

E. A. ROBERTS & N. L. JOHNSON.
ELECTRICAL HAIR SINGEING DEVICE.
APPLICATION FILED JAN. 20, 1910.

975,073.

Patented Nov. 8, 1910.

Fig. 1.

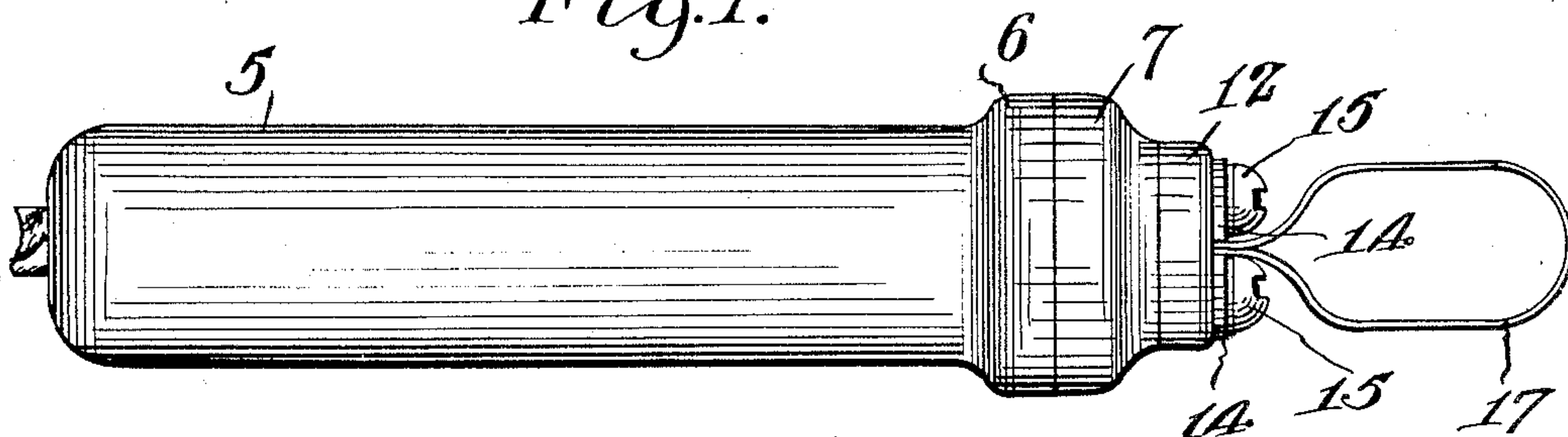


Fig. 2.

