

March 17, 1925.

1,530,459

J. P. CARMICHAEL

DENTIFRICE PACKAGE AND CARRIER

Filed Jan. 11, 1922

FIG. 1.

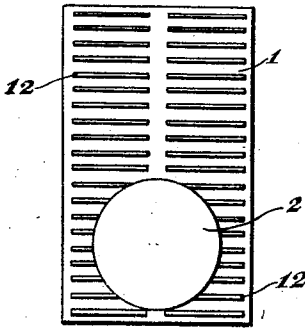


FIG. 2.



FIG. 3.

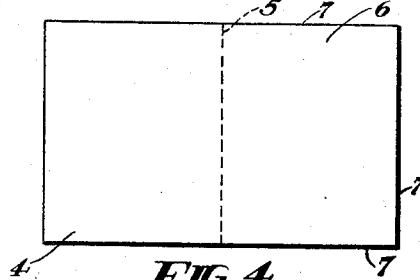


FIG. 4.

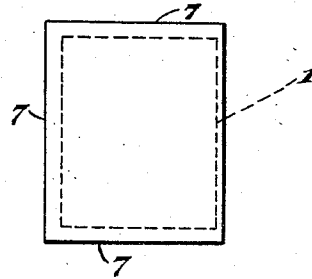


FIG. 5.

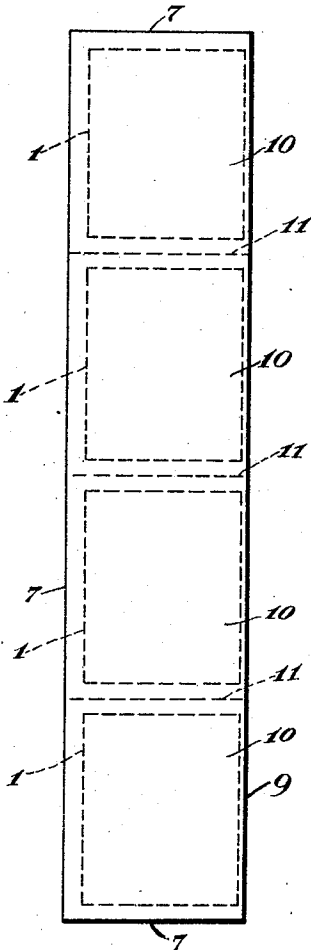
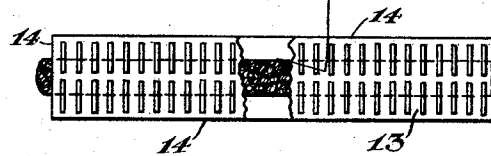


FIG. 6.



INVENTOR.

John P. Carmichael
BY
Erwin Wheeler & Woolard
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

JOHN P. CARMICHAEL, OF MILWAUKEE, WISCONSIN.

DENTIFRICE PACKAGE AND CARRIER.

Application filed January 11, 1922. Serial No. 528,505.

To all whom it may concern:

Be it known that I, JOHN P. CARMICHAEL, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Dentifrice Packages and Carriers, of which the following is a specification.

My invention relates to improvements in dentifrice packages and carriers.

The object is to provide means to facilitate a thorough and sanitary cleaning of the teeth; to provide for separately storing a quantitative charge of tooth powder or paste sufficient for a single teeth cleaning operation, and utilizing the container itself to complete the operation; to provide means whereby the container may not only serve as a carrier for the dentifrice to be applied to the tooth brush, but also as a carrier for tooth polishing material and medicated material with which the carrier itself is impregnated, whereby, after brushing one's teeth, the user may then utilize the carrier to polish, cleanse, and massage the teeth and gums.

A further object of this invention is to provide means whereby a dentifrice may be prepared in the form of a dry powder and applied without waste, not only by means of a tooth brush, but also in either an original or a supplemental operation involving the use of a napkin, or equivalent device in which the dentifrice may be originally stored,—each napkin and its charge of dentifrice being adapted for a single teeth cleaning operation and sufficiently inexpensive to allow it to be discarded after such single operation.

It is also an object of this invention to provide means for packaging a dentifrice, whereby to produce a new article of manufacture including the use of a multiple container composed of a series of units in which each unit is adapted to serve not only as a container, but also as a component part of the tooth cleaning material, and a means for mechanically carrying out the cleaning operation.

In the drawings:—

Figure 1 illustrates one of the improved dentifrice carriers with a charge of dentifrice applied thereto preparatory to packaging the same.

Figure 2 is a view of the same, when

folded to form the inner walls of the package.

Figure 3 is a view of the blank which forms the outer envelope as it appears preparatory to the folding and sealing operations.

Figure 4 is a view of the same when folded and sealed.

Figure 5 is a view showing the multiple package container in its commercial form.

Figure 6 illustrates a modified form of container.

Like parts are identified by the same reference characters thruout the several views.

