No. 864,360. PATENTED AUG. 27, 1907.

B. H. COOK.

HAIR PIN.

APPLICATION FILED SEPT. 21, 1905.

FIG. 1.

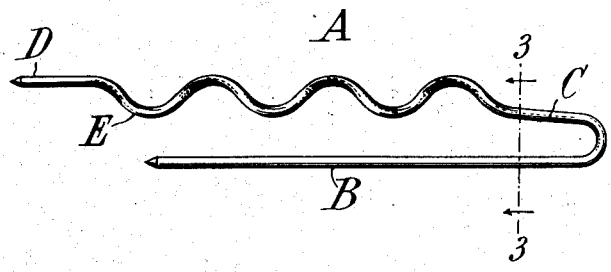


FIG. 2.

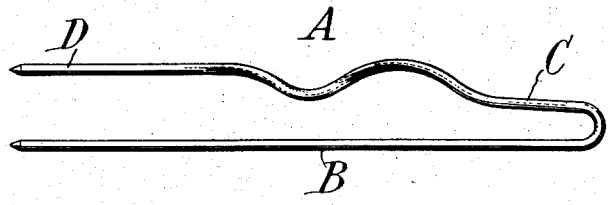
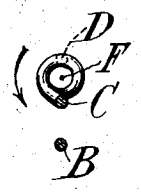


FIG. 3.



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UNITED STATES PATENT OFFICE.

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HAIR-PIN.

No. 864,360. Specification of Letters Patent. Patented Aug. 27, 1907.

Application filed September 21, 1905. Serial No. 279,430.

To all whom it may concern:

Be it known that I, BURTON H. COOK, a citizen of the United States, residing in the borough of Brooklyn, in the county of Kings, city and State of New York, have invented certain new and useful Improvements in Hair-Pins, of which the following is a specification.

This invention aims to provide a hairpin which cannot easily fall out of place, which holds the hair firmly, and which at the same time is easily and cheaply manufactured. To this end, my improved hairpin has two prongs, at least one of which is bent spirally, so as to twist the hair around it in inserting the pin, and thus to hold the hair firmly and to resist the pins falling out. The convolutions are preferably made of quite long pitch, so as to permit the easy introduction of the pin and its withdrawal by hand without pulling the hair.

Various features of improvement are referred to in detail hereinafter.

The accompanying drawings illustrate embodiments of the invention.

Figure 1 is a side view of the pin. Fig. 2 is a side view of a different style. Fig. 3 is a cross-section on the line 3—3 of Fig. 1.

Referring to the embodiments illustrated, two prongs A and B are provided. The prong A is bent spirally. The prong B may be of any desired shape, but is preferably straight, as shown. Any desired number of convolutions may be made in the prong A. For example, in the form shown in Fig. 2, one and one-half convolutions are provided; while in the form shown in Fig. 1, there are three and one-half convolutions. Also the spiral may be formed in any part of the prong. Preferably it commences near the rear end C of the prong, and terminates a little short of the point D, thus leaving short, straight portions C and D at opposite ends. The straight point D serves to fix the pin definitely in a certain direction before the spiral portion engages the hair. It is important that the hair should be gripped tightly between the rear ends of the two prongs, and to effect this the portion C is bent as near as desired to the prong B, and is in line with the inner side of the spiral. Likewise it is of value to embrace between the two prongs as much hair as possible, and the point D, therefore, is in line with the outer side of the spiral; that is to say, considering the inner side of the prong A to be that which is nearest to the prong B, the spiral commences at its rear end at the inner side of the prong, and terminates at the outer side thereof.

An economy in wire is effected by making the prong B shorter than the prong A, the former terminating opposite to a point E, at which the spiral approaches the prong B most closely. This is the first point at which the hair is gripped between the two prongs, and to extend the prong B beyond this point is unnecessary. The hold of the wire in the hair depends to a certain extent upon the number of convolutions, since it is impracticable to make them so short that a single convolution will hold very strongly. Therefore, for a given length of wire, it is advantageous to make the spiral prong longer than the straight one, so as to introduce as many convolutions as possible.

Fig. 3 illustrates the action of the hair pin. In coming out of the hair, there is a tendency of the pin to twist about the center F of the spiral in the direction of the arrow. This rotation, however, is resisted by the prong B alongside of the spiral prong. And since the pin is prevented from twisting, it is also prevented from falling out, unless sufficient force be applied to cause the hair to untwist around the prong A.

Though I have described with great particularity of detail certain embodiments of the invention, yet it is not to be understood therefrom that the invention is to be limited to the specific embodiments disclosed. Various modifications thereof in detail and in the arrangement of parts may be made by those skilled in the art without departure from the invention.

What I claim is:

1. A hair pin having a plurality of prongs, at least one of which is bent spirally and the other of which lies alongside of and outside of the convolutions thereof, and the spiral portion being rigidly connected to the remaining portion, so that as it is forced into the hair the other prong prevents it from turning and it twists the hair firmly around it and resists the pin's falling out.

2. A hair pin having a prong A which is bent spirally so as to twist the hair around it, and having a prong B lying outside of and integrally connected with the prong A and the end of which is opposite to a point at which the spiral approaches the prong B most closely.

3. A hair pin having a plurality of prongs, at least one of which is bent spirally, and the other of which lies alongside of and entirely outside of said spirally bent prong, and the spiral portion being rigidly connected to the remaining portion so that as it is forced into the hair the other prong prevents it from turning, and it twists the hair firmly around it and resists the pin's falling out, the spirally-bent prong being extended beyond the opposite prong.

4. A hair pin having a plurality of prongs at least one of which comprises a straight portion C and a spiral the inner side of which is in line with said straight portion and the other of which lies alongside of and laterally offset from the convolutions thereof and the spiral portion being rigidly connected to the remaining portion so that as it is forced into the hair the other prong prevents it from turning and it twists the hair firmly around it and resists the pin's falling out.

5. A hair pin having two prongs A and B, the prong A having an inner straight portion C, an outer point D, and an intermediate spiral of long pitch the inner side of which is in line with said portion C, and the outer side of which is in line with the point D, and being longer than the prong B, the end of the prong B being opposite to a point E of the spiral at which the latter approaches the prong B most closely, the spiral portion being rigidly connected to the remaining portion, so that as it is forced into the hair it twists the hair firmly around it and resists the pin's falling out.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

BURTON H. COOK.

Witnesses:
THEODORE T. SNELL,
WM. F. MARTINEZ.