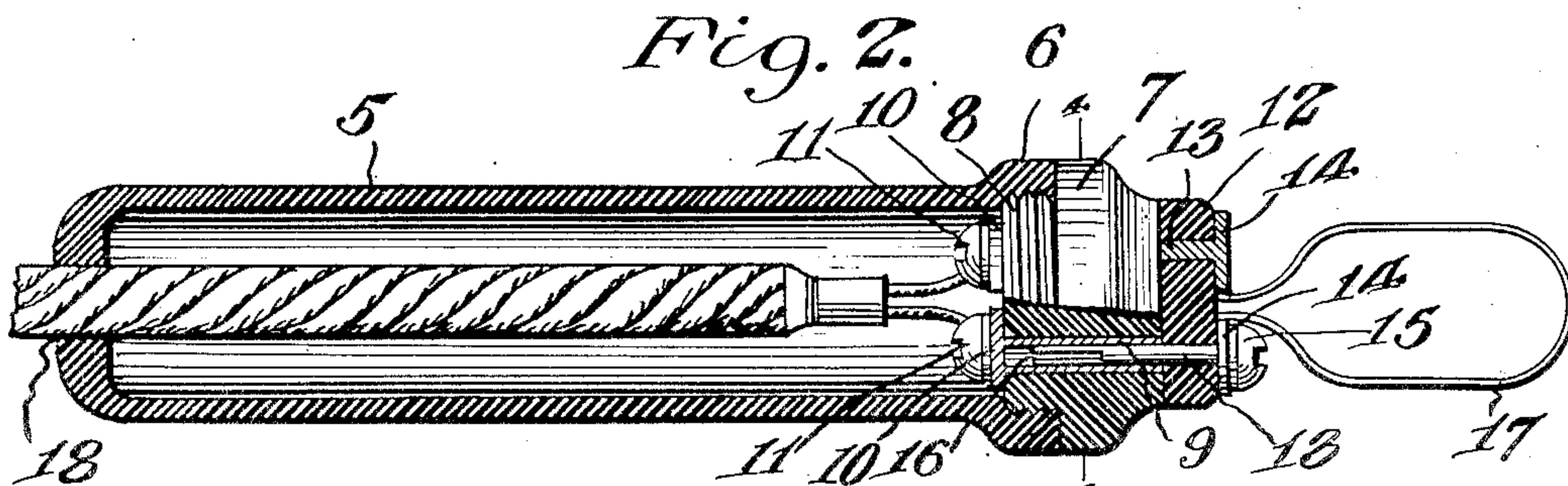


Fig. 3.

