

No. 683,075.

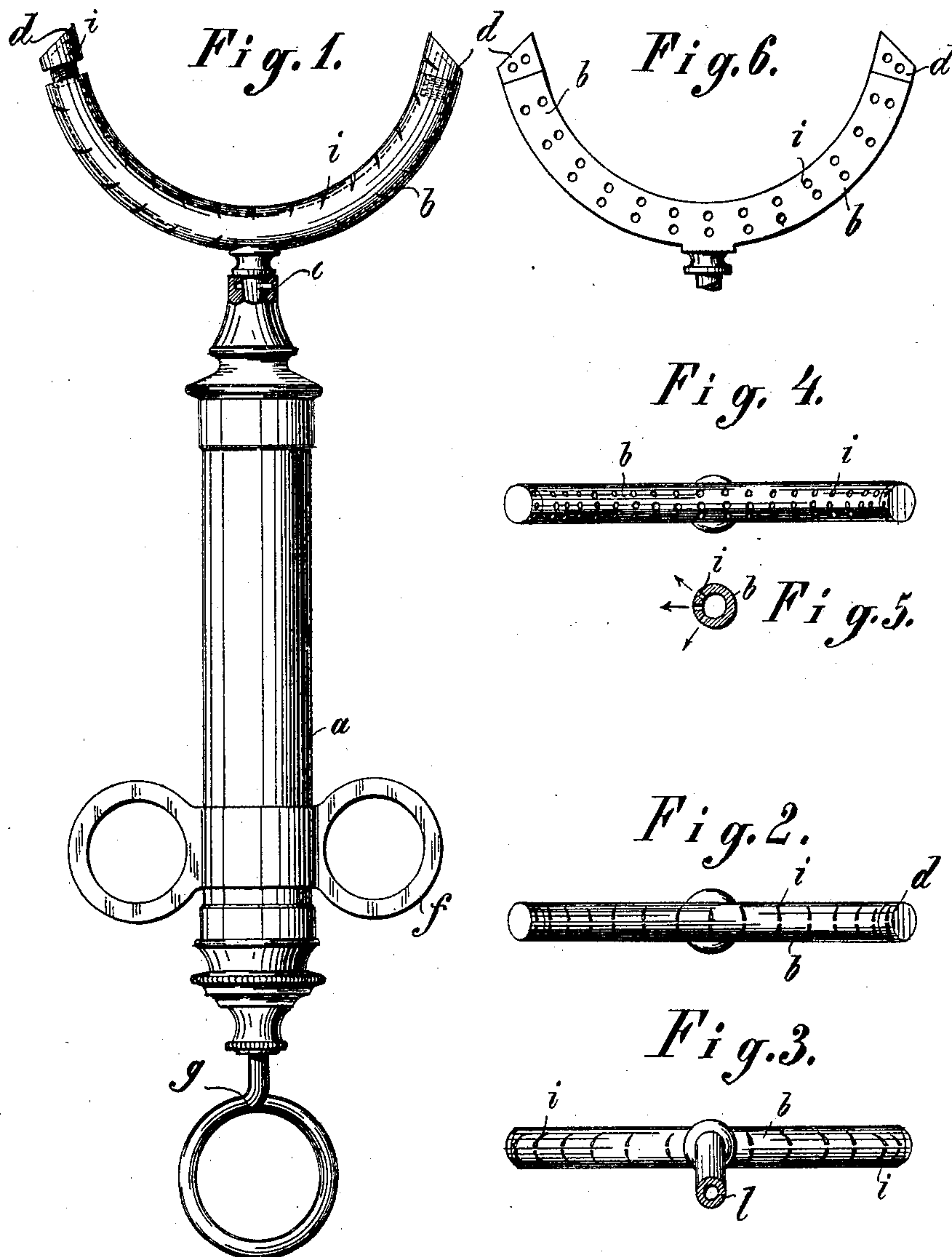
Patented Sept. 24, 1901.

A. SCHNEIDER.

APPLIANCE FOR CLEANING THE TEETH.

