July 5, 1932. E. SILVERMAN 1,865,975

SANITARY COMB

Filed Nov. 11, 1931

FIG. 1.

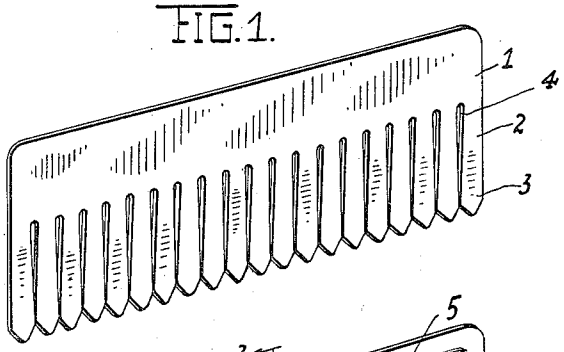



FIG. 2.

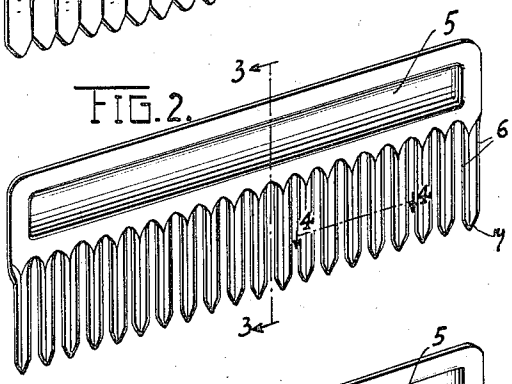



FIG. 3.

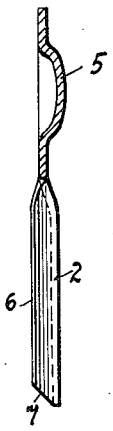



FIG. 5.

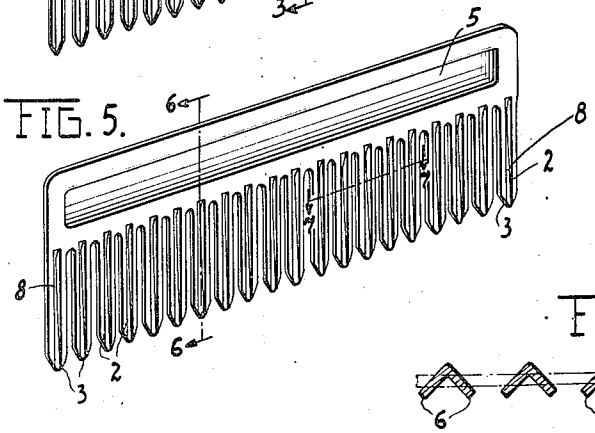



FIG. 6.




FIG. 4.

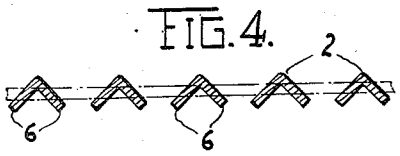
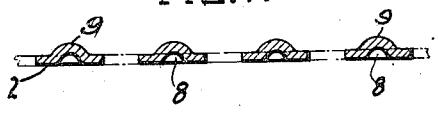



FIG. 7.




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# UNITED STATES PATENT OFFICE

EVELYN SILVERMAN, OF BROOKLYN, NEW YORK

## SANITARY COMB

Application filed November 11, 1931. Serial No. 574,401.

This invention relates to improvements in combs, and has more particular relation to improvements in so called sanitary combs constructed of paper or other cheap material, and which after being once used may be thrown away.

One of the principal objects of the invention is to provide a comb blanked out of paper or other cheap flexible material and so formed as to impart rigidity to its several parts which would not be present because of the thickness of the material itself.

A further object of the invention is to provide a paper comb of light stock, the teeth of which are given lateral rigidity by their formation.

The invention also has other objects, all of which will be hereinafter more particularly set forth and claimed.

In the accompanying drawing forming part of this specification,

Figure 1 represents a perspective view of my improved comb after the first blanking operation.

Figure 2 represents a perspective view of the finished comb.

