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(54) **COMPACT HAIRBRUSH**

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(57) **ABSTRACT**

A compact hair brush comprises a fixing body, an elastic fixing plate, an elastic means and a cover body. The fixing body is coupled with the cover body which is freely opened and closed by a hinge. The elastic fixing plate on which a plurality of bristles is fixedly disposed is elastically fixed to the fixing body and can be protruded from the fixing body by the elastic means. The elastic fixing plate can be protruded from the fixing body by opening the cover body. When using the hairbrush, the bristles are lined up by only opening the cover body. Therefore, a user can easily use and carry the hairbrush.

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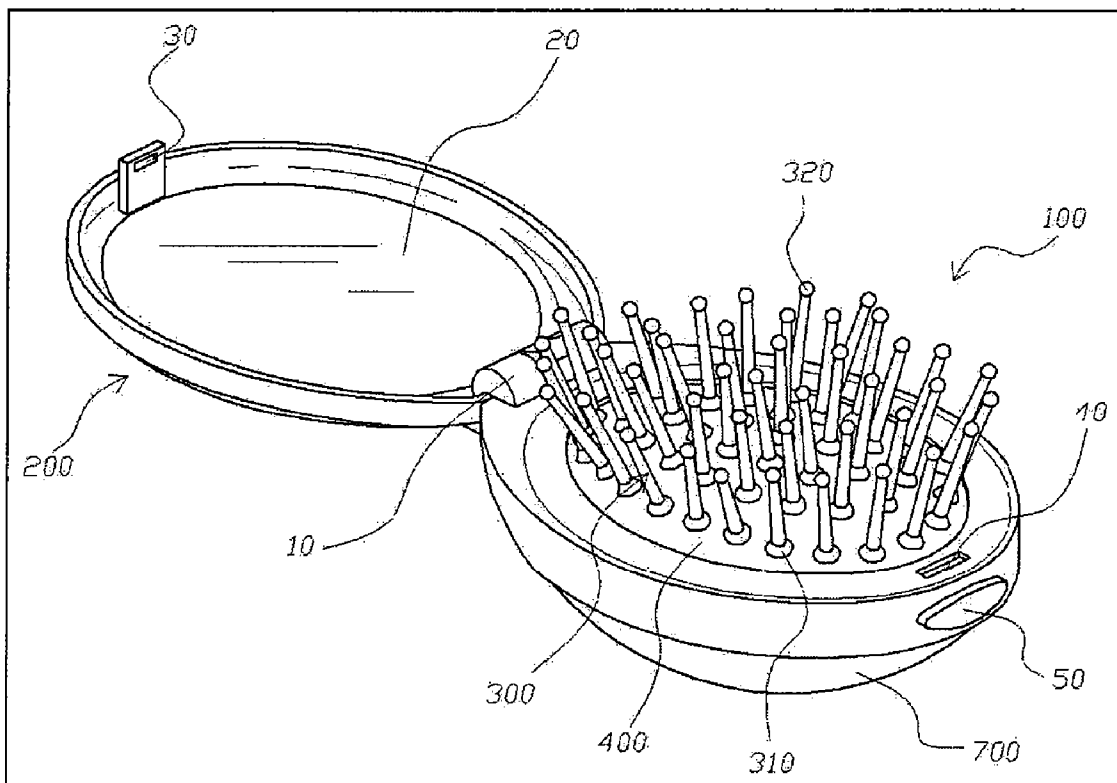