The improved container or carrier comprises a piece of fabric 1, such as cotton cloth, impregnated with a finely divided calcined powder adapted to serve as a polishing material, which is carried into most intimate relation to and between the fibers of the cloth by first saturating the cloth in a liquid filled with suspended particles of the polishing material and then subjecting it to compression, i. e., wringing and ironing processes to expel the water, fix the polishing material in the fiber, and dry the fabric. A binder of starch or gelatinous material including a medicament, is preferably used in the water to stiffen the fabric, to assist in holding the polishing material in the fabric when the latter has been dried, and to also assist in the disinfection of the teeth and gums, and the removal of foreign material therefrom in the final use of the fabric.

A further quantity 2 of the polishing material is then applied to the central portion of the fabric in dry form, after which the fabric is folded, rolled or otherwise manipulated to form a closed receptacle. The binder or stiffening material will be found serviceable in preventing the powder from sifting thru, between the strands or fibers. By first rolling the fabric into the form of a cylinder, and then folding it to bring the edges of the folded portions into juxtaposition together as illustrated in Figure 2, a receptacle 3 will be formed, in which the contents will be held with reasonable security, although if desired the edge margins may preferably be secured together by loosely stitching or applying an adhesive of starchy or gelatinous material to facilitate the packaging operation now to be described.

The containers 3 are then placed in spaced

relation upon a portion 4 of a strip of wrapping paper, which is then folded along the central line 5 to bring the portion 6 to a superposed position, upon the portion 4 to which it may then be secured along the margins and between the containers 3. By gumming one of the portions or strips 4 or 6 along lines 7, which extend between the containers, and folding or superposing the strips with the gum in a moist or adhesive condition, a multiple package 9 (Figure 5) may be formed inexpensively, with each container in a separate individual envelope 10, adapted to be torn off individually along tearing lines 11, provided by slitting, perforating or creasing the paper.

In use, an individual envelope is torn off from the multiple package and the container removed and opened to a flat position preferably in the palm of one hand, to expose the loose or removable contents to a tooth brush. The tooth brush is preferably first moistened to cause the powder to adhere, and after the teeth have been brushed, the removable contents of the container will have been largely removed by the brush. The remainder will have been moistened sufficiently to cause the particles to adhere to the container, and the latter will therefore have a surface content of polishing material in addition to the quantity of such material originally entrained in, or held to, the fibers. This container may then be used as a polishing napkin to polish the teeth, massage the gums, press out material from between the gums and teeth, and medicate or disinfect the surfaces to which it is applied, the fabric being then discarded.

By using a fabric having ribs 12 at intervals, it is possible to operate between the teeth to a considerable extent. The ribs also entrain and carry a much larger content of polishing material, and in fact a greater proportion of such material than the other portions of the fabric owing to the increased thickness and consequent greater co-operation of the fibers with each other, in entraining or holding therein the particles of polishing powder.

In Figure 6, a container 13 is illustrated which may be formed as above described, but which has the exposed side margin 14 secured to the portions which it overlaps. The contents of this container may comprise a tooth paste, which may be squeezed out at one end, the container being then in the form of a flattened tube which may be used for polishing purposes without opening or unrolling it.

I claim:—

1. A new article of manufacture comprising a dentifrice container having flexible

and abrasive walls and adapted to serve as a tooth napkin after performing its function as a container.

2. A new article of manufacture comprising a container for storing a quantity of dentifrice and having walls composed of fabric impregnated with polishing material and adapted to serve as a tooth napkin

3. A new article of manufacture comprising a container for storing a quantity of dentifrice and having walls composed of fabric impregnated with polishing material and adapted to serve as a tooth napkin, said container fabric being also impregnated with a medicament.

4. A new article of manufacture comprising a dentifrice container having ribbed flexible abrasive walls adapted to serve as a carrier to apply the residue of the dentifrice to the teeth after the major portion has been transferred to a tooth brush.

5. A new article of manufacture comprising a dentifrice container having its walls composed of fabric impregnated with polishing material, and a separate quantity of polishing material removably contained therein.

6. A new article of manufacture comprising a dentifrice container having its walls composed of fabric impregnated with polishing material, and a separate quantity of polishing material removably contained therein, said container being adapted to be opened to expose its contents, and to allow the container to be used as a napkin to polish the teeth and massage the gums.

7. A new article of manufacture comprising a multiple package envelope subdivided into a plurality of pockets each having therein a piece of fabric impregnated with polishing material adapted for cleaning and polishing teeth.

8. A new article of manufacture comprising a multiple package envelope subdivided into a plurality of pockets each having therein a piece of fabric impregnated with polishing material adapted for cleaning and polishing teeth, and an additional quantity of such material removably carried by the container.

9. A new article of manufacture comprising a multiple package envelope subdivided into a plurality of separately detachable envelopes, each having therein a container for tooth polishing material.

10. A new article of manufacture comprising a multiple package envelope subdivided into a plurality of separately detachable envelopes, each having therein a container for tooth polishing material, and adapted to be also used for polishing the teeth and massaging the gums.

JOHN P. CARMICHAEL.