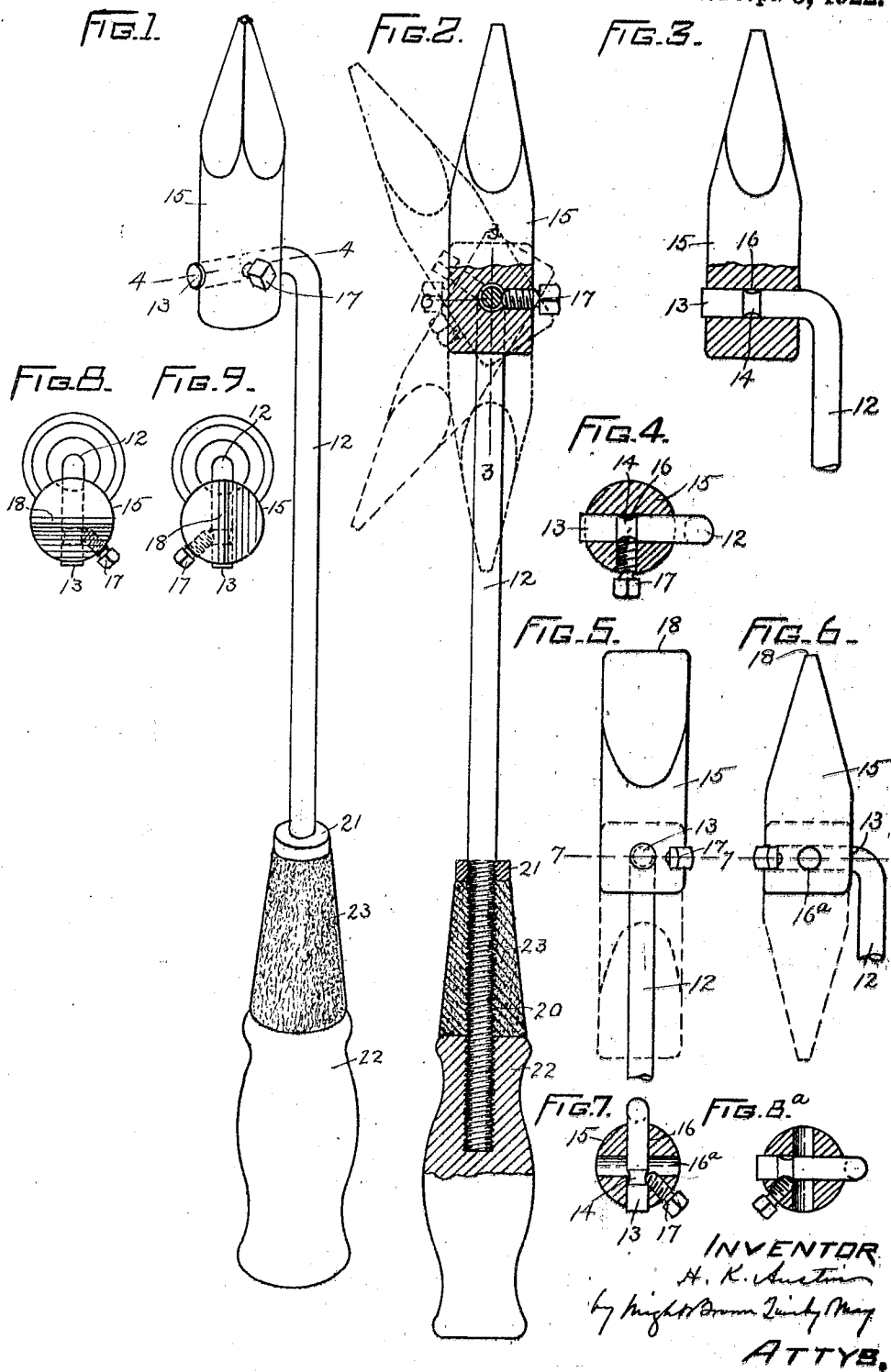


1,427,770.

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UNITED STATES PATENT OFFICE.

HENRY K. AUSTIN, OF READING, MASSACHUSETTS.

