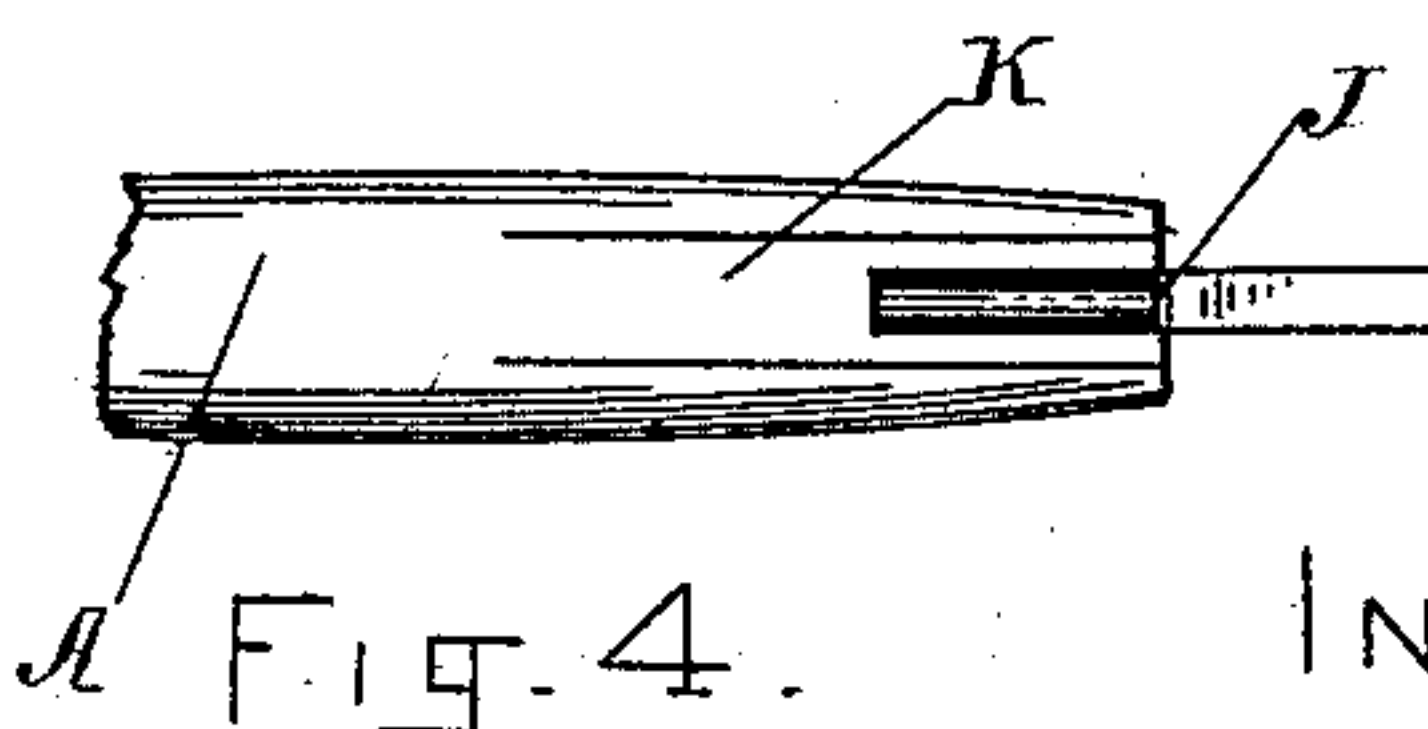
