

(No Model.)

J. K. GRIFFIN.

TOOTH BRUSH.

No. 250,658.

Patented Dec. 13, 1881.

Fig. 1.

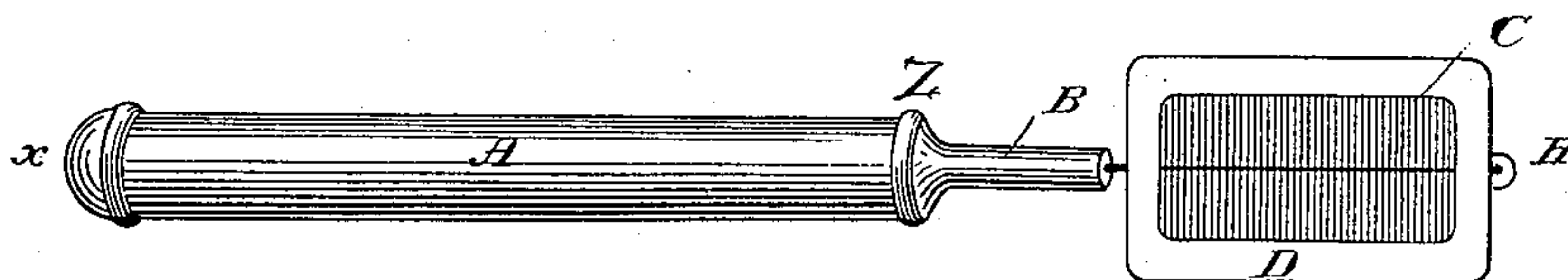
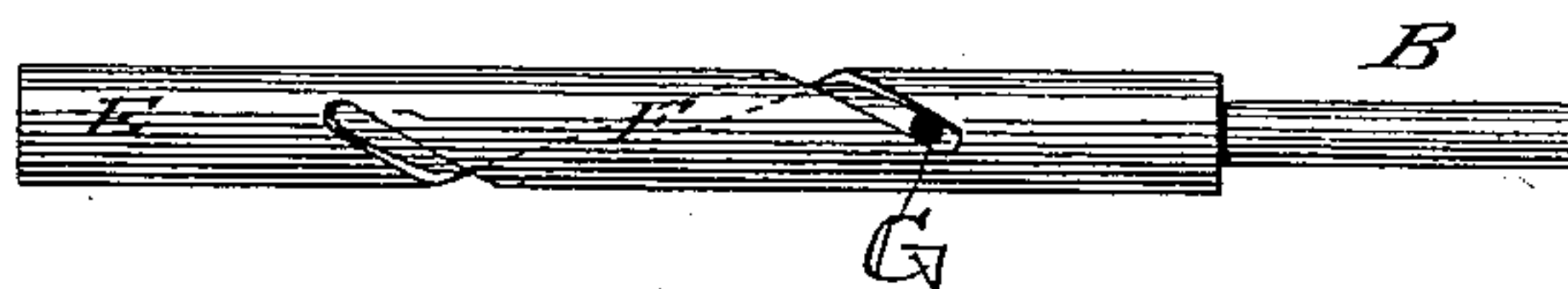


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE.

JAMES K. GRIFFIN, OF WATERDOWN, ONTARIO, CANADA.

TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 250,658, dated December 13, 1881.

Application filed May 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES K. GRIFFIN, of Waterdown, in the county of Wentworth, Province of Ontario, Dominion of Canada, have invented a certain new and useful Improvement in Tooth-Brushes, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an isometrical perspective view; and Fig. 2, a sectional view, showing the shell and shaft detached.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates more especially to that class known as "revolving tooth-brushes"; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more effective device of this character is produced than is now in ordinary use.

In the drawings, A represents the body or handle; B, the main shaft; H, the auxiliary shaft; C, the brush; D, the flanged support or guide surrounding the brush, and E the shell.

The handle A is tubular in form, and provided at each of its ends with screw-caps x z , the cap z having a longitudinal central opening, through which the shaft B passes, and in which it is journaled.

The shell E is also tubular in form, open at either end, and provided with a spiral slot or groove, F. This shell is of such a diameter and length as to fit nicely within the body A, being prevented from moving therein in any direction by means of the screw-caps x z , which press firmly on its ends when turned home or inwardly to their fullest extent.

The shaft B is constructed to fit loosely in the shell E, and is provided with a fixed pin or stud, G, which projects into the groove F.

The brush C is cylindrical in form, and mounted on the auxiliary shaft H, one end of which is elongated and firmly secured in the outer end of the main shaft B.

The support D is about one-eighth of an inch in thickness, rectangular in form, having a central opening to receive the brush C, and

is so mounted as to revolve freely on the auxiliary shaft H. It is preferably constructed with thin tapering or flanged edges, being designed to be held between the teeth when the brush is in use, and may extend entirely around it, or only on one of its sides, as preferred.

The groove F may be formed in the body A, if desired, and the shell E dispensed with, without departing from the spirit of the invention.

In the use of my improvement the support D is held firmly between the teeth in such positions as to bring the brush C in proper contact with the same, the body or handle A being held horizontally, and moved rapidly back and forth, thus producing, by means of the grooved shell E, acting through the stud G on the shaft B, a corresponding reciprocating rotary movement of the brush C, in a manner which will be readily understood by all conversant with such matters without a more explicit description.

The body A, shell E, shaft B, and support D are preferably composed of hard rubber; but it will be obvious that these parts may be made of metal, or any other suitable material, if desired. It will also be obvious that the part D not only serves as a support to the brush C, but acts as a guide or guard to enable it to be held in any desired position against the teeth when in use. The support D also resists the end thrust of the shaft B as the body A is moved back and forth, thus enabling the shell E to properly act on the shaft to produce reciprocating rotary movements of the brush. The support may be held firmly between the fingers, instead of between the teeth, if preferred, during the operation of brushing the teeth.

Having thus explained my improvement, what I claim is—

1. In a rotary tooth-brush, the flanged support D, in combination with the brush C, substantially as and for the purpose specified.

2. The improved rotary tooth-brush described, the same consisting of the body or handle A, shaft B, shell E, brush C, and support D, combined and arranged to operate substantially as specified.

JAMES K. GRIFFIN.

Witnesses:

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