

Oct. 10, 1939.

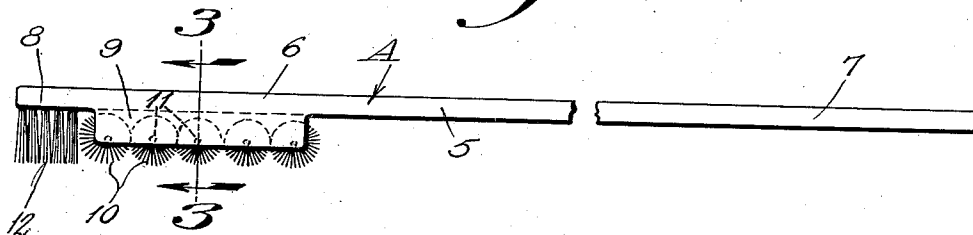
L. STEINER

2,175,975

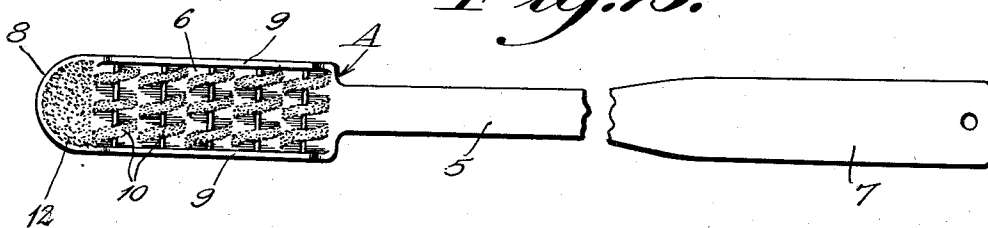
TOOTH BRUSH

Filed May 10, 1937

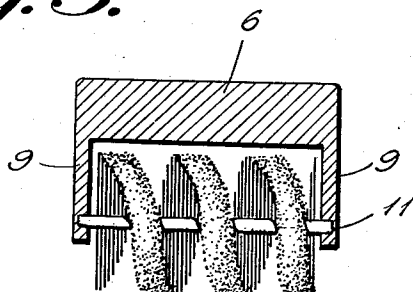
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*A. E. Wise*

WITNESS

*Lloyd Steiner*  
INVENTOR  
BY *Victor J. Evans & Co.*  
ATTORNEYS

# UNITED STATES PATENT OFFICE

2,175,975

## TOOTH BRUSH

Lloyd Steiner, Princeton, N. J.

Application May 10, 1937, Serial No. 141,856

1 Claim. (Cl. 15—167)

The invention relates to a tooth brush and more especially to a spiral bristled tooth brush of rotary type.

The primary object of the invention is the provision of a brush of this character, wherein the bristles are arranged spirally on a turnable axle or arbor so that in the use of the brush there will be no liability of the bristles scratching the lips when the said brush is in use for the cleaning of the teeth particularly on reciprocation thereof.

Another object of the invention is the provision of a brush of this character, wherein a plurality of spirals of bristles are arranged at the head of the stock of such brush so that in the use of the latter continuous contact of the bristles will be had on the teeth of a user for removing deposit upon the teeth or between the same and a thorough cleaning of such teeth will be assured.

A further object of the invention is the provision of a brush of this character, wherein the bristled area of the same is novel in its entirety and will enable a thorough cleaning of the teeth with dispatch and without injury to the mouth or lips of a user as scratching action will be avoided.

A still further object of the invention is the provision of a brush of this character, which is simple in its construction, convenient in its use, thoroughly reliable and efficient in operation, durable, and inexpensive to manufacture.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention and pointed out in the claim hereunto appended.

In the accompanying drawing:

Figure 1 is a side elevation of a tooth brush constructed in accordance with the invention.

Figure 2 is a plan view thereof.

Figure 3 is an enlarged transverse sectional view taken on the line 3—3 of Figure 1.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, A designates generally a tooth brush constructed in accordance with the invention and involves a stock 5 made from any suitable stiff material having provided

at one end a head 6 and at the other end a handle 7, respectively. The head 6 is of elongated formation and has a rounded outer end 8 while slightly removed with respect to this end and arranged at opposite longer edges of said head are side walls or cheeks 9, these being coextensive with the head for a major portion of its length and are in spaced parallel relation to each other.

Transversely of the head 6 between the walls or cheeks 9 are bristled spirals 10, there being a plurality of the same arranged side by side and are formed with arbors or axles 11 centrally thereof. These arbors or axles 11 at opposite ends are journaled in the walls or cheeks 9 in a manner to have the series of bristled spirals 10 protrude uniformly with respect to each other beyond the said walls or cheeks 9 and constitute the brush proper in the series.

Mounted in the end 8 are tufted bristles 12 which are of a length in the group thereof to have the free ends terminate in a plane or flush with the spirals 10 at the outermost sides thereof.

The coils of bristles 10 are rotatable and in the use of the brush will effect a thorough and full cleaning of the teeth of the user without liability of injuring the gums, the inner portion of the mouth or the lips of such user and a spiral or screw-like brushing action will be had upon the teeth of such user for cleaning purposes both for the removal of deposit on the teeth or for extracting particles from between the same. The tufted bristles 12 at the end 8 are serviceable for cleaning of the back teeth within the mouth of a user.

What is claimed is:

A tooth brush comprising a flat elongated stock cut into an opposite longer edges thereof for forming a head at one end, opposed parallel sides formed at one face of said head and terminating removed from the outer end of the head, arbors journaled in the said sides and disposed crosswise between said sides, bristles spirally fitting the said arbors, and tufted bristles fitted with the head at the outer end thereof and beyond the sides and substantially flush with the spiral bristles.

LLOYD STEINER. 50