Sept. 9, 1958 J. L. PELLETIER 2,850,753

POCKET TOOTH BRUSH

Filed June 29, 1956

Fig. 1.

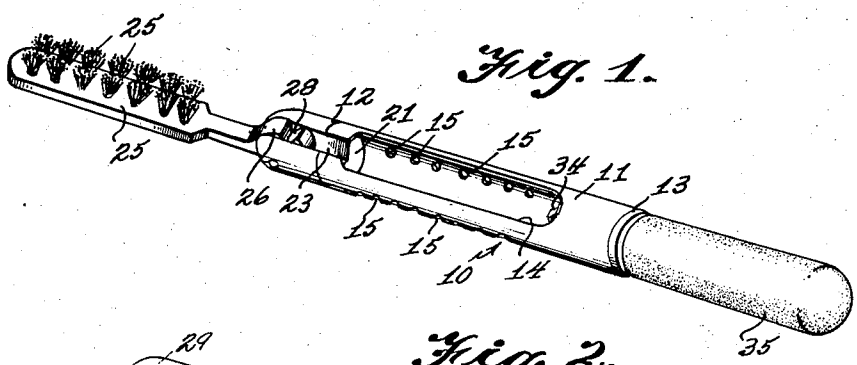


Fig. 2.

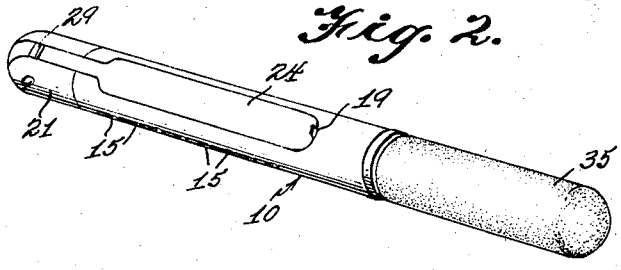


Fig. 3.

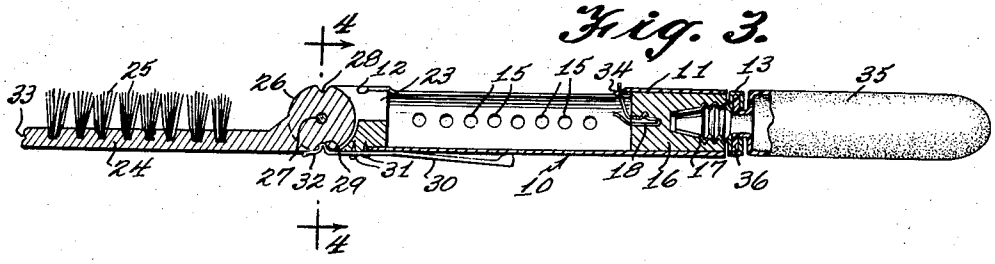


Fig. 4.

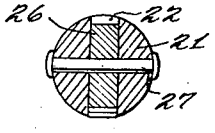
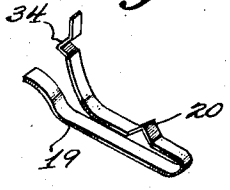


Fig. 5.



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POCKET TOOTH BRUSH

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1 Claim. (Cl. 15—185)

The present invention relates to pocket tooth brushes, and more particularly to such devices which can be folded to reduce the overall bulk thereof.

The primary object of the invention is to provide a pocket tooth brush which is complete having a handle, a brush portion, and a supply of dentifrice which can be detached from the handle and applied to the brush.

Another object of the invention is to provide a pocket tooth brush in which the brush portion can be folded into the handle when it is desired to store the device in the pocket.

A further object of the invention is to provide a tooth brush of the class described in which ventilation openings are provided in the handle to ventilate the brush portion when stored therein.

A still further object of the invention is to provide a pocket tooth brush having a combination pocket clip and brush retaining spring for maintaining the brush in open position.

Another object of the invention is to provide a pocket tooth brush which is inexpensive to manufacture, simple to use, and compact in its folded form.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a perspective view of the invention with the brush shown in open position.

Figure 2 is a perspective view of the invention with the brush shown in closed position.

