

L. QUOSBARTH.
PYROGRAPHIC POINT.
APPLICATION FILED JUNE 16, 1909.

957,625.

Patented May 10, 1910.

Fig. 1.

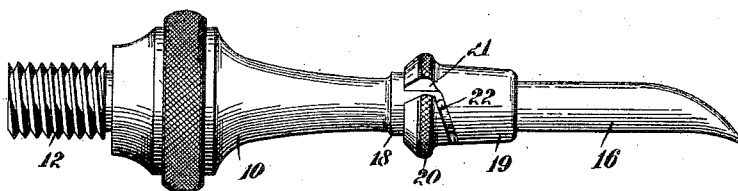


Fig. 2.

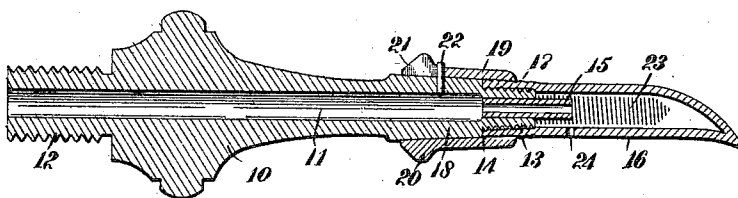
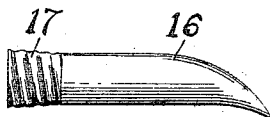


Fig. 3.



WITNESSES

J. A. P. Myers
C. W. Fairbank

INVENTOR

Ludwig Quosbarth

BY

Mum & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

LUDWIG QUOSBARTH, OF NEWARK, NEW JERSEY.

PYROGRAPHIC POINT.

957,625.

Specification of Letters Patent.

Patented May 10, 1910.

Application filed June 16, 1909. Serial No. 502,403.

To all whom it may concern:

Be it known that I, LUDWIG QUOSBARTH, a citizen of the United States, and a resident of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Pyrographic Point, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in the construction of tools or points of pyrographic burners, thermocauters and cauterizing tools, and to the means for securing of the tip or point in place. The body of tools of this character is commonly formed of brass or other suitable metal, whereas the point is formed of platinum. It is often necessary to replace the tips by larger or smaller ones, or tips of a different character, and it is necessary that the tip be so connected that it may be very readily and quickly removed when desired. It is also necessary that the tip be firm and rigid when in place.

The main object of my invention is to so form the tip and the securing means therefor that the tip cannot work loose in use, but may be instantly and easily removed when desired to replace or repair.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a side elevation of the burner end of a pyrographic tool constructed in accordance with my invention; Fig. 2 is a longitudinal section through the same; and Fig. 3 is a side elevation of the platinum tip or point.

In the specific form illustrated, I employ a body 10, having a central passage 11 therethrough and having one end of the body provided with a threaded stem 12, or with any other suitable means for securing the body to a handle or other holding means. At the opposite end the body is provided with a slightly conical threaded portion 13 of somewhat smaller diameter than the main portion of the body, the threaded portion terminating at a shoulder 14. Extending through this threaded portion, I preferably provide a small tube 15, through which the flame or gases escape into the platinum point 16. This platinum point 16 may be of any shape, size or form desired, dependent upon the character of the work to be done, it only being essential that the point have an interior chamber into which the

flame from the tube 15 is delivered. The rear end portion 17 of the platinum point is slightly expanded or conical, and is provided with threads to receive the threaded portion 13 of the body. These threads are formed directly on the platinum shell rather than being brazed on with other metal, as has been done in other constructions heretofore employed. In other words, the shell is made from a single piece of platinum without seams, joints or solder, and is thus inexpensive to manufacture and very durable. When the point is screwed into place, the rear end abuts against the shoulder 14 and the outer surface of the point is flush with the outer surface of the adjacent portion 18 of the body. This portion 18 and also the adjacent exterior surface of the platinum point, are slightly conical and fit a conical bore in the exterior collar 19. This collar is placed in position after the tip is screwed on to the threaded extension 13, and the collar is of such length that it overlaps the line of separation between the end of the point and the adjacent portion 18 of the body. The collar is provided with a milled ridge or flange 20, by means of which it may be readily turned, and is also provided with a bayonet slot 21, adapted to receive an outwardly-extending pin 22, carried by the conical portion 18 of the body. The major portion of the bayonet slot extends diagonally, so that after the threaded portion is threaded up against the shoulder 14 and the collar 19 is placed in position and rotated, the rotation will draw the collar lengthwise and cause it to tightly wedge upon the outer surface of the point and body. The angle of the slot and the friction of the collar is such that said collar is retained in position, and as the base end of the platinum point is gripped both interiorly and exteriorly, it cannot loosen by expansion and contraction or by pressure during the use of the tool.

The inner tube 15 may have a platinum spring 23, secured thereto and extending into the tube to act as an igniter and prevent the flame from coming out, and the tip may have a gas escape port 24, but these are features constituting no portion of my present invention.

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

A device of the class described, having a

body presenting a conical portion and a threaded extension at the smaller end thereof, a platinum point having a hollow base portion corrugated to present inwardly and
5 outwardly-facing threads, the inwardly-facing thread having engagement with said threaded extension and the outer surface of the base portion terminating substantially flush with the smaller end of the conical portion, a collar having a conical bore receiving said conical portion and the base portion
10 of said point, and means for detachably se-

curing said collar to said body and moving the collar longitudinally to frictionally bind against the outwardly-facing threads of the 15 point.

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

LUDWIG QUOSBARTH.

Witnesses:

CONRAD EISENACH,
HENRY BENDER.