

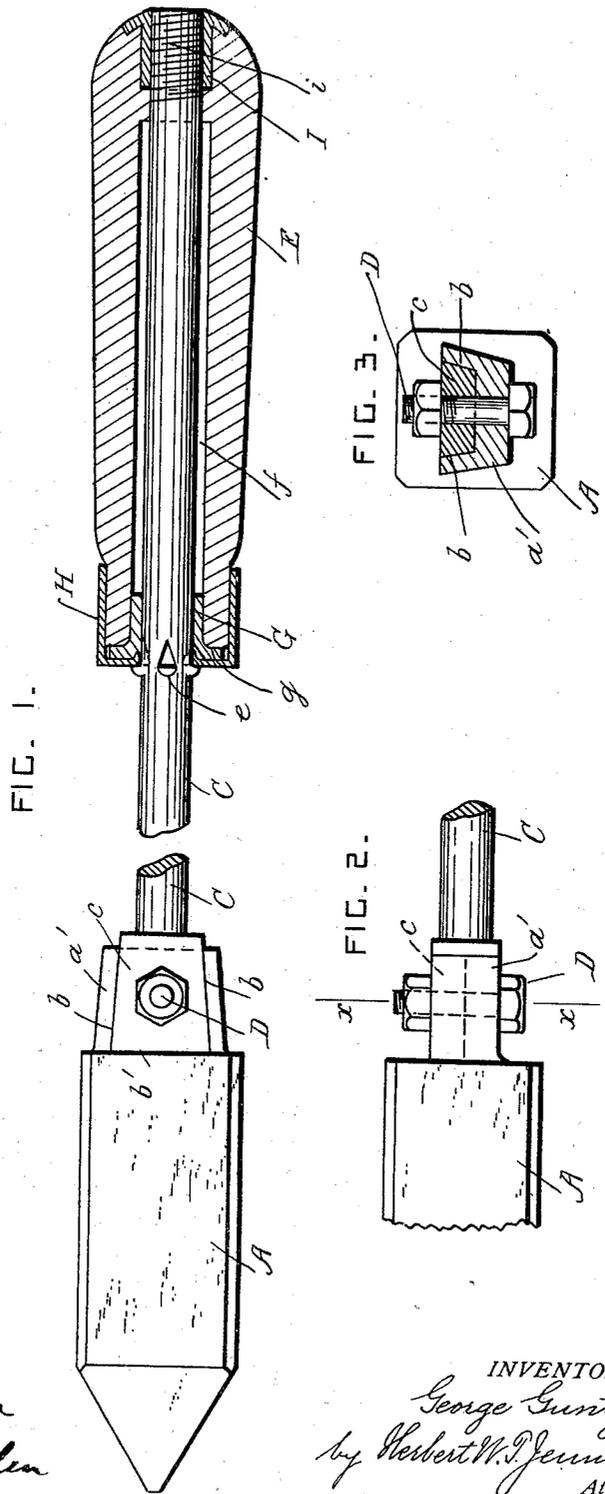
No. 705,752.

Patented July 29, 1902.

G. GUNTZ.
SOLDERING IRON.

(Application filed Dec. 5, 1901.)

(No Model.)



WITNESSES
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UNITED STATES PATENT OFFICE.

GEORGE GUNTZ, OF BROOKLYN, NEW YORK.

SOLDERING-IRON.

SPECIFICATION forming part of Letters Patent No. 705,752, dated July 29, 1902.

Application filed December 5, 1901, Serial No. 84,783. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GUNTZ, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Soldering-Irons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to soldering-irons; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a plan view of the soldering-iron, showing the handle in section. Fig. 2 is a side view of the socket. Fig. 3 is a cross-section taken on the line $x x$ in Fig. 2.

A is the copper head of the soldering-iron, provided with a socket a' at one end. This socket has tapering sides b , and it is wider at its end b' next to the head than at the other end.

C is the shank, provided with a plate c at one end. This plate has tapering sides and is broader at its extreme end, so that it may readily be dropped into engagement with the socket a' of the head.

D is a bolt which passes through the plate and the back of the socket and secures the head to the shank. The head is readily removable, and other heads of different size and weight may be secured to the shank in a similar manner.

The shank C is provided with projections e , which are struck up from its surface with a suitable tool, and these projections form an abutment or stop for the handle.

E is the handle, provided with a chamber f of larger diameter than the shank, so that an air-space is formed around the shank.

G is a collar of asbestos or other similar material which is a bad conductor of heat. This collar is inserted in one end of the chamber f around the shank, and it has a flange g , which bears against the end of the handle.

H is a metallic ferrule or cap which encircles the end portion of the handle and incloses the flange g and bears against the pro-

jections or stop e . The other end i of the shank is screw-threaded, and I is a nut which is let into the end of the handle and which engages with the screw-threaded end i , thereby securing the shank in position and drawing the projections e tight against the end of the ferrule. The air-chamber and collar prevent the heat of the shank from destroying the handle.

What I claim is—

1. In a soldering-iron, the combination, with a removable head provided with a socket which has tapering sides and is broadest at its end next to the head, said socket being open on top and at its narrow end, of a shank provided with a plate which fits the said socket, and a fastening device which secures the said plate in the said socket, substantially as set forth.

2. In a soldering-iron, the combination, with a shank provided with a head at one end and a series of projections struck up from its sides, of a handle which abuts against the said projections, and means for securing the said handle on the shank, substantially as set forth.

3. In a soldering-iron, the combination, with a shank, of a handle provided with an air-chamber around the shank, a collar of non-heat-conducting material encircling the shank and inserted in one end of the said chamber, and means for securing the shank in the handle, substantially as set forth.

4. In a soldering-iron, the combination, with a shank having a stop for the handle, of a handle provided with an air-chamber around the shank, a collar of non-heat-conducting material inserted in one end of the said chamber and provided with a flange, a ferrule which bears against the said stop and incloses the said flange, and means for securing the shank to the handle, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE GUNTZ.

Witnesses:

M. S. BOYLAN,
GEORGE GUNTZ, Jr.