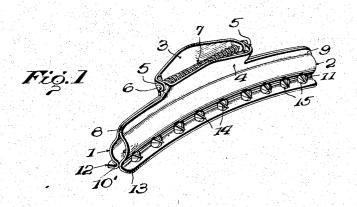
## J. E. ANDREW

HAIR CLAMP

Filed Nov. 26, 1934





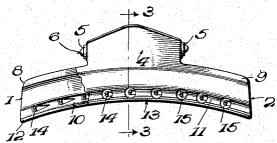


Fig.3.

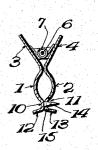
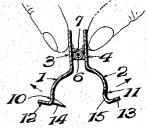


Fig. 4.



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## UNITED STATES PATENT OFFICE

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HAIR CLAMP.

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13 Claims. (Cl. 132-31)

The present invention relates to hair clamps of the type used in securing a wave in the hair.

It is an object of the invention to provide a hair clamp which will be formed as a split tube whereby the hair being waved may be received within an open space when the clamp is closed as in use.

Another object of the invention is to provide a hair clamp which will be formed as a split tube curved longitudinally thereof in order to adapt the same to the usual contours of the head.

Another object is to provide a hair clamp having cooperating faces which may be provided with registering pins and openings whereby the hair is held from movement longitudinally of the clamp when the same is in use.

A further object is to provide a hair clamp having outwardly-extending flanges on the members thereof which cooperate to provide a curved sur-20 face which assists in maintaining the device in an upright position on the head.

A further object is to provide a hair clamp which will be simple in construction and efficacious in operation, and which may be easily and cheaply manufactured.

Other objects and features of novelty will be apparent from the following description and the annexed drawing, it being expressly understood, however, that the invention is in no way limited by such description and drawing, or otherwise than by the appended claims.

Referring to the drawing, in which similar reference numerals refer to like parts,

Fig. 1 is a perspective view of a device according to the invention:

Fig. 2 is an elevational view, with parts broken away, of the device as disclosed in Fig. 1;

Fig. 3 is a sectional view taken on line 3-3 of  $_{40}$  Fig. 2, and

Fig. 4 is a sectional view, similar to Fig. 3, but showing the device according to the invention in open or inoperative position.

The hair clamp according to the present invention comprises two cooperating jaw members 1. 2, the same being of greater longitudinal length than width and being preferably formed from sheet metal, as by stamping, although they may be formed from such materials as bakelite or other moldable materials. The members 1, 2 are curved longitudinally as clearly disclosed in Fig. 2 of the drawing to provide a contour generally adaptable to the contours of the head. Formed on the upper edge of each of members 1, 2 and intermediate the ends thereof, are handle members 3, 4, the same being so arranged as to extend upwardly in such relation to each other, when the clamp is assembled, as to provide handle means which may be easily gripped by the fingers of one hand. At each end of each of the handle members there is provided a flange 5, the flanges at each end being over-lapped and provided with registering and aligned openings through which a pivot pin 8 is passed, whereby the two clamp members are pivoted together above the upper edges of the clamp members, all as clearly shown in the drawing. Coiled about the pivot pin 6 is an helically coiled spring 7, the same being slightly twisted to be placed under tension, and the ends thereof bearing against the inner sides of the handle members. It will be ap- 10 parent that other types of springs, such as leaf springs, or springs disposed in another manner, may be provided without departing in any way from the spirit of the invention. It will be seen that the tension of the spring is imparted to the  $^{15}$ handle members in such a manner as to urge the jaws of the clamp member together.

Referring more particularly to the structure and shape of the jaw members 1, 2, the same are so formed as to present longitudinal meeting sur- 20 faces 8, 9 adjacent their upper edges. Intermediate of the width of the jaw members, the same are outwardly curved longitudinally of the clamp to form, when the clamp is in its closed position, an open-ended tube extending throughout the 25 length of the clamp. The jaw members, below the tubular portions thereof, are provided with meeting faces 10, 11, while the lower edges of the jaw members are flared outwardly laterally of the clamp to form cooperating surfaces 12, 13. It 20 will be seen that the surfaces 12, 13 are curved longitudinally of the clamp, in accordance with the general shape thereof, and are also curved laterally of the clamp in order to present a curved surface formed by the two flanges 12, 13 which 35 will adapt itself to the contours of the head.

Means are provided for preventing movement of hair, which may be held in the clamp, in a direction longitudinally thereof. Such means comprise a plurality of pin members 14 struck up 40 from the surface 10 below the tubular portion of the clamp and extending laterally of the clam and through holes 15 formed in the surface 11 which abuts the surface 10 when the clamp is in its closed position, all as clearly disclosed in Fig.  $^{45}$ 3 of the drawing. It will be seen that the pins 14 are preferably so formed and disposed that they present only the thickness of the material thereof in a direction laterally of the clamp in order that they may pass between the strands of 50 hair held in the clamp without disarranging the same, while a larger surface is presented in a direction longitudinally of the clamp in order to present a larger surface in that direction to thereby prevent movement of the hair in that direc- 55

In the operation and use of the clamp according to the present invention, the same may be opened by pressing together the handle portions 3, 4 to thereby cause the jaws to move apart and 60

the pins 14 to be withdrawn from the openings 15. In this position the hair to be waved may be arranged within the tubular portion of the clamp as may be desired. After the hair has been so arranged within the tubular portion of the clamp, the handle members may be released to allow the spring I to force the jaw members of the clamp together to the position as shown in Figs. 1 and 3 of the drawing. Due to the curvature of the 10 clamp and the surfaces 12, 13 both longitudinally and laterally of the clamp, the same will not only fit closely to the curvature of the head but the hair will be clamped in the curved tubular portion of the clamp, thereby giving a shape to the wave in the hair which will cause the same to assume a proper curvature on the head.

