

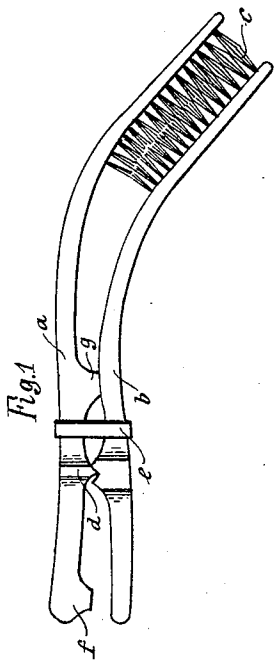
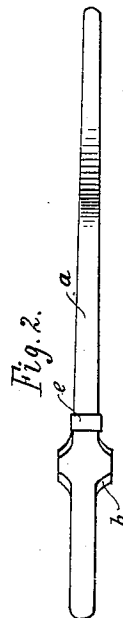
No. 680,365.

Patented Aug. 13, 1901.

W. STARK.
TOOTH BRUSH.

(Application filed Dec. 18, 1899.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILHELM STARK, OF VIENNA, AUSTRIA-HUNGARY.

TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 680,365, dated August 13, 1901.

Application filed December 18, 1899. Serial No. 740,766. (No model.)

To all whom it may concern:

Be it known that I, WILHELM STARK, a subject of the Emperor of Austria-Hungary, residing at Berggasse No. 21, Vienna, Austria-Hungary, have invented a certain new and Improved Tooth-Brush, of which the following is a specification.

This invention relates to a new or improved tooth-brush, and is intended to thoroughly and hygienically clean the teeth in the spaces between the single teeth, both inside and outside.

In the accompanying drawings the new tooth-brush is shown in Figure 1 in side view and in Fig. 2 in plan view.

The brush consists of two curved arms *a* and *b*, which are each, near one end of their insides, set with bristles *c*, while the other ends are used as handles. The arm *a* carries bristles in the form of a convex bow corresponding with the outer curve of the row of teeth, while the bristles on the arm *b* follow the inner curve of the row of teeth.

The arm *a* possesses a prismatic triangular prolongation *d*, which rests with its edge in a suitable recess in the arm *b*. An india-rubber ring *e* holds the two arms *a* and *b* together. When the ends of the arms *a* and *b* used as handles are pressed together, the ends set with bristles separate from each other and the tooth-brush *a* can be put on the teeth. If the pressure is released, the brush will close and the arms are pressed close to the teeth by the effect of the india-rubber ring *e*. It is important that the bristle bundles of both the brushes do not correspond, but that the bundles of the one arm engage in the intermediate spaces of those of the other. The purpose of this arrangement of the bristle bundles is to enable the bristles to enter the spaces between the teeth. Prolongations *f*

and *g* on the arm *a* limit the opening and closing of the brush.

The use of the tooth-brush is as follows: By a pressure on the handles the ends of the arms *a* and *b* set with bristles separate from each other, and the tooth-brush is brought then on the teeth and the latter are cleaned by moving the brush to and fro. In cleaning the second half of the set of teeth the brush must of course be turned in order to fit to the rounding of the set of teeth. By the rounding of the arms the brushes will adapt themselves exactly to the outer and inner rounding of the set of teeth, enabling a hygienic and perfect cleaning of the teeth, and the brushes are automatically pressed to the teeth by the india-rubber ring. If the brush is moved on the upper teeth from above downward and on the lower teeth from below upward, the one set of bristle bundles bears firmly against the tooth-surfaces, while by the pressure of the india-rubber ring the other set of bristle bundles penetrates between the teeth and so removes deposited matter in the direction of the edge of the set of teeth.

I declare that what I claim is—

In a tooth-brush, the combination of two arms *a* and *b* each provided with bristles near one end, the other ends being adapted to serve as handles having respectively an edged projection *d* on the arm *a*, and a recess therefor in the arm *b*, together with an elastic ring *e* surrounding said arms *a* and *b* for the purpose set forth.

In witness whereof I have signed this specification in the presence of two witnesses.

WILHELM STARK.

Witnesses:

JOSEF KURTZ,
JULIUS FRIZE.