

A. O. KRETZSCHMAR.
TOOTH BRUSH.
APPLICATION FILED MAY 4, 1911.

1,025,751.

Patented May 7, 1912.

Fig 1

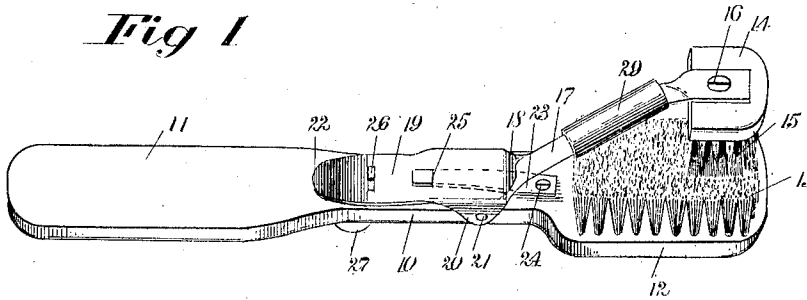


Fig 2

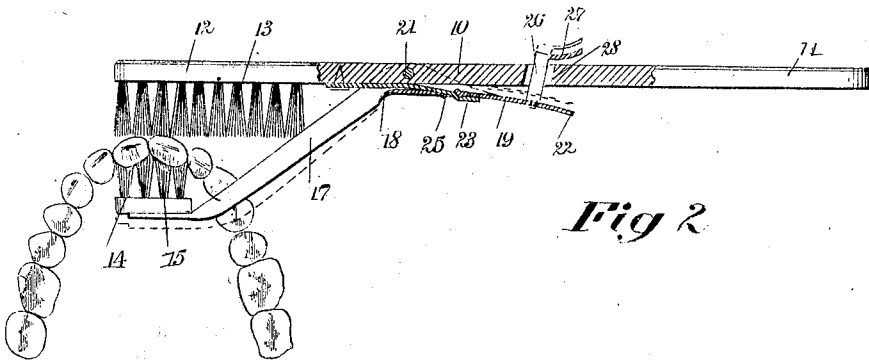


Fig 3

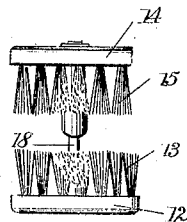
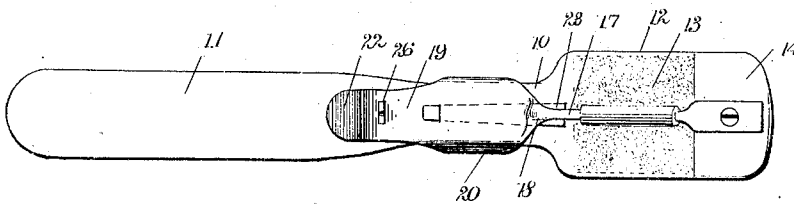


Fig 4

WITNESSES:
Sidney Brooks
John K. Brachvogel

INVENTOR
August O. Kretzschmar
BY *Miner Co*
ATTORNEYS

UNITED STATES PATENT OFFICE.

AUGUST OTTO KRETZSCHMAR, OF ENDICOTT, NEW YORK.

TOOTH-BRUSH.

1,025,751.

Specification of Letters Patent.

Patented May 7, 1912.

Application filed May 4, 1911. Serial No. 624,944.

To all whom it may concern:

Be it known that I, AUGUST O. KRETZSCHMAR, a subject of the German Emperor, and a resident of Endicott, in the county of Broome and State of New York, have invented a new and Improved Tooth-Brush, of which the following is a full, clear, and exact description.

This invention relates to tooth brushes, and has reference more particularly to a device of this class which comprises a pair of relatively movable, opposed brushes, by means of which the teeth can be cleansed at their inner and outer sides, simultaneously, the relative adjustability of the brushes permitting the space therebetween to be varied at will, to accommodate teeth of different thicknesses.

The object of the invention is to provide a simple and durable tooth brush which materially facilitates the operation of cleansing the teeth, which shortens the operation, in that it permits the teeth to be cleansed at the inside and the outside simultaneously, in which the brushes can be pressed toward each other with different degrees of force, as desired, which is adjustable so that it can suitably accommodate both the thinner, front teeth, and the thicker, back teeth, and which will not injure the teeth, when in use.