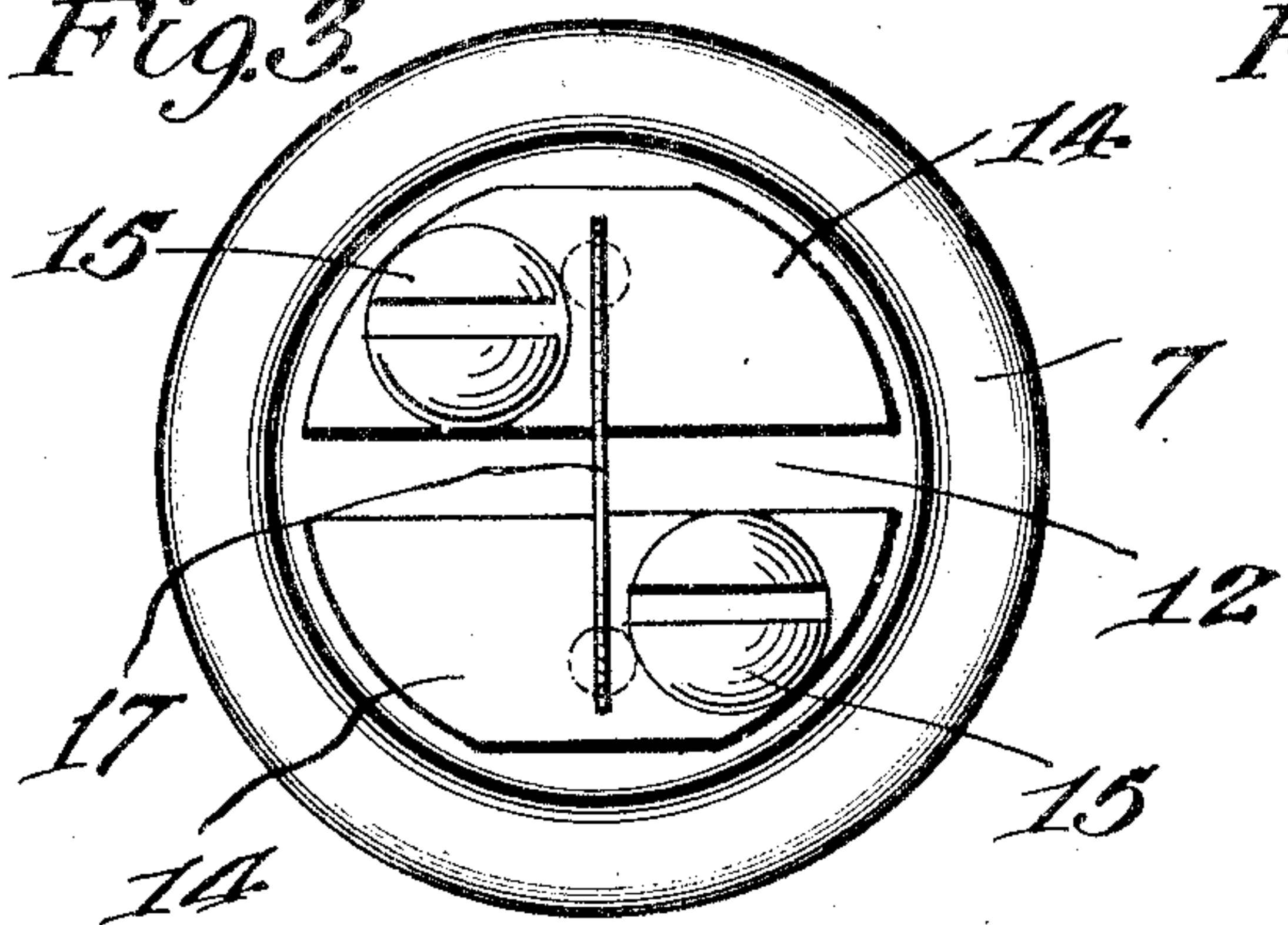


Fig. 4.

