No. 898,063. PATENTED SEPT. 8, 1908.

P. E. OSWALD.

HAIR CRIMPER AND CURLER.

APPLICATION FILED AUG. 22, 1907.

2 SHEETS—SHEET 1.

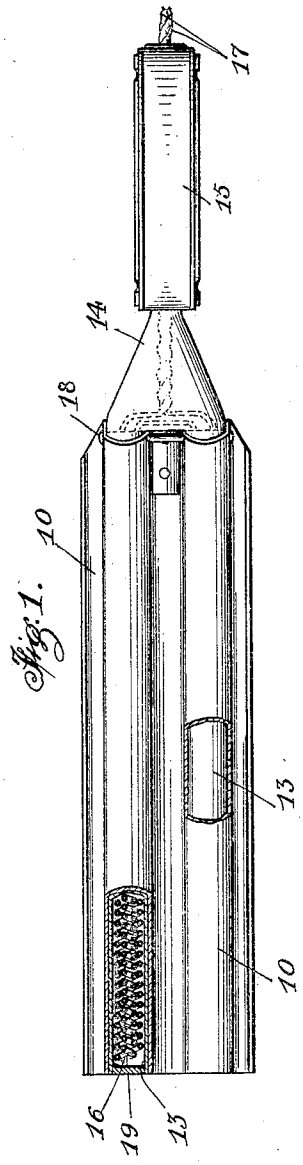


Fig. 1.

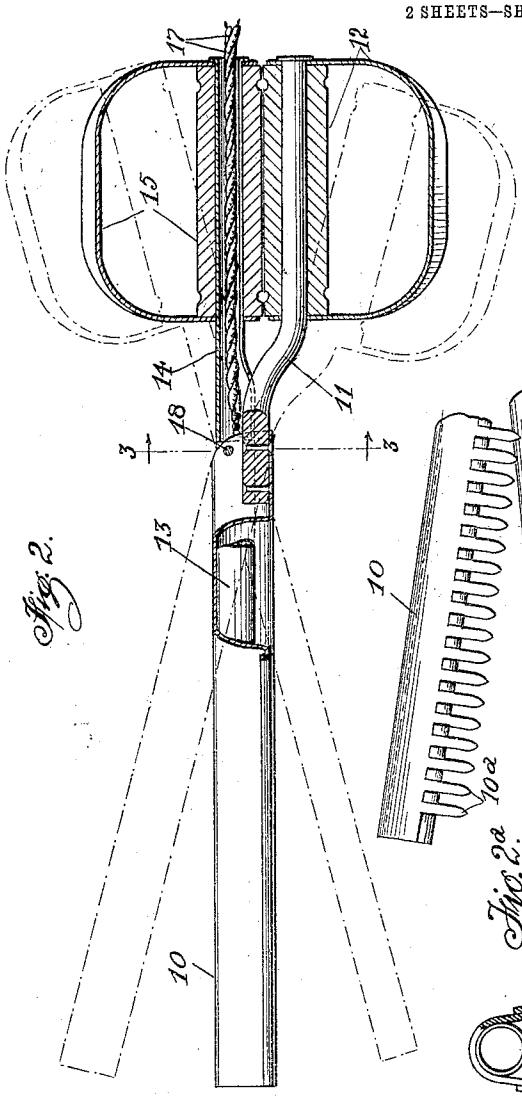


Fig. 2.

Fig. 2a.

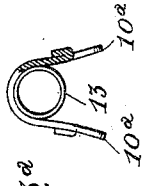


Fig. 3a.

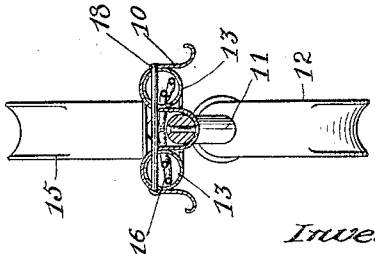


Fig. 3.

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2 SHEETS—SHEET 2.

