Oct. 5, 1937. W. H. STANSBERRY 2,094,858

PROCESS OF MAKING A CURLING IRON

Filed Oct. 7, 1935

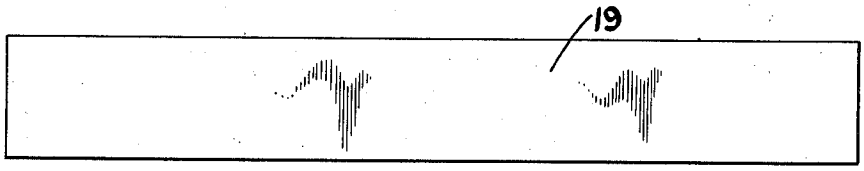


Fig. 1.

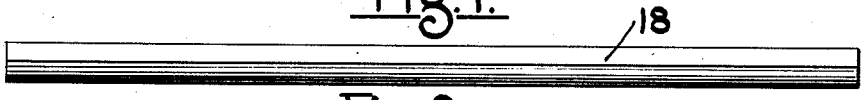


Fig. 2.

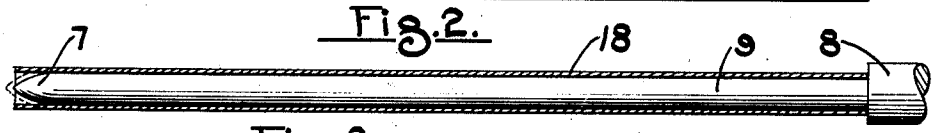


Fig. 3.

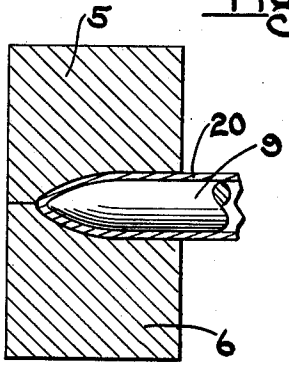


Fig. 4.

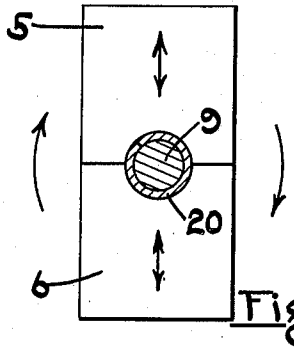


Fig. 5.

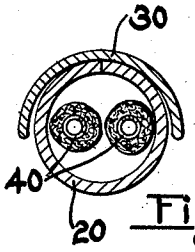


Fig. 7.

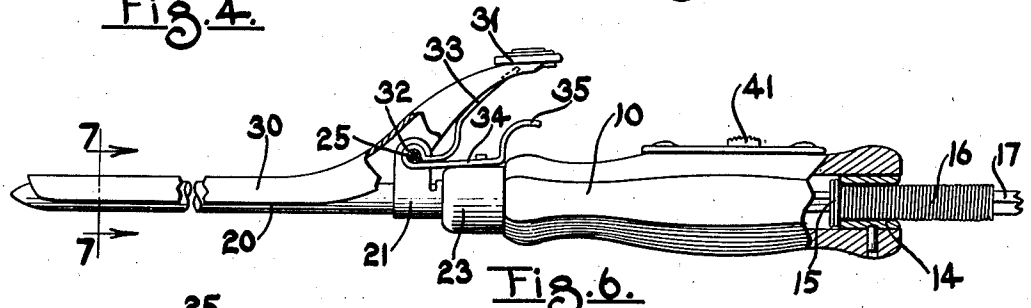


Fig. 6.

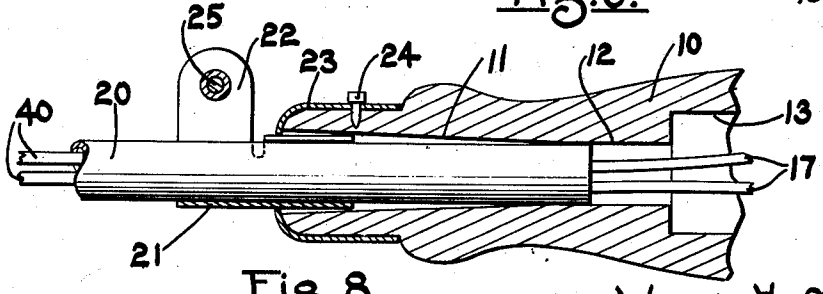


Fig. 8.

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Patented Oct. 5, 1937 2,094,858

UNITED STATES PATENT OFFICE

2,094,858

PROCESS OF MAKING A CURLING IRON

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Application October 7, 1935, Serial No. 43,825

1 Claim. (Cl. 29—156)

This invention relates generally to a curling iron and more particularly to the construction of a tube or stem therefor. Also, the handle is novelly formed and attached in assembled relationship.