FIG. 1

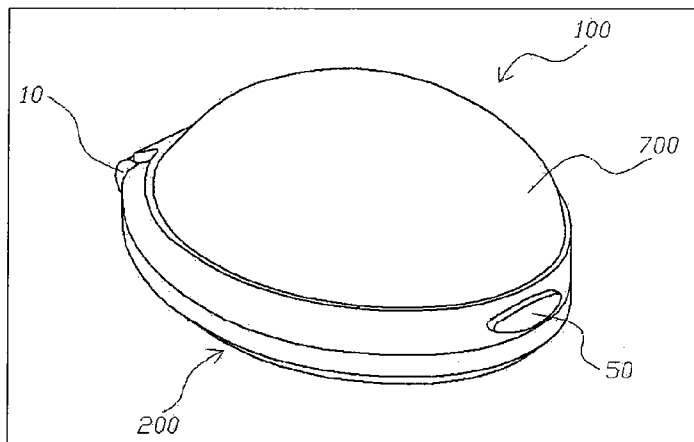


FIG. 2

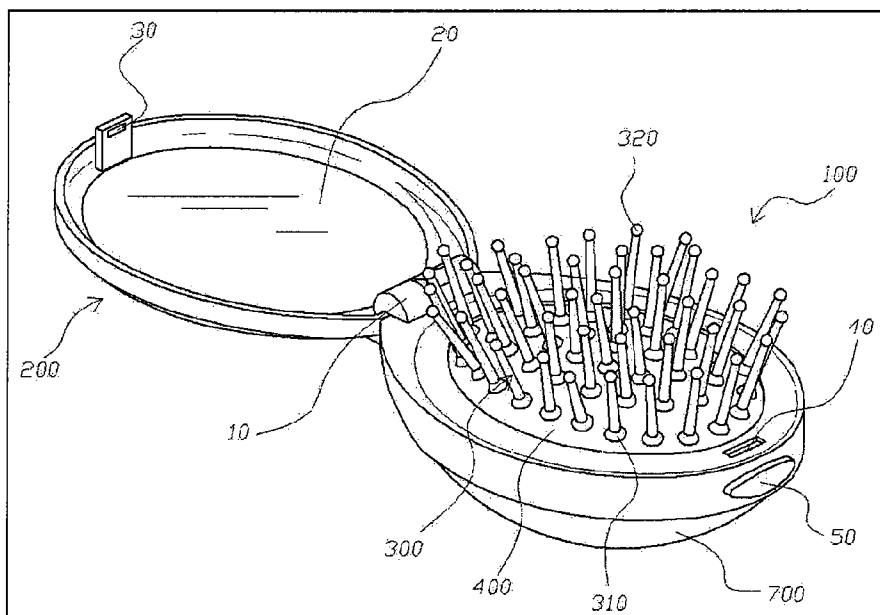


FIG. 3

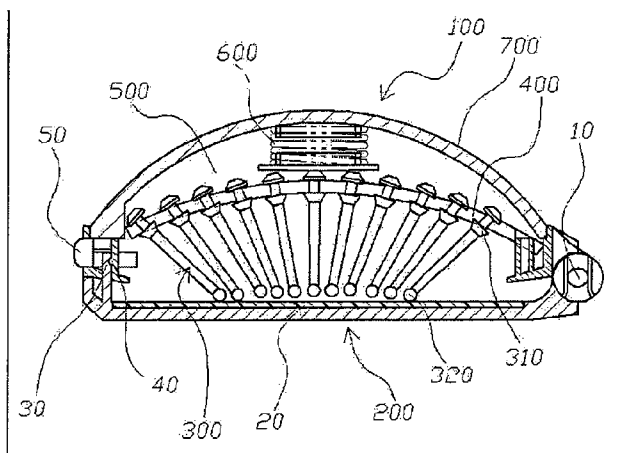


FIG. 4

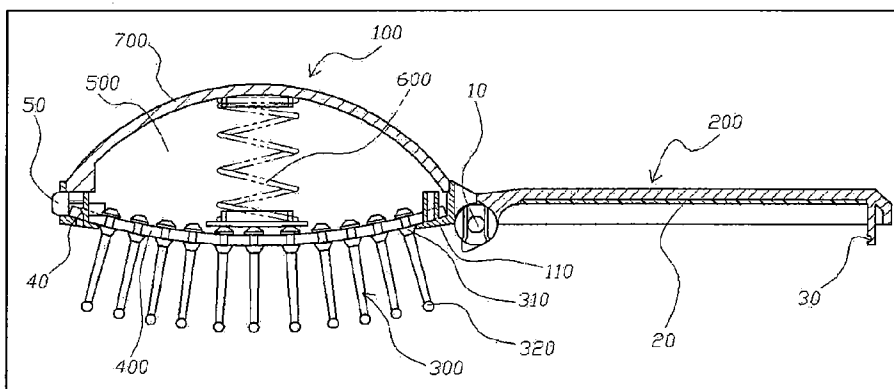
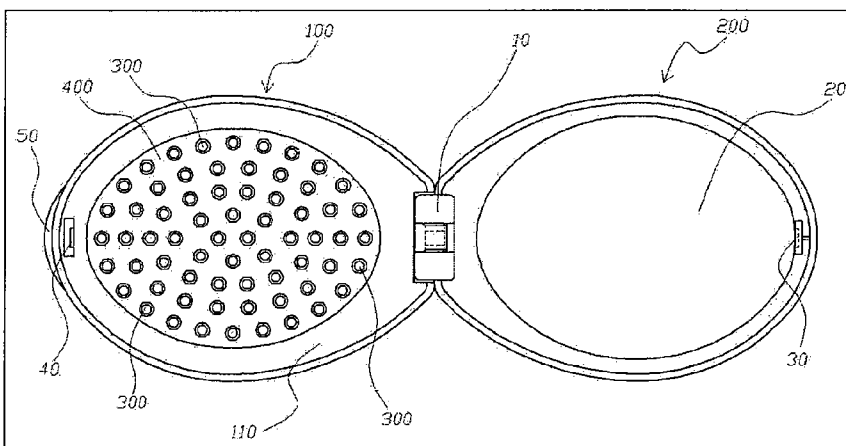


