

No. 622,948.

Patented Apr. 11, 1899.

M. P. GILL.
ROTARY TOOTH BRUSH.

(Application filed May 5, 1898.)

(No Model.)

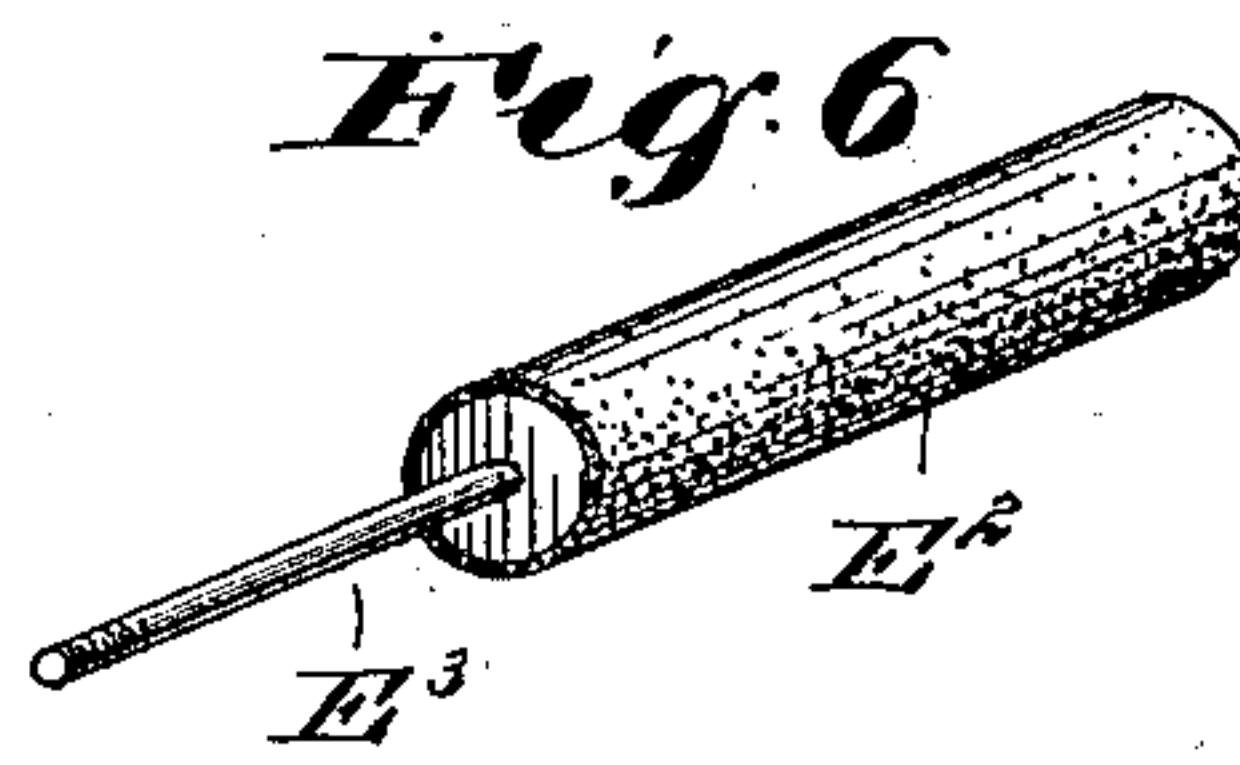
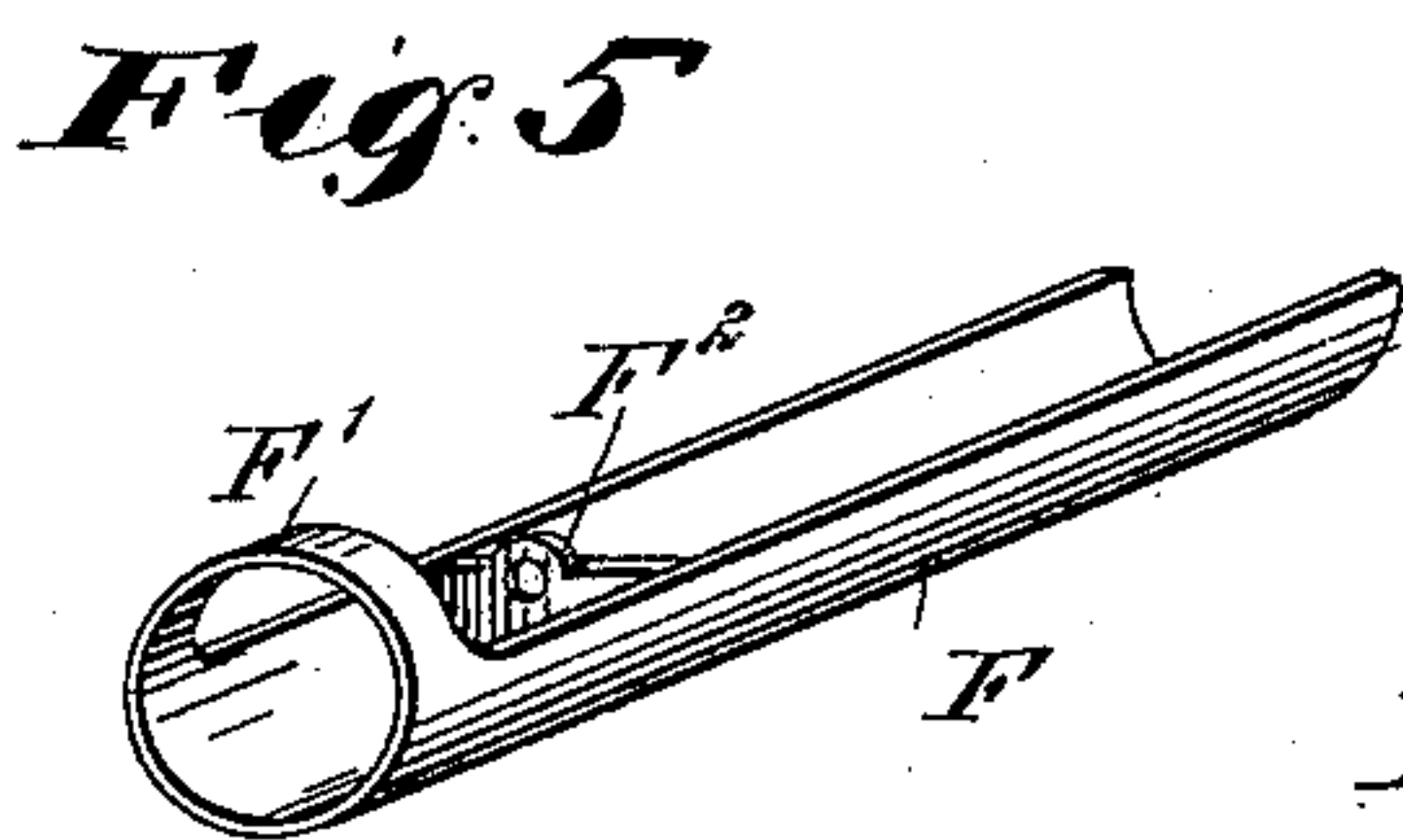
