F. W. SADLER.

SOLUBLE BRUSH.

APPLICATION FILED OCT. 17, 1911.

1,113,054. Patented Oct. 6, 1914.

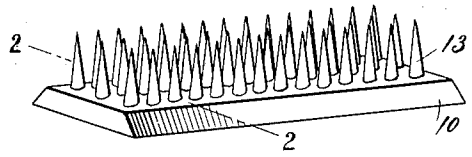


Fig. 1.

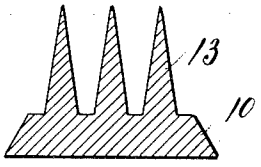


Fig. 2.

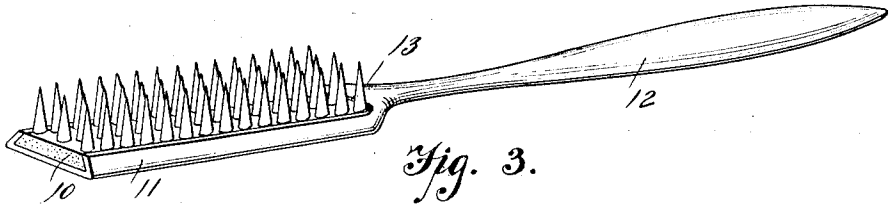


Fig. 3.

Witnesses:-
Carroll Bailey.
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UNITED STATES PATENT OFFICE.

FRANCIS W. SADLER, OF NORRISTOWN, PENNSYLVANIA.

SOLUBLE BRUSH.

1,113,054. Specification of Letters Patent. Patented Oct. 6, 1914.

Application filed October 17, 1911. Serial No. 655,128.

To all whom it may concern:

Be it known that I, FRANCIS W. SADLER, a citizen of the United States, residing at Norristown, in the county of Montgomery and State of Pennsylvania, have invented new and useful Improvements in Soluble Brushes, of which the following is a specification.

An object of the invention is to provide a brush capable of becoming soluble when subjected to the dissolving action of a fluid.

My invention relates more particularly to a brush body, provided with projecting elements, soluble in water or the like, so that when the brush is once used in connection with a fluid, the same cannot be reused, thus insuring perfect sanitation, particularly when my device is used as a tooth brush or the like.

Reference is to be had to the accompanying drawings constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of the brush. Fig. 2 is a vertical sectional view taken substantially on the line 2—2 in Fig. 1. Fig. 3 is a perspective view of my brush showing the same in connection with a holder.

Referring more particularly to the views, I provide a brush body 10, preferably rectangular in shape and having the sides thereof slightly inclined, the said brush body being adapted for slidable engagement with a holder 11, provided with a handle 12. Integrally formed on the brush body 10 and projecting upwardly therefrom are a series of projections 13, such as bristles or teeth, the said projections being preferably conical in shape and composed of a substance which becomes soluble when subjected to the action of a fluid. The brush body 10 and projections 13 are preferably made of a mixture of antiseptic formaldehyde tooth powder and paper pulp and an adhesive of an antiseptic or sanitary nature is mixed with the mentioned ingredients to act as a binder therefor.

In the use of my device, the brush body 10 is preferably mounted on a holder, such as the holder 11, shown in Fig. 3. Assuming that the particular brush disclosed is used as a tooth brush, when the projections thereof come in contact with the saliva in the mouth, the action of the saliva on the projections will cause the same to become soluble so that after one application, the projections will be destroyed so that the brush cannot be reused, it being necessary to provide a new brush when it is desired to clean the teeth a second time.

From the foregoing description, it will be seen that a device is provided, which is absolutely sanitary in its application and use and in which the projections of the brush, being soluble are destroyed and rendered unfit for use after the first application thereof.

It will be understood that the projections mentioned herein can be fashioned similarly to bristles or teeth and that the scope of the invention is defined in the appended claims.

I claim:—

1. A tooth brush having an acting surface composed of pointed protuberances of a material soluble and disintegrable under the influence of moisture and the rubbing action of said protuberances against the teeth, the said protuberances being impregnated with an antiseptic cleansing agent.

2. A tooth brush having an acting surface composed of pointed protuberances of a material soluble and disintegrable under the influence of moisture and a rubbing action of said protuberances against the teeth, the said protuberances being molded from a material of the character described impregnated with an antiseptic, a cleansing agent, and an adhesive.

3. A tooth brush having an acting surface composed of pointed protuberances molded from paper pulp, an antiseptic, a cleansing powder, and an adhesive, said protuberances being soluble and disintegrable under the influence of moisture and the rubbing action of said protuberances against the teeth, whereby in the cleansing action disintegrated particles of the protuberances carrying the antiseptic agent will be left in the interstices between the teeth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS W. SADLER.

Witnesses:

E. C. A. MOYER,

SYLVESTER B. DRAKE.