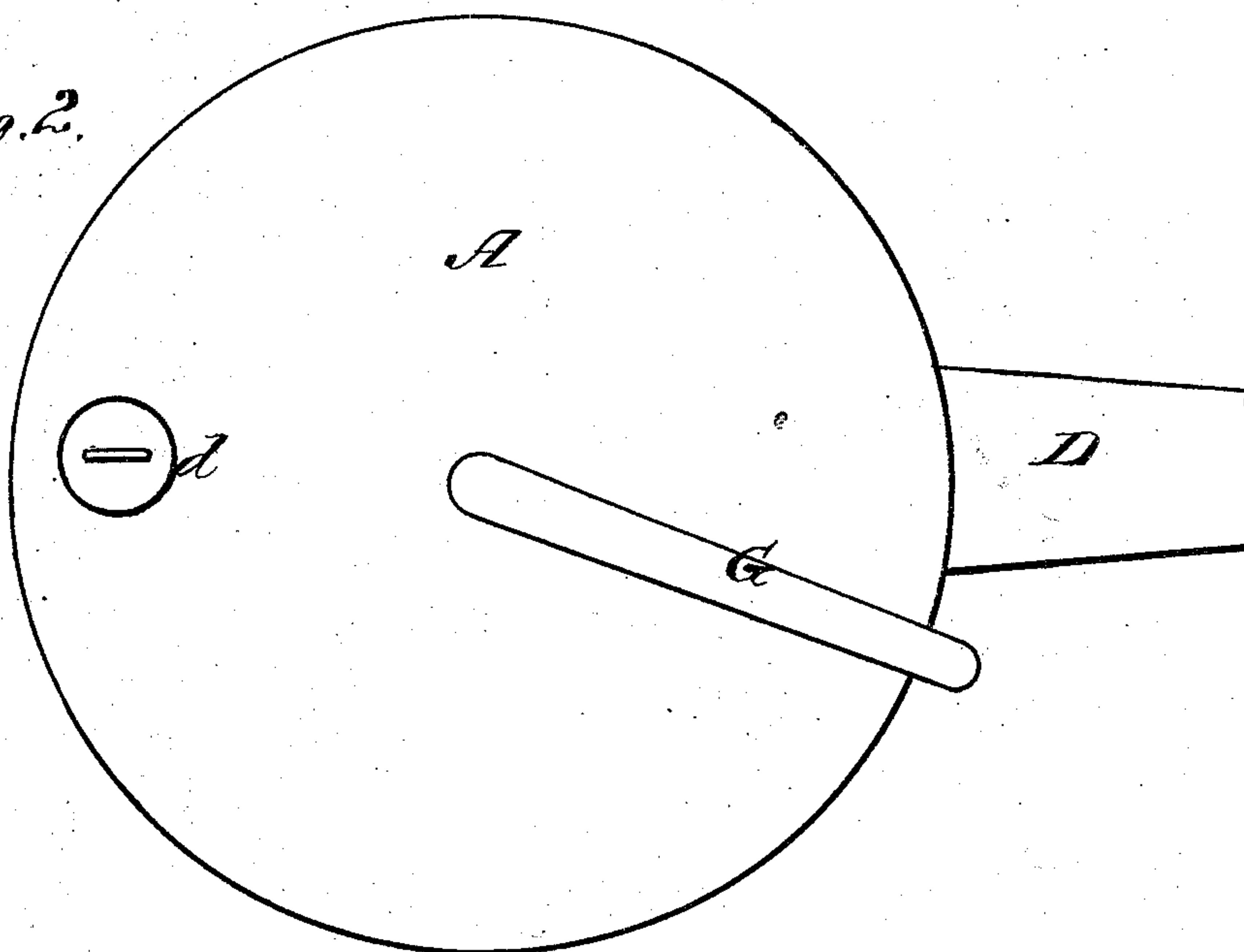
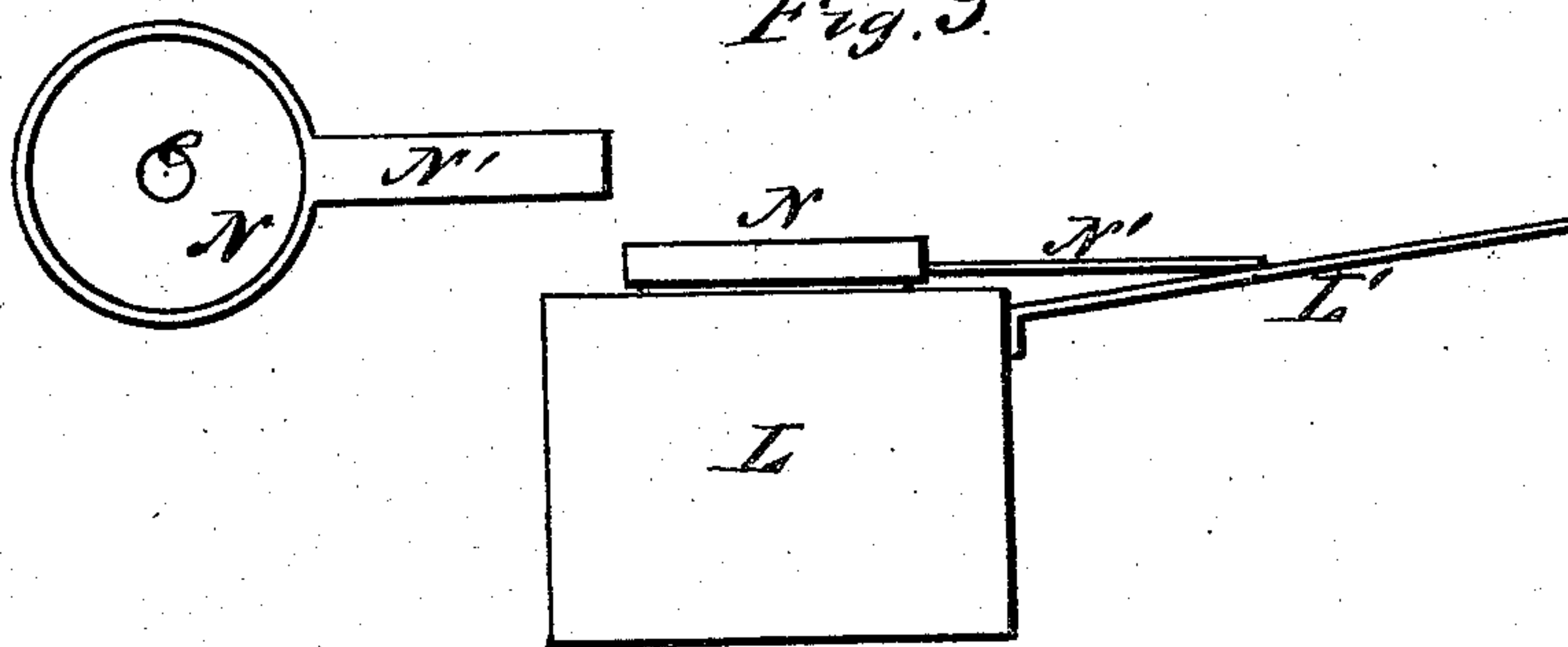