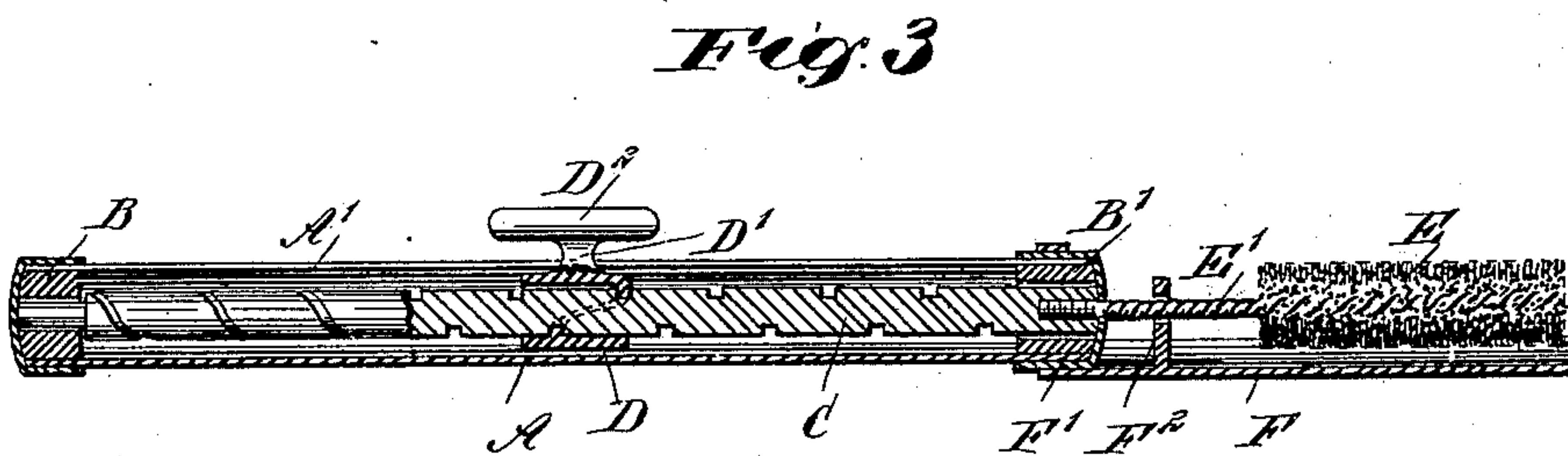
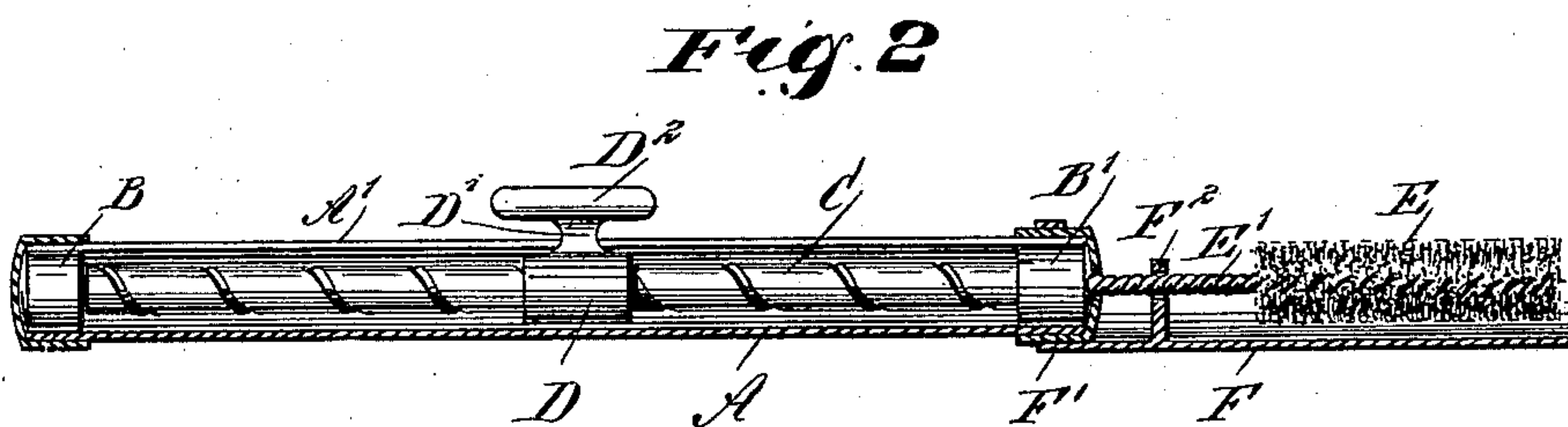
