Aug. 8, 1950 S. F. NATHAN 2,517,912

TOOTH SCRUBBER OR CLEANER

Filed March 10, 1947

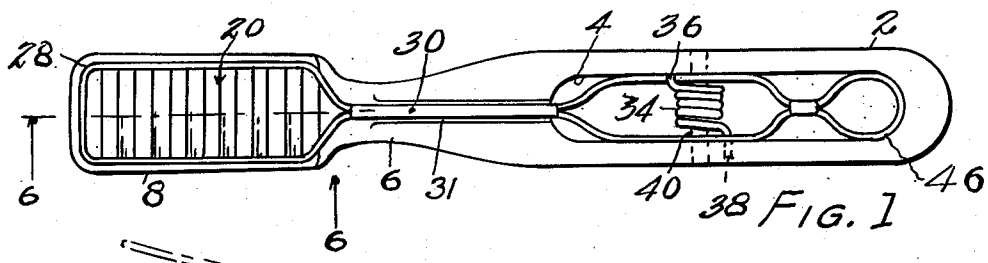


FIG. 1

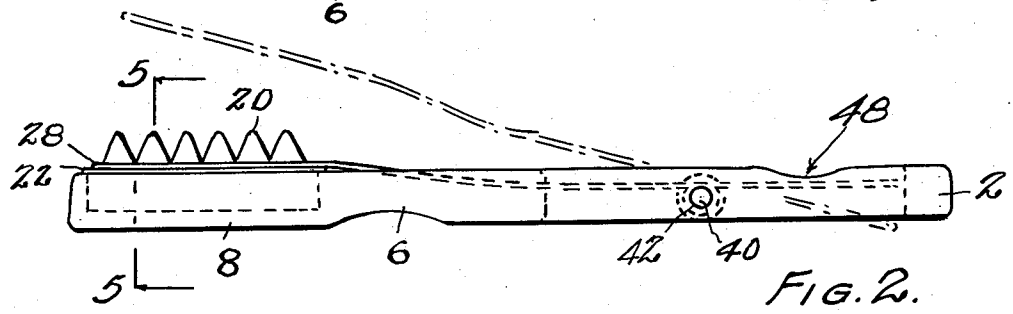
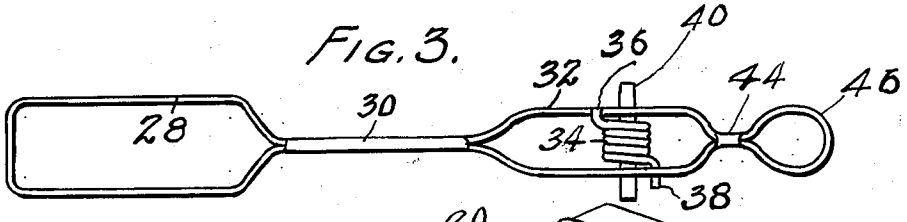


FIG. 2.

FIG. 3.



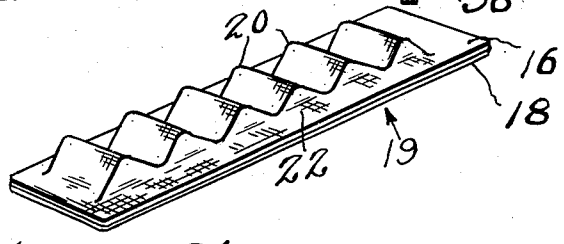


FIG. 4.

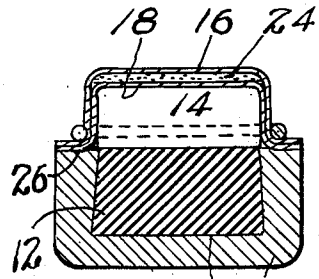


FIG. 5.

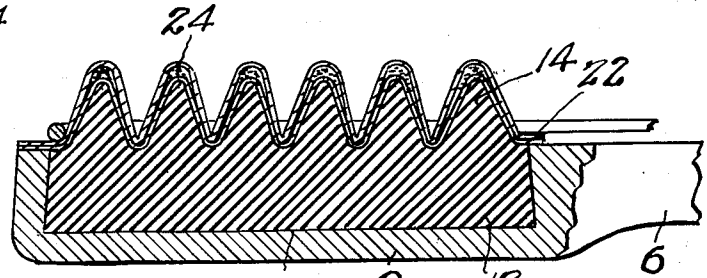


FIG. 6.

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TOOTH SCRUBBER OR CLEANER

Steven F. Nathan, New York, N. Y.