The invention consists in the construction and combination of parts, to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a perspective view of an embodiment of my invention; Fig. 2 is a side elevation of the brush, showing parts in longitudinal section; Fig. 3 is a plan view of the brush; and Fig. 4 is an end elevation of the same.

Before proceeding to a more detailed explanation of my invention it should be clearly understood that the brushes proper of each device may be of any suitable form, dimensions and material; preferably they are fashioned from the conventional bristles employed for this purpose, and are mounted upon bone, rubber, or other backs.

I am aware that double tooth brushes have hitherto been proposed, by means of which the inner sides and the outer sides of the

teeth can be cleansed simultaneously. With my brush however, the separated brushes can be pressed together with different degrees of force and can be adjusted to accommodate teeth of different thicknesses. This adjustability is at all times within the control of the user.

Certain of the details of construction shown for example, herewith, form no part of the invention, and can be varied in accordance with individual preference and special conditions, without deviating from the essence of the invention as defined in the appended claims.

Referring more particularly to the drawings I employ a main bar or back 10, fashioned from bone or other suitable material, and shaped at one end to constitute a suitable grip 11. At the other end the member 10 is also enlarged to form a brush back proper, 12, in which are set the usual bristles 13, in any suitable manner. I employ a secondary brush back 14, which is also provided with bristles, 15, similar to the bristles 13. The secondary brush is preferably considerably smaller than the main brush. Both may have the bristles suitably shortened or cut away near the central portions, to receive the teeth and permit the bristles to come into contact thoroughly therewith.

The secondary brush back 14 is rigidly secured by means of a screw 16 or in any other suitable manner, upon an arm 17 of a lever 18. The latter is preferably stamped from metal, and has a flat arm 19 at an angle with the arm 17 and provided at one end with downwardly disposed ears 20. By means of these ears, which are positioned at the sides of the member 10, it is movably mounted upon the same, a suitable pivot pin or rivet 21 being employed. The sheet metal is folded inwardly to form the arm 17, which is thus of considerably less width than the flat arm 19. At the extremity the metal is again flattened out into suitable form for attachment to the secondary brush 14. At the free end 22, the arm 19 is upwardly disposed for a purpose which will appear hereinafter. I employ a leaf spring 23 secured by means of a screw 24 or in any other suitable manner, to the member 10, and having the free end extending through a slot 25 of the lever arm 19. The spring tends normally to hold the parts in position such that the brushes are separated.

A lug or projection 26 extends through an opening 28 of the member 10 and has one end riveted or otherwise secured to the lever arm 19. At its other end, *i. e.*, at the side of the member 10, remote from the lever, the projection 26 has a laterally disposed part 27 presenting a flat, curved surface and constituting a manipulating button or presser. Upon the arm 17 is positioned a sleeve 29 of rubber or other soft material, constituting a guard to prevent injury to the teeth by the metal of the arm when the brush is in use.

It will be understood that when the device is in operation, the teeth are received between the bristles of the brushes, as indicated in Fig. 2, and the brush is then used in the customary manner, to cleanse the teeth. The brushes are pressed together with the required degree of force, either by pressing upon the part 27 with the forefinger or by forcing the thumb under the upwardly disposed end 22 of the lever, as may be convenient.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:

1. A device of the class described comprising a substantially straight bar constituting a handle, a brush carried by said bar, a lever comprising angular arms and pivotally

mounted upon said bar, a secondary brush mounted at the end of one of said arms, said other arm of said lever having a stud projecting to the other side of said bar and constituting means to permit the manipulation of said lever, and a spring tending to hold said lever in a normal position.

2. A device of the class described, comprising a bar constituting a handle, a brush carried by said bar, a lever fashioned from sheet metal and comprising angularly disposed arms pivotally mounted upon said bar, a secondary brush mounted at the end of one of said arms, the other of said arms being upwardly disposed at the extremity, so that it can be easily manipulated, said bar having an opening, said last-mentioned arm of said lever having a stud projection extending through said opening and constituting means to permit the manipulation of said lever, and a spring secured to said bar and engaging said lever and tending to hold the same in a normal position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AUGUST OTTO KRETZSCHMAR.

Witnesses:

JOHN A. HUNT,
C. FRANKLIN HUNT.