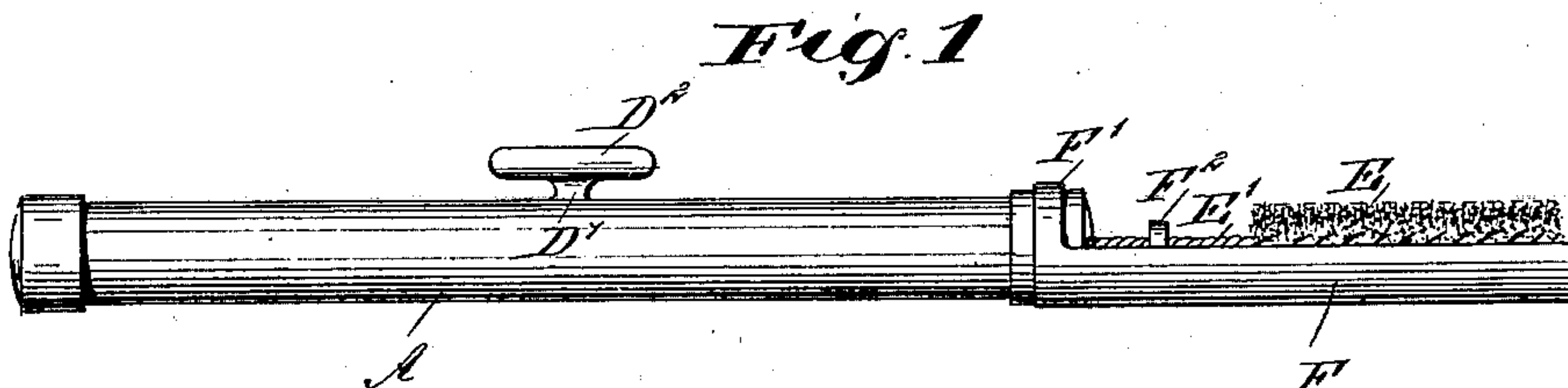
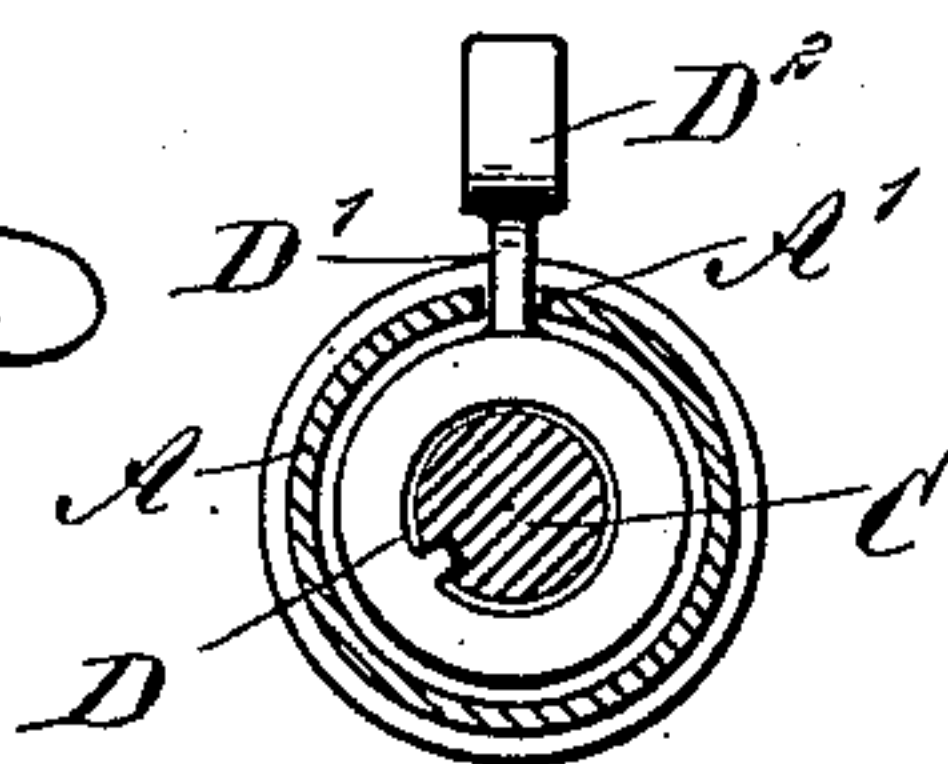