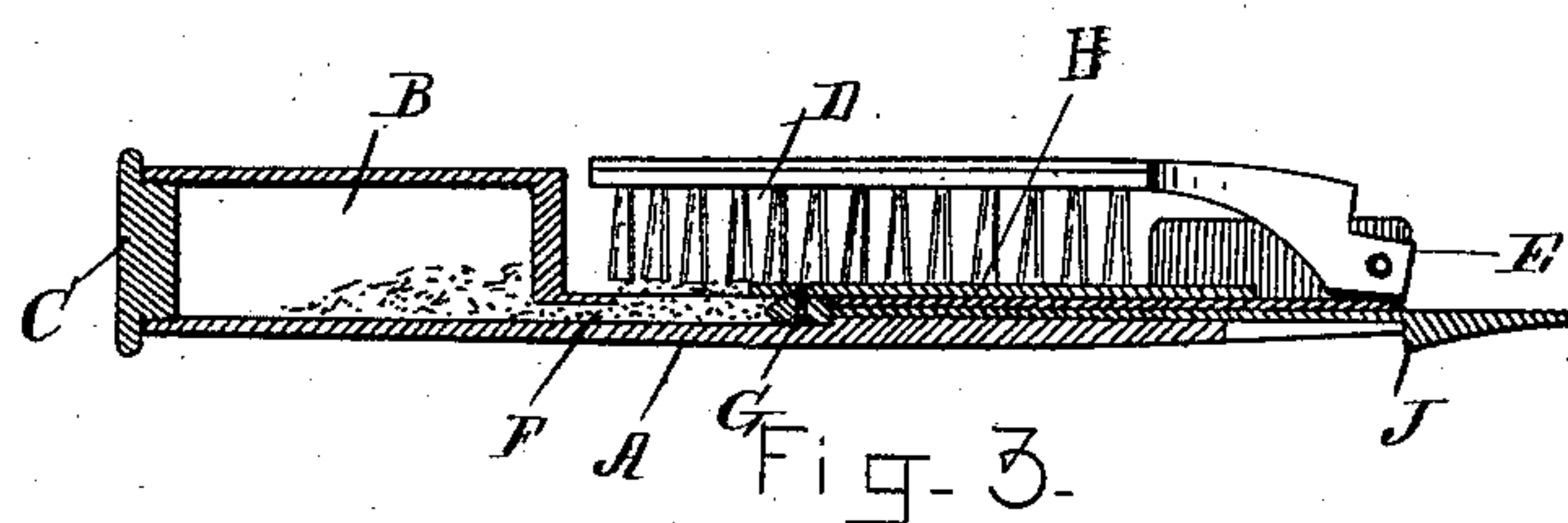
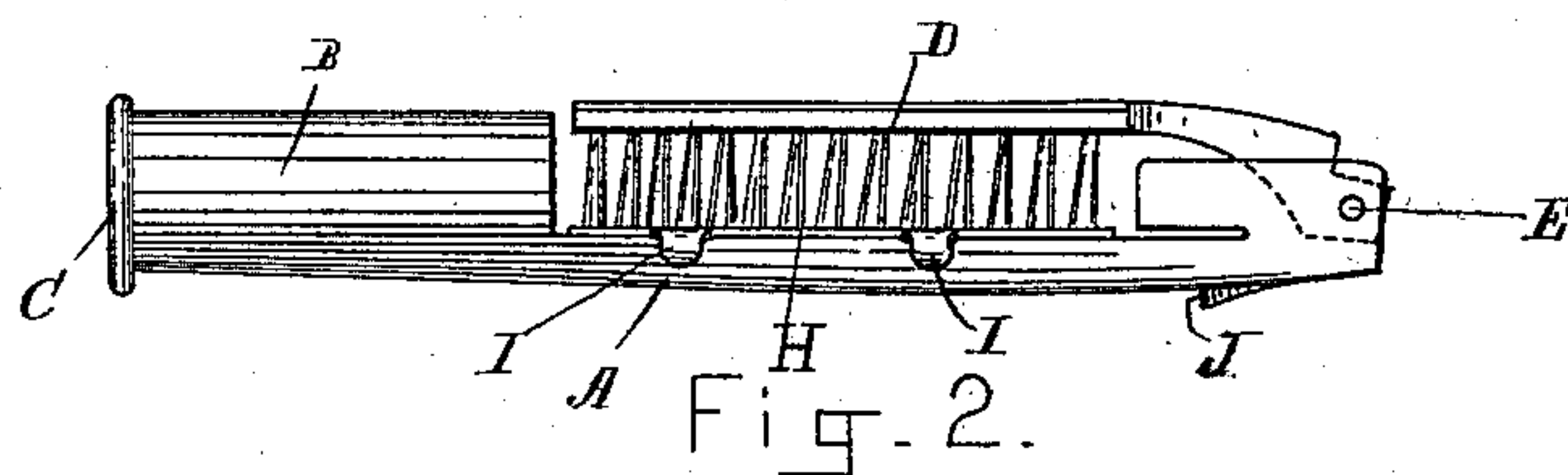
