May 24, 1949. M. E. BAKER 2,471,019

SINGEING TOOL

Filed April 24, 1946

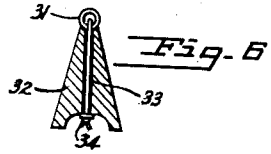

Fig. 6

Fig. 4

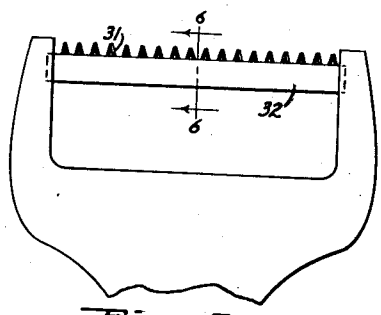

Fig. 5

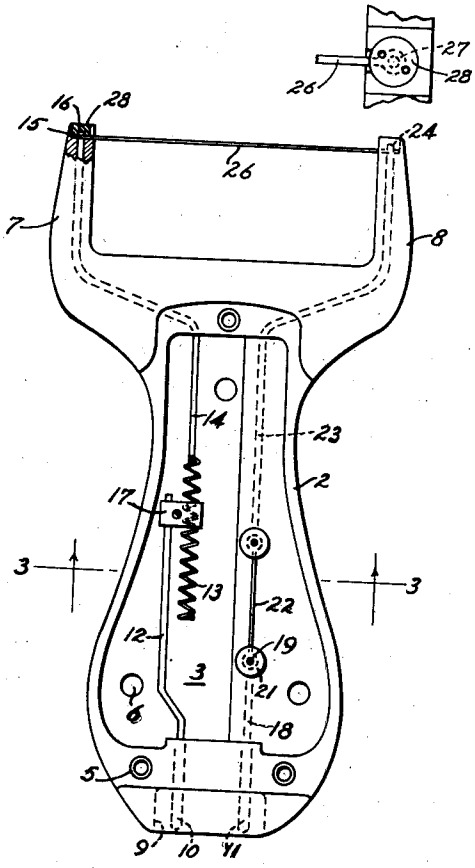

Fig. 1

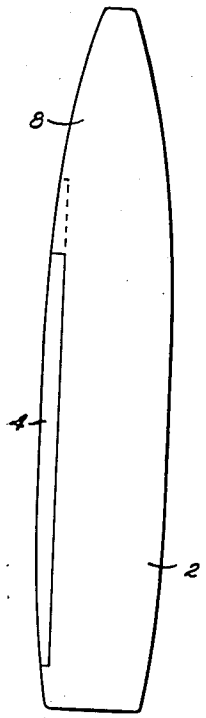

Fig. 2

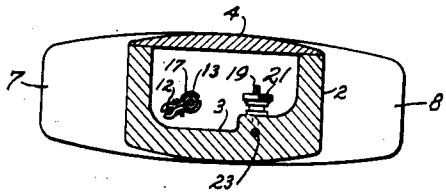

Fig. 3

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SINGEING TOOL

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Application April 24, 1946, Serial No. 664,615

1 Claim. (Cl. 219—29)

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My invention relates to devices for singeing the hair and the principal object of the invention is the provision of a tool suitably shaped for the hand to grasp; and having at its head or bit end a resistance element which becomes hot upon passing an electric current through it.

The invention possesses other objects, some of which with the foregoing will be set forth at length in the following description wherein are explained those forms of the invention which have been selected for illustration in the drawings accompanying and forming a part of this specification. In said drawings, illustrative forms of the invention are shown, but it is to be understood that it is not limited to those forms, since the invention as set forth in the claim may be embodied in a plurality of other forms.

Referring to the drawings, Figure 1 is a front elevation of my singeing tool, the cover plate being omitted and a portion being shown in section. Figure 2 is a side elevation of the tool with the cover plate in place. The upper end is shown in section. Figure 3 is a cross sectional view of the tool, the plane of section being indicated in Figure 1 by the line 3—3. Figure 4 is a top view of one of the fork ends. Figure 5 is a front elevation in part of a different construction; and Figure 6 is a sectional view on an enlarged scale and taken in a plane indicated by the line 6—6 of Figure 5.