Fig. 4

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UNITED STATES PATENT OFFICE.

MARY PARKER GILL, OF LOUISVILLE, KENTUCKY.

ROTARY TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 622,948, dated April 11, 1899.

Application filed May 5, 1898. Serial No. 679,842. (No model.)

To all whom it may concern:

Be it known that I, MARY PARKER GILL, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Rotary Tooth-Brush, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved rotary tooth-brush which is simple and durable in construction, easily manipulated, and arranged to bring the bristles to the inner curved surfaces of adjacent teeth to properly clean the same and at the same time protect the inside of the cheek from injury.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out 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 figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is a like view of the same with the casing in section. Fig. 3 is a sectional side elevation of the improvement. Fig. 4 is a transverse section of the same. Fig. 5 is a perspective view of the cheek-protector, and Fig. 6 is a perspective view of the polishing-brush.

The improved tooth-brush is provided with a casing A, made of suitable material and preferably in cylindrical form, with bearings B B' in the ends of the casing for a screw-rod C to rotate in. A nut D engages said screw-rod and is provided with a neck D', extending through a longitudinal slot A', formed in the casing A, the outer end of the neck carrying a button or handle D², adapted to be taken hold of by the operator to move the nut D longitudinally in the casing, so as to rotate the screw-rod C.

Into one outer end of the screw-rod C is screwed or otherwise fastened the core E' of a brush E, either formed of bristles, as indicated in Figs. 1, 2, and 3, or with a polishing material E², as indicated in Fig. 6, the core E³ of this brush being likewise arranged to permit of conveniently fastening it to the end of the screw-rod C. A portion of the cylindrical brush E is surrounded by a cheek-protector F, made in the shape of a half-cylinder whose axis coincides with that of the brush and formed at one end with a ring F'

for securing the protector to the end of the casing A at the bearing B'. The protector F is also formed at one end with a bearing F² for the core E' or E³ of the brush.

Now it is evident that when the operator moves the handle D² forward or backward and a rotary motion is given to the screw-rod C, as described, then the brush E is revolved with the screw-rod, and when either the cleaning-brush or the polishing-brush is brought in contact with the teeth the latter are readily cleaned, especially at the inwardly-curved surfaces between adjacent teeth.

The casing A forms the handle of the device and is held in such a manner that the uncovered portion of the brush E extends to the surfaces of the teeth, while the cheek-protector F extends to the inside of the cheek, so that the latter is not injured by the revolving of the brush when used.

By the construction described either the bristles or the polishing material can be readily interchanged on the screw-rod C, so that either can be used for properly cleaning and polishing the teeth.

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

1. A rotary tooth-brush, comprising a longitudinally-slotted casing, a screw-rod mounted in the casing, a nut on the screw-rod provided with a neck projecting through the slot of the casing and carrying a handle at its end, a semicylindrical cheek-protector secured to one end of the casing and provided with a bearing, and a cylindrical brush provided with a projecting stem or core mounted in the bearing of the cheek-protector and projecting into the casing and detachably secured to the screw-rod, substantially as described.

2. In a rotary tooth-brush, the combination with a casing, a screw-rod mounted in the casing, and a nut for operating the screw-rod, of a semicylindrical cheek-protector provided at one end with a ring for securing it to the casing, and with a bearing a short distance from the ring, and a cylindrical brush having its stem or core mounted in the bearing and having its end secured in the screw-rod, substantially as described.

MARY PARKER GILL.

Witnesses:

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