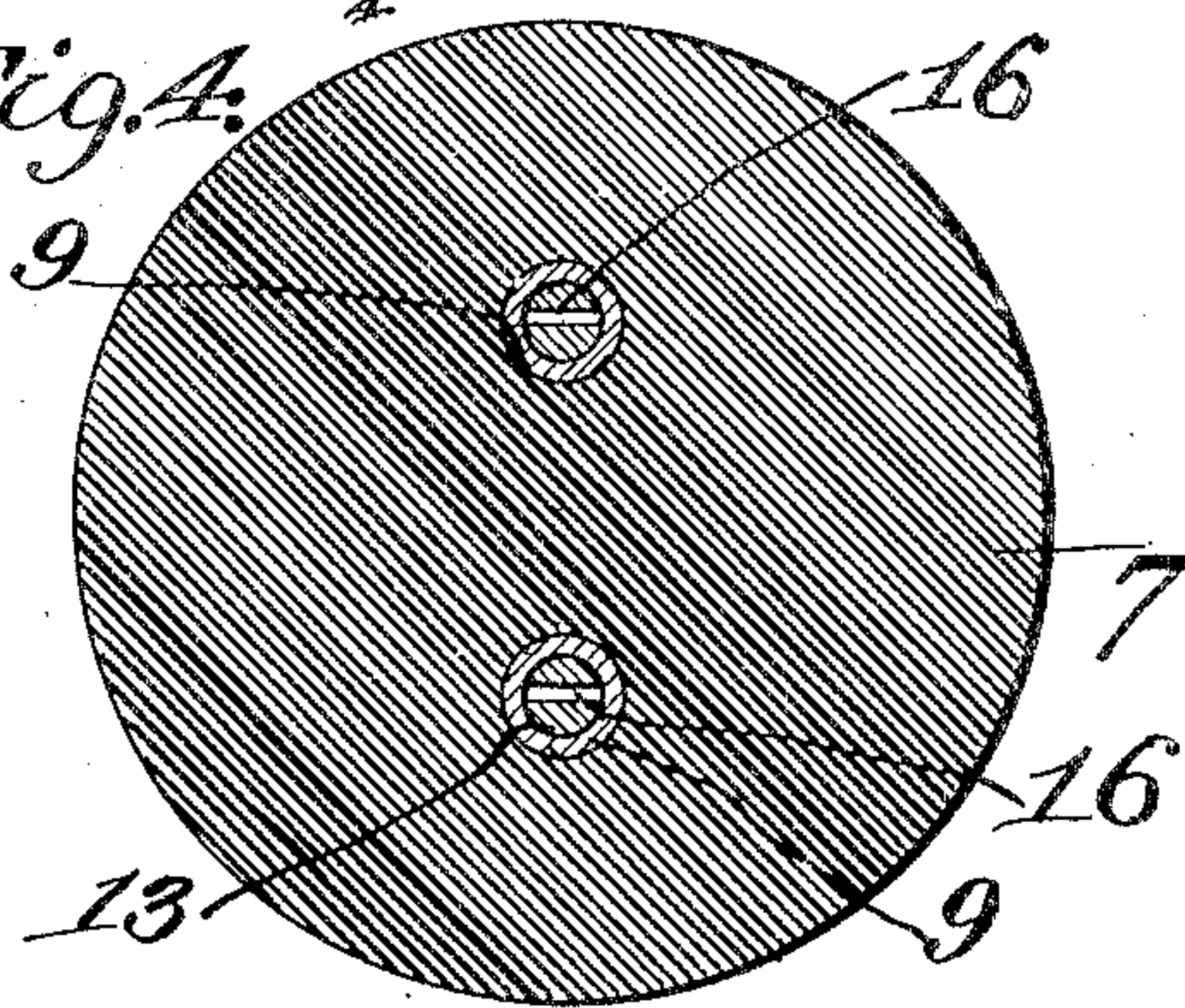


Fig. 5.