Figure 3 is a longitudinal cross-section taken of the device with the brush in open position.

Figure 4 is a transverse cross-section taken along the line 4—4 of Figure 3, looking in the direction of the arrows.

Figure 5 is a perspective view of the locking spring for holding the brush in closed position.

Referring now to the drawings in detail wherein like reference numerals indicate like parts throughout the several figures, the reference numeral **10** indicates generally a pocket tooth brush constructed in accordance with the invention.

The pocket tooth brush **10** comprises a tubular handle portion **11** have opposite open ends **12** and **13**, and slotted longitudinally as at **14** from a point adjacent to but spaced from the open end **13** through the open end **12**. The tubular handle **11** is provided with a plurality of ventilating openings **15** extending through the sides thereof to ventilate the internal portions of the tubular handle **11**.

A cylindrical body **16** is positioned within the tubular handle **11** adjacent the end **13** thereof and is provided with

a threaded bore **17** extending axially thereof opening outwardly away from the end **12** of the tubular body **11**. The opposite end of the cylindrical body **16** has an opening **18** extending axially therein for receiving a locking spring **19** therein as illustrated in Figure 3. The locking spring **19** has a detent **20** formed thereon to secure the locking spring **19** within the opening **18**.

A cylindrical body **21** extends into the open end **12** of the tubular handle **11** and is secured therein. The cylindrical body **21** is bifurcated as at **22** and is provided with a longitudinally extending slot **23** extending completely therealong and communicating with the bifurcated portion **22**.

A plate **24** is provided with a plurality of bristles **25** along one face thereof and has a shank terminating in a disk-like extension **26** which is positioned within the bifurcation **22** and pivotally secured therein by pivot pin **27**. The disk-like member **26** is provided with opposite detent recesses **28** and **29**, for reasons to be assigned.

A spring pocket clip **30** is secured to the body **21** by means of securing elements **31**, as seen in Figure 3, and has a spring retaining arm **32** extending integrally outwardly therefrom and engaging in the detent recesses **29** and **28** securing the plate **24** in opened position, as illustrated in Figure 3, and in closed position, as illustrated in Figure 2.

The outer end of the plate **24** is provided with a detent recess **33**, as illustrated in Figure 3, which is adapted to engage over the detent portion **34** of the spring **19**, as seen in Figure 3, to assist in securing the plate **24** in closed position.

A flexible plastic dentifrice container **35** is secured to a threaded nozzle member **36** by any suitable conventional means and the threaded nozzle **36** is adapted to be threadedly engaged in the threaded bore **17** to secure the dentifrice container **35** to the body **16**, and hence to the tubular handle **11**.

In the operation of the invention, the plate **24** is locked in open or closed position by means of the detent recesses **28** and **29**, and the detent arm **32**, with the spring **19** and its detent portion **34** assisting in holding the plate **24** in closed position.

The container **35** can be removed from the body **16** by unscrewing the nozzle **36** from the threaded bore **17** so that dentifrice can be dispensed onto the bristles **25** by squeezing the flexible container **35** in the usual manner. The dentifrice container **35** can be refilled or replaced as required to maintain the tooth brush **10** ready for use.

Having thus described the preferred embodiment of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to without departing from the scope of the appended claim.

What is claimed is:

A pocket tooth brush comprising an elongated tubular handle, said handle having a longitudinally extending elongated aperture formed in one side thereof, a plate, tooth brush bristles mounted in said plate, a bifurcated body secured in one end of said handle, a disk formed on said plate engaging in the bifurcated portion of said body, means pivotally securing said disk to said body, said plate being movable from a position aligned with said handle to a position with said bristles enclosed within said handle and said plate closing said aperture in said

handle, said disk having a pair of oppositely disposed detent notches formed therein, an elongated spring member, means rigidly securing said spring member to said body, a detent formed on said spring member for selectively engaging in said detent notches locking said plate in open and in closed position, a pocket clip integrally formed on the end of said spring member opposite said detent, said plate having a detent notch formed therein at the end thereof opposite said disk, and a spring detent supported in said tubular handle for engaging in said last named detent notch for releasably locking said plate in said aperture.

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