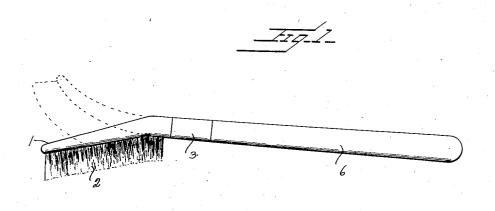
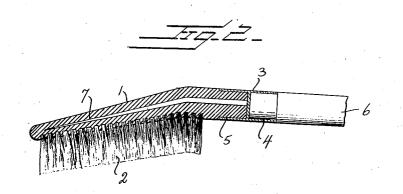
P. B. BURLEIGH. TOOTHBRUSH, APPLICATION FILED OCT. 26, 1918.

1,327,807.

Patented Jan. 13, 1920.





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## UNITED STATES PATENT OFFICE.

PAUL B. BURLEIGH, OF OMAHA, NEBRASKA.

## TOOTHBRUSH.

1,327,807.

Specification of Letters Patent. Patented Jan. 13, 1920.

Application filed October 26, 1918. Serial No. 259,820.

## To all whom it may concern:

Be it known that I, PAUL B. BURLEIGH, a citizen of the United States, residing at Omaha, in the county of Douglas and State

- of Nebraska, have invented certain new and useful Improvements in Toothbrushes, of which the following is a specification, reference being had to the accompanying drawings
- This invention relates to certain improve-10 ments in tooth brushes, and it is an object of the invention to provide a novel and im-proved device of this general character wherein the brush head is flexible, so that the
- 15 cleansing operation may be materially facilitated.

A further object of the invention is the provision of improved means, for connect-

- ing the handle, and the brush end of the 20 tooth brush. In carrying out this object it is the aim to provide a tubular thimble, having means between the ends of the thimble, for separating the handle from the body of the brush head.
- 25A further object of the invention is to. provide stiffening means, consisting of a metal member or rod, preferably steel embedded in the brush head. One end of this member or rod is cylindrical, and extends to
- 30 the rear end of the brush head, and in close position to the separating means between the brush head and the handle, and also within
- brush head and the handle, and also within the thimble. This construction insures the strength and rigidity at the point where
  35 the brush head and the thimble are telescopically united. At a point a short distance beyond the thimble the metallic rod or member gradually tapers, which allows
- the greater end portion of the rubber brush 40 head to resiliently yield, and yet at the same time insure sufficient rigidity, to cause the bristles of the brush to bear firmly upon the teeth while the brush is in use. The resiliency of the greater end portion of the 45 brush head, allows the greater portion to be
- curved or disposed, in order to separate the bristles of the brush, to facilitate cleaning. The invention consists in the details of construction and in the combination and ar-50 rangement of the several parts of my improved tooth brush whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous
- 55 for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to de- 60 scribe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation of a tooth brush constructed in accordance with an embodiment of my invention, the second 65 position of the head or back being indicated by dotted lines; and

Fig. 2 is an enlarged fragmentary view partly in elevation and partly in section of my improved brush as herein embodied. 70

As disclosed in the accompanying drawings, 1 denotes a brush head or back formed of rubber or other similar flexible or resilient material, and which has set or otherwise attached thereto the bristles 2.

3 denotes a thimble or ferrule provided at its opposite ends with the sockets 4 and An end portion of the head or back 1 is fitted within the forward socket 3, while the second or opposite socket 4 is adapted 80

to receive an end portion of the handle 6. Extending longitudinally of the head or back 1 and embedded therein is an elon-gated resilient reinforcing rod 7 preferably formed of steel, and which is tapered toward 85 its outer end whereby the head or back 1 is given sufficient strength, and which serves to constantly urge the head or back 1 in one direction or in a direction toward the work when the brush is in use.

From the foregoing description, it is thought to be obvious that a tooth brush constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which 95 it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof, and for this reason I do 100 not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. The combination with a pliable tooth brush head, provided with brush bristles and having a portion extending at an obtuse an-gle to the rear portion of the head, of re- 110 silient means embedded in the head and corresponding in shape thereto and tapering

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correspondingly with the portion that extends at an obtuse angle, thereby affording resiliency for said portion, whereby said portion may yield when urging the bristles 5 toward their work, a handle for the head, and means for uniting the head and the handle, said means being so positioned with relation to the rear portion of the embedded means, as to insure strength and rigidity 10 at the point of connection of the uniting means and the head.

2. The combination with a pliable tooth brush head, provided with brush bristles and having a portion extending at an obtuse an-

15 gle to the rear portion of the head, of resilient means embedded in the head and corresponding in shape thereto and tapering correspondingly with the portion that ex-tends at an obtuse angle, thereby affording '0 resiliency for said portion, whereby said portion may yield, when urging the bristles

toward their work, a handle for the head, and a thimble into the opposite end of which

the handle and the head are respectively telescopically inserted, thereby uniting the 25 handle and the head, one end of the thimble being so positioned with relation to the embedded means, as to insure strength and rigidity at the point of connection of the head with the thimble. 30

3. The combination with a pliable tooth brush head, provided with a tapering part extending at an obtuse angle to the rear part of the head, of a member embedded in the head and having a tapering portion which 35 likewise extends at an obtuse angle to the rear part of the member, said tapering portion of the member acting to insure resiliency for the pliable head to assist in holding the bristles against the teeth. 40

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

PAUL B. BURLEIGH.

Witnesses: CLIFFORD N. FORBES, JACOB GEHRIG.

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