May 30, 1939. E. KREUTZIG 2,160,618

COMB BRUSH

Filed Dec. 21, 1938

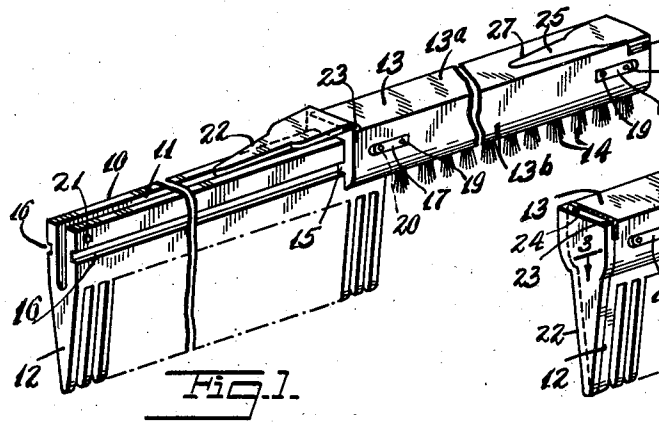


Fig. 1.

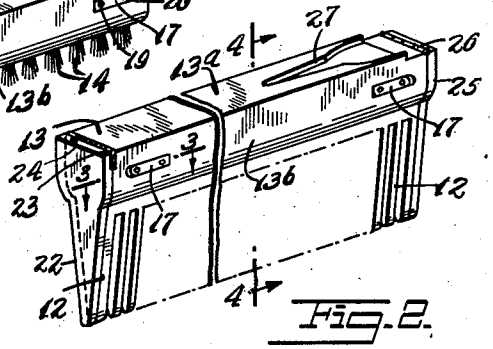


Fig. 2.

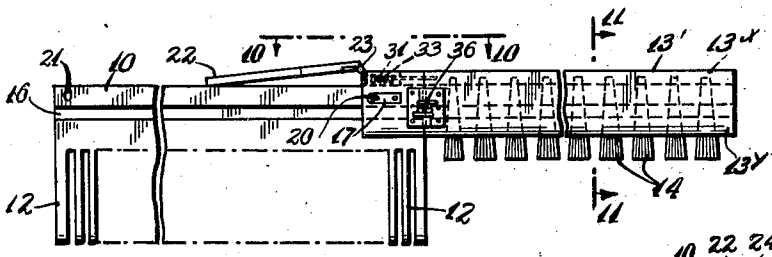


Fig. 9.

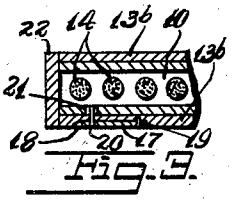


Fig. 9.

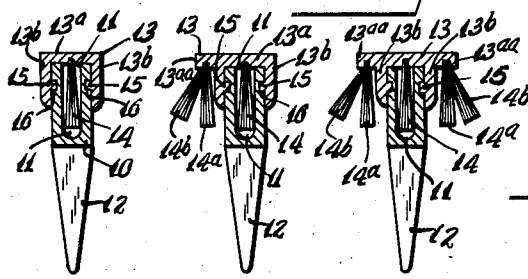


Fig. 4. Fig. 5. Fig. 6.

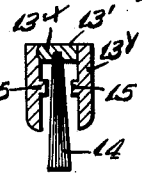


Fig. 11.

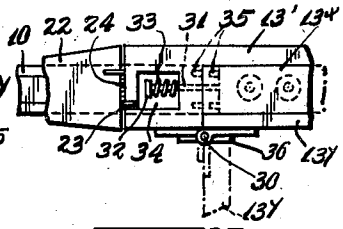


Fig. 10.

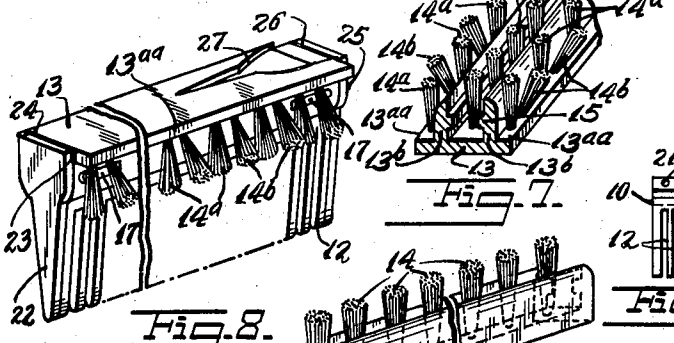


Fig. 8.

Fig. 7.