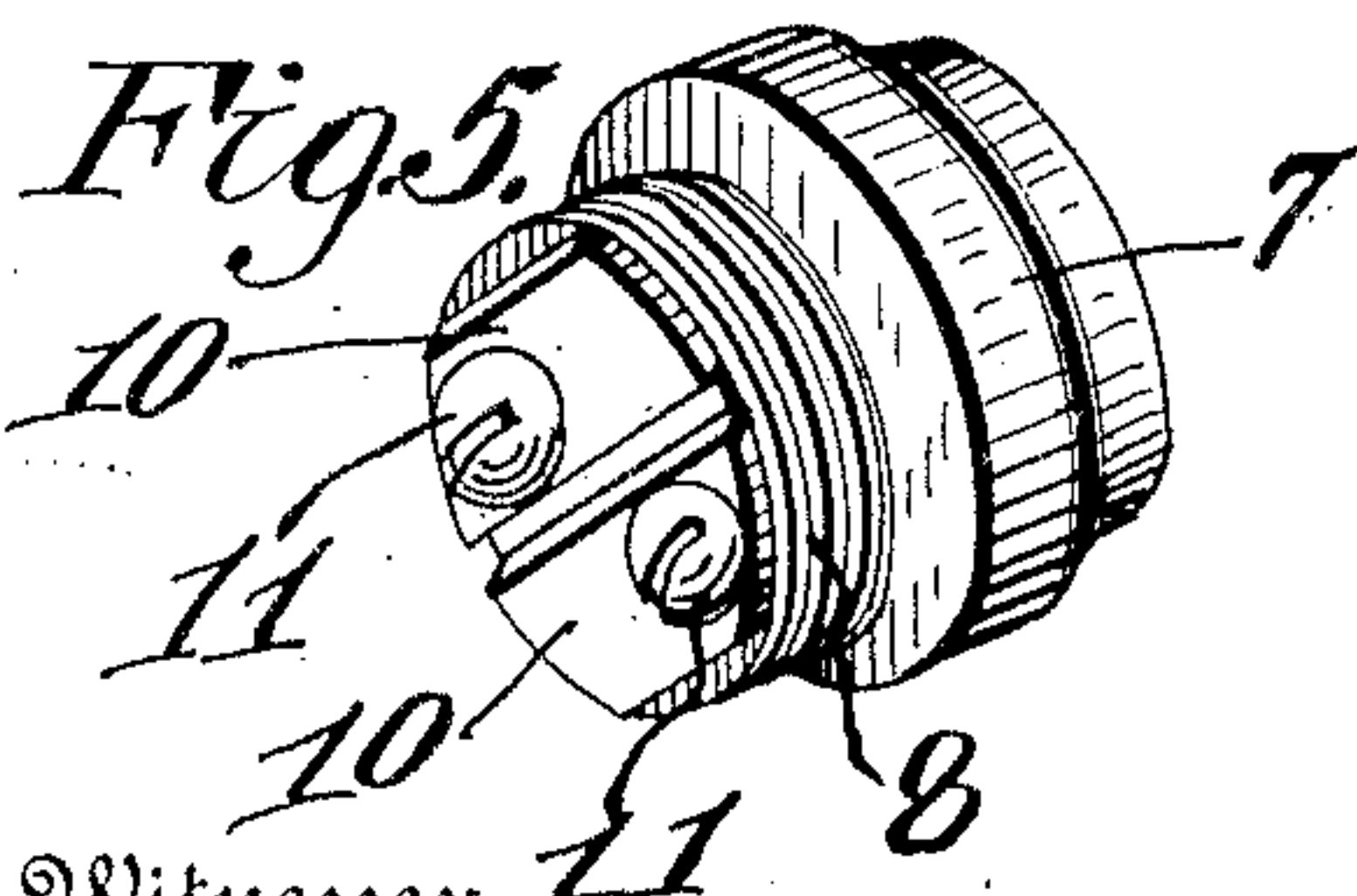
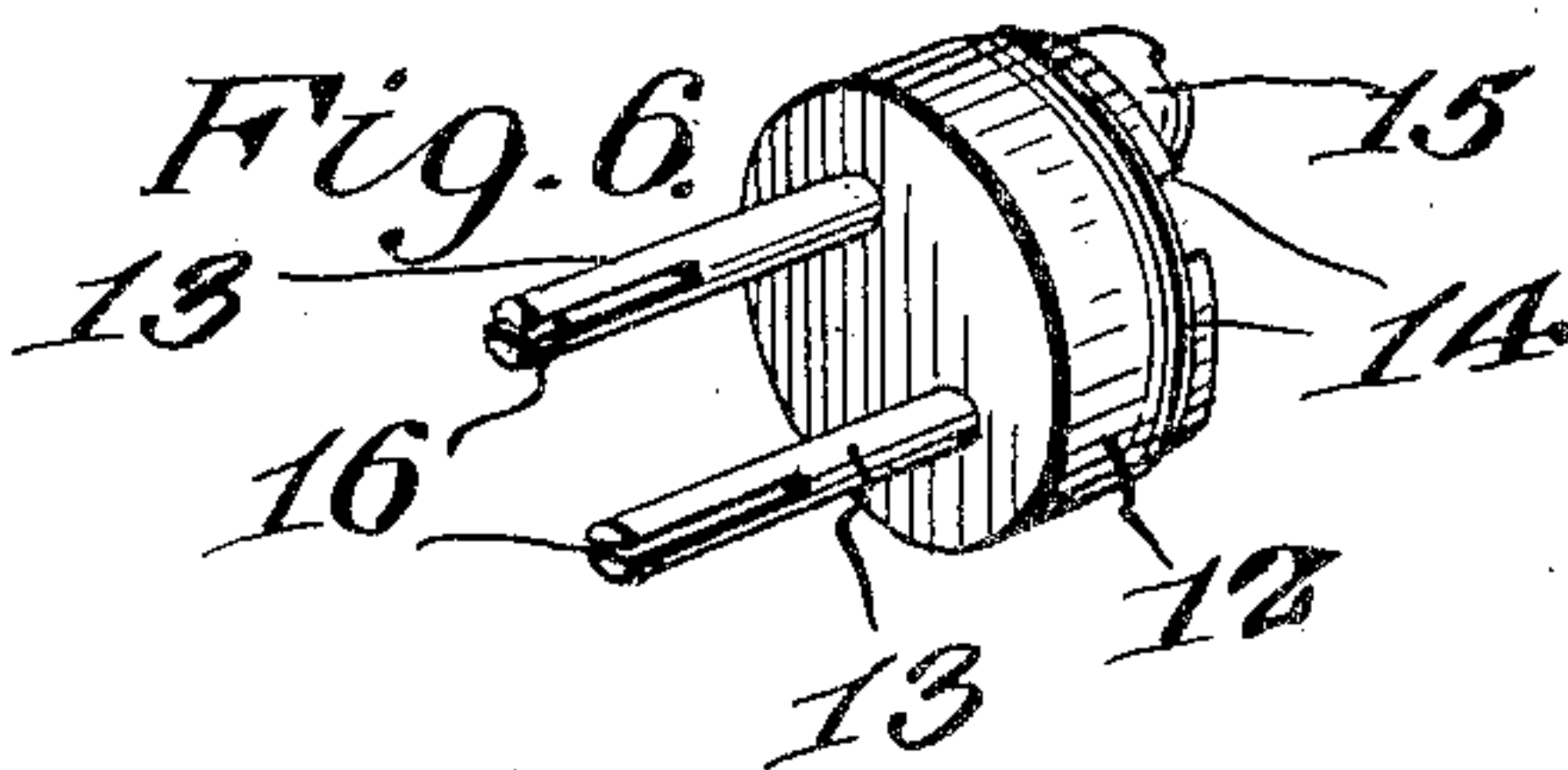


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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ELECTRICAL HAIR-SINGEING DEVICE.