FIG. 5



COMPACT HAIRBRUSH

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority from Korean Utility Model Application No. 20-2006-0023603, filed on Sep. 1, 2006, the contents of which are incorporated herein by reference in its entirety.

BACKGROUND OF THE INVENTION

[0002] 1. Field of Invention

[0003] The present invention relates to a hairbrush for combing hair, and more particularly to a compact hair brush capable of being easily carried and used.

[0004] 2. Description of the Related Art

[0005] In general, a hairbrush is utilized for combing hair neatly. This hairbrush is classified according to the hairstyle and the purpose of use thereof: the different hair brushes are used for combing different styles of hair such as straight hair and wavy hair which is permanent, and for different purposes such as combing and drying hair.

[0006] Generally, a hairbrush for combing natural hair has a flat shaped plate on which a plurality of bristles is mounted and a handle formed on the plate. This hairbrush is convenient for using, but restricted for carrying due to its large size.

[0007] To reduce the size of the hairbrush, the bristles are fixed on an elastic fixing plate and covered with a cover. However, in case of using the hairbrush, a user opens the cover and then pushes the elastic fixing plate with his finger to eject the bristles from the elastic fixing plate.

[0008] On the other hand, in case of carrying or keeping, a user presses down tip portions of the bristles to return the bristles to their original positions. In the above cases, there is a sanitary problem caused by contacting the user's finger to the bristles. In addition, there is another problem that when the user presses down the tips portion of the bristles, the user's finger is caught between the bristles to cause pain to the user.

SUMMARY OF THE INVENTION

[0009] The present invention is conceived for solving the above-mention problems, an object of the present invention is to provide a compact hairbrush capable of being easily used and carried.

[0010] According to an aspect of the present invention, there is provided a compact hairbrush comprising a fixing body; an elastic fixing plate fixed to the fixing body on which a plurality of bristles is arranged; an elastic means arranged between the fixing body and the fixing plate; and a cover body fixed to the fixing body through a hinge so as to be able to open and close it. The elastic fixing plate has a convex surface on the rear side thereof so as to form a receiving space for housing the elastic means, and the elastic fixing plate is biased to an opening side of the fixing body by the elastic means.

[0011] It is desirable that the cover body is contacted with tip portions of the bristles fixed to the elastic fixing plate.

[0012] Further, it is desirable that the cover body has a mirror provided thereon.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The above and other features and advantages of the present invention will become readily apparent by reference to the following detailed description when considered in conjunction with the accompanying drawings wherein;

[0014] FIG. 1 is a perspective view showing a state where a compact hairbrush according to the present invention is folded;

[0015] FIG. 2 is a perspective view showing a state where a compact hairbrush according to the present invention is unfolded;

[0016] FIG. 3 is a cross sectional view showing a state where a compact hairbrush according to the present invention is folded;

[0017] FIG. 4 is a cross sectional view showing a state where a compact hairbrush according to the present invention is unfolded; and

[0018] FIG. 5 is a plane view showing a state where a compact hairbrush according to the present invention is unfolded.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0019] Hereinafter, the preferred embodiments of the present invention will be explained in more detail with reference to the accompanying drawings.

[0020] FIG. 1 is a perspective view showing a state where a compact hairbrush according to the present invention is folded, FIG. 2 is a perspective view showing a state where a compact hairbrush according to the present invention is unfolded, FIG. 3 is a cross sectional view showing a state where a compact hairbrush according to the present invention is folded, FIG. 4 is a cross sectional view showing a state where a compact hairbrush according to the present invention is unfolded, and FIG. 5 is a plane view showing a state where a compact hairbrush according to the present invention is unfolded.

