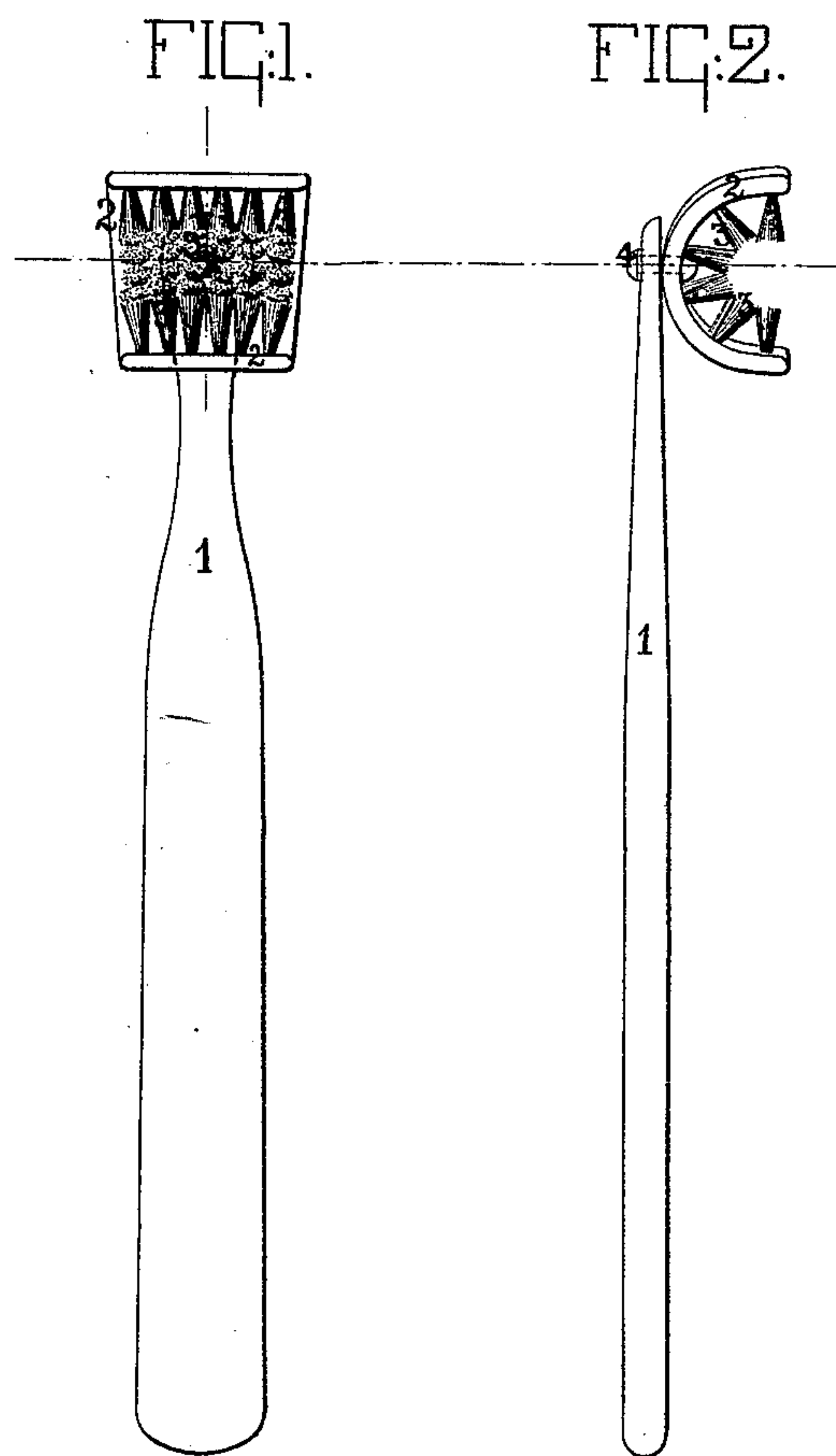


(No Model.)

L. HOLZ & L. MEYER.  
Tooth Brush.

No. 229,823.

