No. 663,615. Patented Dec. 11, 1900.

W. H. SCOTT.

PYROGRAPHICAL TOOL.

(Application filed Aug. 10, 1900.)

(No Model.)

Fig. 1,

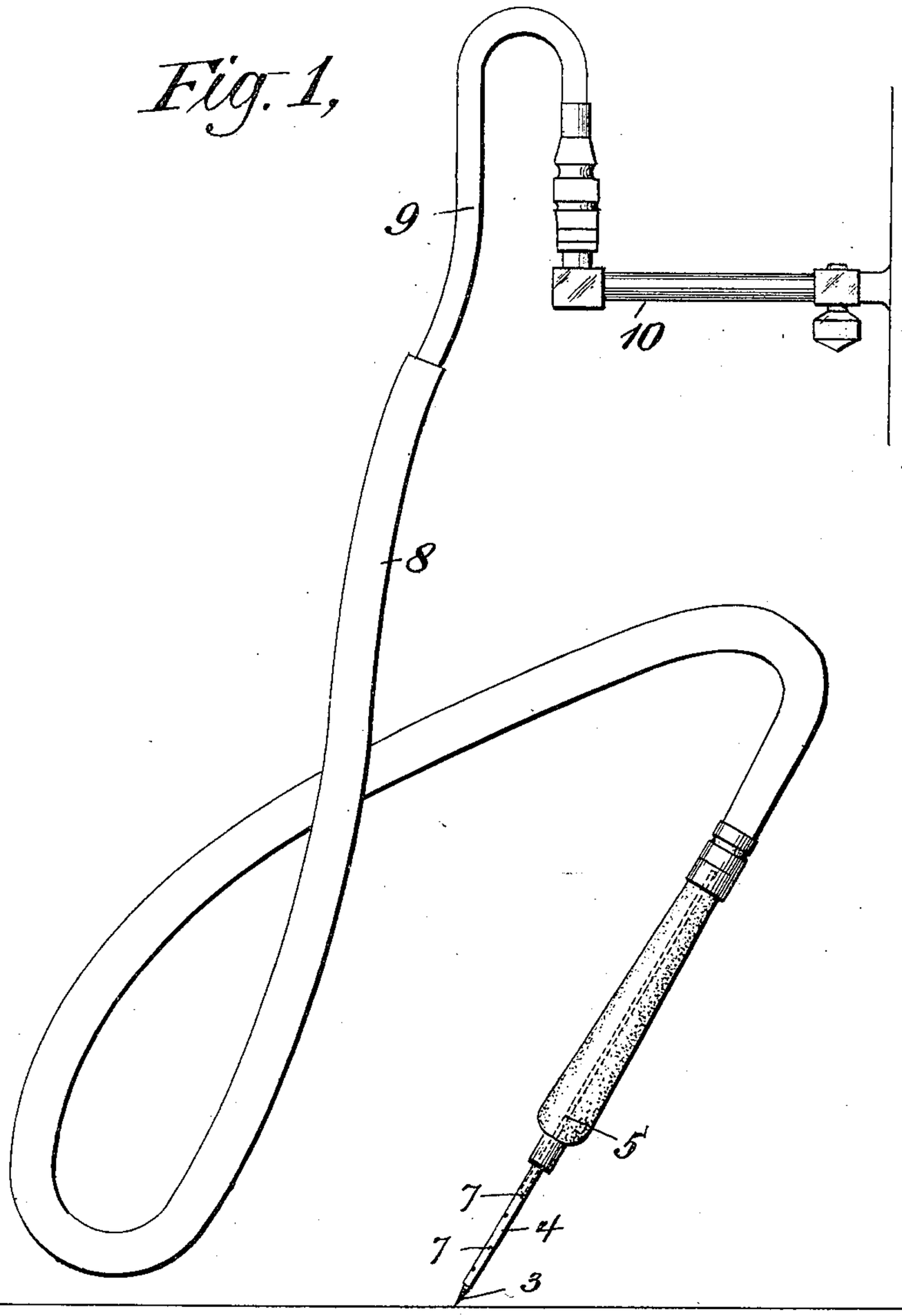
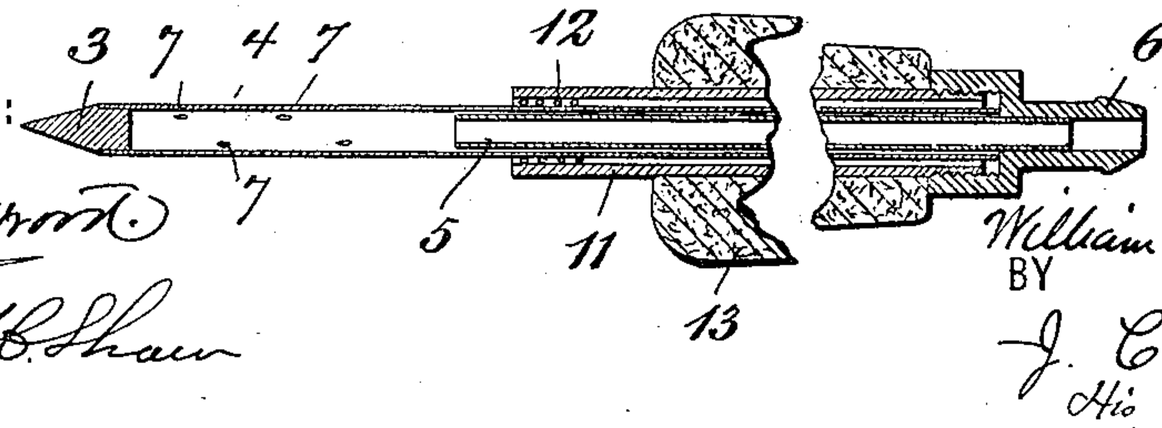