SOLDERING TOOL.

Application filed February 28, 1921. Serial No. 448,306.

To all whom it may concern:

Be it known that I, HENRY K. AUSTIN, a citizen of the United States, residing at Reading, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Soldering Tools, of which the following is a specification.

This invention relates to a soldering tool comprising a copper bit and a shank to which the bit is secured, the shank being provided with a handle.

The object of the invention is to enable the bit to be revolvably mounted on the shank, so that it may be turned to many different positions, and stand at many different angles relatively to the shank, and may be folded beside the shank to reduce the length of the tool and enable it to be conveniently stored when not in use.

The invention is embodied in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings forming a part of this specification,—

Figure 1 is a perspective view of my improved tool.

Figure 2 is a side view, parts being shown in section.

Figure 3 is a fragmentary side view, the bit being shown in section on line 3—3 of Figure 2.

Figure 4 is a section on line 4—4 of Figure 1.

Figures 5 and 6 are side views, showing a chisel-shaped bit, a portion of the shank being broken away.

Figure 7 is a section on line 7—7 of Figure 5.

Figures 8 and 9 are end views of the tool shown by Figures 5 and 6.

Figure 8^a is a view similar to Figure 7.

The same reference characters indicate the same parts in all of the figures.

In the drawings, 12 represents a shank, and 13 an arm at one end of the shank, said arm and shank being formed by bending a cylindrical metal rod near one of its ends. In the arm is formed a peripheral groove

14. 15 represents an elongated copper bit, having in its inner end portion a socket 16 formed to fit the arm 13. The bit is revolvable on the arm through a complete circle, and is provided with a set screw 17, adapted to engage the groove 14, and lock the bit in any angular position to which it may be

revolved. The bit may, therefore, be moved to and locked in the position shown by full lines, to elongate the tool to its maximum length, or in the lowest dotted line position shown by Figure 2, to reduce the tool to a minimum length for storage in a tool box. The bit may also be moved to various intermediate positions, as the nature of the work performed may require, some of these positions being shown by dotted lines in Figure 2.

The acting end of the bit may be pyramidal, as shown by Figures 1, 2 and 3, or may be chisel-shaped, and provided with a thin edge 18, as shown by Figures 5, 6, 8 and 9.

When the tool is formed as last described, it is preferably provided with an additional arm-receiving socket 16^a, intersecting the socket 16. In this case the groove 14 and set screw 17 are arranged as shown by Figures 7, 8 and 9, the set screw being engageable with the groove to hold the edge 18 either at right angles with the arm 13, as shown by Figures 5, 6, and 8, or parallel with said arm, as shown by Figure 9. The operator is therefore enabled to adjust the edge 18 to suit different requirements of the work in hand.

The shank 12 may be provided with a screw thread 20 at its outer end portion, and with a fixed collar 21 at the inner end of the screw thread.

With the rod may be engaged an outer wooden handle section, internally threaded to engage a portion of the thread 20. Between the section 22 and the collar 21 may be interposed and clamped an inner handle section 23, which is a sleeve molded from asbestos fiber, rendered suitably plastic and solidified by drying after being molded.

I claim:

1. A soldering tool comprising a cylindrical rod, bent near one end to form a shank, and an arm, the latter having a peripheral groove, an elongated bit having an arm-receiving socket in its inner end portion and revolvable through a complete circle on the arm, the bit being provided with a set screw adapted to engage said groove and lock the bit to the arm at any point to which the bit may be revolved, so that the bit may be locked in a position parallel with the shank, and projecting either outward or inward from the arm, either to elongate

or contract the tool, and may also be locked in various intermediate angular positions, the shank being provided with a handle at the end opposite the arm.

- 5 2. A soldering tool comprising a cylindrical rod, bent near one end to form a shank, and an arm, the latter having a peripheral groove, an elongated bit provided with a chisel point extending across

its outer end and provided with two intersecting arm-receiving sockets, and with a set screw adapted to engage said groove and lock the bit to the arm with the chisel point either parallel with the arm, or at right angles thereto. 10 15

In testimony whereof I have affixed my signature.

HENRY K. AUSTIN.