Patented July 13, 1880.



Witnesses:  
Penn. Halsted  
Saml R. Turner

Inventors:  
Louis Holz  
and Leopold Meyer  
by John J. Halsted, Atty



# UNITED STATES PATENT OFFICE.

LOUIS HOLZ AND LEOPOLD MEYER, OF PARIS, FRANCE.

## TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 229,823, dated July 13, 1880.

Application filed May 3, 1880. (No model.) Patented in France October 28, 1879.

*To all whom it may concern:*

Be it known that we, LOUIS HOLZ and LEOPOLD MEYER, both of Paris, France, have invented a certain new and useful Improvement in Tooth-Brushes; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

As heretofore manufactured, tooth-brushes usually consist of a brush-body, in one face of which are set the bristles, and of a handle, generally formed in one piece with the brush-body, being merely a prolongation thereof, or, if formed of a separate piece, rigidly attached to the brush-body, so as to practically constitute, with the latter, a single rigid piece. A brush thus constructed forms a very inconvenient instrument for the purpose intended, because the crowns, and particularly the inner faces of the teeth, are accessible for a brush of this shape only with difficulty, and not without disagreeable distortions of the mouth of the user, and a thorough clearing of the said parts of the teeth with such an instrument is barely possible. These difficulties are avoided, according to this invention, by a peculiar and novel construction of tooth-brush, the main feature of which consists in the fact that the brush-body not only forms a separate piece from the handle and is united thereto, as hereinafter described, by means of a swivel or other joint, so that the brush-body can assume a great variety of different positions with regard to the handle, according to the form of the surface of the teeth with which it is brought into contact, but the bristles are so disposed in this swiveling body that when the brush is in use a portion of them act directly upon the crowns or ends of the teeth at the same time that the other portions act both upon the outside and inside of the teeth. By this means all the parts of the surface of the teeth, the outer as well as the inner faces and the crowns, are made easily accessible, and are acted upon simultaneously by our improved construction without any distortion of the mouth, and a thorough and rapid cleaning is consequently rendered possible.

Our invention consists in making the brush-body laterally curved and in setting the bris-

ties in its concave face, so that when in use this brush-body acts simultaneously on the inner and the outer faces and on the crowns of the teeth.

In the accompanying drawings, Figure 1 is a front view, and Fig. 2 a side view, of a tooth-brush constructed according to this invention. In Fig. 2 the brush-body is shown slightly inclined with regard to the handle.

1 is the handle of the brush, made of ivory, bone, or any suitable material. 2 is the brush-body, curved laterally, as represented, with the bristles 3 set in the concave side, so that they present three faces—two opposite each other and the third between the two. This brush-body 2 is loosely mounted on the extremity of the handle 1 by means of a pin or rivet, 4, which constitutes a swivel-joint.

It will be easily understood that when in use the bristles 3 act simultaneously on both faces and on the crowns of the teeth, and that the entire brush-body follows with ease the line of the teeth, necessitating but little or no change of the direction in which the handle is moved by the user.

Besides the lateral curvature, as represented, which renders possible the simultaneous action on the three exposed faces of the teeth, a slight longitudinal curvature may be given to the brush-body, so as to accommodate it more or less to the curved line of the jaw.

Having thus described the nature of our invention, as well as the best means we are acquainted with of carrying the same into practice, we claim as our invention—

1. A tooth-brush composed of a handle and of a curved brush-body swiveling thereon, and provided with bristles on the inner side of such curve, adapted to span the teeth and also simultaneously to act upon the crown and upon the inner and outer faces of the teeth.

2. In combination with the handle 1, the curved swiveling brush-body 2, bristles 3, disposed thereon, as shown, and the rivet or pin 4, connecting the parts, as shown and described.

In witness whereof we have hereunto set our hands this 21st day of April, 1880, in the presence of two subscribing witnesses.

LOUIS HOLZ.  
LEOPOLD MEYER.

Witnesses:

GEO. H. SCIDMORE,  
DAVID T. S. FULLER.