It is usual, in practice, to employ a clamp of this type on wet hair and, due to the tubular space provided for the reception of the wet hair, free 20 circulation of air through the tubular portion of the clamp is permitted, thereby assisting materially in the drying of the hair. The pins 14 operate to hold the clamp from movement on the hair in a direction longitudinally of the clamp.

While one embodiment of my invention is described herein and illustrated in the drawing, it will be apparent to those skilled in the art that the invention is in no way limited thereby, or otherwise than by the appended claims.

What is claimed is:

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1. A hair clamp comprising pivotally connected jaw members, handles connected to said jaw members for operating the same, said jaw members being formed to provide spaced abutting faces, 35 said jaw members between said faces being curved outwardly to provide between them a hair-receiving recess.

2. A hair clamp comprising pivotally connected jaw members and means for operating said mem-40 bers, said jaw members abutting along faces spaced along the width of the clamp, the portion of each jaw member between said abutting faces being curved outwardly to provide a hair-receiving recess.

3. A hair clamp comprising pivotally connected jaw members and means for operating said jaw members, each of said jaw members being provided with an outwardly curved portion intermediate the edges thereof and extending longitudi-50 nally of the jaw, said outwardly curved portions cooperating to provide a recess between the jaws for the reception of the hair to be clamped.

4. A hair clamp comprising pivotally connected jaw members and means for operating said jaw 55 members, said jaw members being provided with spaced abutting portions which define the opposite edges of the clamp, the portion of each jaw member between said spaced portions being outwardly curved to provide a recess for the hair to be clamped.

5. A hair clamp comprising a plurality of jaw members, the lower edges of said jaw members being outwardly turned to provide flanges curved laterally of the clamp to fit the contours of the head, and said clamp being curved longitudinally thereof to approximate the curvature of the head.

6. A hair clamp comprising a plurality of cooperating jaw members, means pivotally connecting said jaw members and extending in a direc-70 tion longitudinal thereof, one of said jaw members having openings formed therein, and the other of said jaw members having pins extending therefrom and extending through said openings when said clamp is in closed position.

7. A hair clamp comprising a plurality of cooperating jaw members, means for pivotally connecting said jaw members about an axis extending longitudinally of said jaw members, one of said jaw members having openings formed therein, and the other of said jaw members having pins struck from the material thereof and extending through said openings when said clamp is in closed position.

8. A hair clamp comprising pivotally connected 10 jaw members, said jaw members being formed to provide abutting faces intermediate the edges thereof, and other abutting faces adjacent one edge thereof, curved portions between said abutting faces cooperating to provide a hair receiving 15 recess, and flanges extending laterally of said clamp adjacent the lower edges of said inter-

mediate abutting faces.

9. A hair clamp comprising pivotally connected jaw members, said jaw members being formed to 20 provide abutting faces intermediate the edges thereof and other abutting faces adjacent one edge thereof, curved portions between said abutting faces cooperating to provide a recess therebetween, one of said intermediate abutting faces 25 being provided with openings, the other of said intermediate abutting faces being provided with pins normally extending through said openings.

10. A hair clamp comprising pivotally connected jaw members, each of said jaw members being 30 outwardly curved to provide a recess between said jaw members, one of said jaw members being provided with openings, the other of said jaw members being provided with pins normally extending

through said openings.

11. A hair clamp comprising pivotally connected jaw members and means for operating said jaw members, said jaw members abutting along two faces spaced along the width of the clamp, each of said jaw members being provided intermediate 40 said spaced portions with an outwardly curved portion to provide a hair-receiving recess between said jaw members, one of said jaw members being provided with openings therein, and the other of said jaw members being provided with pins 45 aligned with said openings.

12. A hair clamp comprising pivotally connected jaw members and means for operating said jaw members, said jaw members abutting along two faces spaced along the width of the clamp, each 50 of said jaw members being provided intermediate said spaced portions with an outwardly curved portion to provide a hair-receiving recess between said jaw members, the lower edge of each of said jaw members being turned outwardly to provide 55 a flange extending longitudinally of the jaw member.

13. A hair clamp comprising pivotally connected jaw members and means for operating said jaw members, said jaw members abutting along two 60 faces spaced along the width of the clamp, each of said jaw members being provided intermediate said spaced portions with an outwardly curved portion to provide a hair-receiving recess between said jaw members, the lower edge of each of said 65 jaw members being turned outwardly to provide a flange extending longitudinally of the jaw member, one of said jaw members having openings formed therein, and the other of said jaw members having pins normally extending through said 70 openings.

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