Nov. 11, 1930. C. A. DIES 1,781,324

HAIRPIN

Filed Feb. 26, 1929

Fig. 1.

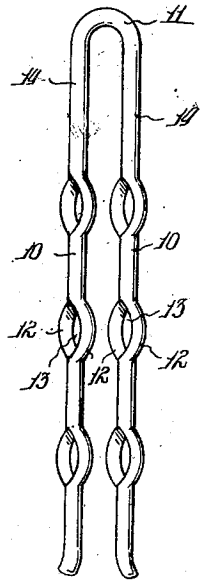


Fig. 2.

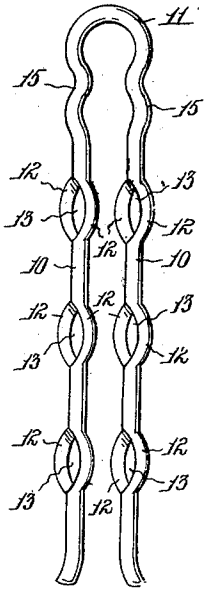


Fig. 3.

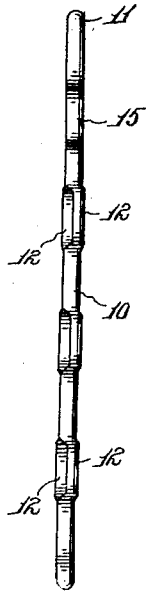


Fig. 4.

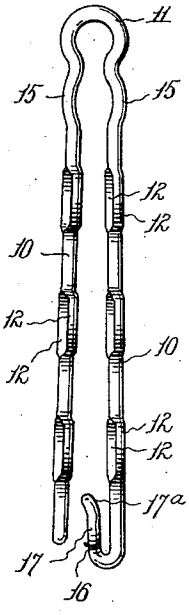


Fig. 5.

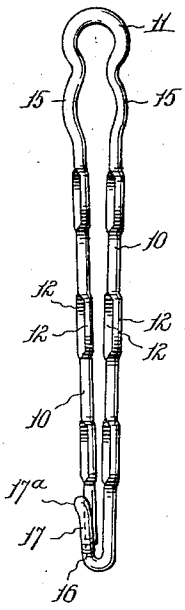


Fig. 6.

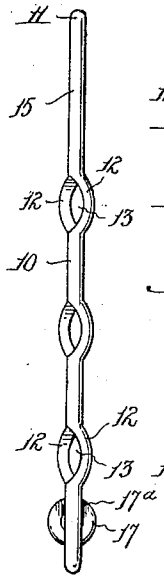


Fig. 7.

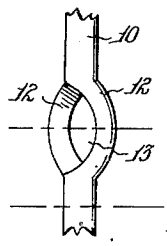


Fig. 8.

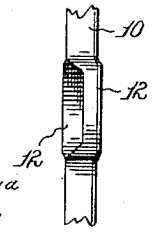


Fig. 9.

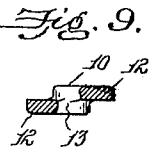


Fig. 10.

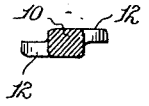


Fig. 11.



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UNITED STATES PATENT OFFICE

CHARLES A. DIES, OF CHICAGO, ILLINOIS

HAIRPIN

Application filed February 26, 1929. Serial No. 342,764.

My invention is an improvement in hairpins and relates more especially to that particular type in which the prongs or spaced apart members are provided with means for retaining them in engagement with the hair of the wearer, the present invention being an improvement on the construction of hairpin shown in my prior Patent No. 1,358,139, dated November 9, 1920.

The primary object of my invention is to provide a construction of hairpin somewhat similar to that shown in my prior patent referred to but in which the opposite humps are formed in a particular manner to reduce the cost of manufacture as well as provide a more effective construction, the hairpin forming the subject matter of this application being effective in use in holding bobbed hair by establishing a firm grip.

A further object of this invention is to provide in association with the opposite humps on the prongs or spaced apart members of the U-shaped hairpin other features of construction which will cooperate with said humps to secure a more intimate engagement without affecting the easy withdrawal of the hairpin.

With these principal objects in view the present invention consists in the formation of the opposite humps on the prongs of the hairpin by stamping or pressing them from the material instead of forming slits and staggering or distorting the prongs at opposite sides of the slits as shown and described in my prior patent.

The present invention further consists in the particular construction of hairpin hereinafter described and specifically set forth in the appended claims.

In the drawings:

Figure 1 is a front elevation of a hairpin formed with opposite humps on the prong members thereof in accordance with my invention.

Figs. 2 and 3 are similar views, showing modifications.

Figs. 4 and 5 are front views showing a further modification of the hairpin with the prongs opened and closed respectively.

Fig. 6 is an edge view of the modification shown in Figs. 4 and 5.

Figs. 7 and 8 are enlarged detail views to more clearly show the formation of the humps.

Figs. 9 and 10 are sectional views on the lines 9—9 and 10—10 of Fig. 7, and

Fig. 11 is a detail view of a modification of the crown showing the formation disclosed in my aforementioned patent.

Like numerals of reference indicate like parts throughout the several views of the drawings.