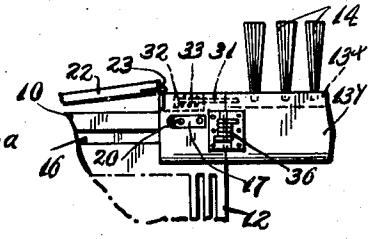


Fig. 12.

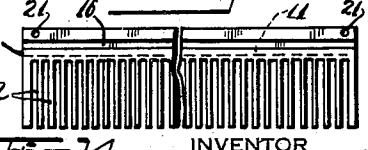


Fig. 14.

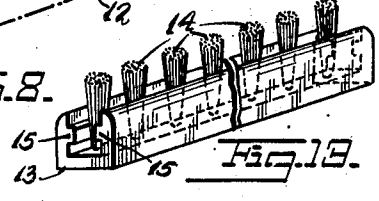


Fig. 13.

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UNITED STATES PATENT OFFICE

2,160,618

COMB BRUSH

Elsa Kreutzig, Jersey City, N. J.

Application December 21, 1938, Serial No. 246,929

10 Claims. (Cl. 132—86)

This invention relates to new and useful improvements in a comb brush.

The invention has for an object the construction of an article as mentioned which is characterized by a comb body having a hollow back portion open along one end and one side, and comb teeth projecting from the other side, and a cover with bristles mounted upon said comb body in a novel manner. It is proposed to arrange the cover so that it may slide upon the comb body and in one position cover the hollow in a way that the bristles extend within the hollow of the comb body, while in another position to have the bristles extended from the hollow so that the article may be used as a brush.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:

Fig. 1 is a perspective view of a comb brush constructed according to this invention, illustrated with the brush in its extended position.

Fig. 2 is a perspective view of the comb brush with the brush in its folded position.

Fig. 3 is a fragmentary horizontal sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is a sectional view similar to Fig. 4 but illustrating another embodiment of the invention.

Fig. 6 is a sectional view similar to Fig. 4 but illustrating a still further modified form.

Fig. 7 is a perspective fragmentary view of a portion of the brush shown in Fig. 6.

Fig. 8 is a similar view to Fig. 2 but illustrating side bristles on one side of the slide.

Fig. 9 is a side elevational view of a comb brush constructed according to another modification of this invention.

Fig. 10 is a fragmentay plan view looking in the direction of the line 10—10 of Fig. 9.

Fig. 11 is a vertical sectional view taken on the line 11—11 of Fig. 9.

Fig. 12 is a fragmentary elevational view similar to Fig. 8 but showing the parts in a different position.

Fig. 13 is another perspective view of a slide cover.

Fig. 14 is a side elevational view of the comb body used in this invention.

The comb brush, according to this invention, includes a comb body 10 having a hollow 11 in its back portion, said hollow being open along the top and along both ends of the comb body. On the side directly opposite the open edge of the comb body the body is provided with a plurality of projecting comb teeth 12. A cover 13 is slidably mounted upon the comb body 10 and is adapted to extend over and cover the top of the opening 11 or to be extended therefrom as shown in Fig. 1. The cover 13 on its underside is provided with a plurality of bristles 14 which in the folded condition of the comb brush extend into the hollow 11. The cover 13 has a top wall 13a which extends over the top portion of the hollow 11 and side walls 13b which extend partially over the sides of the comb body 10. These side walls are provided with projecting tongues 15 which engage into grooves 16 formed in the sides of the comb body. This inter-engagement serves to slidably support the cover upon the body.

A means is provided for holding the cover 13 in an extended position or in its folded position directly over the comb body. This means includes flexible flat springs 17 mounted on the cover 13 and reposed within recesses 18 formed in the wall of the cover (see Fig. 3). Each of the springs 17 is fixedly secured on one of its ends by fastening elements 19. The free ends of these springs 17 are provided with pins 20 which extend inwards through openings in the cover 13. The inner ends of the pins 20 are adapted to engage apertures 21 formed in the comb body 12. These apertures are located at the ends of the comb body to be capable of holding the cover extended or retracted.

An end plate 22 is hingedly mounted on one end of the cover 13 by a hinge construction 23. This end plate is shaped to conform with the contour of the cover 13 and the comb body (see Fig. 2). A coaxial spring 24 is arranged upon the hinge 23 and acts between the cover and the end plate 22 for normally urging it into a position at right angles to the cover. This position is illustrated in Fig. 2. Another end cover plate 25 is supported by a hinge 26 upon the other end of the cover 13. This plate is also shaped to conform with the contour of the cover and the end of the comb body.

