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(54) Hair cutting apparatus and method

(57) Hair is prepared for cutting by an apparatus, or comb, comprising a curved spine (22) and teeth (24)

projecting from the spine. The spine (22) is curvilinear along at least part of its length and the multiplicity of teeth (24) project from the curved part of the spine (22).

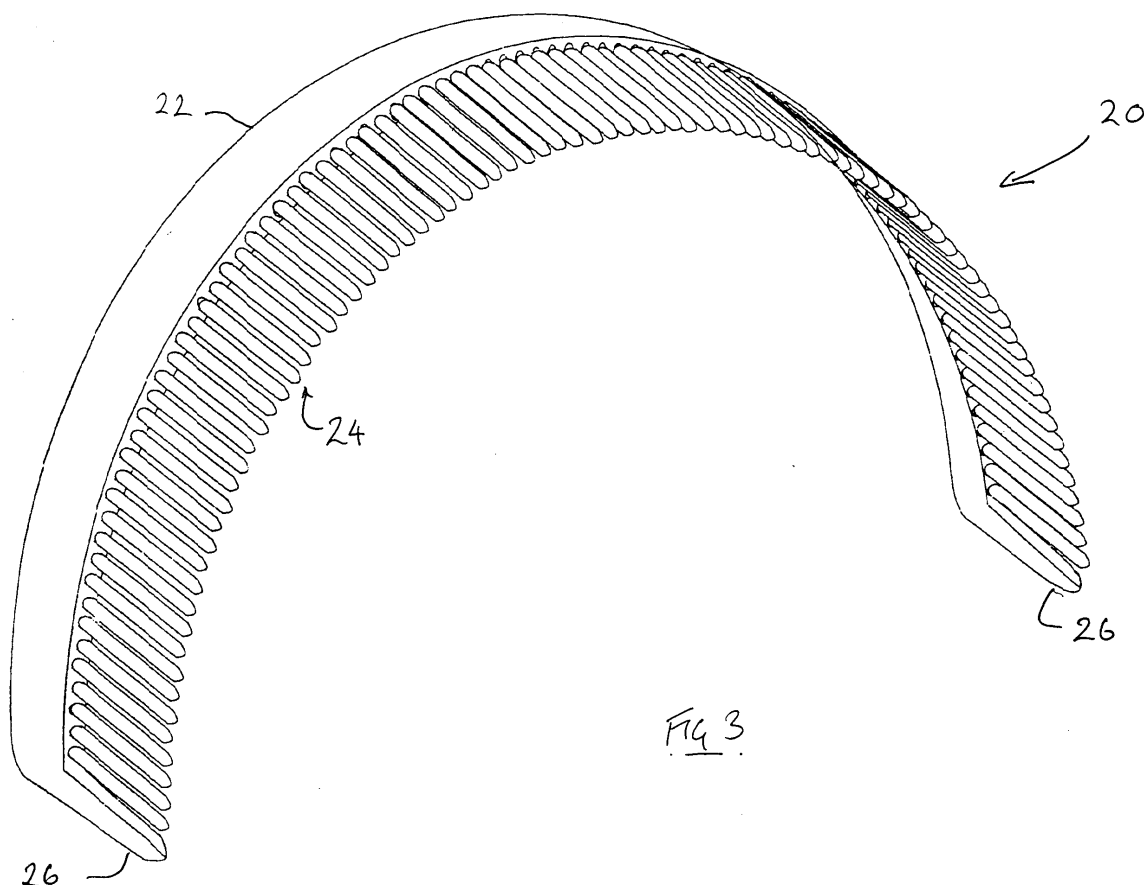


Fig 3

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Description

[0001] The present invention relates to apparatus and a method for use in preparing hair, such as for cutting. The invention relates, for example, to apparatus and a method for selecting a portion of hair to be cut.

[0002] To cut a person's hair, it is normal to use a comb to lift an amount of hair from the person's head. The hair is generally held under tension and can then cut with scissors or other cutting means close to the comb. This process is repeated until all of the person's hair has been cut.

[0003] Significant time taken in cutting hair is spent in moving the comb to a new location and picking up more hair. Only a small amount of hair can be picked up at any one time otherwise there is a risk that the hair will not be cut to a uniform length. As well as being time-consuming, the repeated action of hair being picked up in a comb, time after time, can be a source of discomfort for the person whose hair is being cut.