In terms of broad inclusion my singeing tool comprises a resistance element thermally responsive to an electric current, and mounted in a forked handle. The handle is provided with slip connector elements by which an electric cord may be readily attached. The connector elements are the terminals at one end of conductors extending through the body of the handle and through each fork arm where demountable connections are made with the ends of the resistance element. The effect is to connect the resistance element across the line so that when the cord is plugged into a current supply, the element becomes heated to low incandescence, at which time it makes an excellent implement with which hair may be singed. A variable resistor is inserted in one of the conductors in the handle so that the degree of heating of the singeing element may be adjusted; and a safety fuse is inserted in the other conductor to protect against an overload.

In greater detail my singeing tool comprises a hollow handle 2, enclosing the chamber 3, which is closed in the cover plate 4, secured by screws set in metal bushings 5, molded in the handle body. Apertures 6 permit ventilation. One end

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of the handle widens out into the fork arms 7 and 8. The entire handle body and the forks are moulded of urea-formaldehyde plastic or similar electrically non-conductive material.

The butt end of the handle is formed with a recess 9 which houses the two slip connector elements or prongs 10 and 11 by which an electric cord may be detachably connected. On one side the prong 10 is continuous with the conductor rod 12 lying close and parallel to the resistor coil 13, which is continuous with the conductor rod 14, molded in the plastic and extending through the fork arm 7. At the end the fork arm is formed with a shallow threaded recess 15, opening on the side facing the other fork arm 8. The conductor rod 14 emerges as a short stud 16, into the center of this recess.

A small clamp 17 is slidably mounted on the conductor rod 12 and coil 13, and may be positioned to include the desired amount of resistance in the circuit.

The other prong 11 is continuous with the rod 18, the end 19 of which turns at right angles and emerges into the chamber 3. The end is threaded to receive a nut 21 which secures one end of the fuse link 22, the other end of which is similarly secured to the conductor rod 23. This conductor passes up through the other fork arm 8 to emerge at its end in a short lug 24, the construction being the same as that already explained.

Extending across between the fork arms is an element 26 of resistance wire so that it becomes heated when carrying an electric current. The wire is formed with an eye 27 at each end, and the proportions are such that the element may be seated in the recessed ends of the arms, the eyes engaging over the studs. Small plastic plugs 28 are then turned down into the recesses to hold the element securely in place.

By adjusting the resistor coil 13, the degree of heating of the element 26 may be controlled to that degree of redness or low incandescence which the operator prefers.

My singeing tool not only permits much faster work, but completely eliminates the dangerous hazard of singeing with an open flame. It is found also that the hair is not injured as it frequently is with the taper method.

In Figures 5 and 6, I have shown a modified construction of my tool. In this case the singeing element is a fine coil 31; and a porcelain bridge 32 extending between the fork arms provides support for it. The bridge is approximately triangular in section as shown in Figure 6, with a shallow groove along its upper edge in which the

element lies. One or more fine apertures **33** may be formed in the bridge through which a tie wire **34** is passed to secure the element in its seat intermediate its ends. The end mounting is the same as already explained in connection with Figure 1.

I claim:

An electric hair singeing device, comprising a hollow handle having spaced arms to form a fork, a pair of prongs in the handle for connection to a source of electrical energy, an electric conductor embedded in each fork arm and projecting from the free end thereof in a short stud, each said conductor being connected at its other end to one of said prongs, a variable resistance arranged on one conductor within said hollow handle, a replaceable fuse arranged on one conductor within said handle, a demountable resistance element arranged across the fork arms and connected to the studs, and a removable cover plate on the handle.

MERLE E. BAKER.

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The following references are of record in the file of this patent:

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