

Sept. 1, 1942.

J. ROCCA

2,294,631

TOOTHBRUSH

Filed Sept. 8, 1941

Fig. 1.

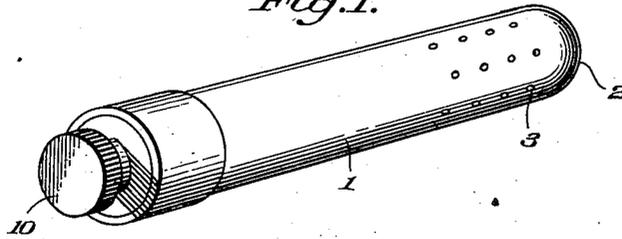


Fig. 2.

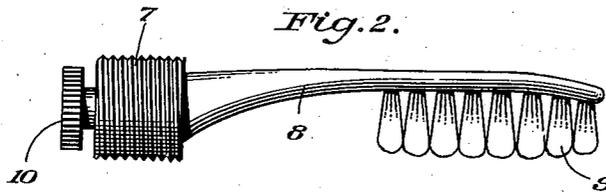


Fig. 3.

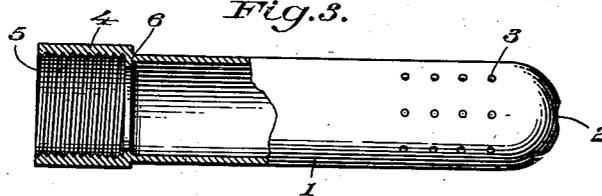


Fig. 4.

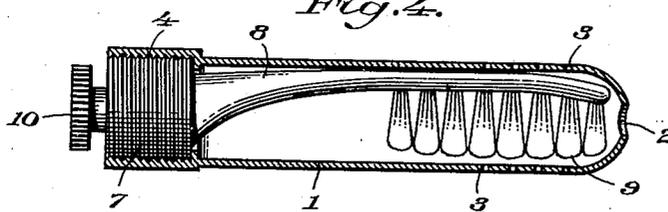
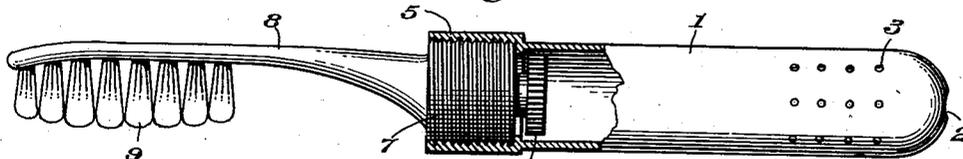


Fig. 5.



10 John Rocca INVENTOR.

BY
Victor J. Evans & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE

2,294,631

TOOTHBRUSH

John Rocca, Graterford, Pa.

Application September 8, 1941, Serial No. 410,105

1 Claim. (Cl. 15—184)

This invention relates to improvements in tooth brushes.

An object of the invention is to provide a sanitary tooth brush, in which the shank and bristles of the brush are held in a container, the same forming a handle when the brush is in use.

Another object of the invention is to provide a brush of this character, in which the shank and bristles may be readily inserted in the handle or removed from the handle and connected thereto in operative position for cleaning the teeth.

A further object of the invention is to provide a brush of this character formed of few parts and producing a very compact brush having certain details of structure and combination of parts hereinafter more fully set forth.

In the accompanying drawing,

Figure 1 is a perspective view of my improved brush with the shank and bristles within the handle;

Figure 2 is a side elevation of the shank removed from the handle;

Figure 3 is a side elevation of the handle, partly in section;

Figure 4 is a longitudinal sectional view of Figure 1;

Figure 5 is a side elevation, partly in section, showing the shank in the handle in operative position.

Referring now to the drawing, 1 represents a hollow cylindrical handle having one end rounded and closed at 2, and provided with openings 3 for ventilation. The opposite end of the handle is open and has an enlarged cylindrical portion 4, internally threaded at 5. At the inner end of the enlarged portion 4, I provide an inwardly extending annular flange 6, forming a stop for a purpose later described. The brush proper is composed of a cylindrical portion 7, externally threaded, and adapted to screw into the enlarged portion 4 of the handle. One end of the enlarged portion 7 is provided with a curved shank 8, carrying at its outer end the

usual bristles 9, which may be of any desired form. The opposite end of the cylindrical portion 7 is provided with an operating knob 10, which is of a diameter less than the bore of the handle 1.

From the foregoing description, it will be seen that the brush proper is passed into the handle; and, by means of the knob 10, the cylindrical threaded portion 7 is readily screwed into the threads 5 of the enlarged portion 4 of the handle until the inner end of the portion 7 engages the annular flange 6. In this position, a very neat and compact article is produced. When it is desired to use the brush, the same is removed from the handle by turning the knob 10 and screwing the cylindrical portion 7, carried by the shank, within the enlarged portion 4, as shown in Figure 5 of the drawing. As heretofore stated, the knob 10 is of a diameter less than the bore of the handle and passes into the handle and allows the portion 7 to pass into the handle until it engages the annular flange 6, whereby the brush is locked against rotation in the handle.

Having thus described my invention, what I claim is—

A tooth brush, comprising a hollow cylindrical handle closed at one end and having an enlarged internally threaded opposite end, an internal flange at the junction of the handle and the enlarged internally threaded end, an externally threaded cylindrical member of a length equal to that of the enlarged internally threaded end of the handle, a shank carried by one end of the cylindrical member and carrying a brush, and an operating knob carried by the opposite end of the cylindrical member and of a diameter less than the bore of the handle, whereby the cylindrical member may be screwed wholly within the handle in either position with the cylindrical member engaging the internal flange and locked by friction against the same.

JOHN ROCCA.