[0004] An object of this invention is to provide a method and an apparatus which can allow more hair to be picked up at once with even tension than is possible when using conventional techniques.

[0005] According to one aspect of the present invention there is provided apparatus for use in preparing hair such as for cutting comprising a spine and teeth projecting therefrom, wherein the spine is curvilinear along at least part of the length thereof and the multiplicity of teeth project from the curved part of the spine.

[0006] Hair to be prepared can be picked up by the teeth of the apparatus. The curve of the spine ensures that more hair of approximately uniform length can be picked up than is possible with a conventional straight comb.

[0007] If desired, the spine can be curved along the entire length thereof.

[0008] The teeth are most typically of round or oval cross section. In embodiments in which the teeth are of oval cross-section, the cross-section of each tooth has its long axis disposed generally transverse to the length of the spine.

[0009] Most typically, the teeth are of uniform length. The apparatus has been found to be particularly effective if the length of the teeth is in the range of approximately 2.5 cm to 4 cm. More preferably, the teeth are not longer than approximately 3.8 cm.

[0010] The teeth are preferably spaced evenly along the spine. The average number of teeth per centimetre of the length of the spine is typically in the range of approximately 3.5 to 8. Within this range, a figure in the range of approximately 3.5 to 4 is preferred. In a typical embodiment, the spacing between the teeth is approximately the same as the thickness of the teeth in the longitudinal direction of the spine.

[0011] The spine advantageously is approximately 15 cm to 20 cm in length. Typically, the spine has a curvature which is curved as a segment of a circle and, in

such embodiments, the teeth typically extend parallel to a centre axis of the curve. In a preferred range of embodiments, the spine may curve through an angle of approximately from 14° to 90°. More preferably, this range may be approximately from 28° to 54°. Yet more preferably, the angle subtended is in the range of approximately 32° to 44°.

[0012] Alternatively, the curvature of the spine may be expressed as having radius of approximately from 11 cm to 72 cm. More preferably, the radius is approximately from 19 cm to 36 cm. Yet more preferably, the radius is in the range of approximately 23 cm to 32 cm.

[0013] The apparatus may conveniently be formed as a one-piece moulding of plastics material or of metal.

[0014] Additionally, the apparatus may include a handle.

[0015] According to another aspect of the present invention there is provided a method of preparing hair of a person or an animal in which apparatus embodying the first aspect of the invention is used repeatedly to pick up an amount of hair such as to be cut.

[0016] Hair picked up in this method lies between the teeth of the apparatus. In such a method the hair is typically cut with scissors closely adjacent to the teeth.

[0017] As will be understood, the curved locus along which the teeth are disposed approximates the curvature of the person's scalp or an animal's body, with the result that the hair picked up by the apparatus is of approximately uniform length.

[0018] For a better understanding of the present invention and to show more clearly how it may be carried into effect reference will now be made, by way of example, to the accompanying drawings in which:

Figures 1A and 1B show a known apparatus in use in a first example of cutting a person's hair by a known method;

Figures 2A and 2B show a known apparatus in use in a second example of cutting a person's hair by a known method;

Figure 3 is a perspective view of apparatus embodying the invention;

Figures 4A and 4B show apparatus embodying the invention in use in a first example of cutting a person's hair in a method embodying the invention; and

[0019] Figures 5A and 5B show apparatus embodying the invention in use in a first example of portioning a person's hair in a method embodying the invention.

[0020] With reference first to Figures 1A and 1B, there will be seen a conventional comb 10 in use in portioning a person's hair 14. The comb 10 is used to pick up hair 14 for cutting with scissors or the like. As can be seen, the comb 10 can pick up hair for cutting over just a small part of its length, indicated at 12 in the figures. It is not

possible to pick up hair 14 over a longer part of the length of the comb 10 because the person's scalp curves away from the comb 10.

[0021] Figures 2A and 2B show a conventional comb 10 in use in portioning long hair 14 to be cut. In this case, it is possible to pick up hair 14 over a longer length of the comb. However, this is not satisfactory because the length to which the hair 14 will be cut will not be constant because distance between the person's scalp and the comb 10 is not uniform over the length of the comb 10. This is most clearly seen in Figure 2B.

[0022] With reference now to Figure 3, there is shown apparatus embodying the invention.

