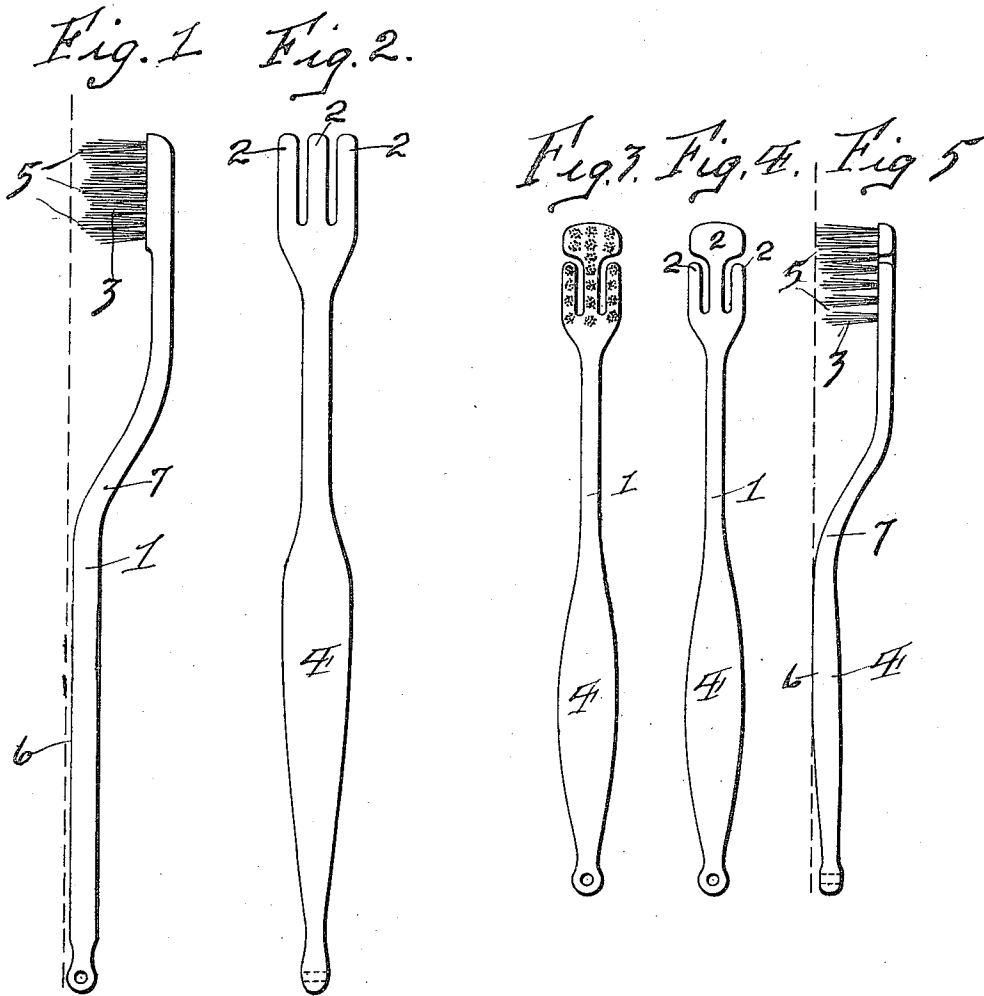


J. A. GARDNER.
TOOTH BRUSH.
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1,323,042.

Patented Nov. 25, 1919.



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JOSEPH A. GARDNER, OF MEMPHIS, TENNESSEE.

TOOTH-BRUSH.

1,323,042.

Specification of Letters Patent.

Patented Nov. 25, 1919.

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To all whom it may concern:

Be it known that I, JOSEPH A. GARDNER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented a certain new and useful Improvement in Tooth-Brushes, of which the following is a specification.

My invention has for its object to provide a construction for a brush having flexible prongs which will afford an offset for the lateral prongs equal to the length of a normal tooth from the gum line to the grinding or occlusal surface, thereby making it possible to pass the scrubbing ends of the bristles in the lateral prongs over the lingual surface of the teeth without tilting the brush, and at the same time keeping the scrubbing ends of the bristles moving in line with the long axis of the hilt of the handle.

My invention has for its further object to provide a tooth brush with a brush-head formed of a plurality of flexible prongs.

I am aware that pronged brush-heads have been made heretofore, which are more sanitary than other designs, also being very easy to clean. But I not only divide the brush-head into prongs or sections, with the desirable results thus attained, but I provide a certain flexibility of each prong by means of which a result is secured which is necessary in order to reach all surfaces of the teeth due to the irregularity of same, the absence of which flexibility is an objection urged by the dental profession against other designs of tooth brushes.

My invention has for its further object to construct the tooth brush handle so as to bring the scrubbing ends of the bristles in line with the long axis of the hilt or grip portion of the handle, which eliminates the tendency of the brush to turn in the hand during the process of cleaning the teeth.

My means of accomplishing the foregoing objects may be more readily understood by having reference to the accompanying drawing, which is hereunto annexed and is a part of this specification, in which:

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

Fig. 2 is a back view.

Fig. 3 is a front view showing the bristles, of a modified form.

Figs. 4 and 5 show top and side views of the form shown in Fig. 3.

Similar reference numerals refer to similar parts throughout the entire description.

As shown in the drawings, the brush 1 is formed by a plurality of prongs 2, in which are mounted the bristles 3, the handle 4, of the brush 1, is so formed as clearly shown in Fig. 1, that the ends 5, of the bristles 3, are in the same plane as the front 6, of the handle 4. This is accomplished by bending the handle as at 7. The bent portion is reduced in width until it spreads out to form the prongs 2 for the brush proper. The lateral prongs project beyond the sides of the reduced portion of the handle a distance equal to the length of a normal tooth taken at points between the grinding surface of the tooth and the gum line, and the reduced portion of the handle is also bent so that the grip or portion of the handle engaged by the hand of a user has its front surface approximately in line with the plane of the ends of the bristles of the brush head, and preferably, the reduced or bent portion is of a length which will enable the bristles to reach the second molar teeth without the shoulder of the handle between the reduced portion and the grip portion striking the lips.

Practice has shown that this reduced portion of the handle should be at least one and a half inches in length, as that construction will permit the brush proper to enter the mouth sufficiently to brush the second molar tooth without having the shoulder or bent portion 7, strike the lips.

It will be apparent from the foregoing description that a brush constructed as I have just described my invention will accomplish all of the objects and possess all of the advantages set forth in the preamble to this specification.

In some instances it may be found desirable to construct the brush proper or rather the prongs as shown in Figs. 3, 4 and 5, in which the central prong 2^a is formed with an enlarged end, and the lateral prongs 2^b are shorter terminating at a point adjacent the enlarged portion of the

prong 2^a, to increase the effective scrubbing area, and I do not wish to be understood as limiting myself to any precise shape for the prongs, as a variety of shapes may be employed without departing from my invention.

Having thus described my invention what I regard as new and desire to secure by Letters Patent of the United States is:

10 As a new article of manufacture, a tooth

brush comprising a handle provided with a central and lateral flexible prongs, bristles mounted in said prongs, the central prong extending beyond the lateral prongs and having an enlarged end adjacent, but beyond the ends of the lateral prongs. 15

In witness whereof I have signed the foregoing specification.

JOSEPH A. GARDNER.