Figure 3 represents a vertical section through the finished comb on the line 3—3 of Figure 2.

Figure 4 represents a detail horizontal section through the comb teeth on the line 4—4 of Figure 2.

Figure 5 represents a perspective view of a modified form of my comb.

Figure 6 represents a vertical section through this modified form of comb on the line 6—6 of Figure 5, and

Figure 7 represents a detail horizontal section through the comb teeth of the modified form on the line 7—7 of Figure 5.

Described in general terms, it has heretofore been old to make combs out of light stock such as paper, but all of such combs have been open to the objection that their very lightness has resulted in their being so fragile that they were only capable of being handled very lightly, and if drawn vigorously through thick hair, the teeth would bend and destroy the comb.

Attempts have also been made to strengthen the paper stock of which the comb was constructed by impregnating this stock with different chemicals, varnishes and the like, to lend it rigidity.

With the present invention, however, the applicant wishes to construct a very cheap comb of light paper stock, papier-mâché, or very light aluminum or other metal, so that the comb will cost so little that it may be readily thrown away after being used once or twice. Such combs are particularly desirable in all public places and may be dispensed from coin dispensers. They are also particularly desirable in barber shops, hotel wash rooms, Pullman cars, and in fact any place where the public desires to use a comb but wishes a fresh one that has not been used before. Such combs are commonly known as sanitary combs because of the well known fact that most of the scalp troubles such as dandruff and the like are transmitted from one person to another by the use of a common comb in dressing rooms or other public places where combs are provided by the proprietors.

I preferably construct my comb of paper stock as this I find to be the cheapest. This stock is pressed and calendered to give it density and some character of rigidity. In order to hold down the cost, however, I use a very light stock and rely for longitudinal rigidity of the comb and for vertical rigidity of the teeth, on the forming operations or embossing, which is preferably performed by suitable dies.

Described in detail and referring to Figure 1, 1 represents the back or main portion of the comb, 2 the teeth, 3 the ends of the teeth which at this stage of the operation are preferably close together. The blank, it will be observed at 4 is cut out considerably more than at the end of the teeth. This effect is provided so that a rounded surface will be present at the crotch located between each pair of teeth so that the hair will not catch as it would if the teeth came close together at this point. When the teeth are embossed as shown in Figures 2 and 4 to turn the vertical side edges together and form a right angular structure, the vertical edges of the teeth are brought approximately parallel

with each other as shown in Figure 2. This fluting or embossing of the respective teeth along the middle line of each, so that the two wings extend approximately at right angles to each other, also brings the end of the tooth into a pointed formation as at 7, with the edges 6 of all the teeth, facing forward.

At the same time the forming die embosses the depression 5 longitudinally along the part 1 of the comb. This embossing imparts longitudinal rigidity to the comb whereas the angular structure of the teeth prevents these teeth buckling or bending lengthwise.

It will, of course, be understood that in a device of the character of the present invention, the fundamental demand is cheapness, because if cheapness cannot be secured, then the very object of the comb is defeated, this object being to impose no obstacle in the way of discarding of the comb after each use, by even the most thrifty.

In the form of my invention shown in Figure 5, the structure is substantially the same as that in Figure 2, with the exception that each of the flat teeth, after being blanked out, is embossed or formed with a longitudinal groove 8 which, of course, imparts a corresponding projection 9 at the back of the tooth. This formation of the tooth is somewhat easier and slightly cheaper than that shown in Figure 2, but accomplishes the same result as it adds rigidity lengthwise to all the teeth.

It will, of course, be understood that while I have described the comb as being blanked out and formed of paper stock, it may with equal facility be blanked out and formed from thin sheet metal such as aluminum or the like and the same process of embossing or forming utilized to lend both rigidity to the comb proper and stiffen up the teeth to prevent bending.

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

A paper comb having a rigid back and a series of spaced teeth projecting therefrom side by side with free open spaces between them so that the comb may be drawn freely through the hair; said teeth being angular in cross section with the ridges of the angular portions facing in line towards the side of the comb to resist all lateral strains when the teeth are being drawn through the hair.

In testimony whereof I affix my signature.

EVELYN SILVERMAN.