

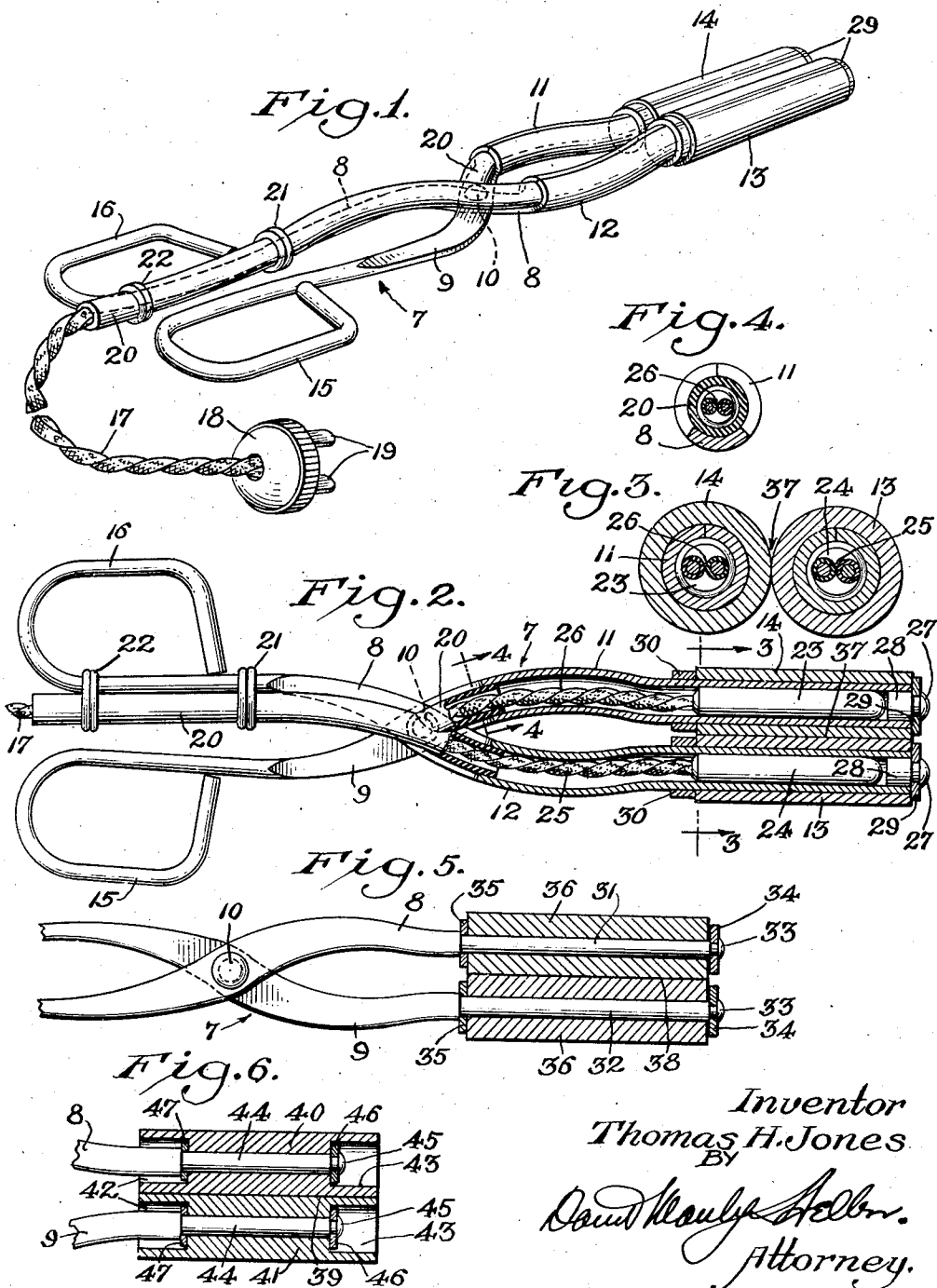
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HAIR STRAIGHTENING DEVICE

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HAIR STRAIGHTENING DEVICE

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1 Claim. (Cl. 219—24)

My invention relates to devices for straightening kinky hair, and has for its primary object the provision of a scissors-like construction which is manually operable and which is adapted to be heated; the operative portion thereof being provided with roller structure or roller means so as to effectively iron and straighten out a strand of hair introduced thereinbetween.

Another object of my invention is to provide a device of the aforementioned character which may be electrically heated or to which extraneous heat may be applied for ironing a strand of hair introduced between a pair of rollers adapted to contact one another tangentially when closed in normal position.

Another object of my invention is to provide a device of the aforementioned character with rollers in which the manipulating handles are secured in counter-sunk well means thus furnishing edges which will permit operation of the rollers freely on a strand of hair without endangering the accidental grabbing or catching of the said strand of hair or portion thereof by the ends of the rollers.

Other objects, features, and advantages, inherent in my invention will become apparent from an examination of the accompanying drawing having special reference to the ensuing description, wherein like numerals are utilized to designate like parts, and in which;

Fig. 1 represents a perspective view of one form of my invention.

Fig. 2 represents a plan view of that form of my invention exemplarily indicated in Figure 1, with certain portions thereof indicated in cross-section so as to more clearly bring out the structural relationship of the elements involved.

Fig. 3 is a transversal cross-sectional view taken on the line 3—3 of Figure 2.

