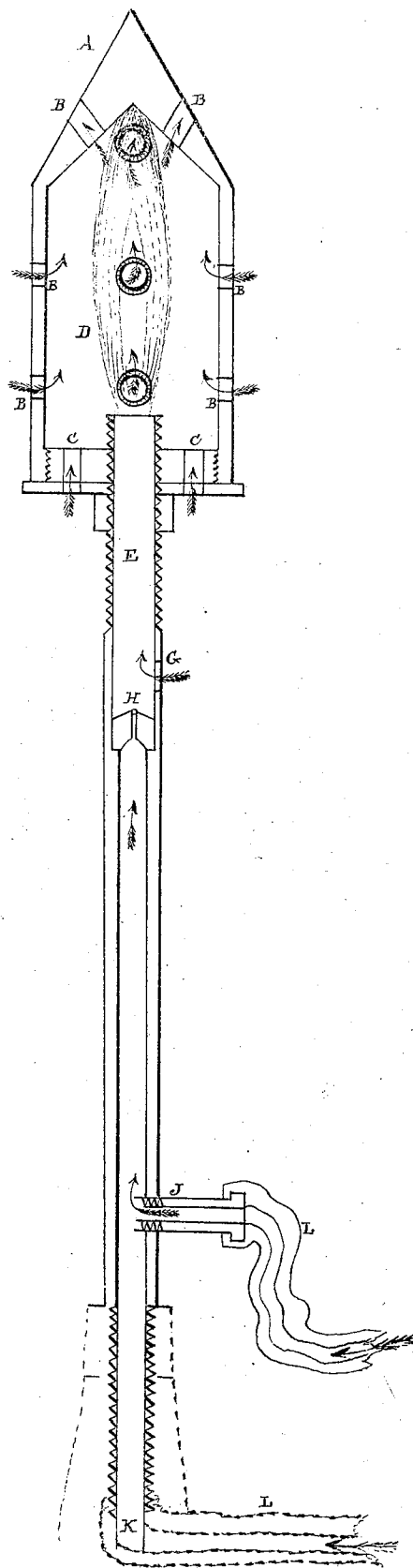


W. H. WIGHT.  
Soldering Tools.  
No. 135,025. Patented Jan. 21, 1873.

*William H. Wight.*  
*By his Atty -*  
*S. F. Rigart -*

*Witnesses -*  
*Edw. F. Brown.*  
*J. P. Cowl*



# UNITED STATES PATENT OFFICE.

WILLIAM H. WIGHT, OF PRINCESS ANNE COUNTY, VIRGINIA, ASSIGNOR TO  
HIMSELF AND GEORGE H. WIGHT, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN SOLDERING-TOOLS.

Specification forming part of Letters Patent No. **135,025**, dated January 21, 1873.

*To all whom it may concern:*

Be it known that I, WILLIAM H. WIGHT, of Princess Anne county, State of Virginia, have invented a Copper or Iron Tool for Soldering Purposes; and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction of the soldering-tool, made of copper or iron, heated internally so as to form a perfect combustion of the gas, the gas putting in motion a current of air, drawing it into the stem at the base of the flame, and increasing the heat, causing a perfect combustion.

A represents the tool, made of copper, iron, or any proper metal to answer the purpose of a soldering-tool, having round and oblong apertures B B in the sides to assist the combustion; and apertures C C in the lower end to admit drafts of atmospheric air to increase the flame D of the burning gas in the inside of the hollow tool and consume all the gas, so that little or no fuel is lost. The bottom of the tool A is screwed into the lower end of the tool, and has an aperture in its center with a female screw to admit the hollow handle E,

and allow it to be screwed in as far as required to be adjusted, by which adjustment the flame in the inside can be diminished or lengthened; and also slightly regulating the flow of gas when the tool is sufficiently heated. In the hollow handle E, just below the bottom of the tool, is an aperture, G, through which the atmospheric air is admitted, the air being sucked in and forced forward—as indicated by the arrow—by the force of the gas passing from the center-pin hole of the angular-shaped plug H. Near the lower end of the stem or handle E is an attachment or short pipe, J, through which gas is admitted into the stem E; but the gas may, if desired, be admitted into the end of the stem or handle E at K by attaching the rubber or flexible gas-pipe L to the extreme end of the handle.

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

The hollow soldering-tool A, provided with tube E, aperture G, and plug H, all substantially as described.

WILLIAM H. WIGHT.

Witnesses:

J. FRANKLIN REIGART,  
EDM. F. BROWN.