Oct. 16, 1962 K. L. DEWING 3,058,477

BOBBY PIN

Filed March 8, 1960

Fig. 1

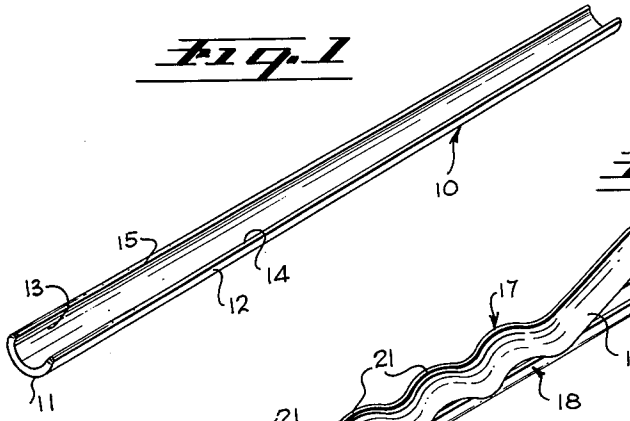



Fig. 2

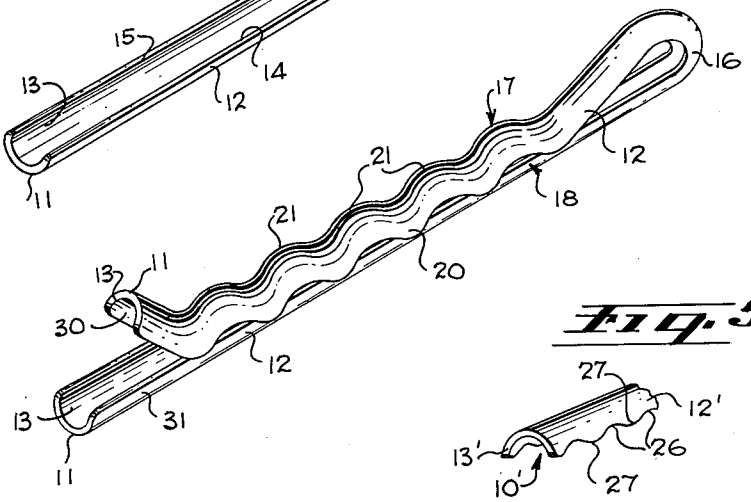



Fig. 5




Fig 3

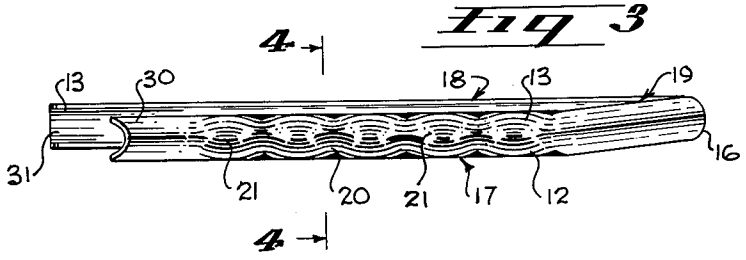
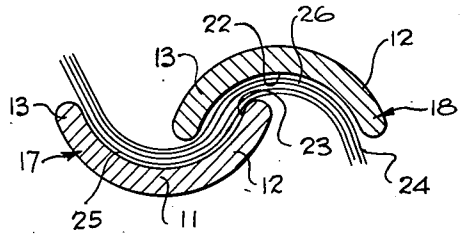



Fig. 4




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United States Patent Office 3,058,477 Patented Oct. 16, 1962



3,058,477

# BOBBY PIN

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Filed Mar. 8, 1960, Ser. No. 13,650
6 Claims. (Cl. 132—50)

The invention relates to hair pins, commonly called bobby pins, and has particular reference to an improvement in a bobby pin to enable the pin to achieve a better grip on the strands of hair and at the same time impart to the strands of hair an additional twist or wave.

