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2,584,637

HAIR CLIP

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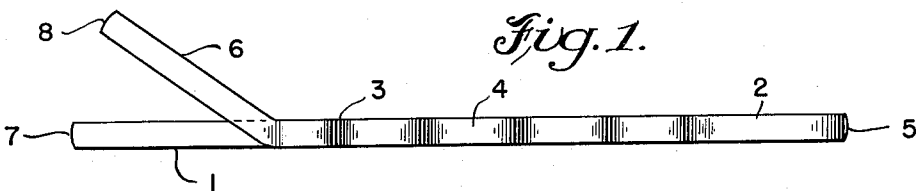


Fig. 1.



Fig. 2.

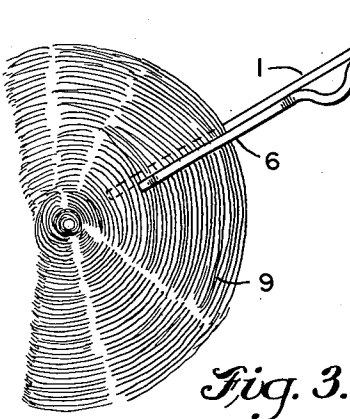


Fig. 3.

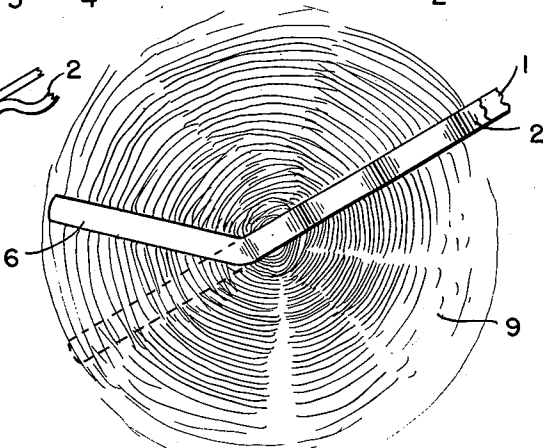


Fig. 4.

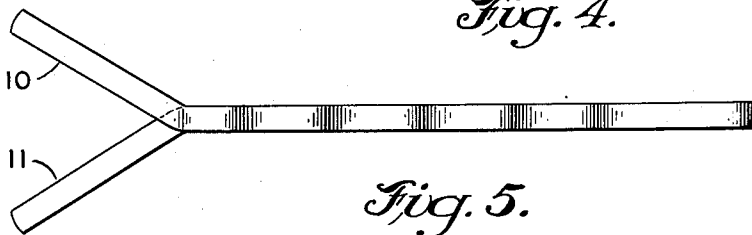


Fig. 5.

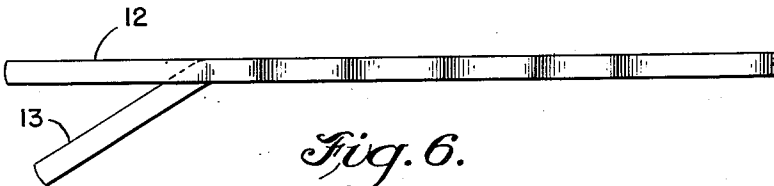


Fig. 6.

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UNITED STATES PATENT OFFICE

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HAIR CLIP

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1 Claim. (Cl. 132—50)

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This invention relates to hair clips of the double arm spring-pressed variety wherein frictional grip of the clip without additional latching means retains the clip in the position in the hair in which it is placed.

The principle of the invention is a hair clip comprising a first arm and a second arm in spring pressed relation to the first arm, said hair clip at the open end having a formed end length or formed end lengths of said arm or arms the inside surface of which is substantially in the same plane as said arm or arms, but formed transversely to the plane defined by the loop at the closed end of the hair clip.

The principal object of the invention is to provide a hair clip with means for automatically spreading its spring-pressed arms at the time of insertion into the hair without attention of the user thereto either before or during the clipping operation.

Another object of the invention is to provide a simple clip which after insertion into the hair will lie substantially flat and present no protruding parts which may press into the scalp of the user, or protruding parts which may create undue pressure of the clip against the scalp during sleeping thereby causing her discomfort.

A further object is to provide a spaced relationship between the ends of the arms of the hair clip so that a lock of hair of pre-selected thickness may be readily insertable therein.

There are many varieties of hair clips on the market, some of which are elaborate and expensive and many of which are uncomfortable for the user, especially when worn at night during sleep. The most popular clip is that type commonly called the "bobby pin." This pin has achieved widespread acclaim because of its effectiveness, simplicity and cheapness. However, since the ends of this pin are substantially spring-pressed together, the user must forcibly separate the ends and spread the entire pin open before inserting into the hair. Spreading the "bobby pin" open is most commonly accomplished by the user by using the fingernails or by holding the pin in one hand and forcing the ends apart with the teeth while holding the lock of hair with the other hand. Broken fingernails and widespread deterioration of teeth have resulted.

