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F. D. REYNOLDS

2,396,606

HAIR CURLER

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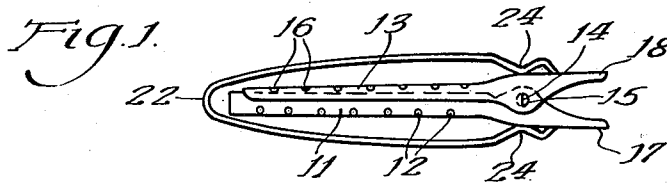
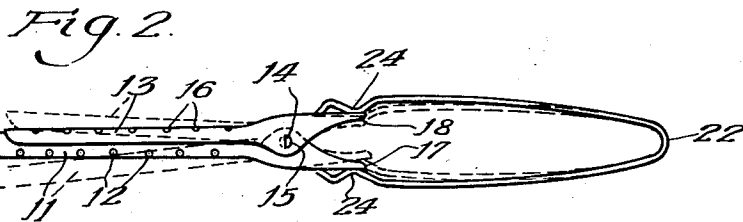


Fig. 3.

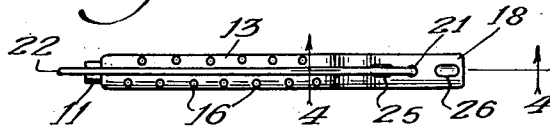


Fig. 6.

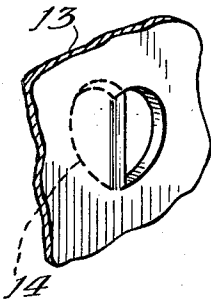


Fig. 4.

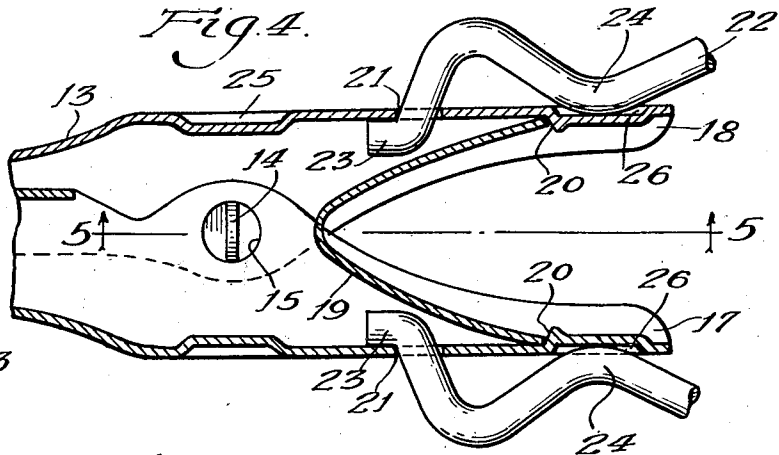


Fig. 7.

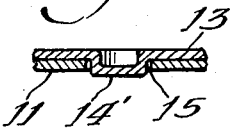
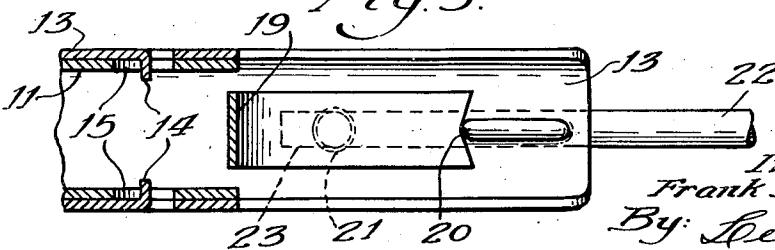


Fig. 5.



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UNITED STATES PATENT OFFICE

2,396,606

HAIR CURLER

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2 Claims. (Cl. 132-40)

This invention relates to hair curlers and is more particularly concerned with curlers in which hair is first gripped between and then wound upon a pair of pivotally connected members, and then secured in curled form by means of a locking bail pivotally connected to the ends of said connected members.

During the winding of hair upon curlers of this type it is necessary to hold the locking bail out of hair locking position and preferably in alignment with the pivotally connected members to avoid entanglement of same with hair adjacent thereto. It has also been discovered that the winding of hair upon curlers of this type may be greatly facilitated by employing the bail as a handle. The present invention contemplates the provision of a hair curler embodying means for yieldably resisting movement of the locking bail from either its hair locking or hair curling position. By providing yieldably resistant means for holding the bail in its hair curling position and in alignment with the pivotally connected members, the bail may be employed as a handle for turning the curler and is properly disposed to prevent entanglement with hair adjacent thereto.

In the manufacture of hair curlers of this type, it has heretofore been the practice to employ rivets for pivotally connecting the bail to the ends of the pivotally connected members. It is a feature of the present invention to eliminate the use of rivets for this purpose as they tend to catch on the user's hair. The use of rivets also adds materially to the cost of manufacture.

It is a further object of this invention to provide a hair curler in which a pair of pivotally connected members are normally maintained in their hair clamping position by means of a compression spring formed of flat strip material, and in which bail locking depressions are formed in the ends of the pivotally connected members for retaining the compression spring in position.

As rivet heads tend to catch in the hair during curling or uncurling movement of the curlers, it is a further object of this invention to provide the pivotally connected members with an improved journaling means which does not protrude from the sides of said members.