[0021] As shown in FIG. 1 and FIG. 2, a compact hairbrush according to the present invention is constructed such that a fixing body 100 is coupled with a cover body 200 through a hinge 10 so as to be able to open and close it.

[0022] As shown in FIG. 2 to FIG. 5, an elastic fixing plate 400 on which a plurality of bristles 300 are disposed is fixed in the fixing body 100. The elastic fixing plate 400 is made of rubber or synthetic resin and has an elastic plate shape. Each bristle 300 comprises a pedestal 310 implanted fixedly in the elastic fixing plate 400 and a tip portion 320 having a spherical shape.

[0023] And, a circumference of the elastic fixing plate 400 is fixed to a circumferential flange 110 of the fixing body 100 through a fixing means (not shown) such as an adhesive or a rivet.

[0024] In addition, as shown in FIG. 3 and FIG. 4, the elastic fixing plate 400 fixed on the fixing body 100 has a convex surface 700 on the rear side thereof so as to form a receiving space 500 for housing an elastic means 600. The elastic fixing plate 400 is biased to an opening side of the fixing body 100 by the elastic means 600.

[0025] The elastic spring means 600 may be, for example, a coil spring, a torsion spring or an elastic rubber.

[0026] Further, the cover body 200 is coupled to the fixing body 100 by the hinge 10 so as to be able to contact with the tip 320 of each bristle 300 fixed on the elastic fixing plate 400. Consequently, as shown in FIG. 3, in case of closing the cover body 200, it pushes the bristles 300, and as shown FIG. 4, in case of opening the cover body 200, the bristles 300 are spread.

[0027] A hook 30 is formed the cover body 200, and a recess 40 and a button 50 are formed on the fixing body 100. The cover body 200 is fastened to the fixing body 100 by the hook 30, the recess 40 and the button 50. By pushing the button 50, the hook 30 is released from the recess 40 to open immediately the cover body 200 and spread the bristles 300 as shown in FIG. 4. After opening the cover body 200, a user can hold the cover body 200 as a handle and comb his hair.

[0028] On the contrary, upon closing the cover body 200, the tip portions 320 of the bristles 300 are pressed down by the cover body 200, as shown FIG. 3, to contract the elastic means 600 in the receiving space 500 and engage the hook 30 with the recess 40.

[0029] In addition, a mirror 20 is provided on an inner surface of the cover body 200 so that a user can look at his image in the mirror while combing his hair. Alternatively, the mirror 20 may be provided on an outer surface the cover body 200.

[0030] In the hairbrush according to the present invention as described above, the fixing body 100 is coupled with a cover body 200 which is freely opened and closed by the hinge. Therefore, a user can easily carry and keep the hairbrush. Further, the elastic fixing plate on which the bristles are fixedly disposed is elastically fixed to the fixing body and can be protruded from the fixing body by the elastic means. That is, the elastic fixing plate can be protruded from the fixing body by opening the cover body.

Therefore, when using the hairbrush, the bristles are lined up by only opening the cover body so that a user can use the hairbrush easily.

[0031] Although the embodiment has been described with reference to a number of illustrative embodiments thereof, it should be understood that numerous other modifications and embodiments can be devised by those skilled in the art that will fall within the spirit and scope of the principles of this disclosure. More particularly, various variations and modifications are possible in the component parts and/or arrangements of the subject combination arrangement within the scope of the disclosure, the drawings and the appended claims. In addition to variations and modifications in the component parts and/or arrangements, alternative uses will also be apparent to those skilled in the art.

1. A compact hairbrush, comprising:

- a fixing body;
 - an elastic fixing plate fixed to the fixing body on which a plurality of bristles is arranged;
 - an elastic means arranged between the fixing body and the fixing plate; and
 - a cover body fixed to the fixing body through a hinge so as to be able to open and close it;
- wherein the elastic fixing plate has a convex surface on the rear side thereof so as to form a receiving space for housing the elastic means, and the elastic fixing plate is biased to an opening side of the fixing body by the elastic means.

2. The compact hairbrush according to claim 1, wherein the cover body is contacted with tip portions of the bristles fixed to the elastic fixing plate.

3. The compact hairbrush according to claim 1, wherein the cover body has a mirror provided thereon.

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