Fig. 4 is a transversal cross-sectional view taken on the line 4—4 of Figure 2.

Fig. 5 is a fragmentary plan view showing another form of my invention with certain portions thereof indicated in cross-section, the said form being a device which requires heating to be supplied from outside sources.

Fig. 6 is an enlarged view of a modification of the form indicated in Figure 5, wherein the roller means is recessed at the extremities so as to conceal the attaching portion thereof, and to furnish a device which will be more efficient, will prevent the strand of hair from being caught therein, during the operation of ironing or straightening the hair.

Referring, more particularly, to Figure 1, the

scissors-like structure, generally, designated 7, is comprised of two levers 8 and 9 being articulately fulcrumed or secured by virtue of the pivot screw or pin 10. The levers 8 and 9 are provided with handles 15 and 16 so as to accommodate the thumb and one or more fingers of the hand for manipulating the said instrument in a manner similar to the operation of a scissors. The lever structures 8 and 9 are preferably formed for a substantial distance thereof into substantially semi-cylindrical and hollow sections designated 11 and 12 for housing the electrical connections to be used with my invention.

The said cylindrical sections 11 and 12 are shaped approximately as indicated in the cross-sectional view Figure 2, and provide a housing for securing therein the electrical heating elements 23 and 24. The rollers 14 and 13 are rotatably mounted and confined between the collars 30 which are secured to the portions 11 and 12 and the washer elements 29. The end of the sections 11 and 12 are adapted to receive the plug structures 28 which have reduced shoulders so as to permit the riveted portions 27 to be formed and confined in assembly to the washer elements 29.

The lever 8 is also provided with a tubing element 20 secured thereto for housing a terminal of the wire 17. The tube 20 serves as an additional housing secured to the portion 12 for retaining the electrical wire connection 17 which terminates in a male plug 18 having the prongs 19 adapted to be inserted in an electrical wall receptacle or socket to furnish the necessary electrical current for heating the heating elements 23 and 24. The said tubing 20 may be, preferably, secured to the handle portion of the lever 18 by means of the spring wire securing means 21 and 22. The wire 17 branches off to two double cord terminals 25 and 26 each being connected to heating elements 24 and 23.

In Figure 5, I show a form of my invention comprised of similar lever structures 8 and 9 in which the terminals of the levers are reduced rod portions 31 and 32, having a reduced shoulder so as to permit riveting the ends 33 thereto to secure the washers 34 and thus confining between the washers 35 and 34 a space sufficiently large to enable the rollers 36 to rotate freely therebetween.

In Figure 6, the reduced sections of the levers 8 and 9 are designated 44 and are also provided with reduced shoulders to hold in fixed position the washer elements 47 and 46, the termini of the said levers being riveted over as indicated at

45 and thus confining the washers 46 and 47 a suitable distance to provide freedom of rotation to the rollers 49 which, as will be seen, have counter-bored recesses 43 and 42 in order to provide smooth and obstruction-proof ends to the rotating rollers thus preventing any of the hair filaments from being caught during the operation, or rotation of the rollers when straightening the hair or ironing the same.

The strand of hair to be straightened out is placed in the opening confined between the rollers 14 and 13, or rollers 36, or rollers 40 and 41 whenever it is desired to straighten kinky hair. The rollers are then caused to be tangentially in contact with the strand of hair placed therebetween, namely, at the contact lines 37, 38 or 39. The arrangement indicated in Figure 1 being heated from a suitable source of electrical supply will cause the hair to be straightened by the application of heat and pressure simultaneously when the rollers are operated over the strand of hair which is held in one hand, its other point of anchorage being on the head of the person operated upon.

In like manner, the devices of Figures 5 and 6 are utilized for straightening out kinky hair and giving the same a permanent straight character, with the exception that the structures of Figure 5 and Figure 6 require heat to be supplied from a Bunsen burner, gas light, or other similar heating source of supply.

Altho, I have, herein, indicated preferred forms of my invention, it is understood that the same may be modified or amplified within the spirit and scope of the foregoing disclosure, as well as the embodiments of the accompanying drawings; my invention to be limited by the appended claim.

Having thus described and revealed my inven-

tion, what I claim as novel and desire to secure by Letters Patent is:

A device of the character described comprising, a scissors-like means including a pair of crossed lever members, hollow cylindrical housing portions formed on the termini of said lever members, a tubular conduit having one of its ends secured to the inner portion of one of said cylindrical housing portions and configurative with the shape of the lever member to which it is secured, its other end being secured to the handle portion of the said lever member, wire clip means securing the said tubular conduit to the said handle portion, an auxiliary and comparatively short tubular conduit secured to the inner portion of the other of said housing portions and terminating substantially at the pivotal point of the said lever members, a pair of heating elements removably secured within the confines of the said housing portions, a pair of electrical conduits each secured to one of said heating elements, the free ends of the said conduits being trained through the said housing portions, the said tubular and the said auxiliary tubular conduits merging into one assemblage at the pivotal point of the said lever members, the free end of the said assemblage emanating through the terminus of the said tubular conduit and having an electrical plug secured thereto, collar elements secured on the said housing portions, plug elements having enlarged washer elements secured thereto driven into the open ends of the said housing portions, and roller means rotatably mounted on the said housing portions and confined against longitudinal displacement between the said collar elements and the said plug elements.

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