The simple hair pin known currently as a bobby pin in the form currently popular has been a pin formed of opposite sections of spring-like material curved in the form of a loop at one end to supply the spring force holding the adjacent sections together, there having been provided a wavy effect from end to end of one only of the sections, as a rule, in the interest of allowing room for a quantity of hair strands over which the pin is clasped so that the strands do not spread the pin unduly, thereby to impair the grip of the sections upon the hair.

Sundry modifications have been attempted from the conventional form which have attempted to introduce some special gripping means or gripping effect. The innovations which have been attempted have invariably resulted in modifications of the material of such an extent that the necessary added cost has in the main offset the advantages to the extent that virtually none of the modified forms have become popular. Bobby pins of the common type are sold in such quantities and in such a highly competitive market that differences in cost amounting to only a fraction of a penny are sufficient to make modified pins non-competitive and consequently non-salable, even though some improvement might reside in the altered form.

It is nevertheless recognized that there is a limitation to the holding power of the conventional bobby pin and that on occasions it slips out of pace. It is also commonly recognized that not much wave can be formed in the hair by clamping action of the conventional bobby pin alone. Hence, considerable skill is needed by the user in setting pins side by side in such an arrangement that by the positioning of an assortment of pins, the hair can be given a desired wave.

It is therefore among the objects of the invention to provide a new and improved form of bobby pin which is in all respects as inexpensive or perhaps more inexpensive than conventional bobby pins now in use and which at the same time is one capable of more adequately gripping the strands of hair.

Another object of the invention is to provide a new and improved bobby pin of such form and character that it is capable of giving to the strands of hair a double reverse curve or wave which is achieved purely by the clamping action of opposite sections of the pin.

Still another object of the invention is to provide a new and improved method of forming a bobby pin and the resulting product which makes possible utilization of a strip of spring bar material of continuously uniform cross section and having such a cross-sectional shape that when the bar material is bent upon itself, opposite sections may be slightly offset with respect to each other so that portions only match up, thereby to form gripping faces providing a more tenacious grip upon the strands of hair while at the same time avoiding any appreciable change in the outward appearance of the device and avoiding any increase in the cost of manufacture.

Still another object of the invention is to provide a new and improved bobby pin of extremely simple shape and form but which by virtue of its special cross-sectional shape makes possible an interlock between opposite sections which achieves a double purpose of providing a firmer grip and at the same time imparting to the hair strands an extra wave.



With these and other objects in view, the invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter set forth, pointed out in the appended claims and illustrated in the accompanying drawings.

In the drawings:

FIGURE 1 is a perspective view of a strip of bar material in its initial shape prior to being formed into a bobby pin.

FIGURE 2 is a perspective view of a finished bobby pin.

FIGURE 3 is a plan view of a finished bobby pin.

FIGURE 4 is a cross-sectional view taken on the line 4—4 of FIGURE 3.

FIGURE 5 is a fragmentary side elevational view of a modified form of bar material usable in forming the bobby pin.

In an embodiment of the invention chosen for the purpose of illustration a strip **10** of relatively springy bar material is shown in the form existing when the strip of material emerges either from an extrusion die or a forming roll, depending on how the strip of material is fabricated. The strip is in the form of a shallow V having an appreciably rounded bottom **11** formed by legs **12** and **13**. Edges **14** and **15** of the respective legs may be rounded to a considerable degree in order to avoid any possible tendency when the bobby pin is used to break individual strands of hair. The recess between opposite sides extends longitudinally through the length of the bar.

The strip **10** is usually cut into lengths equal to approximately twice the length of the finished pin shown in FIGURE 2 during the process of manufacture. The strip is bent so as to form a loop **16** of an appreciable degree of curvature in order not to impair the resilience of the material and to provide an arcuate spring to connect one section or bar of the finished bobby pin, indicated generally by the reference character **17**, to the other section or bar of the finished bobby pin, indicated generally by the reference character **18**.

