No. 801,513. PATENTED OCT. 10, 1905.

G. DELORY.

COMB FOR APPLYING LIQUID TO THE HAIR.

APPLICATION FILED AUG. 18, 1904.

Fig. 1

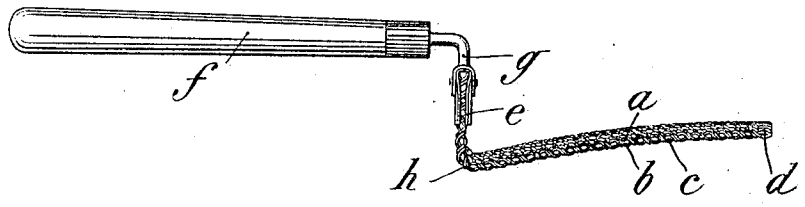


Fig. 2

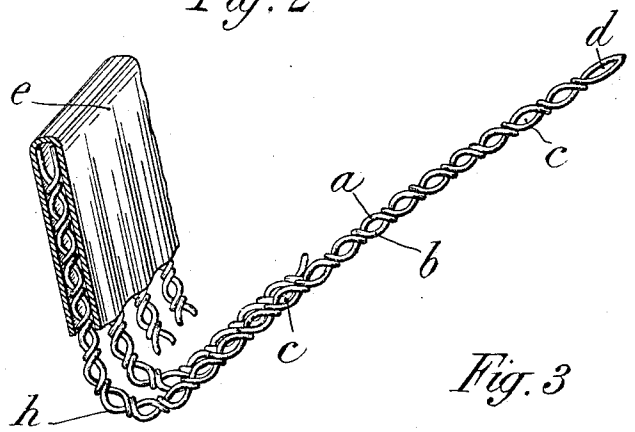


Fig. 3

Fig. 4

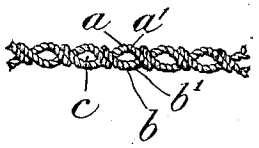
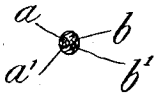


Fig. 5



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UNITED STATES PATENT OFFICE.

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COMB FOR APPLYING LIQUID TO THE HAIR.

No. 801,513. Specification of Letters Patent. Patented Oct. 10, 1905.

Application filed August 18, 1904. Serial No. 221,259.

To all whom it may concern:

Be it known that I, GUSTAVE DELORY, manufacturer, a citizen of the Republic of France, and a resident of 31 Rue de Maubenge, Paris, in the Republic of France, have invented certain new and useful Improvements in Combs for Applying Liquid Close to the Roots of the Hair or Beard; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to combs and comb-like devices for applying coloring preparations or discoloring preparations or antiseptic or medicinal preparations or other liquids close to the roots of the hair or beard without getting it onto other parts of the hair; and it has for its object to simplify the construction of these combs and to render it possible for them to hold a greater charge of liquid.

The improvements consist principally in forming each tooth of the comb device from two threads or wires of metal or other suitable material conveniently twisted together in such a manner that there is obtained along the length of each tooth a series of loops, meshes, chinks, or openings communicating with one another by grooves formed by the helicoidal hollows or depressions in the neighborhood of the line of contact between the threads or wires, which meshes and grooves retain the liquid to be deposited at the roots of the hair when the comb is applied to the head or face.

The invention consists also in forming each of the said threads not only of a single smooth filament or fiber, but also of two or more fine threads, wires, or filaments previously twisted together in order to increase the number of grooves along the tooth.

It consists, moreover, in providing a rounded loop at the free extremity of each tooth or prong of the comb device in order to avoid points at such extremities which would be liable to do injury or cause wounds.

The invention consists, lastly, in giving a particular form to the teeth of the comb device and in their attachment to the shank, root, or frame in such a manner that the comb shall not catch in the hair.

