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H. R. RATHBUN

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TEETH CLEANING APPLICATOR

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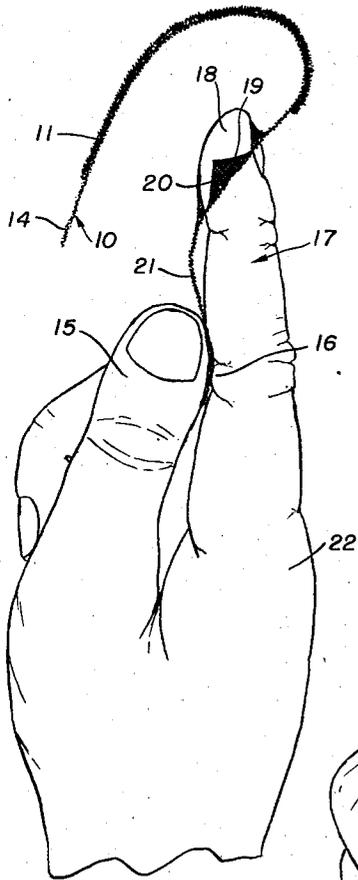
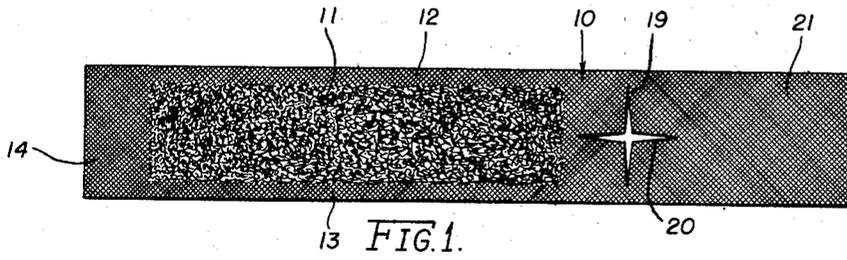


FIG. 2.

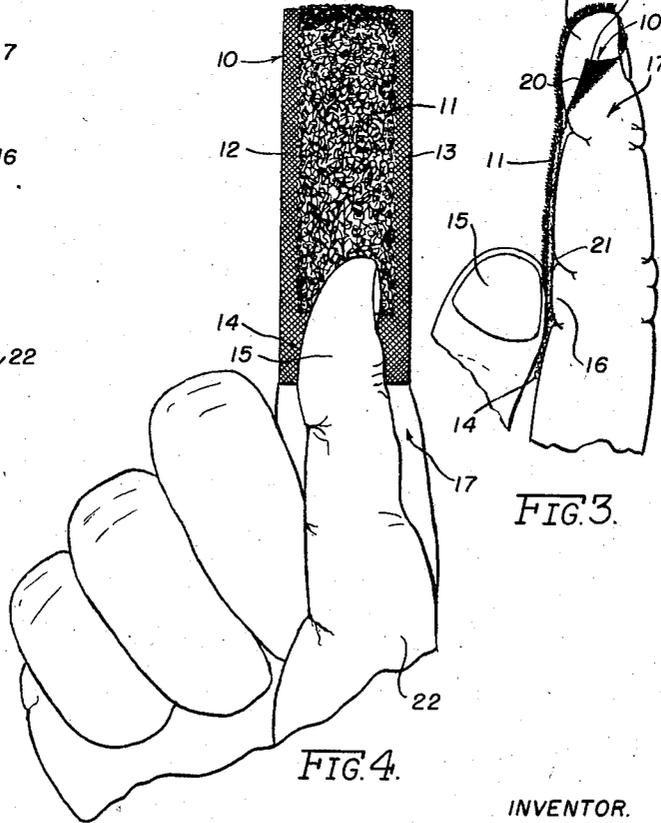


FIG. 3.

FIG. 4.

INVENTOR.
HARRY R. RATHBUN.
BY *Harry C. Smith*
ATTORNEY.

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TOOTH CLEANING APPLICATOR

Harry R. Rathbun, Glen Ellyn, Ill.

