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(54) **Curler for hairstyles and permanent waves**

Lockenwickler zum Wellen der Haare oder Erstellung einer Dauerwelle

Bigoudi pour mises en plis et permanentes

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Description

[0001] The present invention relates to curlers for hair-styles and permanent waves.

[0002] Curlers of different sizes are known, adapted to be used by the operators of the field to perform particular "curled" hairstyles, or for permanent waves, with more or less waving according to the customer's desires.

[0003] A first type of curler includes a cylinder, with a stick introduced therein.

[0004] The ends of the stick protrude from the cylinder and have enlarged sections of different size.

[0005] The enlarged sections are adapted to lock a special small elastic strip extending longitudinally with respect to the cylinder and aimed at fixing the curler during use. The diameter of the intermediate portion of the cylinder reduces progressively, so as to facilitate the operator when rolling up a hair lock onto the curler.

[0006] A variant of this type of curler includes a cylindrical-shaped member at the ends of which corresponding covers are fastened. The central parts of the covers feature each a corresponding pin and a head, to which a suitable small elastic strip is fastened, which acts as described above.

[0007] A second type of curler is flat and has slightly curved walls, connected by two sides. The flat curler has a regular thickness for the entire extension, and a slight narrowing in the central portion of the sides.

[0008] The heads of the above curler feature connecting members, integral therewith and aimed at longitudinally locking a stretched small elastic strip, which acts as described above.

[0009] A third type of curler includes two discs with a kind of barrel placed therebetween.

[0010] The discs feature in their central part connecting members, aimed at longitudinally locking a stretched small elastic strip, so as to block the curler during its use.

[0011] A fourth type of curler is formed by two parts: the first one includes a cylindrical element with pointed ends; the second part features a frame made of two bars, whose length is equal to the length of the cylindrical portion of the first part. The first and the second parts are joined by four circular strips.

[0012] Using this curler, the hair lock is rolled around the cylindrical element and locked by the frame applied to the cylindrical element with pressure.

[0013] Said curlers allow to obtain "curled" or waved hairstyles, depending on the type and size of curler used.

[0014] Even if performed with care and with particular techniques, the final hairstyle looks unnatural, that is to say, the difference between a natural curled/waved hairstyle and the one obtained artificially is visible.

[0015] Moreover, in the specific case of a permanent, where it is necessary to use acids for fixing the hairstyle, it happens that the shape of the curlers mentioned above and the pressure exerted by the elastic strip locking the hair lock damage the hair lock under the elastic strip (hair incision or cut).

[0016] If a waved permanent with a more natural effect is desired, a series of curlers of a different size must be used, with a consequent loss of time for the operator. German Patent No. DE 18 10 549 to Sellen, Pierre; Sellen, René; and Sellen, Jean-Marie discloses a curler having an elongated, typically elliptical or ovoidal, cross-section and a longitudinal section continuously decreasing from the curler heads toward the curler center.

[0017] The feature of the invention is to propose a curler with a simple design and low manufacturing costs, which allows to obtain as natural a hairstyle as possible.

[0018] Another object of the present invention is to propose a curler, whose shape allows to prevent damages to the hair, and avoids undesired folds in the hairstyle resulting from the pressure exerted by said elastic strip on the hair lock.

[0019] A further object of the present invention is to propose a curler which facilitates the operator in obtaining the desired results, accelerating the operation by reducing the quantity of curlers to be applied.

[0020] The above mentioned objects are obtained by the present invention in accordance with the claims.

[0021] The characteristic features of the present invention will be pointed out in the following description with reference to the enclosed drawings, in which:

- Figure 1 is a top view of the proposed curler;
- Figure 2 is a lateral view of the proposed curler;
- Figure 3 is a section view taken along III-III of Figure 2;
- Figure 4 is a section view taken along IV-IV of Figure 2.

[0022] With reference to the enclosed drawings, the reference numeral 2 indicates a curler for hairstyles and permanent waves, which has an elongated shape, symmetrical with respect to the central vertical and horizontal planes.

