

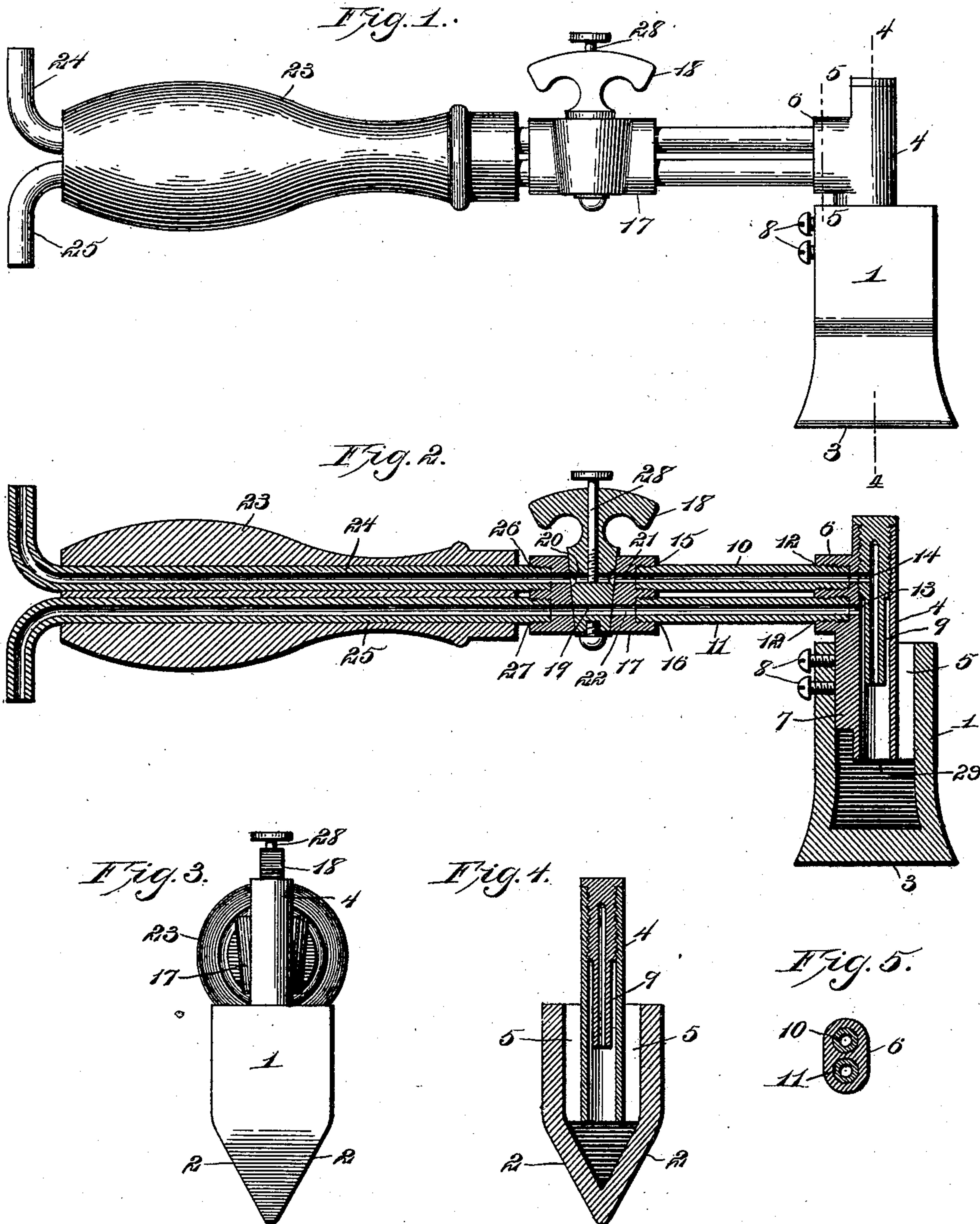
No. 667,259.

Patented Feb. 5, 1901.

