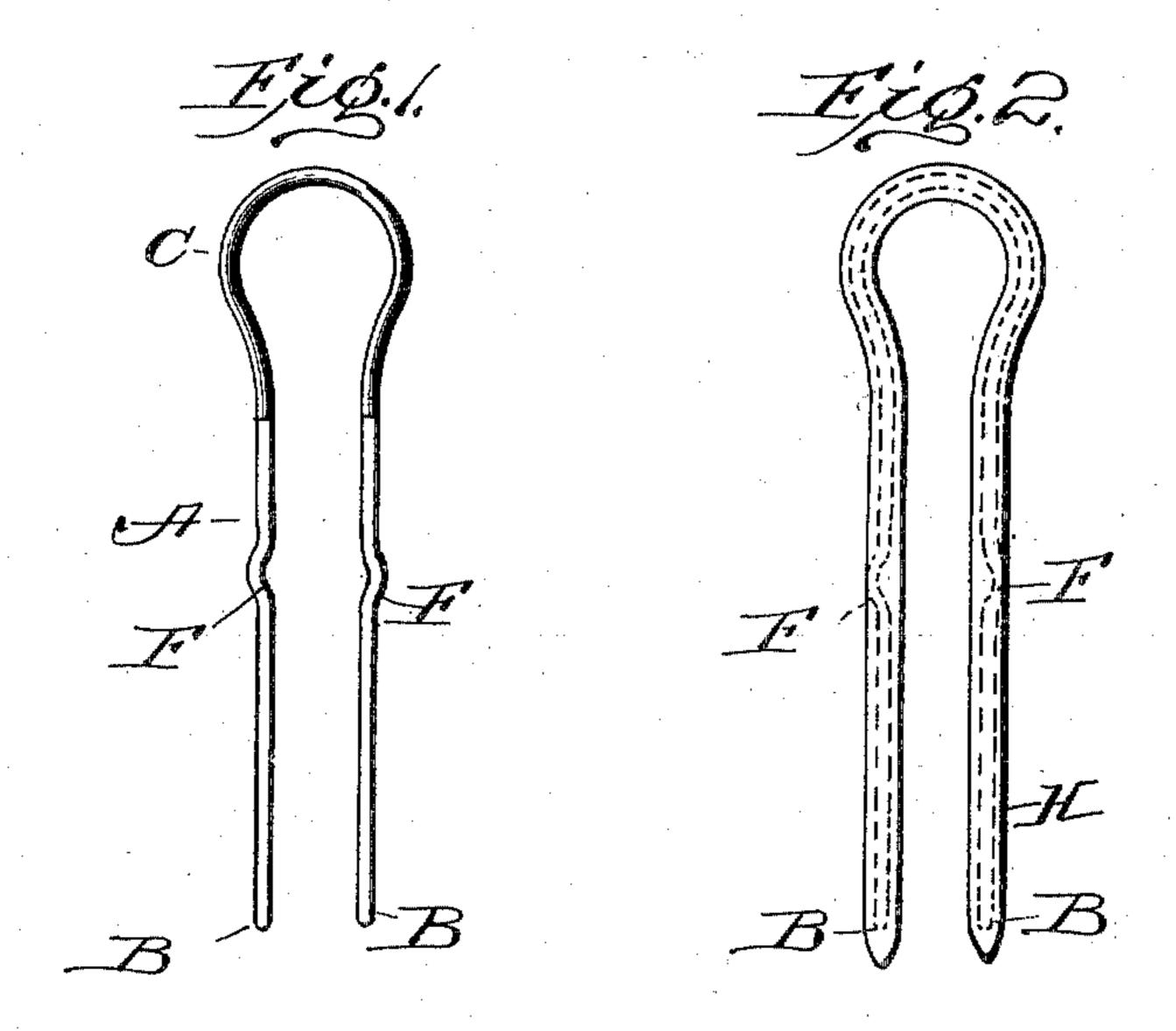
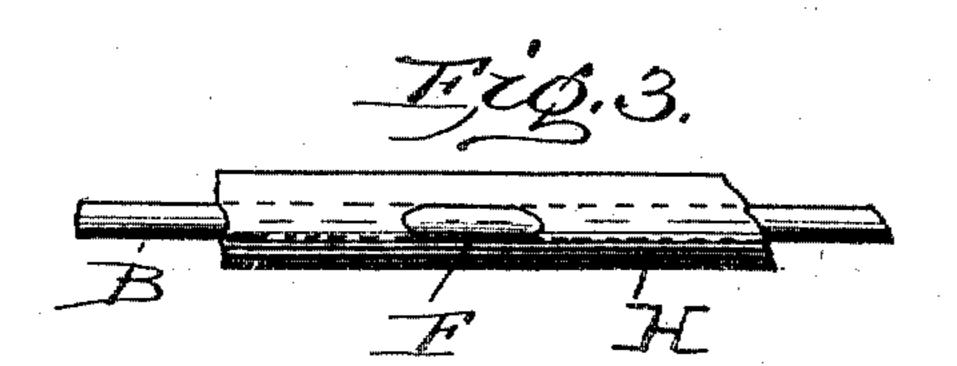
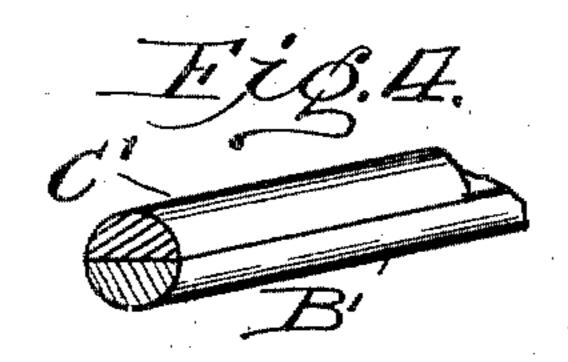
C. E. KOEHL. HAIR PIN.

