Dec. 21, 1948. A. A. NORIN ET AL 2,456,645

HAIR CURLER

Original Filed Nov. 24, 1944

Fig. 1.

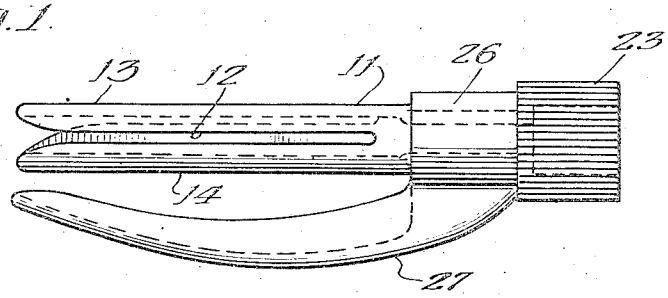


Fig. 2.

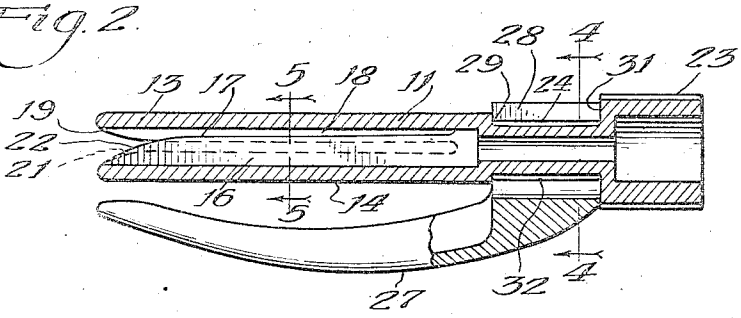


Fig. 3.

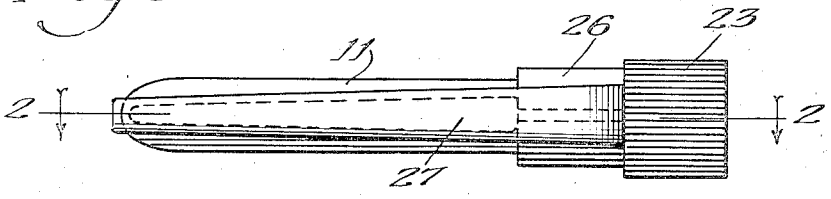


Fig. 4.

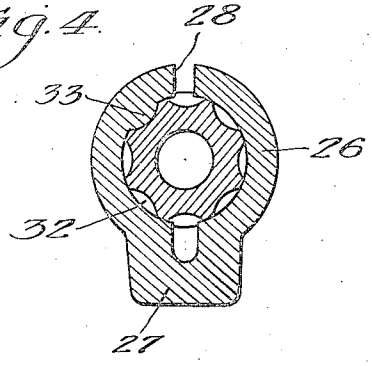
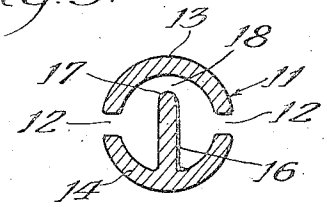


Fig. 5.



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Patented Dec. 21, 1948

2,456,645

UNITED STATES PATENT OFFICE

2,456,645

HAIR CURLER

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Original application November 24, 1944, Serial No. 564,927. Divided and this application January 24, 1946, Serial No. 643,066

1 Claim. (Cl. 132—34)

1

This invention relates to hair curlers, and is a division of our application filed November 24, 1944, Serial No. 564,927, now Patent 2,415,840, and has for an object the provision of a hair curler which is relatively simple in operation, inexpensive to manufacture, and which will not readily get out of order.

This invention further contemplates the provision of a hair curler embodying a rotatable member formed with a pair of hair engaging fingers similar in construction to the curler disclosed in a copending application Serial No. 564,926, now Patent 2,403,992, and which application was filed concurrently with parent application, Serial No. 564,927, and a hair confining arm journaled on the rotatable member to coact with the hair engaging fingers.

