

M. R. CARR.
PYROGRAPHIC NEEDLE.
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1,137,573.

Patented Apr. 27, 1915.

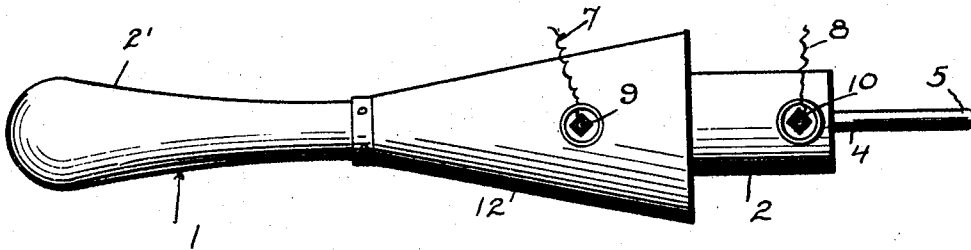


Fig. 1.

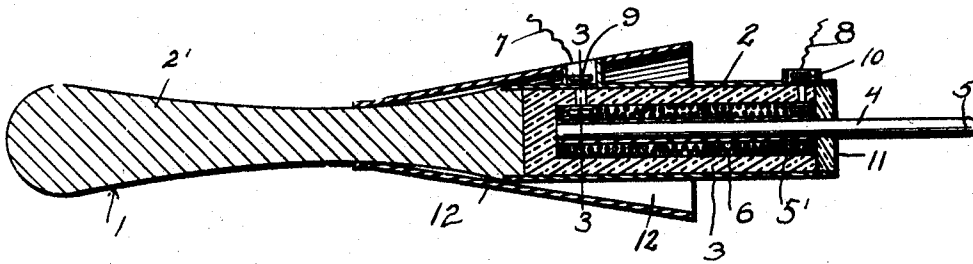


Fig. 2.

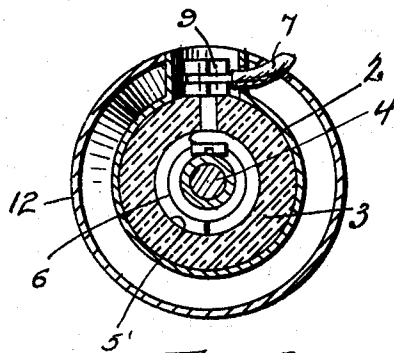


Fig. 3.

Witnesses

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PYROGRAPHIC NEEDLE.

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To all whom it may concern:

Be it known that I, MICHAEL R. CARR, a citizen of the United States, residing at Corte Madera, in the county of Marin and State of California, have invented certain new and useful Improvements in Pyrographic Needles; 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 improvements in pyrographic needles, and the primary object of the invention is the provision of a pyrographic needle structure which embodies therein means for heating the needle preparatory to the burning of designs upon wood, leather or the like.

Another object of the invention is the provision of an auxiliary casing positioned exteriorly of the ordinary protective casing of the needle, which is spaced outwardly from the protective casing, so as to provide a gripping surface for the fingers of the person operating the needle, and to eliminate the liability of burning the fingers while using the same.

With the foregoing and other objects in view, this invention consists in such novel features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawings, and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings, wherein like characters of reference designate like or corresponding parts throughout the several views, and in which:—

Figure 1 is a plan view of the improved pyrographic needle, Fig. 2 is a longitudinal central sectional view, and Fig. 3 is a cross sectional view on the line 3—3 of Fig. 2.

Referring more particularly to the drawings, 1 designates the pyrographic needle structure as an entirety, which has the handle 2' formed thereupon, which handle is constructed of any suitable material such as wood or the like and has a casing 2 secured to the outer surface adjacent one terminal end thereof, which casing protrudes outwardly from the end of the handle and is cylindrical in shape, having a porcelain tube

3 mounted therein. The tube 3 may be constructed of porcelain, fiber, or any other suitable non-conducting material, this feature being left to the discretion of the person manufacturing the device. The tube 3 has the needle 4 disposed centrally within the bore 5' thereof, and the needle 4 projects outwardly from one end of the casing, having its outer terminal end 5 shaped for the tracing or burning of lines upon wood, leather, or other similar material, such as is used in the pyrographic art.

The portion of the needle 4 which is positioned interiorly of the tube 3 has coiled thereabout an electrical resistance coil 6, which coil has communication through the electrical conductors 7 and 8 to the opposite poles of any suitable electrical supply source, such as batteries or the like. The electrical conductors 7 and 8 are connected to the resistance coil 6 through the medium of binding posts 9 and 10, which posts extend outwardly through the tube 3 and the casing 2. A washer or collar 11, which is also constructed of porcelain or non-conductive material is mounted in the outer end of the casing 2, and abuts the outer end of the tube 3, forming a closure for the end of the tube and protecting the end of the resistance coil 6 which is mounted in the bore 5' of the tube.

The handle 2' of the pyrographic needle structure 1 has an auxiliary casing 12 secured thereto, which casing is substantially frusto-conical shaped, having its reduced end attached to the handle, and flaring outwardly therefrom as is clearly shown in Fig. 2 of the drawings, so as to provide a gripping portion for the fingers of the person using the needle, which will be spaced from the needle structure proper, thereby eliminating the possibility of burning the fingers while using the needle.

In reducing the invention to practice, certain minor features of construction, combination, and arrangement of parts may necessitate alterations, to which the patentee is entitled, provided such alterations are comprehended within the scope of what is claimed.

What is claimed is:—

In a pyrographic needle structure, a handle having a casing secured to one end thereof, an insulating tube mounted within

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said casing, a pyrographic needle disposed centrally within the hollow portion of said tube, an electrical resistance coil positioned about said needle within said tube for heating said needle to the desired temperature for burning designs upon various articles, and an auxiliary gripping casing secured to said handle and flaring outwardly there-

from being disposed in spaced relation with said first named casing.

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

MICHAEL R. CARR.

Witnesses:

JAS. A. HAMON,
WM. J. WATERS.