[0023] The apparatus is constituted by a comb 20. In this embodiment, the comb 20 is formed as a one-piece moulding of plastics material. The moulding includes an elongate arcuate spine 22 of generally rectangular cross-section. The spine 22 is formed in a uniform curve along its length, following a segment of a circle, although it is not essential for the curve to extend the entire length of the spine. The spine 22 is in the region of 15 cm to 20 cm in length.

[0024] In Figure 5, the comb 20 illustrated extends around a comparatively large segment of a circle. Other embodiments, such as are shown in Figures 4A and 4B and Figures 5A and 5B, have a lesser angular extent. In each case, the length of the comb 20 is approximately 15 cm to 20 cm. Thus, those combs which have a lesser angular extent are formed to have a larger radius of curvature.

[0025] The spine curves through an angle in the range approximately from 14 degrees to 90 degrees, and preferably in the range approximately from 28 degrees to 54 degrees. Most preferably, the spine curves through an angle in the range approximately from 32 degrees to 44 degrees.

[0026] Put an alternative way, the curvature of the spine has a radius of approximately 11 cm to 36 cm, preferably approximately from 19 cm to 36 cm. Most preferably, the curvature of the spine has a radius of approximately 23 cm to 32 cm.

[0027] A multiplicity of teeth 24 projects from the spine 22. The teeth 24 extend generally parallel to one another and parallel to an axis about which the spine 22 is curved. The teeth 24 are evenly-spaced along the spine and extend almost its entire length. The teeth 24 are substantially identical to one another.

[0028] The teeth have a length in the range of approximately 2.5 cm to 4 cm and are preferably not longer than approximately 3.8 cm.

[0029] In this embodiment, each tooth 24 has an oval cross-section for most of its length. The teeth 24 may taper gently away from the spine 22. An end portion of each tooth 24 remote from the spine is formed into a point which is sufficiently sharp to enable it to penetrate a mass of hair, but which is not so sharp as to be likely to harm a person's scalp. The teeth 24 are arranged such that their short cross-sectional axes are directed

along the length of the spine 22 and their long cross-sectional axes extend across the spine 22.

[0030] The teeth 24 are arranged, in this embodiment, at regular intervals of approximately 2.6 mm. The thickness of each tooth 24 along the length of the spine is approximately equal to the width of the spaces between adjacent teeth.

[0031] The average number of teeth per centimetre of the length of the spine is generally in the range of approximately 3.5 to 8, preferable in the range of approximately 3.5 to 4.

[0032] From a position adjacent to each of the ends of the spine 22, there projects a respective end tooth 26. Each end tooth 26 lies adjacent a respective end one of the teeth 24. The end teeth 26 are somewhat thicker in a direction along the length of the spine 22 than are the teeth 24. The end teeth 26 provide protection for the teeth 24.

[0033] In use, a comb 20 embodying the invention is pushed into a subject's hair 14 onto his or her scalp, and a portion of the hair 14 is then lifted from the scalp for cutting, with scissors or some other cutter. This sequence is repeated as often as necessary. Most skilled practitioners should be able readily to adapt to work in accordance with the invention. In general, the apparatus allows the practitioner to lift and evenly tension a greater amount of hair than is conventionally possible. Consequently, fewer repetitious sequences, as described above, are required to complete the entire hair cutting operation. Thus a practitioner can work more quickly using a method and apparatus of the invention than is the case with conventional methods and apparatus.

[0034] As will be appreciated, the apparatus and method of this invention can be applied in animal grooming where the curve of the comb is selected to approximate the curve of part of an animal's body. Additionally, the spacing, length and shape of the teeth may be selected to optimise their performance with the hair of a particular animal.

Claims

1. Apparatus for use in preparing hair such as for cutting comprising a spine (22) and teeth (24) projecting therefrom, characterised in that the spine (22) is curvilinear along at least part of the length thereof and the multiplicity of teeth (24) project from the curved part of the spine (22).
2. Apparatus as claimed in claim 1, characterised in that the spine (22) is curved along the entire length thereof.
3. Apparatus as claimed in claim 1 or 2, characterised in that the teeth (24) are of round or oval cross section.

