Aug. 21, 1923. **1,465,838**

J. P. CANEAVRI

HAIR IRON

Filed Aug. 1, 1921

Fig. 1.

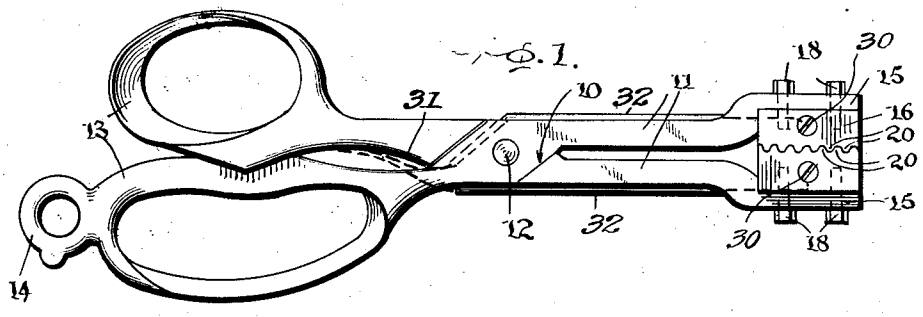
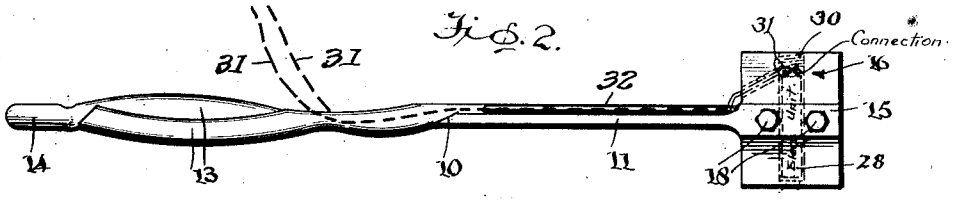


Fig. 2.



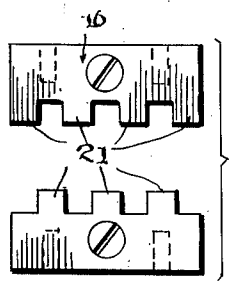
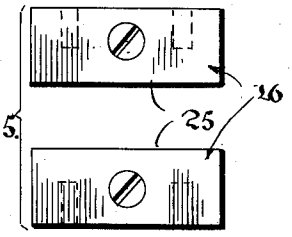


Fig. 3.

Fig. 5.



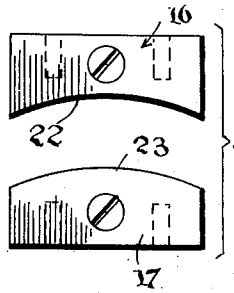
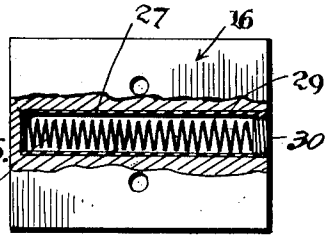


Fig. 4.

Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH PING CANEAVRI, OF PORT ARTHUR, TEXAS.

HAIR IRON.

Application filed August 1, 1921. Serial No. 488,953.

To all whom it may concern:

Be it known that I, JOSEPH PING CANEAVRI, a citizen of the United States, and a resident of Port Arthur, in the county of Jefferson and State of Texas, have invented certain new and useful Improvements in Hair Irons, of which the following is a specification.

The present invention relates to hair irons, and has for its object to provide a device of this character which has a wide range of utility being capable of advantageous use in either crimping or straightening the hair in any desired manner and to any desired degree and which is of simple and durable construction, reliable and safe in operation and easy and inexpensive to manufacture.

Other objects and advantages of the invention reside in certain novel features of construction, combination and arrangement of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings forming part of this specification, and in which:

Figure 1 is a side elevational view of the preferred embodiment of the invention;

Figure 2 is a top plan view;

Figures 3, 4 and 5 are group views in elevation, illustrating various types of dies utilized in conjunction with the invention; and

Figure 6 is a view, partly in section and partly in plan, illustrating the structure common to all the dies.