The two threads, wires, or strips forming each tooth, which may be composed each of a single smooth filament or may be multifilar—*i. e.*, each composed of two or more filaments—and which may be of metal or other appropriate material, are twisted together in such a manner as to form a series of meshes, openings, or chinks each separated by, say, two twists of the threads about one another, so that the hair cannot get between the threads and be caught. The two lengths which form a tooth are preferably made from one piece doubled in two in order to obtain a rounded loop at one of the extremities, which will be the free end of the tooth, as described. The teeth can be flattened by pressure, if desired. A set of teeth being prepared, they are bent to conform to the rounded shape of the head, and they are preferably assembled and fixed in such a manner that they together present a curve transversely of the comb in order that the comb may have a spherical or other concavity to more or less fit the head. At their base the teeth are curved or bent upward at nearly a right angle, the bend being rounded, and these ends of the teeth are fixed in a framing which constitutes, as it were, the back of the comb and which is advantagously furnished with a handle, which may be attached about midway along the length of the back or at one end thereof. The framing or back may be formed of a metal plate doubled or folded over to embrace the extremities of the teeth and then pressed in order to secure them in position, or it can be made of cast metal or of a plastic material, such as celluloid.

The combs may have any desired dimensions and the teeth any length; also, any number of teeth may be employed and they may be of any thickness. The loops also may be of any desired size and may be separated by any number of twists or turns.

In order to enable the invention to be readily understood, reference is made to the accompanying drawings, in which—

Figure 1 is a side view of an improved comb device. Fig. 2 is a perspective view of portion of the comb to a larger scale, each tooth being supposed to be formed of two single or unifilar threads. Fig. 3 is a cross-section of one of the teeth shown in Fig. 2. Figs. 4 and 5 are elevation of part of a tooth and cross-section thereof, respectively, which tooth is formed by twisting together in such a man-

ner as to produce the necessary meshes or loops, not two smooth, unifilar threads, filaments, or wires, but two multifilar threads, being threads each composed of two or more filaments twisted together.

a and *b*, Figs. 1, 2, and 3, or *a a'* and *b b'*, Figs. 4 and 5, are the two threads or wires, single or multifilar, which are twisted together to form the teeth of the comb device. Between the loops or meshes *c* one of the threads or wires is twisted or coiled twice around the other, as shown on the drawings, in order that the hair shall not be caught between them. The teeth are shown terminating each in a loop *d*.

e is the back or root of the comb, consisting in this instance of a metal plate doubled over to embrace the teeth; but it could also be in other materials—for example, in a plastic material, such as celluloid or cast metal.

f is the handle, of which the holder or shank connection terminates in a fork *g*, which embraces the back *e* and is riveted or suitably fastened thereto.

The teeth of the comb are shown curved slightly in both directions, as described, and are bent up at nearly a right angle at *h*, the corner being rounded, as shown.

I claim—

1. In a comb device for depositing liquids near to the roots of the hair and beard, teeth formed of two filaments twisted together in such a manner as to obtain along the teeth loops joined by helicoidal grooves said loops and grooves being capable of retaining a charge of liquid.

2. In a comb device for depositing liquids near to the roots of the hair and beard, teeth formed of two multifilar threads which are twisted together in such a manner as to obtain along the teeth loops joined by helicoidal grooves said loops and grooves being capable of retaining a charge of liquid.

3. In a comb device for depositing liquids near to the roots of the hair and beard, teeth formed of two lengths of thread obtained by doubling a single piece in two, said two lengths being twisted together in such a manner as to obtain along the teeth loops joined by helicoidal grooves, a rounded loop at the free end of the tooth, said loops and grooves being capable of retaining a charge of liquid.

4. In a comb device for depositing liquids near to the roots of the hair and beard and in combination, teeth formed of two threads twisted together in such a manner as to obtain along the teeth loops joined by helicoidal grooves the loops and grooves being capable of retaining a charge of liquid and a framing for fixing the said teeth in position and constituting the back of the comb.

5. In a comb device for depositing liquids near to the roots of the hair or beard, and in combination, teeth formed of two threads twisted together in such a manner as to obtain along the teeth loops joined by helicoidal grooves the said loops and grooves being capable of retaining a charge of liquid, the teeth being bent at about a right angle and the corners rounded, rounded loops at the free extremities of the teeth, a frame constituting the back of the comb and formed of a plate folded over to engage the bent-up portions of the teeth and a handle fixed to said back as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAVE DELORY.

Witnesses:

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ALCIDE FABE.