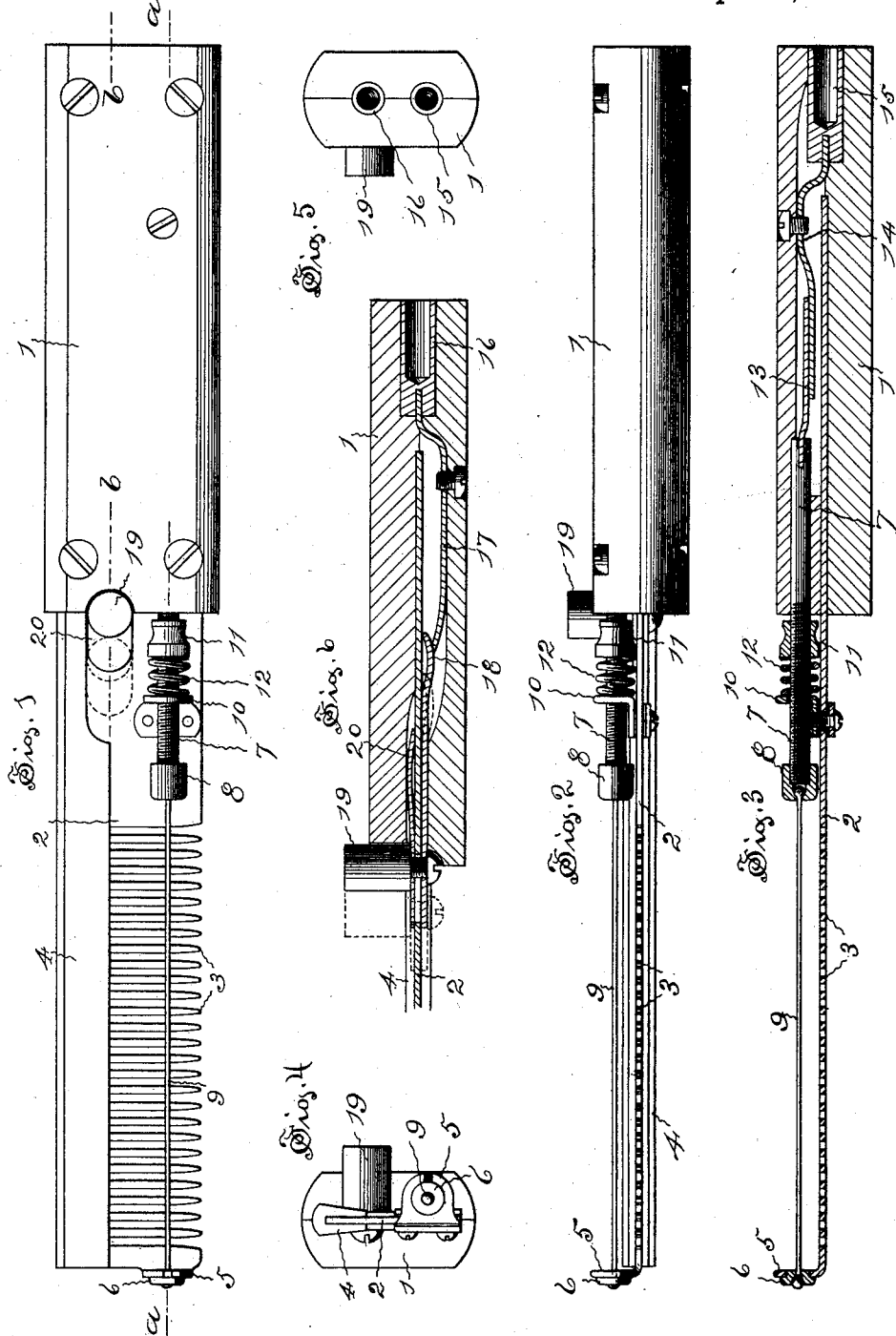


(No Model.)

D. SEIDE.
ELECTRIC HAIR SINGER.

No. 589,445.

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Witnesses:
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UNITED STATES PATENT OFFICE.

DAVID SEIDE, OF HARTFORD, CONNECTICUT.

ELECTRIC HAIR-SINGER.

SPECIFICATION forming part of Letters Patent No. 589,445, dated September 7, 1897.

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To all whom it may concern:

Be it known that I, DAVID SEIDE, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Hair-Singers, of which the following is a specification.

The invention relates to the class of devices which have a part that is adapted to be raised to a desired degree of heat for the purpose of singeing hair by a current of electricity.

The object of the invention is to provide a very simple and inexpensive device of this nature which is so constructed that it is safe to use, convenient to manipulate, and easy to regulate.

To this end the invention resides in a device having an insulating-handle for convenience in manipulating, a body with comb-teeth for raising the hair, said body forming a part of an electrical circuit, a filament or resistance-wire located adjacent to the comb-teeth and forming another part of the circuit, said wire being adapted to be raised to incandescence by a current of electricity, and a switch that can be moved for opening and closing the circuit through the comb and wire and when moved will remain as located, as more particularly hereinafter described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a view of one side of the device. Fig. 2 is an edge view of the same. Fig. 3 is a longitudinal section through the device on the plane indicated by the broken line *a a* of Fig. 1. Fig. 4 is a view looking at the comb end of the device. Fig. 5 is a view looking at the handle end, and Fig. 6 is a detail sectional view taken through the handle on the plane indicated by the broken line *b b*.