Fig. 2,



WITNESSES:

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PYROGRAPHICAL TOOL.

SPECIFICATION forming part of Letters Patent No. 663,615, dated December 11, 1900.

Application filed August 10, 1900. Serial No. 26,475. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENDERSON SCOTT, a citizen of the United States of America, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Pyrographical Tools, of which the following is a specification.

My invention relates to improvements in pyrographical tools; and it consists in the provision of means whereby a metal point may be heated to the desired extent for use in the art of pyrography by means of a connection with a source of supply of ordinary illuminating-gas.

The objects of my invention are to improve and simplify tools of this description, to provide for a concentration of the heat at the desired portion therein, and to construct the tool in such a manner that it may be handily operated. I attain these objects in and by the device which I will now proceed to describe in detail and will then point out the novel features in the claim.

In the drawings, Figure 1 is an elevational view of a pyrographical tool embodying my invention, the same being connected to a gas-bracket. Fig. 2 is a detail central longitudinal section of the tool, the central portion being broken away and the ends moved toward each other for the purpose of illustrating the same upon an enlarged scale and the rubber-tube connection thereof being removed.

Similar reference characters designate corresponding parts in both the figures.

Reference character 3 designates the point or pencil of the tool, which is preferably made of copper or platinum. The point 3 is supported in a tube or holder 4, which in turn is mounted upon a comparatively long tube 5 of very small diameter. The opposite end of the tube 5 is secured into a coupling-piece 6. The relative length and diameter of the tube 5 may be more readily understood by reference to Fig. 1, in which the tube is shown in dotted lines. A number of orifices 7 7 are drilled into the tube or holder 4 and are located between the end of the tube 5 and the point 3. A flexible hose—as, for instance, a rubber hose 8—is secured to the coupling 6 at one end, and the other end is secured to a branch 9, which is adapted to fit over the pedestal of an ordinary gas-bracket. 10 designates such a gas-bracket.

When the gas is turned on, it will pass through the tube 8 and will be conducted into the tube 5 and through the orifices 7. When lighted and burning at these orifices, the heat thereof will be sufficient to heat the point 3 to an extent sufficient for use in the art of pyrography.

A shield 11 is arranged around the tube or holder 4. One end of this shield is screwed into a coupling-piece 6, and the other end is supported upon the tube or holder 4 and correctly spaced away from it by means of a coil of wire 12. In this manner an air-space open to the atmosphere and around which air may freely circulate is always maintained between the shield 11 and the tube or holder 4. The shield 11 is thus prevented from becoming unduly heated and may be held in the hand without inconvenience. For further convenience I preferably provide the shield with a covering or pad of non-conducting material, such as cork. Such covering is designated by reference character 13 in the drawings.

The tool may be used in the ordinary manner, as is common in tools of this description, by grasping the holder and tracing the lines with the point 3 upon wood, leather, and other material upon which it is desired to operate. The degree to which it is desired to heat the point 3 may be nicely and accurately adjusted by the manipulation of the cock upon the gas-bracket, and in this way the danger of overheating, which is so great in devices where compressed air or gas is employed, is obviated.

What I claim is—

The combination in a pyrographical tool, of a point to be heated, a tube or holder 4 having burner-orifices 7, a tube 5 upon which the tube or holder 4 is mounted, the opposite end of the tube 5 being secured to a coupling-piece 6, a shield 11 secured to one end of the coupling-piece and spaced at its opposite end from the tube 4 by suitable spacing connection, and a pad of non-conducting material, as 13, mounted upon the shield 11.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM HENDERSON SCOTT.

Witnesses:
C. F. CARRINGTON,
EDW. B. HAWKINS.