

No. 741,722.

PATENTED OCT. 20, 1903.

W. B. RYDER & C. L. REYNOLDS.

TOOTH BRUSH.

APPLICATION FILED JAN. 18, 1903.

NO MODEL.

Fig. 1.

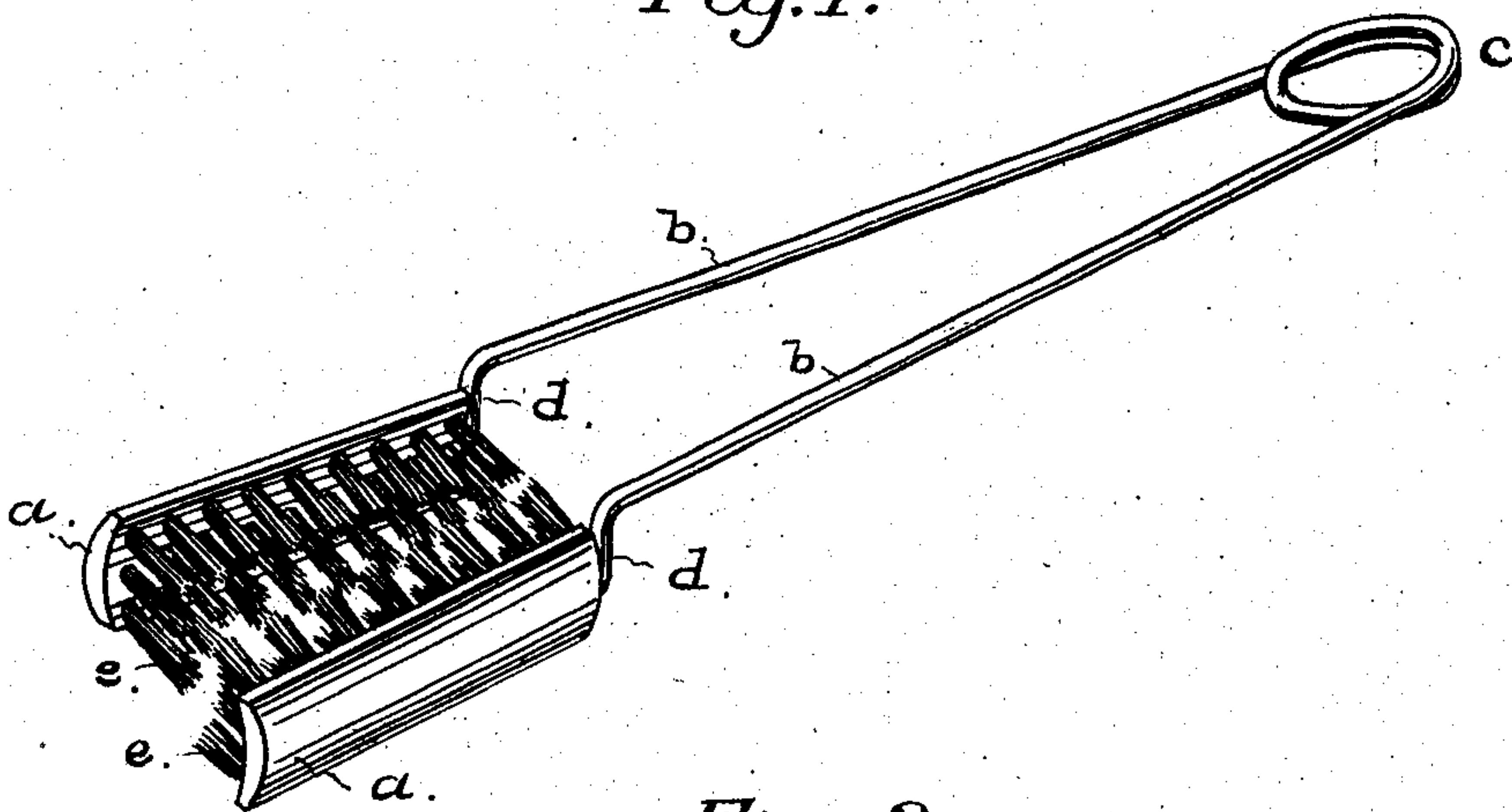
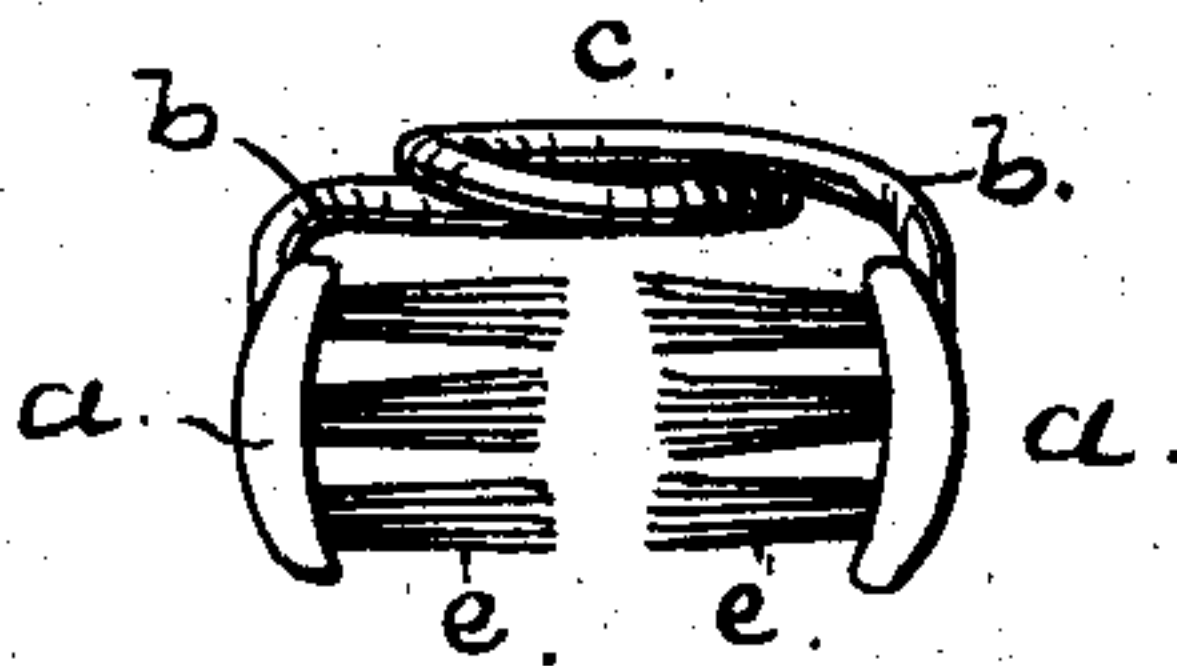