4. Apparatus as claimed in claim 3, characterised in that, where the teeth (24) are of oval cross-section, the cross-section of each tooth has its long axis disposed generally transverse to the length of the spine (22). 5
5. Apparatus as claimed in any preceding claim, characterised in that the teeth (24) are of uniform length.
6. Apparatus as claimed in any preceding claim, characterised in that the length of the teeth (24) is in the range of approximately 2.5 cm to 4 cm, the teeth preferably not being longer than approximately 3.8 cm. 10 15
7. Apparatus as claimed in any preceding claim, characterised in that the average number of teeth (24) per centimetre of the length of the spine (22) is in the range of approximately 3.5 to 8, preferably in the range of approximately 3.5 to 4. 20
8. Apparatus as claimed in any preceding claim, characterised in that the spine (22) has a curvature which is curved as a segment of a circle. 25
9. Apparatus as claimed in claim 8, characterised in that the teeth (24) extend parallel to a centre axis of the curve.
10. Apparatus as claimed in claim 8 or 9, characterised in that the spine (22) curves through an angle in the range approximately from 14° to 90°, preferably approximately from 28° to 54°, and most preferably approximately from 32° to 44°. 30 35
11. Apparatus as claimed in claim 8, 9 or 10, characterised in that the curvature of the spine (22) has a radius of approximately from 11 cm to 72 cm, preferably approximately from 19 cm to 36 cm, and most preferably approximately from 23 cm to 32 cm. 40
12. A method of preparing hair of a person or an animal in which apparatus (20) as claimed in any preceding claim is used repeatedly to pick up an amount of hair such as to be cut. 45

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FIG 1A
PRIOR ART

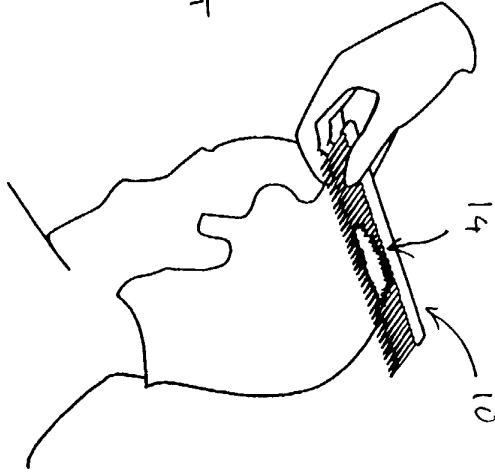


FIG 1B
PRIOR ART

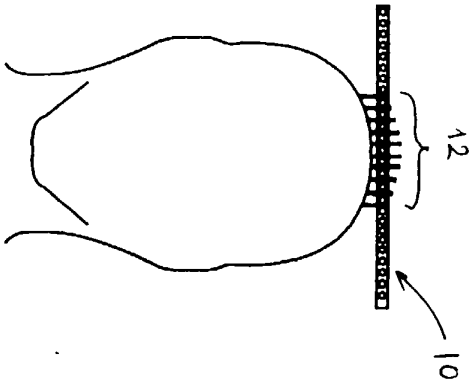


FIG 2A
PRIOR ART

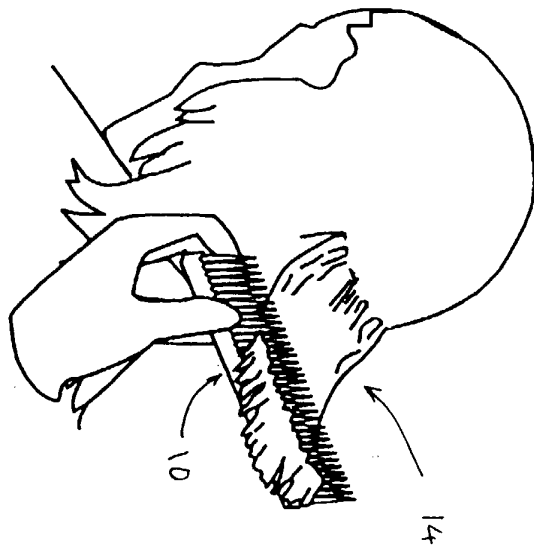
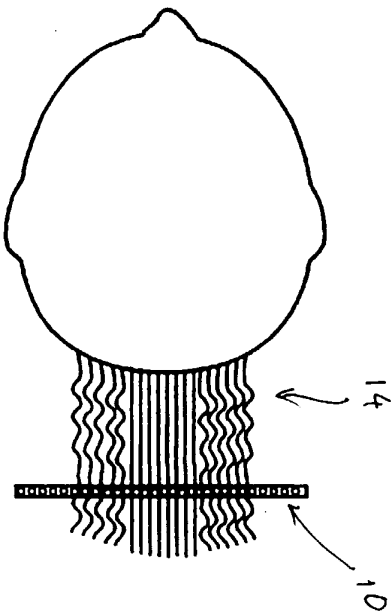