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4 Claims. (Cl. 15—227)

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This invention relates to dental cleansing and massaging devices and more particularly to teeth cleaning and gum massaging applicators, although certain features thereof may be employed with equal advantages for other purposes.

It contemplates more especially the provision of an improved, inexpensive, and highly effective finger manipulated dental cleaning and polishing applicator serving as a substitute for a tooth brush and cleanser customarily employed in the cleaning of the human teeth.

Numerous types of tooth brush substitutes have heretofore been proposed, but these have not proven entirely satisfactory owing to their comparatively high cost as a single use, dental cleaning, polishing and massaging expedient. Such tooth cleaners of the fabric type which have been suggested as sanitary tooth cleaner and massaging devices are highly expensive in construction so that they cannot be utilized as a single use device and still compare favorably with the standard tooth brush.

One object of the present invention is to simplify the construction and improve the operation of devices of the character mentioned.

Another object is to provide a simple and inexpensive strip of fabric constructed for ready adaptation to the forefinger which is manipulated in conjunction therewith as a dental cleaning, polishing and massaging instrumentality.

Still another object is to provide an inexpensive strip of medicated fabric that is suitably slitted to serve as a forefinger index in the folded application thereto as a teeth cleansing pad.

A further object is to provide a single rectangular strip of fabric having an apertured region for protrusion of the forefinger thereto for enabling the folded association of the cleansing strip to the finger.

A still further object is to provide a single rectangular strip of fabric having a cross-slitted region for protrusion of the forefinger thereto for enabling the folded association of the cleansing strip to the finger.

Still a further object is to provide a strip of thin flexible material with a comparatively thick napped region to receive a tooth cleanser and affording the folded application thereof to the forefinger for direct rubbing application to the teeth as a tooth brush substitute.

Other objects and advantages will appear from the following description of an illustrative embodiment of the present invention.

In the drawing:

Figure 1 is a plan view of a dental cleaning

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and massaging device embodying features of the present invention.

Figure 2 is a side view in elevation of a dental pad shown in Figure 1 as applied to the forefinger just prior to being fully folded thereover for grasping engagement by the thumb.

Figure 3 is a view similar to Figure 2, except that the strip of material is fully folded over the forefinger and held thereagainst with the thumb in its operative position of use.

Figure 4 is a palm view of the hand and the cleansing strip in its fully operative folded position preparatory to rubbing application to the teeth.

The structure selected for illustration comprises a thin flexible sheet of material such as a rectangular strip of fabric 10, in this instance a smoothly woven cotton strip. The elongated strip 10 is comparatively long for its width, and is possessed of the usual flexibility constituting a common characteristic of most fabrics. The rectangular strip 10 is preferably provided with an elongated rectangular tooth and gum rubbing region 11 that is woven or otherwise to provide thereon deep-napped protuberances. The comparatively deep-napped area 11 is such as provided by terry cloth which is a commonly known type of fabric consisting of protruding looped threads that has a capacity to absorb moisture and retain foreign substances such as medication and a cleanser therein.

The deep-napped area 11 constitutes a terry cloth pile which offers a mild abrasive action when rubbed or applied with movement against the teeth and gums. The terry cloth 11 is characterized by its ability to retain a medicant or cleanser that is applied thereto in any suitable manner such as by drying a wet solution thereon, blowing a powder therein, or by incorporation through the action of beating or in any other manner depending upon the dictates of commercial practice.

An example of a suitable teeth cleansing and treating medicant is as follows:

	Per cent by weight
Sodium, chloride (iodized)	25
Sodium bicarbonate	25
Calcium lactate	5
Potassium citrate	5
Magnesium sulphate	3
Magnesium carbonate	33
Menthol	1/2
Thymol	1/2
Flavoring (oil of wintergreen or the like) ..	3