My improvements are applied to the conventional type of hairpins which are usually made of wire bent into U-shape providing a pair of spaced apart prongs 10—10 connected by a bight portion 11, which latter is grasped in manipulating the hairpin, and in some instances the prongs are bent back and forth into wave lines or corrugated for increasing their engagement with the hair, while as shown in my prior patent hereinbefore referred to humps are provided intermediate the bight portion or crown and free ends of the prongs by first cutting transverse slits at spaced intervals and then slightly spreading the material sidewise at opposite sides of said slits, the present invention providing similar humps by an improved construction.

In carrying out my invention each prong is provided with opposite humps 12—12 spaced from each other intermediate the bight portion of the hairpin and ends of the prongs thereof, said humps being separated in the present instance by openings or holes 13 to increase the effectiveness of the humps as well as being a necessary adjunct in the process of manufacturing the hairpin, it being understood that in forming the humps suitable dies are used which first punch the hole through the slightly flattened wire and then distort or spread the portions at opposite sides of the hole which portions are stamped or pressed by the dies to assume the shape clearly illustrated in Figs. 6, 7, and 8; this operation being much simpler and less expensive than forming the slits required in carrying out the invention illustrated and

described in my prior patent; that is to say, in the present instance the wire is punched or split and distorted while in the former instance the wire was slit and the portions formed thereby spread sidewise in lines parallel with the slit.

The construction of hairpin hereinbefore described formed with the humps and intermediate holes may be otherwise plain as shown in Fig. 1, with the portions of the prongs between the series of humps and bight portion straight, as at 14, or these portions forming the crown of the hairpin may be corrugated, as at 15 in Figs. 2, 3, 4, and 5. Furthermore, the opposite humps may be disposed either in a plane with the crown as shown in Figs. 1, 2, and 3, or at right angles to said plane as shown in Figs. 4 and 5, the arrangement of said humps with respect to the U-shape hairpin depending upon the direction in which the wire is bent upon itself, as will be obvious. It will be noted by reference to the sectional views 9 and 10 that the portions of the wire hairpin between the humps, as well as the crown and ends of the prongs are slightly flattened at opposite sides, this being the preferred cross-sectional shape though it is not the purpose to limit my invention in this respect.

As a further modification of my invention, and more especially for the purpose of increasing the effectiveness of the hairpin in holding bobbed hair, one of the prongs is extended and bent upon itself in the form of a hook or keeper 16 to receive the end of the other prong, after the manner of a safety pin, the hairpin may be locked with a cluster of hair confined or clamped between them, for which purpose the keeper 16 is provided with an eye 17 depressed centrally, as at 17ª, to receive the outer end of the other prong, as shown in the drawings. The keeper is turned inwardly, and there is only a slight space between the other enlarged end or eye thereof and the adjoining portion of the prong to leave sufficient space to receive the cooperating end of the companion prong of the hairpin.

From the foregoing description in connection with the accompanying drawings it will be apparent that the construction of hairpin forming the subject matter of this application is an improvement upon the hairpin disclosed in my prior patent for the reason that the openings between the humps not only provide for a more economical construction but also increase the effectiveness of the hairpin in use, and with the provision of the inturned keeper at the lower end of one of the prongs to lock the pin in the hair the device is especially adapted for use in holding bobbed hair in place. I have shown and described several forms of hairpins embodying my invention, but it will be obvious that other modifications in the shape or contour of the crown, as well as in other unimportant details may be resorted to within the spirit and scope of my claims.

I claim:

1. A hairpin having prongs and a bight or crown, pairs of oppositely disposed humps formed integrally with the prongs in different juxtaposed parallel planes and openings through the prongs between the pairs of humps.

2. A hairpin having prongs and a connecting crown or bight, pairs of oppositely disposed humps on the prongs semi-spherical in cross section and in different juxtaposed parallel planes, and openings through the prongs between the pairs of humps.

3. A hairpin the prongs of which are provided with pairs of oppositely disposed humps separated by openings through the prongs, an inwardly turned end on one of the prongs, and means on said inturned end with which the outer plain end of the other prong engages in closed position of the hairpin.

4. A hairpin the prongs of which are provided with pairs of oppositely disposed humps each pair separated by an opening through the prong, said pairs of humps being arranged in series intermediate the bight portion of the hairpin and ends of the prongs with that portion of said prongs between the bight and humps corrugated to increase the hold of the hairpin in the hair, the end of one of the prongs being bent into the form of a keeper cooperating with the other member after the manner of a safety pin.

5. A hairpin the prongs of which are provided with pairs of oppositely disposed humps each pair separated by an opening through the prong, said pairs of humps being arranged in series intermediate the bight portion of the hairpin and ends of the prongs with that portion of said prongs between the bight and humps corrugated to increase the hold of the hairpin in the hair, the end of one of the prongs being bent into a keeper depressed at its outer end to cooperate with the other prong after the manner of a safety pin.

6. In a hairpin having spaced apart prongs connected by a bight portion, means for connecting the ends of the prongs together consisting of an eye formed at the outer end of one of the prongs and bent inwardly and upwardly substantially parallel with said prong to form a keeper for releasable engagement of the outer end of the other prong.

7. In a hairpin having spaced apart prongs connected by a bight portion, the outer end of one of the prongs being straight or plain, and an eye formed at the outer end of the other prong and bent inwardly and upwardly substantially parallel therewith, the outer end of said eye being depressed centrally to receive and hold the outer plain end of the other prong.

CHARLES A. DIES.