(11) **EP 1 121 878 A2**

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

08.08.2001 Bulletin 2001/32

(51) Int Cl.7: **A46B 17/06**

(21) Application number: 01830041.8

(22) Date of filing: 24.01.2001

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR

Designated Extension States: **AL LT LV MK RO SI**

(30) Priority: 03.02.2000 IT MI000172

(71) Applicant: Bernasconi, Massimo 6600 Locarno (CH)

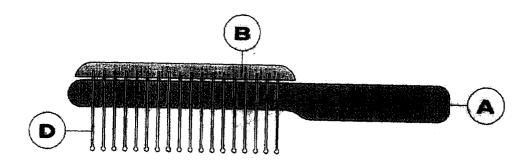
(72) Inventor: Bernasconi, Massimo 6600 Locarno (CH)

(74) Representative: Concone, Emanuele et al Società Italiana Brevetti S.p.A. Via Carducci 8 20123 Milano (IT)

(54) Brush with easy-clean structure

(57) A brush conventionally includes a body (A) and a plurality of bristles (D) housed in holes formed in the body (A), said holes receiving the bristles (D) being through holes whereby the bristles (D) pass through the body (A) and are secured to a rear plate (B) mobile with respect to the body (A), to which in configuration of use it is restrained through retaining means. When the user

wishes to clean the brush he just has to disengage the plate (B) from the body (A), so as to be able to move it away from the latter, whereby the front side of the body (A) is free from the bristles (D), while most of the hair which remained on the brush is automatically removed from the bristles (D) when these enter the body (A) due to the plate (B) being moved away.





Description

[0001] The present invention relates to hair-brushes and the like, and in particular to a brush having a structure which makes its cleaning easy. Specific reference will be made hereafter to a hair-brush, while being understood that what is said applies as well to similar brushes used for similar purposes such as brushes for animals or for carpets, and the like.

[0002] It is known that a conventional brush essentially consists of a plurality of bristles mounted on an elongated body, of which a narrower and round portion acts as a handle and the other wider and flat portion acts as a plate where the bristles are secured.

[0003] The typical problem of these brushes is the removal of hair and dust caught up among the bristles, with a tendency to accumulate at the base of the bristles where the latter are secured to the brush body. In fact, it is a common experience that cleaning a brush is a difficult and laborious operation, and often with an unsatisfying outcome.

[0004] Therefore the object of the present invention is to provide a brush which overcomes the above-mentioned drawback.

[0005] This object is achieved by means of a brush having the characteristics disclosed in claim 1. Other advantageous features are disclosed in the dependent claims.

[0006] The fundamental advantage of the brush according to the invention is that of allowing a quick and complete cleaning while retaining the usual functionality of known brushes.

[0007] Another advantage of this brush stems from the fact that said easy-clean capacity is achieved through a very simple and cheap structure.

[0008] These and other advantages and characteristics of the brush according to the present invention will be clear to those skilled in the art from the following detailed description of an embodiment thereof, with reference to the annexed drawings wherein:

<u>Fig. 1</u> is a diagrammatic side view of a brush according to the invention in its normal configuration of use:

<u>Fig.2</u> is an enlarged view of the distal end of said brush, where the distal end is meant to be the end opposite the handle end;

<u>Fig. 3</u> is a diagrammatic side view of the brush according to the invention in its configuration for cleaning:

 $\underline{\text{Fig.4}}$ is an enlarged view of the distal end of the brush of fig.3.

[0009] With reference to said figures, there is seen that the present brush includes a body A, similar to a conventional brush body, wherein the holes receiving the bristles D are not blind holes but through holes. As a consequence, the bristles D pass through body A and

are secured, in a conventional way, in the holes of a rear plate B (where the rear side is meant to be the side of body A opposite the side from which the bristles D project).

[0010] The bristle-carrying plate B is therefore a separate member mobile with respect to body A, to which in the configuration of use (figs. 1, 2) it is restrained by stops or the like not shown in the figures. The connection between plate B and body A may be simply achieved through bristles D which have their free ends larger than the diameter of the holes formed in body A, so as to act as end stops.

[0011] However, due to the low rigidity of bristles D it is preferable to provide a connection through two telescopic pins C arranged at the distal and proximal ends of plate B, as illustrated in the figures. In this case, the travel of plate B can be limited by the length of pins C or by the length of bristles D.

[0012] The operation of the present brush is quite simple and easily deducible from the description above.

[0013] When the user wishes to clean the brush he just has to disengage plate B from body A, so as to be able to move it away from the latter as illustrated in figs. 3 and 4. In this configuration the front side of body A is free from bristles D and perfectly straight, whereby it is extremely easy to clean. Furthermore, most of the hair which remained on the brush is automatically removed from the bristles when these enter body A due to plate B being moved away.

O [0014] Once the cleaning has been carried out, it is sufficient to return plate B in contact with body A and lock it thereon to have the brush again in configuration of use.

[0015] It is clear that the above-described and illustrated embodiment of the brush according to the invention is just an example susceptible of various modifications. In particular, the exact shape, number and arrangement of bristles D as well as of body A and plate B may be somewhat changed as long as the general structure described above is maintained.

Claims

- 45 1. A brush including a body (A) and a plurality of bristles (D) housed in holes formed in said body (A), characterized in that said holes receiving the bristles (D) are through holes whereby the bristles (D) pass through the body (A) and are secured to a rear plate (B) mobile with respect to the body (A), to which in configuration of use it is restrained through retaining means.
 - 2. A brush according to claim 1, characterized in that the bristles (D) have free ends larger than the diameter of the holes formed in the body (A) so as to act as end stops.

55

3. A brush according to claim 1 or 2, characterized in that the connection between the body (A) and the bristle-carrying plate (B) is achieved through two telescopic pins (C) arranged at the distal and proximal ends of said plate (B).

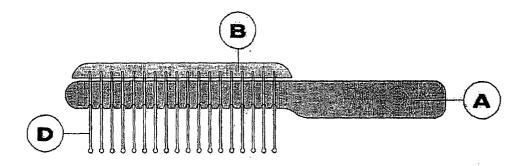
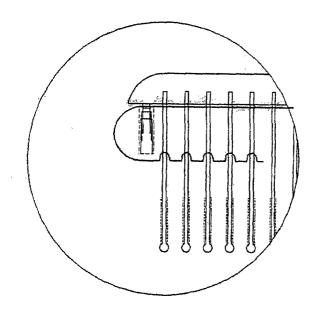
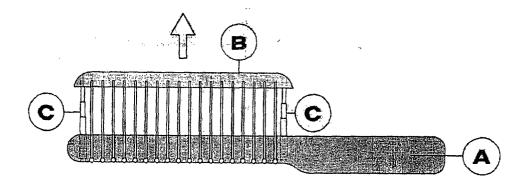


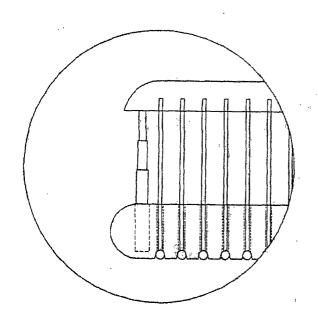
Fig.1



FIJ 2



FDJ



FIJ.4