975,073.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ERNEST A. ROBERTS and NELS LAURENCE JOHNSON, citizens of the United States, residing at Buhl, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Electrical Hair-Singeing Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an electrical hair-singeing device and has for its object to provide a handle member having a head removably secured in one end, said head carrying tubes adapted to receive suitable contact members secured in a cap to connect an electric circuit and to heat a wire loop, the ends of which are connected to plates secured on the outer face of the cap.

Another object is to provide a very simple device of this character whereby a secure contact may be had at all times and the heating of the singeing wire absolutely assured.

A further object is to provide means for easily and quickly connecting the electric circuit to heat the wire, said means being attachable to the end of a cylindrical handle, by means of which the device may be conveniently manipulated.

With these and other objects in view, the invention consists in the novel construction, combination and arrangement of parts, hereinafter fully described and claimed, and illustrated in the accompanying drawings in which,

Figure 1 is a side elevation of a hair-singeing device constructed in accordance with the present invention; Fig. 2 is a vertical longitudinal section thereof; Fig. 3 is a front end elevation; Fig. 4 is a transverse section on the line 4—4 in Fig. 2; Fig. 5 is a detail perspective view of the removable head, and Fig. 6 is a similar view of the contact carrying cap.

Referring to the drawing 5 indicates a substantially cylindrical handle which is preferably constructed of hard rubber, fiber or other suitable insulating material. This handle is hollow or tubular and is circumferentially enlarged at one end, as shown at 6. This enlarged end is provided with interior screw threads to receive the reduced

extension 8 of a removable head 7. Tubes 9 extend through the head 7 and are disposed in radial alinement. These tubes are each preferably formed integral with a plate 10. These plates are disposed upon the face of the reduced extension 8 of the head and are secured thereon by means of the screws 11 which are threaded into the head. The outer end portion of the head 7 is reduced in diameter and a cap 12 is disposed upon the same. This cap carries the contact rods 13 which extend therethrough and are formed on the plates 14 which are secured to the outer surface of the cap by means of the screws 15 threaded therein. The contact rods 13 have their outer ends split, as shown at 16 to secure a certain amount of resiliency thereof. These rods are adapted for insertion into the tubes 9 disposed through the head 7, and by thus splitting their ends the secure engagement of the rods with the inner wall of the tubes is obtained. In this manner the proper connection of the electric circuit is assured. A wire loop 17 has each of its ends secured to one of the plates 14. The circuit wires which are incased in suitable insulating material are extended through an opening 18 in the rear end of the handle member 5 and the terminal wires are secured to the separated plates 10 arranged upon the inner face of the head 7. As the handle 5, head 7 and cap 12, are all formed of insulating material, it will be seen that the plates 10 and 14 are entirely insulated from each other and the electric circuit is connected only when the rods 16 are engaged in the tubes 9. The current may be supplied from any desired source of electro-motive force.

In the operation of the device, when the current is turned on and the contact rods 16 are disposed within the tubes 9, the electric circuit is connected through the wire loop 17 which soon becomes highly heated and may be manipulated by the operator to singe the hair in the desired manner. While this is the particular purpose for which the device is primarily adapted, it will be understood that it is not limited to such use but is also applicable to many other desirable purposes.

In the manufacture of the device we construct a template providing the wire loops 17 in a

2
multiplicity of forms each secured to a separate end cap 12. Thus when another wire of different form may be found more desirable, it is only necessary to remove the cap and withdraw the rods 16 from the tubes when the electric circuit is disconnected. Another of the caps carrying a differently formed wire may then be inserted and the singeing operation proceeded with.