[0023] The cross sections of the curler 2, along the longitudinal extension thereof, have a profile similar to an elliptical one with a continuously variable cross section area.

[0024] In the example shown in figures 1, 2, the curler has two heads 3, 4, connected to a central portion 8 by two narrow portions 5, 6; the cross section of the central portion is smaller than the maximum cross section of the heads.

[0025] At its ends, the curler 2 features, integral therewith and concentric with respect to the ends, connecting members 88, 89, respectively, protruding outwards.

[0026] A small elastic strip 7 (of known type), stretched longitudinally with respect to the curler, is removably fastened to the connecting members.

[0027] The small elastic strip 7 is in contact only with the heads 3, 4, in the region of the maximum section

thereof, while it does not touch the remaining part of the curler due to the particular shape of the curler, which leaves an open space L, through which the hair rolled on the curler pass.

[0028] Thus, the pressure exerted on the hair by the small strip 7 is considerably reduced.

[0029] In non-use condition, the small elastic strip 7 of the curler 2 is coupled to the connecting members 88, 89; before using the curler, an operator must release the small elastic strip 7 from one of the connecting members, for example from member 89.

[0030] Then, the operator rolls a hair lock onto the curler, and locks the latter together with the hair lock, by hooking the small elastic strip 7 to the same connecting member 89.

[0031] It is to be pointed out that the curler is proposed in different sizes, needed to perform the required hairstyles on different hair lengths.

[0032] The described curler proposed for hairstyles and permanents is particularly advantageous because of its elongated shape, symmetrical with respect to the horizontal and vertical planes, with cross sections having a profile similar to an elliptical area with a variable cross section, which allows to obtain hairstyles or permanents with a more natural look.

[0033] The natural effect is obtained due to the fact that the hair lock that the operator rolls onto the curler has areas with a different waving; more precisely, the waves are more marked for the hair rolled at the narrow portions 5, 6, and less marked for the hair rolled on the central portion 8.

[0034] The proposed curler allows to obtain waves with a natural effect, since all the curlers used by the operator have identical size, thus allowing the operator to save time when applying the same.

[0035] Moreover, the number of curlers to apply is reduced, thus obtaining a better final result; in fact, as different waves are obtained on each curler, it is no longer necessary to apply a series of curlers of different size to obtain a similar effect.

[0036] The shape of the curler is advantageous also because the pressure of the elastic strip 7 on the rolled hair lock is very slight, which allows to avoid undesired folds near the elastic strip and, in case hairstyle fixing acids are used, the hair lock under the elastic strip is not damaged.

[0037] It is understood that what above, has been described as a pure, not limitative example, therefore, possible variants of the invention remain within the protective scope of the present technical solution, as described above and claimed hereinafter.

Claims

1. Curler (2) for hairstyles and permanent waves comprising an elongated body, symmetrical with respect to central vertical and horizontal planes, said body

having, along the longitudinal extension, a substantially elliptical profile, with cross section continuously changing from at least a minimum to at least a maximum extension, in relation to a predetermined direction, said body being **characterized in that** it comprises two heads (3,4), and at least one central portion (8) separated from the heads (3,4) by at least two narrow portions (5,6); the cross section of said central portion (8) being smaller than the maximum cross section of said heads (3, 4) .

2. Curler for hairstyles and permanent waves, according to claim 1, **characterized in that** said body has, at its ends, connecting members (88,89) protruding outwards, to which elastic means are removably fastened.
3. Curler for hairstyles and permanent waves, according to claim 1 or 2, **characterized in that** said body includes two heads (3,4) connected to a single central portion (8) by two of said narrow portions (5,6).
4. Curler for hairstyles and permanent waves, according to claim 1 to 3, **characterized in that** said elastic means (7), stretched longitudinally with respect to the curler, touch said heads (3,4) only in the region of the maximum section thereof, while they do not touch the remaining part of the curler, so as to define an open space L, which allows the passage of the hair rolled on said curler.