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM B. RYDER AND CHARLES L. REYNOLDS, OF REDDING, CALIFORNIA.

TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 741,722, dated October 20, 1903.

Application filed January 16, 1903. Serial No. 139,305. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM B. RYDER and CHARLES L. REYNOLDS, citizens of the United States, residing at Redding, in the county of Shasta and State of California, have invented a new and useful Improvement in Tooth-Brushes, of which the following is a specification.

This invention relates to a novel construction of tooth-brush for cleaning both the anterior and posterior surfaces of the teeth at one operation and having other useful points and features of advantage, as hereinafter mentioned.

The nature of the said invention and the manner in which we proceed to produce and carry out the same are explained at length in the following description, in which the accompanying drawings, forming a part thereof, are referred to by letters.

Figure 1 of the drawings represents in perspective a tooth-brush embodying our invention. Fig. 2 is a front view of the head or body of the brush or the bristle-carrying members.

Our invention consists in the provision of two opposite bristle-carrying heads set in slightly-diverging lines and a V-shaped spring handle member attached at its free ends to the ends of the heads, which lie closely together.

Our invention further consists in the manner of attaching said handle member to the heads, whereby a firm and compact juncture is effected.

The heads are secured to their respective shanks each in substantially the same plane with its own shank; but the latter is also provided with an angular bend or offset d at the end near the head, so as to throw the shank out of line with and somewhat above the head, although still being practically parallel with it. The purpose of this bend or offset is to bring the shanks clear of the lips and sides of the mouth when the two heads of the brush are placed in operative position to grasp the teeth between them, as will be readily understood from the drawings, where Fig. 1 illustrates the position of the brush when it is about to be introduced in the mouth to

operate on the teeth of the lower jaw, or when the brushes are turned to operate on the upper row the handle will be below the edge of the teeth. As will be seen by reference to Fig. 1, each shank is attached to the inner end of its head at the center thereof and is thence bent upward in an offset which bears against the upper half of the head end. By this construction we effect a junction between the handle and the heads which is exceedingly strong and compact, while adapted to prevent contact with the lips of the user, as before set forth. It will further be seen by reference to Fig. 1 that the spiral convolution connecting the two shanks of the handle normally holds said shanks in diverging lines, and as each head is fixed upon its shank in a substantially parallel direction it follows that these bristle members also diverge slightly from their inner ends. By this arrangement we insure an even amount of pressure upon both sides of the teeth, inasmuch as a tooth-brush so constructed will adapt itself to the curve of the jaw and the increasing width of the back teeth.

A brush thus constructed will work simultaneously on the anterior and posterior surfaces and between the teeth, performing the operation of cleansing the teeth more effectively and requiring the expenditure of much less time and labor than the ordinary single-head brush.

The spring between the shanks of the handle should have sufficient power to spread the heads apart when the grip on the handles is removed, as the working pressure of the brushes on the teeth is applied entirely by the person using the article.

Having thus fully described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

1. A tooth-brush comprising two diverging heads bearing bristles on their inner faces and a handle consisting of two shanks resiliently connected to each other at their outer extremities and secured to the converging ends of the heads at their inner extremities.

2. A tooth-brush comprising an elongated bristle-carrying head and a shank having a

handle portion parallel with the axis of the head and a perpendicular shoulder portion secured to the end of said head.

- 5 3. A tooth-brush comprising an elongated bristle-carrying head and a shank having a handle portion parallel to the axis of, but eccentric to, the head and a perpendicular shoulder portion bearing against, and attached at its free end to, the end of said head.

In testimony whereof we have signed our names in the presence of two subscribing witnesses.

WILLIAM B. RYDER.
CHAS. L. REYNOLDS.

Witnesses:

F. STABEL,
JOSEPH SESSIONS.