W. F. SOMES.
SOLDERING TOOL.

(Application filed Feb. 20, 1900.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

WALTER F. SOMES, OF BOSTON, MASSACHUSETTS.

SOLDERING-TOOL.

SPECIFICATION forming part of Letters Patent No. 667,259, dated February 5, 1901.

Application filed February 20, 1900. Serial No. 5,953. (No model.)

To all whom it may concern:

Be it known that I, WALTER F. SOMES, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Soldering-Tools, of which the following is a specification.

My invention relates to soldering-tools of the class in which the soldering-block is kept heated by means of a flame applied directly to the interior of the block; and the primary object of the invention is to provide improved means for heating the block.

The construction of the tool will be fully described hereinafter and defined in the appended claims, in connection with the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of a tool embodying the invention. Fig. 2 is a central vertical longitudinal section of the same. Fig. 3 is a front elevation of the tool. Fig. 4 is a transverse vertical section on the line 4 4 of Fig. 1, and Fig. 5 is a section on the line 5 5 of Fig. 1.

The reference-numeral 1 designates a hollow soldering-block, which may be of any preferred size and shape, having its walls converged to form the soldering edge 3. Within the block 1 is arranged a casting comprising a tube 4, formed with vertical webs or flanges 5, a rearwardly-extending sleeve 6, and a bracket 7. The casting is supported within the open upper end of the block 1 by set-screws 8, extending through the rear wall of the block and bearing upon the bracket 7 of the casting to hold the webs or flanges 5 in firm contact with the inner surface of the block. Within the tube 4, which is the gas-supply tube of the device, is arranged a tube 9, closed at its upper end and having a threaded or other connection with the gas-tube 4. The tube 9 is for the admission of compressed air or steam.

10 and 11 designate pipes extending at one end through openings 12 in the sleeve 6 and communicating by passages 13 and 14, respectively, with the tubes 4 and 9. The opposite ends of the pipes 10 and 11 are secured within sockets 15 and 16 of a coupling 17, which is vertically bored to receive a valve or turning plug 18, formed with passages 19

and 20, and longitudinally bored to form passages 21 and 22, adapted to register with the passages 19 and 20 of the valve and with the gas and air pipes 10 and 11.

23 designates the handle of the tool, formed with parallel longitudinal openings to receive supply-pipes 24 and 25, the forward ends of which project beyond the end of the handle and are secured to sockets 26 and 27 in the rear end of the coupling 17.

The upper portion of the plug 18 is bored to receive a rotary valve 28, which controls the supply of air or steam to the tube 9.

The utility and operation of the device will be readily understood. The admixed air and gas are ignited at the point 29, and the flame spreads over the entire inner surface of the block, the products of combustion escaping through the open upper end of the block.

It will be obvious that a steady and constant heat can be supplied, so that the temperature of the block will be even and uniform, thus avoiding the necessity of frequently retinning the tool, which is ordinarily caused by variations in the temperature of the block.

The air and gas are supplied from any suitable source, the air being under slight pressure. The pipe connection and controlling valves for the air and gas may be constructed and arranged in any suitable manner, the invention not being restricted to the precise construction of the details shown in the drawings, but including all such modifications and variations as may fall within the scope of the following claims.

I claim—

1. A soldering-tool comprising a hollow block; a casting consisting of a tube having vertical webs or flanges, a rearwardly-extending sleeve, and a bracket; a handle; fluid-supply pipes within the handle; pipes secured at one end to said casting, and at their opposite ends to a valved coupling to which the supply-pipes within the handle are also secured.

2. A soldering-tool comprising a hollow block having its walls converged to form a soldering edge; a casting arranged within said block, and consisting of a tube formed with vertical webs or flanges, a rearwardly-extending sleeve, and a bracket; set-screws

extending through openings in said block and
impinging against said bracket; a tube ar-
ranged within the tubular portion of the
casting; fluid-supply pipes connecting the
5 casting with a coupling; and a handle carry-
ing supply-pipes which communicate with the
coupling.

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

WALTER F. SOMES.

Witnesses:

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