Patentansprüche

1. Lockenwickler (2) zum Wellen der Haare und zum Erstellen von Dauerwellen, mit einem länglichen Körper, der in Bezug auf zentrale vertikale und horizontale Ebenen symmetrisch ist, wobei der besagte Körper entlang seiner Längserstreckung ein im wesentlichen elliptisches Profil aufweist, wobei sich der Querschnitt in Bezug auf eine vorgegebene Richtung kontinuierlich von wenigstens einer minimalen zu wenigstens einer maximalen Erstreckung verändert, wobei der besagte Körper **dadurch gekennzeichnet ist, daß** er zwei Köpfe (3, 4) und wenigstens einen zentralen Bereich (8) aufweist, der von den Köpfen (3, 4) durch wenigstens zwei schmale Bereiche (5, 6) getrennt ist, wobei der Querschnitt des besagten zentralen Bereiches (8) kleiner als der maximale Querschnitt der besagten Köpfe (3, 4) ist.
2. Lockenwickler zum Wellen der Haare und zum Erstellen von Dauerwellen gemäß Anspruch 1, **dadurch gekennzeichnet, daß** der besagte Körper an seinen Enden Verbindungselemente (88, 89) aufweist, die sich nach außen erstrecken und an denen elastische Mittel lösbar gehalten sind.

3. Lockenwickler zum Wellen der Haare und zum Erstellen von Dauerwellen gemäß Anspruch 1 oder 2, **dadurch gekennzeichnet, daß** der besagte Körper zwei Köpfe (3, 4) umfaßt, die über zwei der besagten schmalen Bereiche (5, 6) mit einem einzelnen zentralen Bereich (8) verbunden sind. 5
4. Lockenwickler zum Wellen der Haare und zum Erstellen von Dauerwellen gemäß Anspruch 1 bis 3, **dadurch gekennzeichnet, daß** die besagten elastischen Mittel (7), wenn sie in Längsrichtung in Bezug auf den Lockenwickler gedehnt werden, die besagten Köpfe (3, 4) nur im Bereich dessen maximalen Querschnitts berühren, während sie den restlichen Bereich des Lockenwicklers nicht berühren, um einen offenen Bereich L zu bilden, der den Durchtritt der auf den besagten Lockenwickler gerollten Haare ermöglicht. 10 15

qui permet le passage des cheveux enroulés sur ledit bigoudi.

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Revendications

1. Bigoudi (2) pour mises en plis et permanentes comprenant un corps oblong, symétrique par rapport à des plans centraux vertical et horizontal, ledit corps comportant, le long du prolongement longitudinal, un profil sensiblement elliptique, avec une section transversale changeant en continu depuis au moins un prolongement minimum jusqu'à au moins un prolongement maximum, par rapport à une direction prédéterminée, ledit corps étant **caractérisé en ce qu'il** comprend deux têtes (3, 4), et au moins une partie centrale (8) séparée des têtes (3, 4) par au moins deux parties étroites (5,6) ; la section transversale de ladite partie centrale (8) étant inférieure à la section transversale maximum desdites têtes (3, 4). 25 30 35
2. Bigoudi pour mises en plis et permanentes selon la revendication 1, **caractérisé en ce que** ledit corps comporte, au niveau de ses extrémités, des éléments de liaison (88, 89) faisant saillie vers l'extérieur, auxquels sont fixés de façon amovible des moyens élastiques. 40 45
3. Bigoudi pour mises en plis et permanentes selon la revendication 1 ou 2, **caractérisé en ce que** ledit corps comprend deux têtes (3, 4) reliées à une partie centrale unique (8) par deux desdites parties étroites (5, 6). 50
4. Bigoudi pour mises en plis et permanentes selon la revendication 1 à 3, **caractérisé en ce que** lesdits moyens élastiques (7), étirés longitudinalement par rapport au bigoudi, touchent lesdites têtes (3,4) seulement dans la région de la section maximum de celles-ci, alors qu'ils ne touchent pas la partie restante du bigoudi, afin de définir un espace ouvert L, 55

