

Dec. 15, 1959

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2,917,614

CAUTERIZING DEVICE

Filed Sept. 18, 1957

Fig. 1

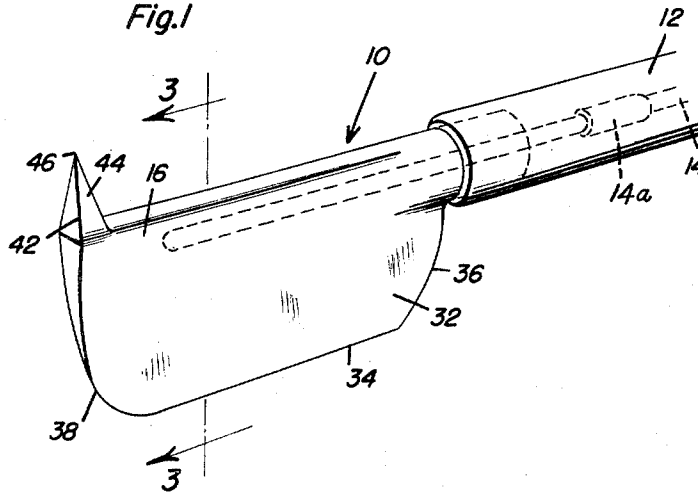


Fig. 2

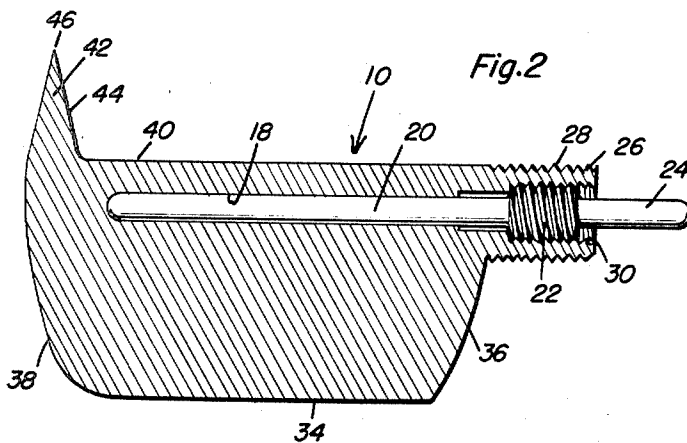


Fig. 3

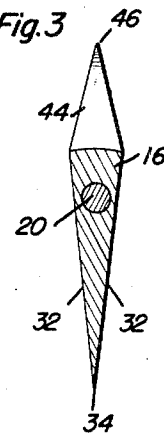
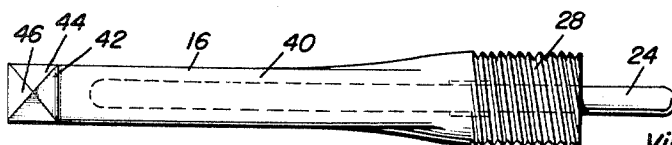


Fig. 4



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CAUTERIZING DEVICE

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Application September 18, 1957, Serial No. 684,806

3 Claims. (Cl. 219—31)

The present invention generally relates to a cauterizing device for use in conjunction with concentric electrode type soldering irons such as those shown in pending application Serial No. 642,058, of Gregory Caliri, filed February 25, 1957, for Soldering Gun.

The primary object of the present invention is to provide a cauterizing device which may be used specifically in autopsy work for obtaining an uncontaminated bacteriological culture or specimen from a cadaver whereby the present invention provides a sterile wound or incision into a diseased organ and also is capable of puncturing the sterile incision so that a probe or other suitable instrument may be employed for obtaining a sterile specimen, thus enabling the persons conducting the autopsy to render a more accurate report and to more accurately determine various facts concerning the organ.