Application March 10, 1947, Serial No. 733,643

2 Claims. (Cl. 15—210)

1

My present invention relates to an improved tooth scrubber or cleaner of the type embodying a ridged or serrated scrubber over which is positioned a dentifrice container of material pervious to water so that the dentifrice will dissolve upon contact with the oral saliva or by dipping in water to effect a scrubbing action upon the teeth.

The dentifrice container is replaceable as the contents are used and the container is formed to fit snugly over the scrubber and unique means are employed to detachably secure the container on the scrubber.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention according to the best mode I have thus far devised, but it will be understood that various changes and alterations may be made in the exemplified structure within the scope of the appended claims.

In the drawings:

Fig. 1 is a top plan view of the scrubber of my invention.

Fig. 2 is a side elevational view thereof.

Fig. 3 is a top plan view of the pad or container securing frame.

Fig. 4 is a perspective view of the container.

Fig. 5 is a transverse vertical sectional view at line 5—5 of Fig. 2.

Fig. 6 is a longitudinal vertical sectional view through the scrubber and the container.

Referring now to the drawings wherein I have illustrated the present preferred embodiment of my invention, I employ a handle 2 having an open center 4 tapering into the reduced shank 6 and the scrubber base 8.

The scrubber base is fashioned with a recess 10 the walls of which diverge downwardly to receive and secure the scrubber 12 which may be of rubber or other suitable material.

The upper face of the scrubber is formed with transverse ridges 14 extending above the upper surface of the scrubber base.

To supply the ridges of the scrubber with a tooth cleaning compound of suitable type such as powder, I employ the water-pervious container or pad 19 having spaced upper and lower walls 16 and 18 and these walls are formed with aligned spaced ridges 20 to conform with the ridges 14 of the scrubber.

These walls abut each other about the edges to form the peripheral flange 22, the walls being adhered or otherwise suitably secured together to retain a quantity of dentifrice 24 therein.

2

The flange rests on the upper face 26 of the centrally recessed scrubber base, and to retain the pad or container on the base and the scrubber ridges I employ a wire frame having a clamping yoke 28 shaped to bear upon the peripheral flange of the pad and having a central shank 30 which fits into a complementary groove 31 of the handle-shank 6. The frame then expands into a bearing yoke 32 mounted in the opening or slot 4 of the handle 2, in order that the clamping yoke may resiliently be pressed into operative position while the groove 31 and the walls of the slotted or open handle coact with shank 30 and yoke 32 respectively to retain the frame against displacement. The clamping yoke is retained against the pad by means of a coiled spring 34 having a free end or end lug 36 which frictionally engages and bears upon the yoke 32, and the other end 38 of the spring is rigidly anchored in a side wall of the open handle. The spring is coiled about and supported on a transversely arranged bearing pin or shaft 40 having its opposite ends mounted in bores 42 of the slotted or open handle, and the pin thus forms a bearing or fulcrum support for the yoke 32 of the tiltable frame, in cooperation with the retaining lug 36 that frictionally engages the yoke 32 of the frame.

A shank 44 connects the bearing yoke with a finger grip 46, and the handle 2 is recessed at 48 to facilitate the fulcruming of the frame upon the shaft to release the yoke 28 from the pad. The spring will, of course, maintain the yoke 32 against the flange of the pad until pressure is applied to the finger piece to release the yoke.

By the utilization of the device of my invention a complete tooth scrubber is available having its self-carried pad of dentifrice and as the dentifrice is exhausted the pad 19 may easily be replaced. The scrubber will suffer little from wear and the device will last indefinitely subject only to the pad replacements, which pads can be produced at low cost.

The scrubber will prove valuable at home or while traveling and will obviate the need for both a tooth brush and a container of dentifrice.

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

1. In a tooth cleaner the combination with a handle having an open-center, a base integral with the handle, and a serrated scrubber mounted on the base, of a disposable dentifrice pad covering the scrubber and having edge flanges, a clamping frame having a bearing yoke

pivotally mounted in the open-center of the handle and an end-yoke clamping the edge flanges, a helical spring mounted in the open-center of the handle, and said spring having a retaining lug bearing on the bearing yoke.

2. A tooth cleaner comprising a recessed base, a handle connected to the base and having an open center, a serrated scrubber mounted in the recessed base and a serrated and water-pervious dentifrice pad mounted on the scrubber, a wire frame having a bearing yoke pivotally mounted in the open-center of the handle, said frame having a depressible lever portion at one end and a clamping yoke at its other end frictionally engaging the pad, and resilient means mounted

in the handle and coacting with the bearing yoke for holding the frame in clamping position.

STEVEN F. NATHAN.

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