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

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

in which the locking bail is shown in its hair locking position.

Fig. 2 is a side elevational view of the hair curler showing the locking bail disposed in its hair curling position and in alignment with the pivotally connected members to serve as a handle for rotating the curler.

Fig. 3 is a plan view showing the hair curler.

Fig. 4 is an enlarged fragmentary sectional view taken along the line 4-4 of Fig. 3.

Fig. 5 is a sectional view taken along the line 5-5 of Fig. 4.

Fig. 6 is a fragmentary perspective view showing a bearing ear pressed from the side of a clamping jaw.

Fig. 7 is a fragmentary sectional view showing a modified form of bearing pressed from each side of the clamping jaw.

Referring now to the drawing for a better understanding of this invention, the hair curler is shown as comprising a mandrel 11 of tapered tubular construction and having a plurality of apertures 12 formed therein. A clamping jaw 13 is provided with semi-circular tongues 14 pressed from the sides thereof for journaled engagement in apertures 15 formed in the mandrel. While the tongues 14 are shown as semi-circular, it is contemplated that they may be formed square, rectangular, or of other shapes, if desired. The jaw 13 is preferably formed arcuate in cross section and provided with the usual apertures 16. The mandrel and clamping jaw are provided with finger gripping portions 17 and 18, respectively, which are normally urged apart by means of a compression spring 19 to hold the clamping jaw against the mandrel. The compression spring is preferably formed of flat strip material and having its V-shaped ends engaged against abutment shoulders 20 formed on the finger gripping portions 17 and 18.

Apertures 21 are formed in the finger engaging portions of the mandrel and clamping jaw to receive the ends of a locking bail 22 which is preferably formed of wire. The ends of the locking bail are bent at 23 for engagement with the undersides of the finger gripping portions 17 and 18 to prevent displacement of same through the apertures 21. The side arms of the locking bail are bent inwardly at 24 for alternate engagement in two sets of bail locking recesses 25 and 26 formed in the outer surfaces of the finger engaging portions of the mandrel and clamping jaw.

In the use of a curler of the type described, the locking bail 22 is first moved to its hair curl-

ing position, as illustrated in Fig. 2, for engagement in the locking recesses 26. The locking jaw 13 is then pivoted away from the mandrel 11 to receive a lock of hair by moving the finger gripping portions 17 and 18 toward each other. After the ends of a lock of hair have been thus gripped between the clamping jaw and mandrel, the curler is rotated by means of the bail to form a curl which is then locked to the curler by pivoting the bail into engagement with the locking recesses 25. By providing a locked hair curling position for the bail, as set forth, the curling operation is greatly facilitated as the curler may be manipulated with less effort and without becoming entangled in hair adjacent thereto.

Heretofore, in the use of hair curlers of this type, the entanglement of hair around rivet heads has been a source of trouble for users. It will be observed that the present curler is free of rivet heads, or other objectionable protuberances, likely to catch on hair, and further that the cost of manufacture has thereby been decreased.

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 thereof or the scope of the appended claims.

I claim as my invention:

1. A hair curler comprising a pair of pivotally connected members having finger gripping portions, said pivotally connected members having apertures provided in the finger gripping portions thereof, a locking bail formed of wire and having its ends projected through said apertures for engagement with the inner surfaces of said finger gripping portions, said pivotally connected members having two sets of locking recesses pressed inwardly on the finger gripping portions thereof, one set of locking recesses being disposed adjacent the point of pivotal connection of the pivotally connected members, the other set of locking recesses being disposed adjacent the free ends of the finger gripping portions, said locking bail having inturned portions engageable in said lock-

ing recesses for yieldably resisting movement of the locking bail, abutment shoulders formed on the finger gripping portions of said pivotally connected members, said abutment shoulders being formed by one set of the inwardly pressed locking recesses, and a spring formed of flat strip material having its ends engaging said abutment shoulders for urging the pivotally connected members into hair clamping position.

2. A hair curler comprising a pair of pivotally connected members having hair gripping portions and finger gripping portions, one of said members having bearing openings formed therein, the other of said members having inwardly disposed journals formed integral therewith for pivotal engagement in said bearing openings, said pivotally connected members having two sets of bail locking recesses pressed therein the forward set of locking recesses being disposed slightly forward of the point of pivotal connection of said pivotally connected members, the rear set of locking recesses being provided adjacent the outer ends of the finger gripping portions of said pivotally connected members, said pivotally connected members having apertures provided in the finger gripping portions thereof equidistantly spaced between and in alignment with said two sets of locking recesses, a locking bail formed of wire having its two ends bent inwardly for journaled engagement in said apertures and thence bent forwardly for engagement with the inner sides of the finger gripping portions of said pivotally connected members, said wire locking bail having side arms and a connecting loop portion arranged for spaced relation with respect to the hair gripping portion of said pivotally connected members for locking a curl of hair thereon, said wire locking bail having its side arms formed with inturned portions for alternate engagement in said two sets of bail locking recesses, said rear set of locking recesses providing inturned abutment shoulders, and a V-shaped compression spring formed of strip material having recessed ends for engagement with said abutment shoulders.

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