The cover 25 is arranged to frictionally maintain positions into which it is placed. It is possible to repose the plate 25 within a recess 27 formed in the top of the cover 13. It is also possible to hinge the plate 25 downwards to extend

over the end of the comb body as illustrated in Fig. 2.

The operation of the device is as follows:

Fig. 2 illustrates the comb brush in its inoperative position, in which condition it may be carried around in one's pocket or purse or stored upon a vanity or other place. In this condition the comb may be used in the customary manner as a comb.

When required the springs 17 may be flexed to have the pins 20 disengage from the apertures 21. Then the cover may be moved along the comb body to the position shown in Fig. 1, and be held in this position by one of the springs 17. The bristles 14 may now be used.

In Fig. 5 a modification is shown in which auxiliary bristles 14^a and 14^b are mounted on one side extension 13^{aa} of the slide 13. In Fig. 6 another form is shown in which auxiliary bristles 14^a and 14^b are on both side extensions 13^{aa} of the slide 13.

In Figs. 9–12 inclusive another modified form of the invention has been disclosed which distinguishes from the prior form in the fact that an arrangement has been provided to extend the bristles 14 outwards when desired. According to this form of the invention the cover 13' is formed from several sections. There is a top section 13^x on the underside of which the bristles 14 are mounted. There is also a side wall section 13^y which is connected with a portion of the cover by a hinge 30. This side wall section 13^y terminates at a short distance from one of the ends of the cover. The hinge 30 connects the side wall section 13^y with the remaining stationary portion of the side wall.

The top wall 13^x at its inner end is provided with a pintle 31 which engages through a stationary portion of the top wall of the cover 13' and which at its extremity is provided with a head 32. A spring 33 acts between this head 32 and one side of an opening 34 formed in the stationary portion of the top wall. Several pins 35 project from the inner end of the cover section 13^x and normally engage into receiving openings formed in the edge of the stationary portions of the cover.

The bristles 14 may be moved from their depending position shown in Fig. 9, to their upwardly extended position shown in Fig. 12 in the following manner. It is first required that the side wall section 13^y be pivoted slightly outwards against the action of a spring 36 arranged upon the hinge 30. Then the top wall section 13^x must be pulled slightly, to compress the spring 33 and to disengage the pins 35 from their openings. It is then possible to rotate the cover section 13^x using the pintle 31 as a pivot. In this manner it is turned around so that the bristles 14 extend upwards. When the cover section 13^x is released the springs 33 will reengage the pins 35 to hold the same fixed. The spring 36 will return the side wall section 13^y to its original position.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, and means for holding said cover extended on said comb body.

2. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, and end plates mounted on the ends of said cover for extending across the ends of the comb body.

3. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, and end plates mounted on the ends of said cover for extending across the ends of the comb body, said cover plates being hingedly mounted on the cover.

4. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, and end plates mounted on the ends of said cover for extending across the ends of the comb body said cover plates being hingedly mounted on the cover, one of said cover plates being provided with a spring upon its hinge for resiliently urging it against the end of the comb body.

5. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, and end plates mounted on the ends of said cover for extending across the ends of the comb body, said cover plates being hingedly mounted on the cover, one of said cover plates being provided with a spring upon its hinge for resiliently urging it against the end of the comb body, the other of the cover plates being arranged to frictionally maintain positions into which it is placed.

6. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, and end plates mounted on the ends of said cover for extending across the ends of the comb body, said cover plates being hingedly mounted on the cover, one of said cover plates being provided with a spring upon its hinge for resiliently urging it against the end of the comb body, comprising leaf springs mounted upon the cover and provided with pins engaging through the cover and into openings formed in the comb body.

7. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, and additional bristles mounted upon said cover.

8. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, said cover having a top wall and side walls, and additional bristles mounted on said walls.

9. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion, and being slidably mounted, means for holding said cover extended on said comb body, said cover having a top wall and side walls, a portion of said top wall being of separate material from the remaining portion of the cover, said bristles being mounted on said separate portion, and means for holding said separate portions in various positions.

10. A comb brush, comprising a comb body having a hollow back portion open along one end and one side and comb teeth projecting from another side, a cover for closing said open side and open end and having brush bristles extending into said hollow back portion and being slidably mounted, means for holding said cover extended on said comb body, said cover having a top wall and side walls, a portion of said top wall being of separate material from the remaining portion of the cover, said bristles being mounted on said separate portion, and means for holding said separate portions in various positions, one of the side walls of said cover being hingedly mounted.

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