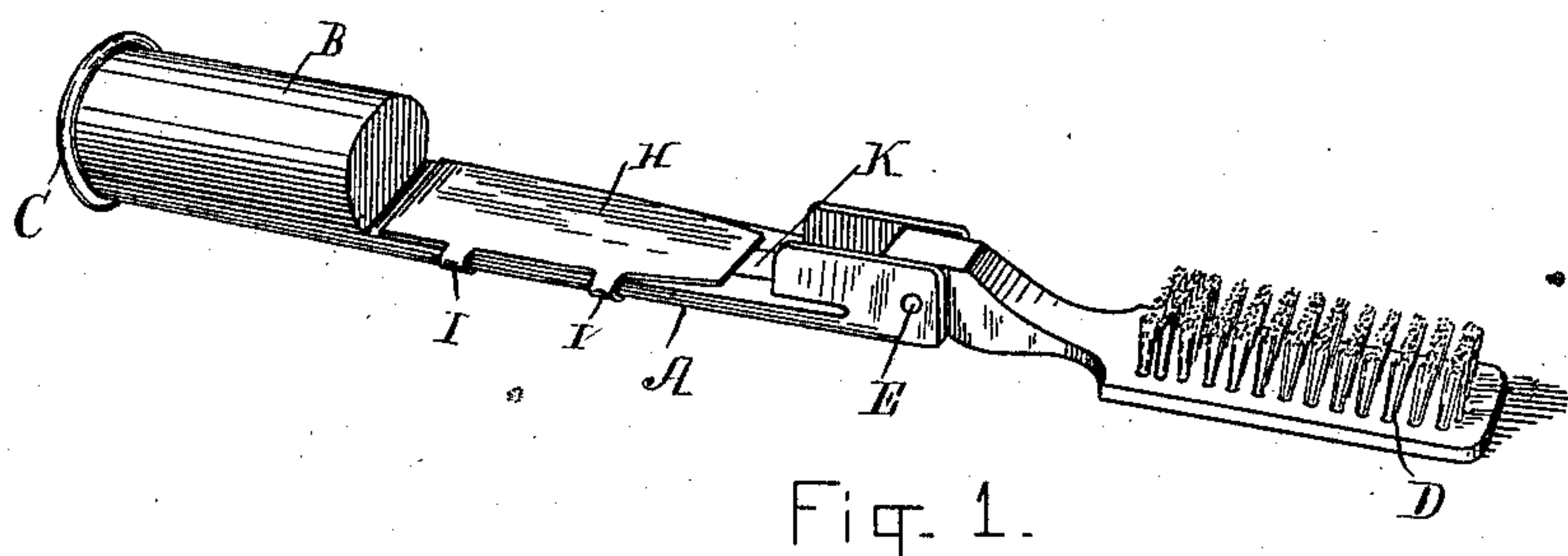