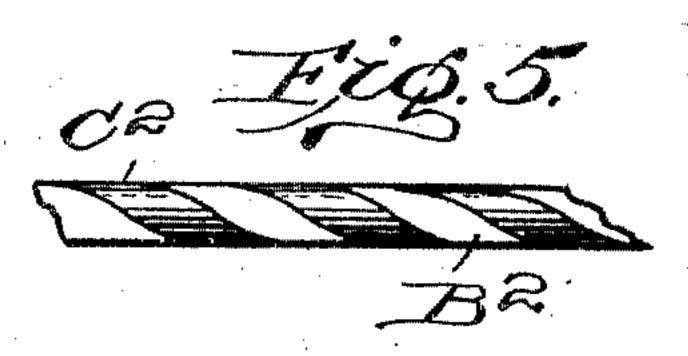
APPLICATION FILED JUNE 3, 1904.

NO MODEL.









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United States Patent Office.

CLARA E. KOEHL, OF PHILADELPHIA, PENNSYLVANIA.

HAIR-PIN.

SPECIFICATION forming part of Letters Patent No. 767,112, dated August 9, 1904.

Application filed June 3, 1904. Serial No. 210,998. (No model.)

To all whom it may concern:

Be it known that I, Clara E. Koehl, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Hair-Pins, of which the following is a specification.

The objects of this invention are to provide a hair-pin that shall generate a slight current of electricity, that shall be ornamental through being composed of materials differing in appearance, and that in certain forms shall give greater strength than is possessed by hair-pins having the same general appearance and now in common use.

In the accompanying drawings, Figure 1 shows a simple form of a hair-pin involving novel features. Fig. 2 is a similar view of a preferred form, the structure of Fig. 1 being embedded in non-metallic material. Fig. 3 is a view of a small portion of the structure of Fig. 2. Fig. 4 shows a modified construction of a certain rod. Fig. 5 shows a rod of metal spirally intertwined with a rod of more electropositive metal.

In the views, A represents a hair-pin made of a wire consisting in this instance of segments of different metals, one of the segments, BC, being more and preferably very much more electropositive than that lying next it. Such metals thus arranged create a very slight but constant electric current, and this undoubtedly exercises a beneficial influence in many cases. Preferably the metals are strikingly different in appearance, the bent end of the hair-pin being often made to appear like silver or gold or a combination of the two.

As shown in Fig. 1, the hair-pin may consist of three segments, a segment of one metal being interposed and forming a connection between two segments of a second metal; but the number of segments of any metal is not limited nor is the number of metals. It is a very simple matter to join end to end any number of segments of two or more metals.

If desired, the wire or rod may be composed

of segments C' B', lying side by side and laterally in contact, as shown in Fig. 4, or of two segments or wires B²C², twisted together ropelike. As shown in Fig. 2, the wire may have 50 any suitable material H enveloping it, the material being molded upon the wire or the wire being embedded in the material. The wire may have any desired number of projections or bends F reaching the surface of the envelop, 55 and preferably the bend is primarily made to project slightly and is then ground off and polished, so that its surface lies in the general surface of the envelop and is distinguishable therefrom only by difference in the character 60 of the material and not by the form or the joint between the parts. The patches of highly-polished metal give the hair-pins an attractive and ornamental appearance and the electrical effect is practically the same as in the form of Fig. 1. 65

The metal may be simple metals or alloys having the desired colors, and in some cases the segments B² C² may be electrically welded, although when laid side by side this is not advisable, especially if they be twisted together 7° or otherwise interlocked, as in Fig. 5. The envelop may be celluloid, which is readily made to closely resemble tortoise-shell, and with this material a golden-bronze metal forms a pleasing combination. Whatever the ma- 75 terials employed if the exposed parts of the metal be inconspicuous the hair-pin will have the appearance of the ordinary hair-pin of like external material, yet the embedded wire if of proper character gives it much greater 80 strength, and if the material be such as deteriorates through lapse of time, like hard rubber, celluloid, and the like, the durability is very materially increased.

What I claim is—

1. A hair-pin consisting of a metal core composed of metals one of which is more electropositive than the other and a non-metallic enveloping body leaving one or more points of the core exposed.

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2. A hair-pin consisting of a non-metallic body having embedded therein a wire made up

of segments of different metals widely sepa-

rated in the electropositive scale.

3. A hair-pin made up of a metal core and an enveloping body of celluloid or the like, said tore being provided with small projections whose outer surfaces lie in the general surface of the envelop

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLARA E. KOEHL.

Witnesses:

MARGARET M. BAILEY, WALLACE GREENE.