(Application filed Apr. 24, 1901.)

(No Model.)



WITNESSES:

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ADAM SCHNEIDER, OF BERLIN, GERMANY.

APPLIANCE FOR CLEANING THE TEETH.

SPECIFICATION forming part of Letters Patent No. 683,075, dated September 24, 1901.

Application filed April 24, 1901. Serial No. 57,188. (No model.)

To all whom it may concern:

Be it known that I, ADAM SCHNEIDER, a subject of the Emperor of Germany, residing at Berlin, Germany, have invented certain new and useful Improvements in Syringes or Appliances for Cleaning Teeth, of which the following is a specification.

This invention relates to an appliance or a syringe for dislodging particles of food remaining in the hollows and defective or carious parts of the teeth without the use of tooth-brushes and toothpicks. From a hygienic point of view the use of the customary tooth-brushes and toothpicks is injurious, since the enamel of the teeth is thereby destroyed and the substances which they are intended to remove are sometimes still further pressed into the hollows and carious parts.

According to my invention the improved appliance consists of a syringe (or its equivalent) to the nozzle end of which is mounted a curved tube shaped to correspond with the rows of teeth and in which tube are arranged in any appropriate manner perforations, slits, or openings of any suitable shape. Rings or loops are fixed on the body of the syringe, so that this latter can be held by one hand, while the other hand is left free to operate the piston.

To cleanse the teeth, the tube is placed either outside or inside the rows of teeth or between them, and the mouth of the user being closed the piston is operated, so that mouth-wash, disinfecting liquid, or the like is forced under pressure into the hollows of the teeth, and so dislodges the remnants of food from the hollows and recesses of the teeth. By withdrawing the piston the liquid is again drawn into the syringe, and this operation of forcing in and withdrawing the liquid can be repeated until the teeth are thoroughly cleansed.

The improved appliance is shown in view in Figure 1 of the annexed drawings. *a* is the syringe, of any suitable construction, provided with the rings or loops *f* and the piston-ring *g* for manipulating the appliance. At the upper end of the syringe is attached, by means of a bayonet-joint or other suitable connection, the tube *b*, curved in correspondence with the rows of teeth. The openings for the mouth-wash (shown in Fig. 1) have the form of slits *s* and are arranged on the inner and outer periphery of the tube *b* and extend on the upper and lower surfaces. Said perfo-

rations, slits, or openings may be separated into parts or be provided with central bridge-pieces, Fig. 2, so that the cleansing liquid may be divided into upward and downward streams.

Fig. 2 is a front view of the tube *b*.

Fig. 3 is a back view of the tube represented in Figs. 1 and 2, provided with slits also at the back. This tube may be used in order to cleanse the inner side of the teeth by holding it behind the upper or the lower rows of teeth. In this case the syringe is arranged at right angles to the tube *b*.

Figs. 4 and 5 represent in front and in sectional view a tube *b* with circular openings instead of the slits, and which openings are so arranged that diverging streams are produced.

Fig. 6 shows a modified form of curved tube *b*, which is flat and shows apertures only on the upper and lower surfaces. In this instance the tube will not be pressed against the closed teeth, but will be held fast between them and the liquid be discharged in upward and downward streams.

Plugs or stoppers *d* may be provided at each end of the tube *b*, after removal of which a brush may be passed through the tube for the purpose of cleaning it.

The new appliance may be made of metal, celluloid, glass, or any other suitable material and of different shapes and sizes.

Instead of the curve of the tube being formed to correspond to the entire row of teeth it can be made to cover only a portion of the row, so that to clean all the teeth the appliance must be moved from one side of the mouth to the other.

Having now particularly described my said invention and in what manner the same is to be performed, I declare that what I claim is—

An appliance for cleaning teeth comprising a bow-shaped tube having perforations and curved to conform to the rows of teeth, and an inlet to said tube arranged centrally thereof on its convex side leaving the horns of the bow projecting therefrom, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ADAM SCHNEIDER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.