(No Model.)

R. S. LAKIN.
FOLDING TOOTH BRUSH.

No. 345,517.

Patented July 13, 1886.



WITNESSES:
Chas. S. Crooding,
E. A. Phelps.

INVENTOR:

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by N. H. Spencer,
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UNITED STATES PATENT OFFICE.

RINALDO S. LAKIN, OF BOSTON, ASSIGNOR TO SOLOMON S. HIGGINS, OF
SOMERVILLE, MASSACHUSETTS.

FOLDING TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 345,517, dated July 13, 1886.

Application filed January 8, 1885. Serial No. 152,272. (No model.)

To all whom it may concern:

Be it known that I, RINALDO S. LAKIN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Folding Tooth-Brushes; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

This invention is in the nature of an improvement upon that set forth in my application for patent on "Tooth-Brush and Dentifrice-Holder," filed November 20, 1882, Serial No. 77,224.

In my former invention the handle of the brush was hollow, forming a receptacle for tooth-powder, and in some of the figures of the drawings the brush-head was shown as folding into a recess, where the powder was fed to the face of the bristles through an orifice leading thereto from said receptacle. This orifice was furnished with a plug or stopper to retain the powder. I employ these features with my present improvement, and add to them a sliding protecting-plate interposed between the brush-head and the delivery-orifice, so as to cover the latter, except when powder is to be applied to the brush, and also to exclude dust and dirt, and to prevent the dampness of the brush from clogging the orifice; and I further ventilate the brush, when folded, by removing or omitting the sides of the recess into which it folded in my former plan, thus giving the air free access to the bristles to promote their drying.

In the drawings, Figure 1 represents my improved brush opened or spread as for use, and Fig. 2 shows it in its folded position, while Fig. 3 is a longitudinal section of the device folded, showing the sliding plate and plug drawn back to deliver powder to the brush. Fig. 4 is a detail of the back of the brush.

A is the handle, having at one end the receptacle B, provided with the end cap, C, to receive and retain a supply of tooth-powder.

D is the brush-head, pivoted to the handle at E, so as to fold, as shown, with the face of the bristles close to the flat central part of the handle.

F is the orifice through which the powdered dentifrice is fed from the receptacle B to the face of the folded brush. This orifice runs lengthwise of the handle, just beneath the flat central part thereof, and opens through the flat surface along a central line, to deliver the powder to the brush. A plug, G, fills this orifice, and is movable longitudinally to open and close the delivery. In order to prevent dampness from the brush from clogging the aperture, I provide a thin protecting-plate of metal, hard rubber, or other material, lying flat upon the central part of the handle, and interposed between it and the face of the brush. This plate has a sliding movement, so as to uncover the aperture F when it is desired to apply powder to the brush, and to cover and close said aperture at other times. This movement of the plate may be effected in any suitable way, such as swinging outwardly on a pivot at one of its ends or sliding laterally in grooves. In the drawings a longitudinal movement is illustrated, the edges of the plate having lugs or bands I extending over the edges or around the back of the handle, so as to be readily slipped back and forth thereon; or the plug may be attached to the plate and extended to the hinge end of the handle, and formed with a lip, J, to furnish ready means of moving it. When the movement is lengthwise, as shown, the plug G may be made fast to the under side of the plate or form part of it, or they may be separately movable.

The brush is held firmly in its opened and closed positions by a spring, K, integral with the handle, and formed by cutting two parallel slits in the end of the handle, as indicated in Fig. 4.

With my present improvement the article is more efficient and more readily kept sweet and clean than under my former arrangement. There being no side walls to inclose the folded brush, the bristles dry more speedily after use, and the cost of manufacture is somewhat lessened.

I claim as my invention—

1. A folding tooth-brush provided with the receptacle B in its handle, the orifice F, lead-

ing therefrom to the face of the brush, and the interposed plate H, substantially as set forth.

2. A folding tooth-brush having a receptacle for powder within its handle and a delivery-orifice leading therefrom, in combination with a movable plate interposed between the brush and handle and a sliding plug to close said orifice, substantially as set forth.

In testimony whereof I hereto affix my signature in presence of two witnesses.

RINALDO S. LAKIN.

Witnesses:

A. H. SPENCER,
S. S. HIGGINS.