10 From the foregoing it will be seen that we have provided a device which is of very simple construction and is admirably adapted for the purposes in view.

The handle 5 may be made in many other forms other than that shown and described, the essential feature of our invention residing in the manner in which the contact is made.

The resilient end portions of the contact rods 16 will compensate for the wear which is incident to the constant removal and insertion of the rods into the tubes, and insure the proper connection of the electric circuit whereby the heating of the wire loop may be rendered absolutely certain.

While the above description sets forth the preferred embodiment of our invention and is believed to be the one which is most desirable in view of the purpose for which the device is constructed, it will be understood that it is nevertheless susceptible of various modifications in the form, proportion and minor details of construction without materially departing from the essential features or sacrificing any of the advantages of the invention.

Having thus described the invention what is claimed is:

1. A device of the character described comprising a tubular handle portion having an enlarged end, a head removably disposed in said end, metallic tubes extended through said head having plates at their inner ends disposed upon said head, securing screws extended through said plates into the head, said plates having terminal wires of an electric circuit connected thereto, a cap disposed upon the outer end of said head, contact members carried by said cap extending into said tubes, and a wire loop having its ends secured to said contacts and adapted to be heated by the passage of the electrical current therethrough, substantially as and for the purpose set forth.

2. A device of the character described comprising a tubular handle member having an enlarged end provided with interior screw threads, a removable head having a reduced extension threaded into said enlarged end, metallic tubes extending longitudinally through the head having plates at their inner ends disposed upon the head, screws extending through said plates into the head, a cap disposed upon the outer end

of said head carrying contact rods adapted to be positioned in said tubes to connect the electric circuit, said plates having terminal wires of the electric circuit connected thereto, plates on the outer ends of said rods disposed upon the end of the cap, screws securing said plates thereon, said handle member, head and cap, being formed of insulating material, and a wire loop having its ends connected to the plates on the end of said cap and adapted to be heated by the passage of the electrical current therethrough, substantially as and for the purpose set forth.

3. A device of the character described comprising a cylindrical tubular handle member having an enlarged end, a head removably engaged therein, metallic tubes extending longitudinally through said head having plates at their inner ends, said plates having the ends of the terminal wires of an electric circuit connected thereto, a cap disposed upon the outer end of said head, said cap carrying contact rods adapted to be removably positioned in said tubes, plates upon the outer face of said cap connected to the rods, said handle member, head and cap being formed of insulating material, and a wire loop having one of its ends secured to each of said plates and adapted to be heated by the passage of the electrical current therethrough, substantially as and for the purpose set forth.

4. A device of the character described comprising a cylindrical tubular handle member, a removable head engaged in one end of said member, metallic tubes carried by said head having plates at their inner ends disposed against the end of the head, screws securing said plates to the head, said plates having the terminal wires of an electric circuit connected thereto, a cap disposed against the outer end of said head, contact rods extending through said cap and adapted for removable engagement in the tubes to connect the electric circuit, said handle member, head and cap being formed of insulating material, and a wire loop carried by said cap adapted to be heated by the passage of the electrical current therethrough, substantially as and for the purpose set forth.

5. A device of the character described comprising a cylindrical tubular handle member, a head removably engaged in one end of said member, metallic tubes extending longitudinally through the head having plates at their inner ends, screws securing said plates to the head, said plates having the terminal wires of an electric circuit connected thereto, a cap disposed upon the outer end of said head, contact rods extending through said cap, said rods having split resilient outer ends adapted to be removably engaged in said tubes to connect the electric

5 circuit, plates on the outer ends of said rods disposed upon the face of said cap, screws securing said plates to the cap, said handle member, head and cap being formed of insulating material, and a wire loop having one of its ends secured to each of said plates and adapted to be heated by the passage of the electrical current therethrough, substantially as and for the purpose set forth.

In testimony whereof we hereunto affix 10 our signatures in the presence of two witnesses.

ERNEST A. ROBERTS.

NELS LAURENCE JOHNSON.

Witnesses:

F. W. ANDERSON,

J. F. FLEISHER.