The present invention contemplates furnishing a hair clip which completely eliminates the necessity for any pre-spreading operation and requiring no thought or effort on the part of the user in that regard.

The foregoing objects are obtained by the novel

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arrangement and construction of the invention hereinafter described and shown in the accompanying drawing, in which:

Figure 1 is a front elevation of the hair clip in horizontal position.

Figure 2 is a top elevation of the hair clip. Figure 3 is a fragmentary view of the open end of the hair clip placed into position before being advanced onto the lock of hair.

Figure 4 is a fragmentary view of the open end of the hair clip being advanced onto the lock of hair. The hair clip has been opened and turned approximately one-quarter turn or less from left to right.

Figure 5 is a modification of the hair clip of Figure 1.

Figure 6 is a further modification of the hair clip of Figure 1.

Referring now to the drawing, Figure 1 shows a spring hair clip comprising a plain and substantially straight arm 1 and an arm 2 which may have alternate crests 3 and depressions 4 which aid in keeping the clip in its position in the hair. The arms 1 and 2 are formed of a continuous strip of spring substance such as steel or brass or other material of sufficient strength and bending property. The closed end of the clip forms a loop 5. The loop 5 is in the same plane as the paper or drawing as shown in Figure 2. The loop 5 is vertical to the plane of the paper or drawing as shown in Figure 1.

At the open end of the hair clip the arm 2 terminates in an end length 6, the end length 6 being formed transversely to the plane defined by the loop 5.

The open end formed by the arms at 1 and 6 is constructed so as to gain a combination of objectives. The very tip 7 of arm 1 and tip 8 of arm 2 length 6 should be such distance apart as will include the maximum amount of hair which it is desired to clip. Thus for a small pin curl a smaller opening could be employed than for a pin-back purpose where a larger lock of hair is encompassed. Further, the angle formed by the length 6 of the arm 2 and the arm 1 must not be so great that the self-opening procedure hereinafter described is prevented by undue friction with the lock of hair. Angles between 10 and 70 degrees are useful but it will be understood the larger the angle formed by length 6 of arm 2 and the arm 1 the greater the amount of friction in the self-opening procedure with the lock of hair. It also is necessary that the opening between tips 7 and 8 does not terminate at a point so far back toward the center of the

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clip that an appreciable area of clipping surface is lost between the spring-pressed inside areas of arms 1 and 2. I have found that if the opposed area of the arms is approximately three times the unopposed area, the length 6 of arm 2 will still be held down substantially transversely to the plane defined by loop 5, and an appreciable area of clipping surfaces is retained between the spring-pressed inside areas of arm 1 and arm 2. If, however, the proportion of opposed area is further reduced with respect to the unopposed area the clip becomes less rigid in position and the effective holding power is considerably reduced.

In the use of the invention the lock of hair 9 is prepared and held in position with one hand in the usual manner while the clip is positioned as in Figure 3 with the other hand. The length 6 of the arm 2 extends outwardly and the arm 1 extends beneath the lock 9. It sometimes is found convenient to guide the clip by placing tip 7 in light contact with the scalp. Having placed the clip in the position shown in Figure 3, the clip is then inserted by gentle pressure upon the closed end 5, and without further manipulation the clip opens and twists approximately a quarter turn or less during insertion to assume a holding position as in Figure 4. It will be noted that in a holding position the clip presents a generally flat position so that there are no projecting parts directed toward the scalp or projecting parts which may create undue pressure of the clip against the scalp during sleep.

A modification is shown in Figure 5 to which the same general description as above applies. It will be noted, however, that in this clip there is no straight arm, the ends of the two arms both terminating in formed end lengths 10 and 11. In this modification, angles between 10 and 140 degrees are useful since length 10 is formed transversely to the plane defined by loop 5 and length 11 is formed transversely to the plane defined by loop 5, each contributing to increase the angle therebetween.

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A further modification is shown in Figure 6 in which the wavy arm 12 terminates in a straight end and the plain arm 13 terminates in a formed length so as to achieve the same purpose as the embodiment of Figure 1.

It will be noted that the clips of all three embodiments shown herein twist approximately a quarter turn or less so that the wavy arm swings upwardly and the plain arm downwardly in relation thereto when the clip is advanced into the hair from left to right. It will be understood that the arms may be oppositely formed so as to reverse the direction of twist or that the wavy structure may be modified, exchanged or deleted. To those skilled in the art, other variations of the invention will occur without departing from the spirit thereof.

What I claim is:

A hair clip formed of spring material and comprising a first arm and a second arm in spring-pressed relation and joined by a loop at one end, the outer free end of at least one of said arms being bent laterally in the plane of the arm transversely to the plane defined by the loop through an angle not exceeding 70 degrees with respect to the projected unbent length of such arm.

EUGENE SPRINKLE.

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