One of the main advantages of my invention resides in the process of forming the tube or stem of the curling iron from a flat blank of material.

Another advantage resides in the particular style of the spring located between the handle and blade of the curling iron whereby it serves two additional functions, one being that it holds the blade in assembled relationship, the other that it serves as a stop for the blade whereby contact between the blade and the handle, with the consequent marring of the handle, is prevented.

Another feature is the particular shape of the handle whereby the several parts are quickly seated and attached thereto in a convenient and economical manner. Thus the advantage of ready assembly and disassembly is had.

Another advantage is the positioning of the parting below the blade whereby it is concealed and thus the appearance of the article is enhanced. It is true that the extreme end of the tube is exposed to view but the parting is invisible at this point due to my improved method of stretching and drawing the tube to its rounded end shape. Furthermore, this parting permits a ready transfer of heat to the point where it is needed, namely, next to the inner side of the blade.

Further advantages will become apparent as the description proceeds.

In the drawing:

Fig. 1 shows a rectangular blank of bendable sheet metal.

Fig. 2 illustrates a cylindrical tube formed from the blank shown in Fig. 1 by forcibly curving the blank.

Fig. 3 is a view of the mandrel, the cylindrical tube being shown in cross section thereon.

Fig. 4 is a sectional view through the swaging jaws with the tube or stem therebetween.

Fig. 5 is an end view of Fig. 4, the arrows indicating the directions of movement of the several parts.

Fig. 6 is a side view of a curling iron constructed in accordance with my invention.

Fig. 7 is a sectional view taken along the line 7—7 of Fig. 6.

Fig. 8 is an enlarged sectional view illustrating the connections between the stem and the handle of the curling iron.

Like numerals refer to like parts through the several views.

Referring to Figs. 6 and 8, numeral 10 indicates a handle, preferably formed of wood, which is bored to form a tapered portion 11, a short cylindrical portion 12 and an enlarged portion 13. A wooden plug 14, see Fig. 6, is wedged into the portion 13, after the enlarged head 15 of a coiled spring construction 16 has been placed through a central opening of the plug and thus a flexible lead-off is provided for the two electrical conductors 17.

A stem member 20 is adapted to be wedged into the tapered opening 11, the inner end seating in the cylindrical portion 12. A sheet metal sleeve 21, having ears 22, encircles the stem 20 and is likewise received in the tapered portion 11. This aids in supporting the stem 20. A ferrule 23 slides over the end of the handle 10 and is held in place by the small nail 24. A pivot 25 extends between the ears 22.

A blade member 30, of U-shaped cross sectional shape, see Fig. 7, has its sides pivoted to the shaft 25 and a rotating finger button 31 is placed on its inner end. This button is adapted to be engaged by the thumb of the user of the device.

A spring member of irregular shape, see Fig. 6, has its central portion 32 encircling the pivot 25 and one arm 33 yieldingly engaging the underside of the blade 30 while the other arm 34 has a hole into which the head of the nail 24 is received and a finger lift portion 35 is bent upwardly as shown. Thus the operator may insert his finger underneath the lift 35 to easily disconnect the same whereupon the blade 30, the sleeve 21 and the spring itself may be readily detached from the stem of the curling iron.

The stem 20, see Fig. 1, is formed from the blank 19. This blank is bent to form the cylindrical tube 18 as illustrated in Fig. 2.

The tube 18, shown in cross section in Fig. 3, is placed upon the mandrel 9, which is shouldered as indicated at 8 and pointed as indicated at 7. It is to be noted that the mandrel 9 is slightly longer than the tube 18, whereupon the swaging jaws 5 and 6, see Figs. 4 and 5, operating in the directions shown by the arrows, will form the end of the tube 18 by stretching and bening the same to the perfectly closed symmetrical shape shown in Fig. 4. This perfect shape is attained despite the fact that the tube 18 has a parting therein.

As shown in Fig. 7, numeral 40 indicates the heating elements which are located within the stem 20 and are placed in the electrical circuit by means of the switch 41. See Fig. 6.

Having thus revealed this invention, I claim as new and desire to secure the following combinations and elements or equivalents thereof, by Letters Patent of the United States.

The process of manufacturing the stem for a heating unit of a curling iron which consists in providing a rectangularly shaped piece of sheet metal having a longitudinal dimension less than the finished article, then curving the same to cylindrical formation about its longer axis, providing an abutment at one end of the stem and interiorly thereof for the complete length thereof and then exerting pressure by means of a series of impacts against the outer side of one end of said stem whereby the tube is extended and bent to a closed position for the purpose described.

WARREN H. STANSBERRY.