When the sections or bars are folded over upon each other, they are offset slightly by twisting the loop **16** in the area indicated generally by the reference character **19**. Due to the fact that the actual physical dimensions of the strip are relatively narrow, measured in only a small fraction of an inch, the offset or twist in the area **19** is only slight.

During the forming process, the section **17** is given an undulating effect resulting in a succession of inwardly extending configurations **20** alternating with a series of outwardly extending configurations **21**.

The opposite section or bar **18** ordinarily is left substantially straight from end to end. Where the inwardly extending configurations **20** approach the section **18**, legs **13** thereof extend toward the bottom of the V and an inner face **22** of the leg **13**, for example, overlies an inner face **23** of the leg **12** and in the absence of strands of hair lying therebetween will be pressed into face to face relationship. The portions of the section **17** intermediate the inwardly extending configurations **20** extend outwardly away from contact with the section **18** and provide appreciable space therebetween to accommodate a considerably greater thickness of hair strands than are accommodated between the faces **22**, **23**. In fact, pressure of the face **22** against the face **23** tends to work strands **24** of hair laterally outwardly into the more commodious spaces beneath the configurations **21**. It is also important to note that when the haid strands **24** are

clamped between the faces 22, 23, the strands are given a double or reverse wave in that one bend 25 in the hair strand occurs at the bottom of the V of section 17 and another bend 26 of the hair strand occurs at the bottom of the V of section 18. In each instance the bend is forced into the hair by strands by the adjacent leg of the V which extends outwardly away from the contacting faces 22, 23.

Some forms of the device have been found more acceptable when edges 14 and 15 are provided with a rounded serrated effect, as shown in FIGURE 5, which is productive of a series of recesses 26 alternating with a series of projections 27. These can be made identical on both edges 14 and 15 and in the finished form of the bobby pin will be productive of an appreciable combing and aligning effect when strands of hair are fastened by the pin.

To further facilitate fastening the pin into the hair, the free end 30 of the section 17 can be bent outwardly away from the free end 31 of the section 18 to leave a slot within which the finger or fingernail can be inserted in order to spread the sections apart or into which a bunch of hair strands may be inserted for a comparable purpose. It is, however, of no great moment whether the end 30 be bent outwardly or the end 31 be bent outwardly or both, provided a sufficient opening between them results.

Because of the fact that the strip can be made in a substantially shallow V section of precisely identical cross-sectional shape throughout its length when it is initially formed, the stock or strip material which ultimately results in the finished bobby pin is extremely inexpensive to manufacture. Further, by reason of the fact that the cross-sectional shape is virtually identical in both sections 17 and 18 before the configurations are worked into the section 17, the bending of the sections to form the loop 17 is likewise a simple and inexpensive process in that a simple turn is all that is needed to perform the bending and to give the respective sections their slightly offset relationship in the area 19.

Further still, inasmuch as an attractive appearance is very needful in selling devices of this kind, the offset relationship has no detrimental effect when the bobby pins are placed upon a card, as they usually are for sale, because when mounted on such a card and viewed from one side only, as is customary, the offset relationship is concealed and what the customer views has a regular and not an unconventional appeal no matter which side the card may be viewed from. Hence, the advantage gained from the novel offset relationship is not one which is detrimental to the selling appeal of the device.

As a consequence, there is made available a bobby pin having desirable new features embodied in a device, the cost of which is at least as low as the cost of conventional pins and, in frequent instances, appreciably lower.

While the invention has herein been shown and described in what is conceived to be the most practical and preferred embodiment, it is recognized that departures may be made therefrom within the scope of the invention, which is not to be limited to the details disclosed herein but is to be accorded the full scope of the claims so as to embrace any and all equivalent devices.

Having described the invention, what is claimed as new in support of Letters Patent is:

1. A hair pin comprising a pair of bars, and means at one end resiliently pressing said bars together, said bars having each a substantially longitudinally extending recess intermediate opposite side edges with said recesses facing each other, said bars having longitudinal axes offset with respect to each other and being positioned so that as viewed from one end the right side of one bar overlies and is pressed by said means toward the left side of the other bar with each overlying side respectively contained within the recess of the opposite side.