Referring to the drawings wherein for the sake of illustration is shown the preferred embodiment of the invention, the numeral 10 designates generally a pair of crossed handles which include shanks 11 pivotally connected to each other, as at 12 and hand grips 13 carried by the shanks, each shank having a grip integrally formed therewith at one end. One of the grips carries an eye 14 whereby the iron may be suspended when not in use. The shanks are offset and flattened at the ends thereof remote from the grips to provide seats 15 for the dies generally at 16 (see Figures 2 and 6).

The dies are preferably constructed of metal and are provided in pairs or sets, each set being adapted to perform a certain peculiar operation dependent upon the particular characteristics of the die. As shown in the drawings all the dies are preferably in the form of a block, a face of which abuts one of the seats 15 and fastening means such as set screws 18 are carried by the seats and have threaded engagement with the blocks of the dies to secure the dies in position on the seats.

Each set of dies may differ from the others in various ways such as in size, shape, heat conducting or other physical properties of the metal composing the same but the most important and salient feature of difference resides in the construction and formation of the coacting working heads or faces of the dies and in all of the sets these coacting working faces are mating or complementary.

In the set of dies shown in Figure 1 the working faces or heads comprise a series of curved ribs or corrugations 20 extending transversely of each die, the series on one die interfitting with the series on the other die when the dies are brought together as shown in the drawing. It is obvious that the size and number of the ribs or corrugations may be varied.

In Figure 3 the interfitting ribs are designated at 21 and are preferably rectangular in cross section, as shown.

In Figure 4 the working face or head of one of the dies is concaved as shown at 22 and the other is convexed as shown at 23.

In Figure 5 the working heads or faces are plane as designated at 25.

Electric heating means is provided for each die and for this purpose each die is provided with a cavity 27 extending from one side face of the block composing the die to adjacent the other. A helix or coil of wire or ribbon or other resistance element 28 is arranged in the cavity. The resistance element is enclosed by a casing 29 of insulating material and its convolutions are insulated from each other in any desired manner as by mounting on a plate of mica or the like. A plug 30 is threaded in the outer end of the cavity 27 and confines the heating element 28 therein. This plug may be of insulating material, if preferred. Flexible conductors 31 supply the heating element with current and extend through nickel tubes 32 carried by the shanks 11 and from the tubes into the cavity 27 wherein they are connected to the terminals of the heating element.

In use, the operator grasps the grips 13 and applies the dies to the hair with the requisite degree of pressure. The electric heating element heats the dies most efficiently

for the purpose of shaping and fixing the hair so that the hair may be subjected to the action of heat and pressure. The degree of pressure is variable at will and the instrument may be utilized to twist, turn or otherwise manipulate the iron. Moreover the hair may be subjected to the character of bending, flexion or other action appropriate in the circumstances since the dies with the required formation of working face may be readily attached, the set screw facilitating change thereof and the threaded plug 30 affording a ready access to the heating element for connecting and disconnecting the conductors.

I claim:

1. A hair iron comprising a pair of crossed handles including shanks pivotally connected, grips carried by said shanks, said shanks having their ends opposite said grips offset and flattened to provide seats, dies comprising metallic blocks having faces abutting said seats, set screws carried by the seats and having threaded engagement with the blocks, said blocks having cavities therein, a helix arranged in said cavity, an insulating casing for said helix, a plug closing said cavity, conductors leading to said helix and tubes carried by the shanks and accommodating the conductors.

2. A hair iron comprising a pair of crossed handles including shanks pivotally connected, grips carried by said shanks, said shanks having their ends opposite said grips offset and flattened to provide seats, dies comprising blocks having faces abutting said seats, means for releasably securing said blocks to said seats, said blocks having cavities therein, and electric heating means for said blocks including heating elements arranged in said cavities.

3. A hair iron comprising a pair of crossed handles including shanks pivotally connected, grips carried by said shanks, said shanks having their ends opposite said grips formed to constitute seats, dies arranged on said seats and having complementary working faces, means for releasably securing said dies to said seats, and electric heating means for said dies.

JOSEPH PING CANEAVRI.