Another object of this invention is to provide a curler of this type embodying resilient means for resisting relative axial movement of the rotatable member and a hair confining member.

A further object of this invention is to provide resilient means for yieldably resisting relative step-by-step rotational movement of the rotatable member and the hair confining arm.

It is a further object of this invention to provide a curler of this type in which the rotatable member may be inexpensively molded of thermoplastic material, or blanked and formed of thin sheet metal.

This invention further contemplates the provision of a curler which will not readily become entangled within the hair being curled.

This invention embodies other novel features, details of construction and arrangement of parts which are hereinafter set forth in the specification and claim, and illustrated in the accompanying drawing wherein:

Fig. 1 is a side elevational view showing a hair curler embodying features of this invention.

Fig. 2 is a longitudinal sectional view, partly in elevation, taken along the line 2—2 of Fig. 3.

Fig. 3 is a plan view of the curler.

Fig. 4 is a transverse sectional view taken along the line 4—4 of Fig. 2.

Fig. 5 is a transverse sectional view taken along the line 5—5 of Fig. 2.

Referring now to the drawings for a better understanding of this invention and more particularly to Figs. 1 to 5 therein, a hair curler is shown as comprising a rotatable member 11 preferably formed of thermoplastic material and having diametrically opposed longitudinally extending slots 12 to provide a pair of hair engaging fingers 13 and 14. A longitudinally extending rib 16 is

2

formed on the inner wall of the finger 14 and provided with a tapered hair clamping edge 17 to coact with the inner surface of the finger 13 and to define therewith an inwardly converging recess 18. The outer ends of the fingers 13 and 14 and the rib 16 are rounded at 19, 21, and 22, respectively, to facilitate the insertion of a lock of hair therebetween. A knurled knob 23 is formed on one end of the rotatable member 11 and of substantially larger diameter than the remaining portions thereof.

A bearing surface 24 is formed on the member 11 adjacent the knob 23 and is of slightly smaller diameter than the finger portion thereof to receive a collar portion 26 provided on a hair confining arm 27. The arm 27 is preferably formed of thermoplastic material and the collar portion thereof is split at 28 and expandable to permit assembly of the rotatable member therein. After assembly axial displacement of the arm 27 is prevented by means of the shoulders 29 and 31. A plurality of longitudinally extending recesses are formed about the periphery of the bearing 24 for engagement by an inwardly projecting protuberance 33 formed on the inner bearing surface of the expandable collar 26.

In the operation of the hair curler thus described, the end of a lock of hair is engaged in the recess 18 between the edge 17 and the inner wall of the finger 13. The ends of the fingers 13 and 14 may then be manually pinched towards each other during the first one or two revolutions of the member 11. The curling portion is then continued until the curler is disposed in tight engagement against the head, after which the hair confining arm 27 may be pivoted against the head to prevent uncurling movement. If desired, a bobby pin may be employed to straddle the walls of one of the fingers 13 or 14 for engagement with the curl, after which the curler may be displaced axially to leave the bobby pin in hair clamping engagement on the curl.

While this invention has been shown in but one form, it is obvious to those skilled in the art that it is not so limited but is susceptible of various changes and modifications without departing from the spirit and scope of the claimed invention.

We claim as our invention:

A hair curler formed of thermoplastic material, comprising a tubular member having its one end provided with an enlarged head and its other end formed with diametrically opposed slots extending inwardly toward the enlarged head to provide a pair of opposing fingers, said tubular member being formed with a journal portion of

reduced diameter disposed between said enlarged head and the inner ends of said slots, said journal portion being formed with a plurality of spaced longitudinally extending grooves, an arcuate hair confining arm disposed in spaced parallel rotation to the fingers formed on said tubular member, the inner end of said arm being formed with a pair of resilient bearing arms to snugly engage diametrically opposed sides of the journal portion of said tubular member, and a protuberance formed on the free end of one of said bearing arms for engagement in said grooves to yieldably resist relative step-by-step rotational movement of said tubular member and said hair confining arm.

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

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