2. A hair pin comprising a pair of bars bent from a length of wire of uniform cross sectional shape throughout its length and with a recess extending from end to end, said bars when bent having recesses of substantially identical cross-sectional shape therein facing each other and a bent portion of said wire joining said bars at one end and reFsiliently pressing said bars together, said bars having longitudinal axes offset laterally with respect to each other and being positioned so that as viewed from one end the right leg of one bar overlies the left leg of the other bar with the overlying legs respectively contained within the recesses.

3. A hair pin for strands of hair comprising a pair of bars of substantially the same cross-sectional shape and having a central longitudinally extending recess in one face of each bar, said bars comprising a single strip of bar material bent upon itself and a spring loop of said strip joining adjacent ends of the bars and comprising spring means holding said bars together, a first of said bars being substantially straight in a longitudinal direction and having the open side of the recess facing the other bar, a second of said bars having an undulating form from end to end forming a succession of inwardly and outwardly extending configurations, said second bar having the open side of the recess facing the first bar, said second bar at a portion thereof in contact with the hair having the longitudinal axis thereof offset relative to the longitudinal axis of the first bar to a position wherein a portion of said first bar on one side of the recess extends into the recess of said second bar and wherein said one portion is urged by said spring loop toward the alternate opposite side of the other bar whereby to force some of the strands of hair held by the hair pin into the form of a double reverse curve.

4. A hair pin for strands of hair comprising a pair of bars of substantially the same cross-sectional shape and having a centrally extending recess in one face of the bar, said bars comprising a single strip of bar material bent upon itself and a spring loop of said strip joining adjacent ends of the bars and comprising spring means holding said bars together, a first of said bars being substantially straight in a longitudinal direction and having the open side of the recess facing the first bar, said second bar having the longitudinal axis thereof offset relative to the longitudinal axis of the first bar to a position wherein the face of a portion of said first bar on one side of the recess extends into the open side of the recess of said second bar and overlies the inside face of the respectively adjacent portion on the alternate opposite side of said second bar whereby to force some of the strands of hair held by the hair pin into the form of a double reverse curve, edges of the side portions of both said bars facing toward each other having a serrated form for separating strands of hair secured thereby and for grasping only some of the strands of hair extending between said bars.

5. A method of forming a hair pin comprising producing a strip of spring bar material in a form having a substantially central longitudinally extending shallow recess with a rounded bottom extending from end to end and of substantially uniform cross-sectional shape and depth from end to end, cutting said strip of bar material into separate lengths, forming a bend intermediate opposite ends of each length, separating said bar into two sections, forming at least one of said sections into a series of alternate inwardly and outwardly extending configurations, bending said sections into position against each other with the open sides of the recesses facing towards each other, and offsetting one section with respect to the other section so that a portion of each bar on one side of the recess is received in a position adjacent the bottom of the recess of the respectively opposite bar and is pressed into engagement with the portion of said opposite bar and the alternate opposite side of the recess therein.

6. A method of forming a hair pin comprising producing a strip of spring bar material in a form having a sub-

stantially shallow recess with a rounded bottom, forming said recess with a substantially uniform cross-sectional shape and depth from end to end of said strip, cutting said strip of bar material to a length about twice the length of the finished hair pin, forming a bend about midway between opposite ends dividing said length into two sections, forming one of said sections into a straight length and forming the other of said sections into a series of alternate inwardly and outwardly extending configurations, bending said sections into position against each other with the open sides of the recesses facing towards each other, and offsetting one section with respect to the other section a distance about one-half the breadth of the recess so that inside faces of corresponding side portions of the inwardly extending configurations overlie corresponding opposite side portions of the opposite bar and are pressed into engagement therewith.



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