Another object of the present invention is to provide a cauterizing device for obtaining uncontaminated culture specimens from a cadaver which is simple in construction, easy to use, efficient for its particular purposes and relatively inexpensive to manufacture.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of the cauterizing device according to the present invention;

Figure 2 is a longitudinal sectional view taken substantially upon a plane passing along the longitudinal center line of the device;

Figure 3 is a transverse, vertical sectional view taken substantially upon a plane passing along section line 3—3 of Figure 1; and

Figure 4 is a top plan view of the plan view of the device.

Referring now specifically to the drawings, the numeral 10 generally designates the cauterizing device which is shown attached to the barrel 12 of a suitable concentric electrode soldering iron with the inner electrode being shown in dotted lines and designated by numeral 14.

The device 10 includes a generally elongated body 16 having a longitudinally extending bore 18 receiving an electrode rod 20 secured therein by a screw threaded connection 22 with a projecting portion 24 being engaged in a socket 14a in the inner electrode 14 of the barrel 12. The body 16 is provided with a tubular neck 26 which is externally threaded as indicated by numeral 28 for threaded engagement with the outer electrode or barrel 12 and is also provided with internal threads as designated by numeral 30 for receiving the threaded portion 22 of the electrode rod 20.

The body 16 is provided with downwardly tapering and converging side walls 32 terminating in a sharpened bottom edge 34 having an upwardly curved rear edge portion 36 and an upwardly curved forward edge portion

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38. The body 16 is provided with a flat upper surface 40 which has an upstanding point 42 disposed at the outer end thereof. The point 42 is substantially pyramidal in construction and is defined by four upwardly converging wall surfaces 44 which coact to define a pointed extremity 46 at the upper end of the upstanding projection or point 42.

In use of the present invention, the device is connected to the gun barrel of the soldering iron with the removable electrode rod 20 being in electrical circuit with the inner electrode 14 and the body 16 being in electrical circuit with the outer electrode or barrel of the soldering iron 12. Thus when the soldering iron is energized, the entire body or blade portion of the body will become heated as will the point 42. In performing an autopsy, the blade or sharpened edge 34 will be used for searing or sterilizing an incision into a diseased organ with the edges 32 acting to sear the walls of the incision thus providing a sterile incision into the organ. The point 42 may then be employed for puncturing or penetrating the seared surface or wall of the incision so that a probe or other suitable instrument may be employed for obtaining a specimen through the puncture provided by the point 42 thus assuring that the culture specimen obtained will be uncontaminated and permitting a diagnosis or analysis of the diseased organ to be more accurately made.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In a cauterizing device, the combination of an electrical actuating apparatus including an electrically energizable barrel having an open end and an electrode disposed axially in said barrel and having its end spaced inwardly from the end of the barrel, an elongated blade-shaped body having a cutting edge at one longitudinal edge thereof and provided adjacent its other longitudinal edge with a longitudinally extending bore having a blind inner end, an internally screw-threaded neck provided integrally at one end of said body coaxially with said bore, and a removable electrode rod having a screw-threaded intermediate portion engaged in said neck and one end portion projecting outwardly therefrom, the other end portion of said rod being disposed in said bore in abutment with the blind inner end of the bore, said neck being separably connected to the end of said barrel, said projecting portion of said rod extending into the barrel and being connected to said electrode, whereby said body may be heated by passage of electric current there-through.

2. The combination as defined in claim 1 wherein the end portion of said barrel is internally screw-threaded and wherein said neck is externally screw-threaded for separable connection to the barrel.

3. A cauterizing attachment for an electrical actuating apparatus including a barrel and a coaxial electrode therein, said attachment comprising an elongated blade-shaped body having a cutting edge at one longitudinal edge thereof and provided adjacent its other longitudinal edge with a longitudinally extending bore having a blind inner end, an internally screw-threaded neck provided integrally at one end of said body coaxially with said bore, and a removable electrode rod having a screw-threaded intermediate portion engaged in said neck and one end portion projecting outwardly therefrom, the other end portion of said rod being disposed in said bore in abutment with the blind end of the bore, said neck and the projecting

portion of said rod being adapted for separable connection respectively to the barrel and electrode of an electrical actuating apparatus, whereby said body may be heated by passage of electric current therethrough.

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