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The terry cloth pile 11 generally conforms in configuration with the strip 10, but is of slightly lesser width than the strip 10 to present plain marginal borders 12 and 13 and a somewhat wider end border 14. The end border 14 is the portion engaged by the thumb 15 for pressure application against the midjoint 16 of the forefinger 17. The end border 14 should be sufficiently wide to accommodate the engaging surface of the thumb 15. The length of the terry cloth pile 11 is substantially less than the corresponding dimension of the rectangular strip 10. The terry cloth pile 11 need only be sufficiently long to provide full contact with the teeth while the strip 10 is much longer to afford proper finger grasping retention thereof in an operative position for application to the gums and teeth. To afford the application of the strip 10 to the forefinger 17 and the protrusion of its tip 18 therethrough, any suitable aperture is provided therein. To this end, the rectangular fabric strip 10 is provided with cross-slits 19—20 stamped, cut or otherwise formed in the strip 10 immediately above the terry cloth pile 11 and in longitudinal alignment therewith. This provides a plain woven strip portion 21 beyond the aperture forming the cross-slits 19—20 for initial positioning between the thumb 15 and the forefinger 17 after the forefinger tip 18 is projected through the tip indexing and engaging aperture formed by cross-slits 19—20 which are spread into an aperture sized to receive the finger tip 18.

Thereupon the other end 14 of the strip 10 is brought around the forefinger tip 18 so that the terry cloth pile 11 is disposed thereover and folded back on the plain strip portion 21 to also assume a position between the thumb 15 and the forefinger 17 for tensioned retention therebetween. With this arrangement, the strip 10 is readily applied to the forefinger 17 with the treated terry cloth pile 11 positioned along the palm side of the hand 22, so that the strip 10 and its engaging surface 11 can be applied with a rubbing action against the teeth and gums on all surfaces thereof. The medication, cleaner or other substance in the terry cloth pile 11 is dissolved by the saliva or moisture of the mouth during the rubbing application against the teeth surfaces to be cleansed and gums that are to be massaged. This effectually cleans the teeth and enables access to ordinarily hard-to-get-at crevices, which is important to dental hygiene. After the teeth have been cleansed and gums massaged in an effective and satisfactory manner, the strip 10 is disposed of as waste, since it is a single use dental cleansing and massaging expedient. This construction of the strip 10 affords a ready, simple, inexpensive and more sanitary substitute for the customary tooth brush.

Various changes may be made in the embodiment of the invention herewith specifically described without departing from the invention or sacrificing any of the advantages or features thereof, and nothing herein shall be construed as a limitation of the invention, its structural concept or embodiment as to the whole or any part

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thereof, except as defined in the appended claims.

I claim:

1. A dental massage and polishing utensil comprising a single linear flat strip of flexible material, a comparatively deep-napped thick moisture and cleanser absorbing surface associated with a portion of said flexible strip of material and adapted to receive a dental cleansing substance, said linear strip of material having a plain woven fabric portion contiguous with said deep-napped surface portion, there being an aperture in said plain woven portion of said linear strip of flexible material for enabling the attachment of said flexible strip of material to the forefinger for rubbing application to the teeth.

2. A dental massage and polishing utensil comprising a linear strip of flexible material, having a cleansing and polishing surface thereon, said linear strip of flexible material having a plain margin beyond said cleansing and polishing surface, there being cross-slits in the plain margin of said linear strip of flexible material beyond said cleansing and polishing surface for enabling the attachment of said flexible strip of material to and around the forefinger for rubbing application to the teeth.

3. A dental massage and polishing utensil comprising a single linear flat strip of flexible material having a plain surface, a comparatively deep-napped thick moisture and cleanser absorbing surface on a portion of said flexible strip of material to leave a plain surface in longitudinal alignment therewith, a dental cleansing substance associated with said thick absorbing surface, there being cross-slits in the plain surface of said linear strip of flexible material beyond said absorbing surface for enabling the attachment of said flexible strip of material to and around the forefinger for rubbing application to the teeth.

4. A dental massage and polishing utensil comprising a single linear flat strip of flexible material having a plain surface area, a comparatively deep-napped thick moisture and cleanser absorbing surface on said flexible strip of material in longitudinal alignment with said plain surface area, a dental cleansing substance associated with said thick absorbing surface, there being cross-slits in the plain surface area of said linear strip of flexible material in longitudinal alignment with said thick portion for enabling the attachment of said flexible strip of material to and around the forefinger for rubbing application to the teeth.

HARRY R. RATHBUN.

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