In the views, 1 indicates the handle, which is formed of insulating material. The handle shown is made of two blocks of insulating material held together by screws, but of course the parts of the handle may be put together in any other manner than that shown. Projecting from the handle is a body part 2, having comb-teeth 3. This body part is preferably made of metal with a stiffening back strip 4. A portion of the outer end of the comb is turned up, forming an ear 5, and held

in a perforation through this ear is a perforated bushing 6.

Loosely supported by the handle is a screw-threaded rod 7, which bears on its end a perforated cap 8. Extending from the bushing 6 to the cap 8 is a filament or wire 9 of conducting material. Connected with the body of the comb and insulated therefrom is a bracket 10. Turning on the threaded rod is a threaded nut 11, and coiled about the rod between the nut and the bracket is a spiral spring 12, which spring is arranged to thrust against the bracket and force the rod toward the handle. The tension under which this spring is placed determines the strain brought upon the resistance-wire, and the tension of the spring is regulated by the adjustment of the nut on the rod. The rod 7 is threaded for some distance and can have considerable movement in the handle. If a wire parts near either end this rod can be moved out of the handle and the short piece of wire used again, so that when a wire becomes broken it is not entirely useless.

Connected with the rod 7 is a conductor 13, which engages with a conductor 14, connected with a sleeve 15, that is embedded in the end of the handle for receiving the pin of a plug attached to the end of a circuit-wire. Embedded within the handle adjacent to the sleeve 15 is a sleeve 16, and this latter sleeve is also adapted to receive a pin on a plug attached to the end of a circuit-wire. Connected with this sleeve 16 is a conducting-contact 17.

Loosely supported by the handle, so that it may be moved into or out of engagement with the contact 17, is a conducting-contact 18, and attached to this contact is a thumb-piece 19. A spring-plate 20 is connected with the thumb-piece and contact 18, so that when this contact is moved, through the medium of the thumb-piece, there will be friction enough between the parts to keep the thumb-piece and the contact in the positions to which they are moved.

In the device shown and described herein the comb is formed of conducting material and is utilized as one portion of the circuit, being connected with the conducting-slide bearing the thumb-piece. The wire that spans the teeth forms the other portion of the

circuit through the device. When the conducting-contact 18 is moved through the medium of the thumb-piece into engagement with the conducting-contact 17, the circuit is closed, so that current may pass through the comb and wire, heating the latter to incandescence. When these contacts are disengaged, the circuit is, of course, open and no current will pass through the wire.

The device can be easily held in one hand and the thumb-piece moved at will for opening and closing the circuit without interfering with the manipulation of the comb. When the current is flowing through the device, the wire becomes raised to incandescence and can be used to singe the hair which the comb has raised, so that the singeing will take place evenly and at a uniform distance above the comb-teeth. The singeing-wire is preferably made of platinum, but of course it can be made of any other wire having suitable resistance and proper cross-sectional area to be heated to the proper degree by a comparatively small current. Pins on the end of wires of any ordinary circuit suitably located can be easily and quickly inserted into the sleeves in the end of the handle for connecting the device with a source of electrical energy, which may be any ordinary incandescent current or battery-current suitably regulated. The spring connection at one end for the singeing-wire insures that the wire be always held taut regardless of expansion or contraction incident to heating, and this is accomplished without danger of drawing the wire in two when it is weakened by being heated. The length of the screw-threaded rod that forms one terminal of the resistance-wire allows the use of a piece of wire that has been broken. The switch when set remains in that position, so that the hand can be changed on the handle without allowing the wire to be cooled off. The device can be instantly disconnected from the circuit-wires by a sudden pull should anything go wrong and the circuit-wires become overcharged, for the circuit-wires are connected by pins that pass somewhat freely into the sockets in the end of the handle. This construction provides a device which is simple, easily handled, convenient, and durable.

I claim as my invention—

1. A hair-singer consisting of a handle of insulating material, a comb of conducting material held by the handle and adapted to be connected with the wire of an electrical circuit, a wire of comparatively small conducting capacity held adjacent to the comb-teeth and adapted to be connected with the wire of an electrical circuit, said comb and wire being electrically connected at one end, a switch borne by the handle for opening and closing a circuit through the comb and wire, and means for connecting the comb and wire with an electrical circuit, substantially as specified.

2. A hair-singer consisting of a handle of insulating material, a comb of conducting material held by the handle, a sliding switch-plate connected with the comb and provided with a button and arranged to be moved into and out of contact with a plate that is adapted to be connected with a wire of an electrical circuit, a wire of comparatively small conducting capacity held adjacent to the comb-teeth and adapted to be connected with the wire of an electrical circuit, said comb and wire being electrically connected at one end, and means for connecting the switch-plate and the resistance-wire with an electrical circuit, substantially as specified.

3. A hair-singer consisting of a handle of insulating material, bearing a pair of sockets of conducting material, a comb of conducting material held by the handle, a sliding switch-plate connected with the comb and provided with a button and arranged to be moved into and out of contact with a plate connected with one of the conducting-sockets in the insulating-handle, a wire of comparatively small conducting capacity held adjacent to the comb-teeth, said wire being connected at one end with the comb and at the other end with the other of the conducting-sockets in the insulating-handle, and means for connecting the conducting-sockets with an electrical circuit, substantially as specified.

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Witnesses:

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