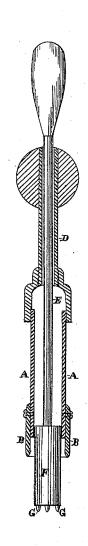
## T. J. WALSH. SOLDERING-IRONS.

No. 195,061.

Patented Sept. 11, 1877.



Witnesses In L. Doone Olwydd Stary Inventor
Phomas & Walsh
By Dewy & Altyje

## UNITED STATES PATENT OFFICE.

THOMAS J. WALSH, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN SOLDERING-IRONS.

Specification forming part of Letters Patent No. 195,061, dated September 11, 1877; application filed April 30, 1877.

To all whom it may concern:

Be it known that I, THOMAS J. WALSH, of the city and county of San Francisco and State of California, have invented an Improved Soldering-Iron; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had the accompanying drawings.

My invention relates to an improvement in irons such as are used for soldering can-tops, &c., in which a circular ring of copper is employed to fit the rim to be soldered. The difficulty in heating these irons without burning and spoiling the copper ring is very great, and is a serious annoyance.

My invention consists in the employment of an interior solid cylinder of iron, which is connected with a rod and handle, so as to be movable longitudinally; and this cylinder is thrust forward, so as to be heated by the fire without exposing the copper ring, and is withdrawn into the ring, to which it communicates its heat for use.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a longitudinal section of my iron.

A is an iron tube, of sufficient size to allow the copper ring B, which acts as a solderingring, to be secured to it by set-screws, or in any other suitable manner. D is a smaller

tube, which is a continuation of the larger one, and serves as a guide for the rod or handle E, which passes through it. At the lower end of this rod E a cylinder, F, is secured. This cylinder is of a size sufficient to fill the tube A and move in it. Points G upon its outer end serve to steady the top or cover to be soldered while the soldering-ring is being turned upon it to melt the solder.

The handle E is made long enough to allow the cylinder F to be thrust forward and outside of the ring B; and it will thus be seen that this cylinder can be heated to any degree and communicate its heat to the ring B without exposing the latter to the intense heat of the fire, so as to burn it or destroy the tinning upon it.

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

The movable cylinder F and handle E, in combination with the soldering-ring B and its supporting-tubes, substantially as and for the purpose herein described.

In witness whereof I have hereunto set my hand and seal.

THOS. J. WALSH. [L. S.]

Witnesses: GEO. H. STRONG, OLWYN T. STACY.