FIG 2B
PRIOR ART



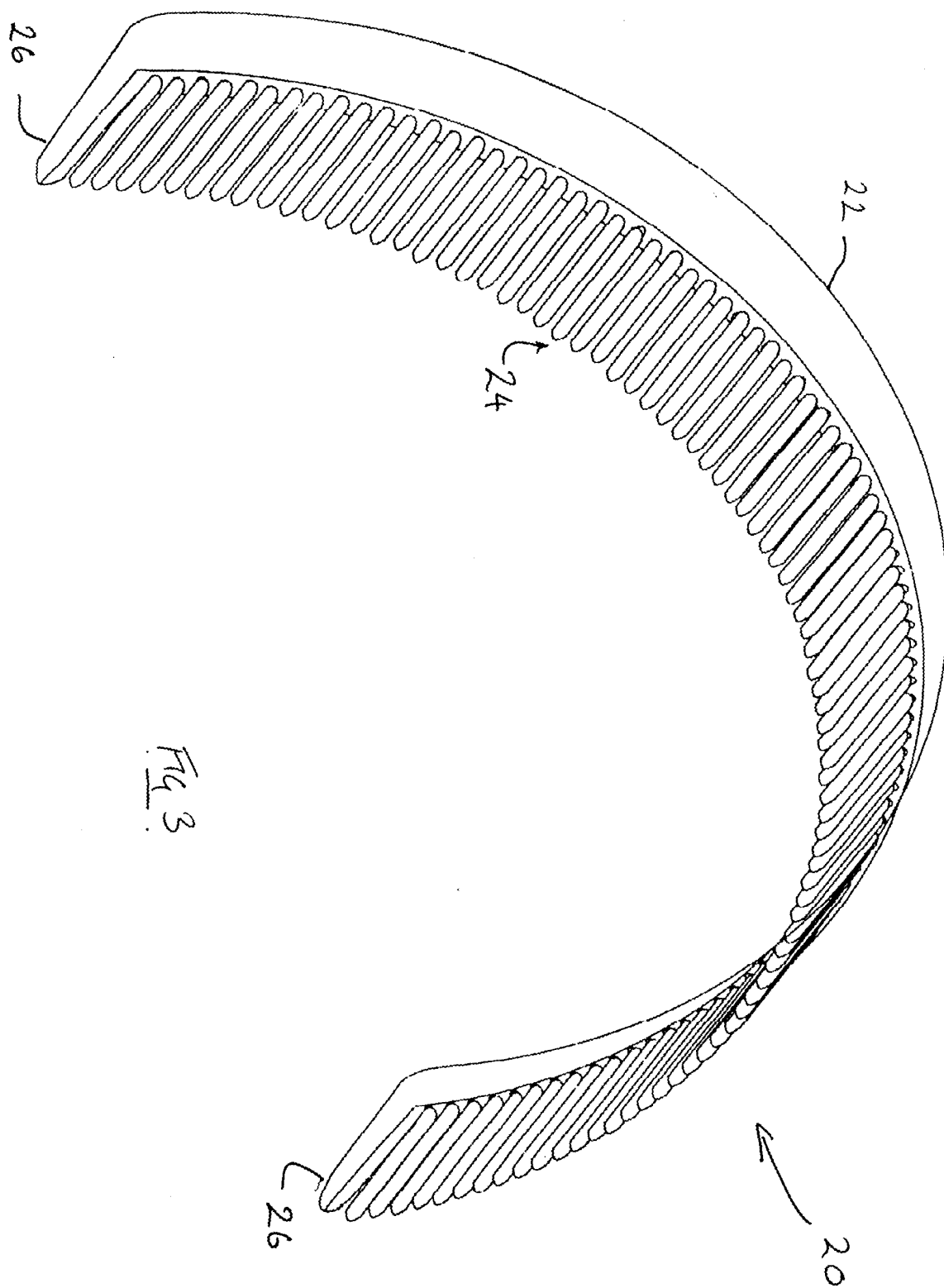


Fig. 3