Fig. 3.



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UNITED STATES PATENT OFFICE.

FERDINAND REITZ, OF BIRMINGHAM, OHIO.

IMPROVEMENT IN SOLDERING-LAMPS.

Specification forming part of Letters Patent No. **154,618**, dated September 1, 1874; application filed August 19, 1874.

To all whom it may concern:

Be it known that I, FERDINAND REITZ, of Birmingham, in the county of Erie and State of Ohio, have invented a new and valuable Improvement in Soldering-Lamps; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a central sectional view of my soldering-lamp. Fig. 2 is a top-view. Fig. 3 is a detail view of the same.

My invention relates to that class of lamps which are designed for tinnerns' use in soldering lead pipes and other articles, wherein alcohol is utilized for producing a blow-pipe flame; and it consists in the novel construction, hereinafter described, by which the alcohol-cup is prevented from falling out of the receiving-cup in case this cup is tilted or upset; also, in protecting the hand of the person holding the lamp-cup from the heated blow-pipe; and also in providing a rest for small articles while in process of soldering; and, finally, in constructing the lamp-holder in the manner described, so that the lamp shall be permitted to sit loosely therein and be moved back and forth at will, and thereby graduate the heat upon the blow-pipe and the size of the flame thereof to the requirements of the case.

In the annexed drawings, A designates the receiving-cup for an alcohol-vessel, E, and a lamp, L, which cup is provided with a handle, D, and constructed with a large opening, *a*, for introducing the lamp L, a small opening, *g*, for the escape of the soldering-jet, holes *b*, for allowing a draft through the cup A, and also a vertical slot, *c*, for receiving the blow-pipe tube G. The slot *c* terminates below the upper end of the cup A, as shown in Fig. 1, for the purpose of allowing the hook-shaped tube G to hold the alcohol-vessel E in its place should the cup A be tilted or upset. The slot *c* is also made on one side of the handle D, and far enough from it to guard against the burning of the hand grasping the handle.

In lamps hitherto made the slot *c* was made in line with and partly through the handle, and extended through the upper end of the

receiving-cup. It is obvious that with such arrangement the hands are burned by the hot tube G, and also that should the receiving-cup be upset the alcohol-vessel would fall out of such cup and be liable to set fire to objects.

The hole *g*, which is opposite the jet-hole *h* of the blow-pipe G, being made no larger than is necessary for the passage of the soldering-flame, the edge of this hole will afford a good rest for small articles while being soldered, and at the same time keep them properly in the flame. In addition to this hole *g*, it will be observed that I have the larger hole, *a*, so arranged that the exposed handle L' of the lamp L will be out of the way while soldering.

The bottom of the receiving-cup or lamp-holder is made flat, as shown, and has an area within its walls much larger than the lamp itself, for the purpose of permitting the lamp to sit loosely thereon, and be moved back and forth, and otherwise, at the will of the operator.

By this method of construction the heat upon the blow-pipe and the flame therefrom may be graduated to suit the requirements of the case. It is also obvious that by this method of construction the flame from the blow-pipe may be extinguished, when desirable, without extinguishing the flame of the lamp.

I am aware that automatic blow-pipes have been constructed by means of alcoholic vapor and lamps. I do not therefore claim the invention thereof, broadly; but

I claim as my invention—

1. In combination with the blow-pipe tube G, the vessel A, having slot *c* closed at its upper end, and constructed at a sufficient distance from the handle D to prevent the said handle from being heated.

2. The combination of the receiving-cup A, having a large flat bottom, with the loosely-fitting lamp L, and the blow-pipe tube G, having its orifice above said lamp, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FERDINAND REITZ.

Witnesses:

E. E. BEEMAN,
LEVI HALES.