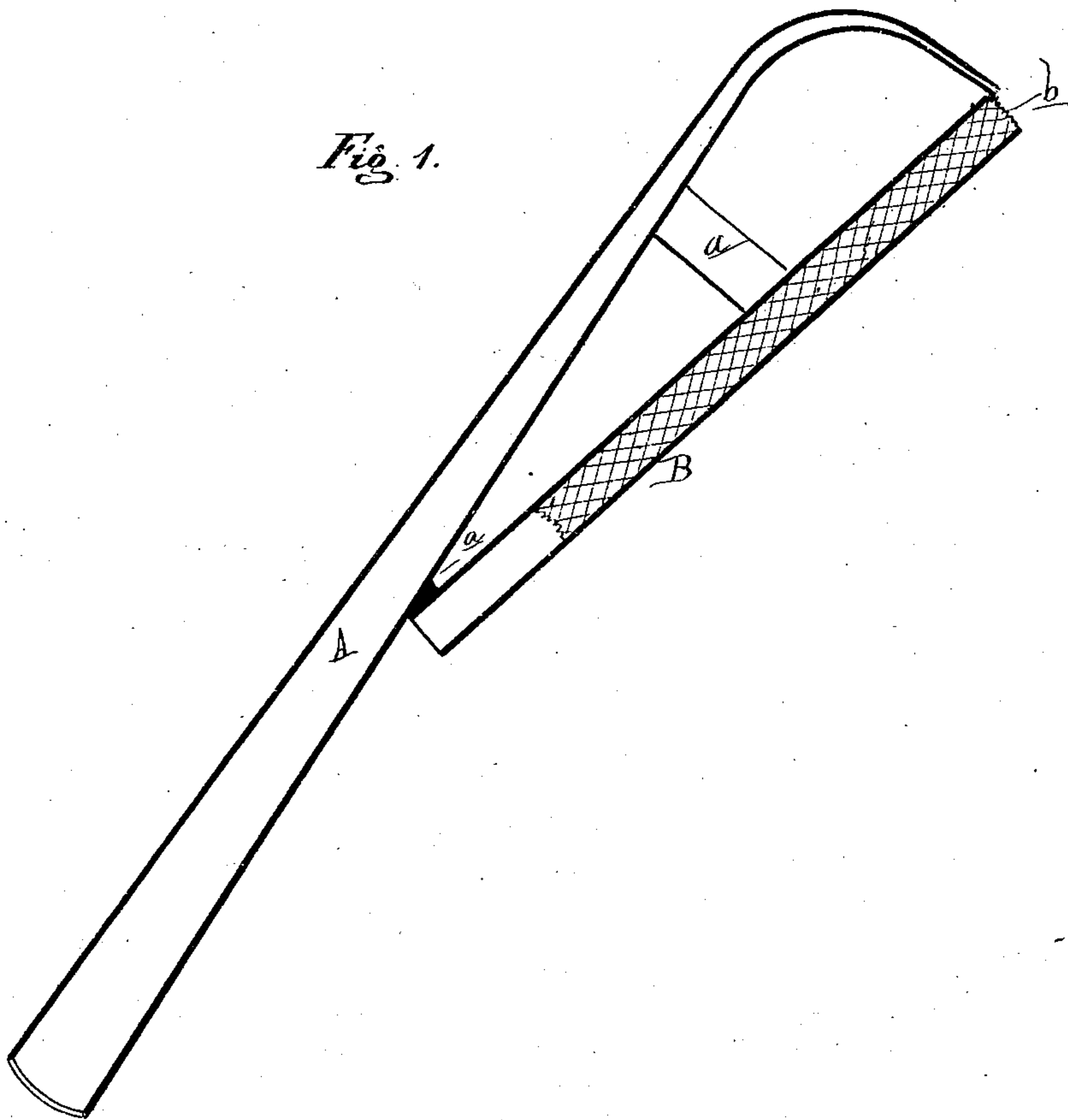


G. W. LOVE.  
Blow-Pipes.

No. 153,357.

Patented July 21, 1874.

*Fig. 1.*



Attest:  
Edward Barthel.  
H. F. Eberts

Inventor:  
George W. Love  
By Attorney  
J. P. S. Sprague

# UNITED STATES PATENT OFFICE.

GEORGE W. LOVE, OF CHIPPEWA FALLS, WISCONSIN, ASSIGNOR TO HIMSELF AND JAMES E. PRUDEN, OF LAKE CITY, MINNESOTA.

## IMPROVEMENT IN BLOW-PIPES.

Specification forming part of Letters Patent No. **153,357**, dated July 21, 1874; application filed May 22, 1874.

*To all whom it may concern:*

Be it known that I, GEORGE W. LOVE, of Chippewa Falls, in the county of Chippewa and State of Wisconsin, have invented a Combined Blow-Pipe and Wick-Tube, of which the following is a specification:

The object of my invention is to combine with a blow-pipe a tube to contain a wick, which may be saturated with any inflammable fluid, which may be lighted to give a flame, which can be projected in any direction by the blow-pipe.

In the drawing, which shows my improvement in longitudinal section, A represents an ordinary blow-pipe, to which is secured, by one or more braces, *a*, a tube, B, which contains a wick, *b*, which tube is so placed with relation to the blow-pipe as that the blast will be directly across the outer end of the wick-tube, causing a long slender flame to be pro-

jected in any direction in which the pipe may be turned, making it very convenient for soldering, more especially as it can be used by any one who cannot use a soldering-copper. The wick should be saturated, before using, with refined petroleum, or other inflammable liquid which will give the required volume of flame.

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

The combination, with a blow-pipe, A, of the tube B, provided with a wick, *b*, and fastened to the blow-pipe by one or more braces, *a*, the said tube B not being connected to any oil-containing vessel, all constructed and arranged substantially as described and shown.

GEO. W. LOVE.

Witnesses:

ROBT. W. LOCKWOOD,  
WM. P. SWIFT.