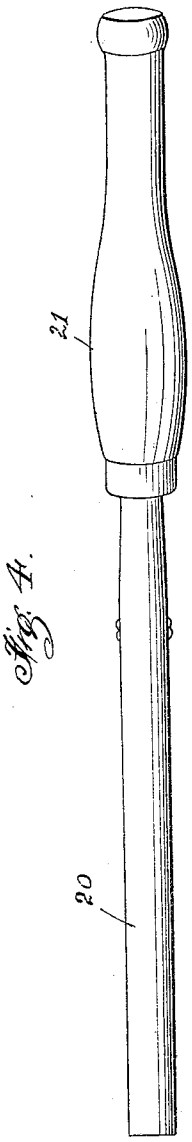


Fig. 4.

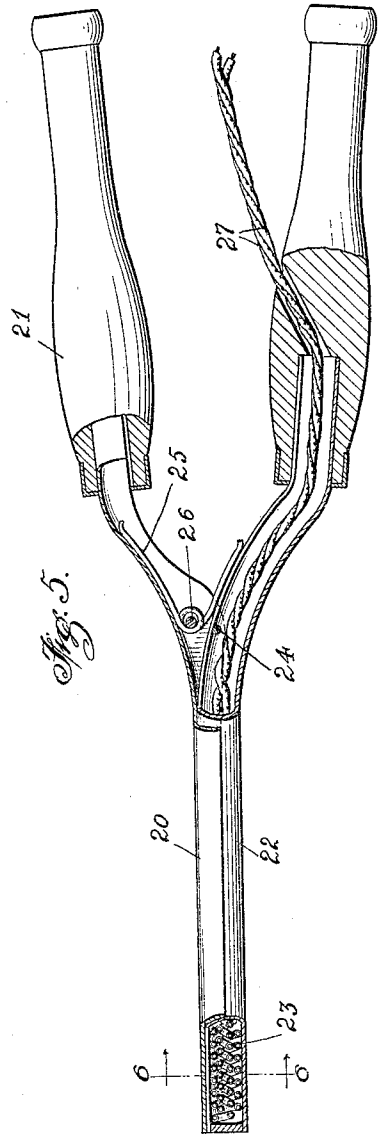


Fig. 5.

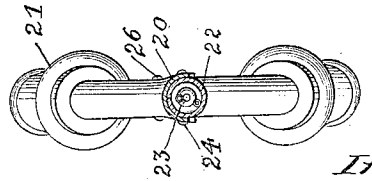


Fig. 6.

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UNITED STATES PATENT OFFICE.

PAUL E. OSWALD, OF LOS ANGELES, CALIFORNIA.

HAIR CRIMPER AND CURLER.

No. 898,063. Specification of Letters Patent. Patented Sept. 8, 1908.

Application filed August 22, 1907. Serial No. 389,605.

To all whom it may concern:

Be it known that I, PAUL E. OSWALD, a citizen of the United States, residing at Los Angeles, county of Los Angeles, State of California, have invented new and useful Improvements in Hair Crimpers and Curlers, of which the following is a specification.

My invention relates to means for curling or giving the hair a wavy appearance and the object thereof is to provide a simple and efficient device for that purpose in which the instrument is heated by an electric current passing through resistance carried in the instrument.

I accomplish this object by the devices described herein and illustrated in the accompanying drawings in which;

Figure 1 is a plan partly in section of the crimper. Fig. 2 is an edge view of the same partly in section. Fig. 2^a is an edge view of a modification, being partly broken away. Fig. 3 is a section on the line 3—3 of Fig. 2. Fig. 3^a is a section on the line 3^a—3^a of Fig. 2^a. Fig. 4 is a plan of the curler. Fig. 5 is a side elevation of the curler partly in section. Fig. 6 is a section on the line 6—6 of Fig. 5.

