No. 711,075. Patented Oct. 14, 1902.

# F. T. RENCH.

## TOOTH BRUSH.

(Application filed Nov. 26, 1901.)

(No Model.)

Fig. 1.




Fig. 2.

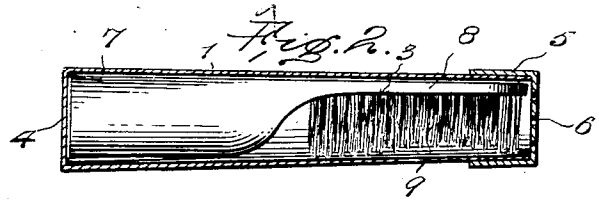
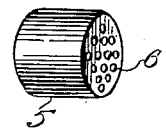



Fig. 5.




Witnesses
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# UNITED STATES PATENT OFFICE.

FREDERIC T. RENCH, OF LAPORTE, INDIANA.

## TOOTH-BRUSH.

SPECIFICATION forming part of Letters Patent No. 711,075, dated October 14, 1902.

Application filed November 26, 1901. Serial No. 83,770. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERIC T. RENCH, a citizen of the United States, residing at Laporte, in the county of Laporte and State of Indiana, have invented a new and useful Tooth-Brush, of which the following is a specification.

This invention relates to tooth-brushes.

The object of the invention is to present a tooth-brush which may be readily carried in the pocket of the user without danger of wetting the garment and in which provision shall be made to permit drying of the brush after use and while in the pocket of the user.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a portable tooth-brush, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated a form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the scope of the invention, and in the drawings—

Figure 1 is a view in perspective showing the tooth-brush projected in position for use. Fig. 2 is a view in sectional elevation showing the tooth-brush housed within the casing or handle. Fig. 3 is a perspective detail view of the cap or cover closing the end of the casing or handle.

Referring to the drawings, 1 designates the casing or handle, the same by preference being constructed of a non-corrosive metal, such as aluminium or nickel-plated brass, and provided along its length with a plurality of openings 2, through which air is admitted to the interior thereof to effect drying of the brush 3 and also to permit escape of moisture therefrom. The casing is a tapered cylinder having its larger end closed by a plate 4, which may be integral with the casing or secured thereto, and its smaller open end closed by a cap or cover 5, which is held associated with the casing by frictional contact, the end of the cap being also provided with perforations 6 to permit escape of moisture from and entrance of air to the casing.

The brush 3 comprises a tapered plug portion or shank 7 of slightly-greater diameter than the open end of the casing, and a flat extension 8, projected from one side of the plug and to which are secured the bristles 9. The plug and extension may be made of any material suited to the purpose, such as bone or the like.

By the provision of means for ventilating the casing a perfectly sanitary implement may be presented, and, further, by housing the brush within the casing in the manner described the same may be placed within a valise after use without danger of dampening or soiling the contents thereof.

The casing and plug portion of the brush are herein shown as circular in cross-section; but it is to be understood that they may be otherwise contoured, the point being to provide a proper holder or casing for the brush and to associate the same with the casing in such manner as separation of the parts in use will be positively prevented. In assembling the brush with the casing when the latter is an open-ended structure the bristle portion of the brush will be inserted through the larger end of the casing, after which the plate 4 will be assembled with the casing in any suitable manner, as being soldered thereto. Where the plate 4 is integral with the casing, the plug portion of the brush will be held within the casing by having the open end of the latter bushed or slightly constricted by suitable mechanism after the brush has been inserted.

In using the brush the plug is drawn out and is tightly wedged between the reduced end of the casing and will thus hold the brush in proper position for use, and after use the brush is pushed into the casing and the cap secured in place.

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

1. The combination with a tapered hollow handle, of a tooth-brush having a tapered shank telescopically and undetachably asso-

ciated therewith and adapted to be held projected by frictional contact with the inner walls of the handle.

2. The combination with a tubular perforated tapered handle, of a tooth-brush having a tapered shank telescopically and undetachably associated therewith.

3. The herein-described article comprising a tapered hollow handle, a brush telescopically and undetachably associated therewith, and a cap or closure for one end of the handle.

4. The herein-described article comprising a hollow tapered and perforated handle, a brush telescopically and undetachably associated therewith, and a perforated cap or closure for one end of the handle.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FREDERIC T. RENCH.

Witnesses:
NORMAN F. WOLFE,
C. E. WOLFE.