In the drawings the upper member 10 is corrugated as best shown in Fig. 3. In the crimper shown in the drawings the upper member is composed of two corrugations. To the rear end of the upper member is secured a handle bar 11 to which is secured the handle 12. The lower member is composed of as many heating members as there are corrugations in the upper member. The outer casing 13 of the heating members is preferably composed of a single sheet of metal which is centrally and longitudinally divided and then bent to form round tubes which will fit into the corrugations of the upper member as best shown in Fig. 3. The rear end of the casing is then bent so as to form a handle bar 14, the excess of metal being cut away, and on this handle bar is secured the handle 15. As shown in Fig. 2 the handle bar member of the lower member is hollow. Within the casing 13 is the heating coil 16 which is formed by coiling into a small spiral coil of the requisite length suitable resistance wire and then dipping the same into an insulating enamel whereby the same is coated so that when placed in casing 13 the coating of enamel will insulate said wire from the casing. Where a single coil is desired the outer end of the wire would be returned to the rear end of the coil preferably through the center thereof, but if more resistance is required than can be obtained from the use of a single coil the inner coil would be of a less diameter than the other coil which would surround the inner coil, and be connected thereto at the outer end, or the inner coil could be first formed and the wire returned back over the inner coil and wound spirally on its return, a temporary sleeve being inserted between the two coils while the second one was being wound. I prefer, however, to wind both coils separately and cover them with enamel before connecting them together as such construction prevents the possibility of short circuiting by reason of poor insulation. To the inner ends of the heating coil are secured the insulated leaders 17 by means of which the instrument is connected up to a source of electrical energy (not shown). The upper and lower members are united by the pivot pin 18 which passes through said members as best illustrated in Fig. 3. The outer ends of casing 13 are closed by plugs 19 to prevent dirt and moisture from entering therein.

In Figs. 2^a and 3^a I have shown a modification of the crimper which consists in cutting teeth 10^a in the outer edges of the upper member and making the same straight instead of being curled outwardly as shown in Fig. 3. By this construction the hair can be caused to lie diagonally across the crimper whereby Marcel waves can be quickly and easily formed, as the hair can be caused to lie at an angle to the central line of the crimper first in one direction and then in the other. If desired the central ridge could be slotted or the crimper could be formed with only a single corrugation.

The curling iron is made of a top member 20 of sheet metal to the inner end of which is secured a handle 21 and the bottom member is likewise formed of sheet metal bent to form a tube 22 in which is placed the resistance coil 23 formed in the same manner as the resistance coils of the crimper. The two members are united by the pivot pin 24 and are normally held in engagement by spring 25 secured by pin 26 to the upper member. The heating coil is secured to the insulated leaders 27 which connect the instrument to the source of electrical energy (not shown). By forming the heating coil in the manner herein before described and by forming the members of the instrument out of sheet metal a

very cheap and efficient crimper and curler is provided. By the use of the heating coil connected to a source of electrical energy the device is always ready for use after being first heated and can be continually used until the hair is properly dressed, thereby saving the time and annoyance of having from time to time to reheat the device, as is the case with the devices which are heated by other than electrical means. By having the resistance of the right amount to produce the desired heat all danger of having the instrument overheated and thereby burning the hair is avoided.

Having described my invention what I claim is:

1. An instrument for crimping and curling the hair, comprising an upper member of suitable shape to partially surround the lower member and having teeth projecting downwardly from the edges thereof; a lower member pivotally secured to the upper member; and handles secured to said members.

2. An instrument for crimping and curling the hair comprising an upper member of suitable shape to partially surround the lower member, said upper member having teeth projecting downwardly from the edges thereof; a lower member pivotally secured to the upper member; an electric heating coil in said lower member, and handles secured to said members.

3. In an instrument for crimping and curling the hair an upper and a hollow lower member pivotally secured together; teeth projecting from the edges of the upper member; an electric heating coil composed of a spirally wound enamel covered resistance wire in the lower of said members; and handles secured to said members.

4. In an instrument for crimping the hair, two members pivotally secured together, one of said members having the body thereof composed of a plurality of hollow tubes in alinement, the body of the other member being of a configuration to partially surround the first member; and having teeth adapted to project beyond and at the sides of the other member electric heating coils in the tubular portions of said first member; and handles secured to said members.

In witness that I claim the foregoing I have hereunto subscribed my name this 8th day of August, 1907.

PAUL E. OSWALD.

Witnesses:

G. E. HARPHAM,

S. B. AUSTIN.