

H. F. HAMILTON.
DENTAL SYRINGE.
APPLICATION FILED JAN. 4, 1909.

919,717.

Patented Apr. 27, 1909.

Fig. 1.

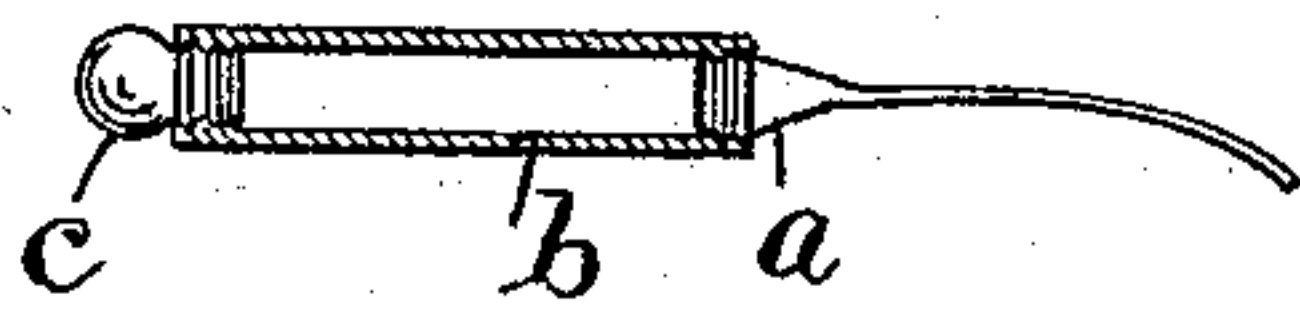
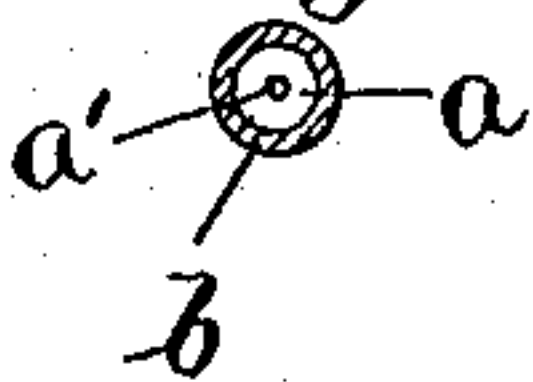


Fig. 2.



Witnesses:
F. C. Poor.
L. P. Barnes

Inventor:
Harry F. Hamilton

UNITED STATES PATENT OFFICE.

HARRY F. HAMILTON, OF BOSTON, MASSACHUSETTS.

DENTAL SYRINGE.

No. 919,717.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed January 4, 1909. Serial No. 470,682.

To all whom it may concern:

Be it known that I, HARRY F. HAMILTON, a citizen of the United States of America, and a resident of Boston, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Dental Syringes, of which the following is a specification.

My invention relates to a syringe adapted for use by dentists for applying antiseptic and other medicinal solutions to and around the teeth.

In treating teeth with antiseptic and other medicinal solutions, I have found from experience that it is often difficult with an ordinary syringe to get the point or nozzle of the syringe into the space or cavity where the liquid is to be deposited. This difficulty results largely from the large size and rigidity of the syringe which does not permit of its being turned freely inside of the mouth to point in any desired direction.

The object of my invention is to construct a syringe which is adapted to be made of small size so that it may be easily manipulated with the thumb and one finger, which shall hold but a very small quantity of liquid and in which the body of the syringe may be easily and cheaply renewed as desired. With these ends in view, I construct my syringe of a small section of rubber tubing usually not over $1\frac{1}{2}$ inches in length and $\frac{1}{4}$ inch in outside diameter with a plug at one end, the other end having inserted therein a plug terminating in an elongated metal nozzle of small diameter. The flexibility of the rubber permits the nozzle to be readily and painlessly thrust into cavities and spaces in and around the teeth where it is desired to deposit the antiseptic or other solution. A syringe constructed in this manner may be held and manipulated by the thumb and finger, turned in any desired position inside of the mouth following easily small openings in the tooth where it is important to reach the extreme end of the opening to rinse it out. It may be readily thrust into the

spaces between the gums and teeth and is generally useful in applying liquids in small quantities for dental and other purposes. The device being made up of the rubber tubing and the two plugs, the syringe may be easily and quickly repaired or renewed to form practically a new syringe, an important consideration when medicinal liquids are employed.

I illustrate my invention by means of the accompanying drawing in which—

Figure 1 is a longitudinal section through a syringe constructed according to my invention and Fig. 2 is a cross section of the same.

In the drawing, *a* represents a metallic nozzle with an elongated flexible point formed of non-resilient metal which will stay in place when bent and a corrugated plug forming its inner end adapted to be inserted into the end of the section *b* of rubber tubing. Closing the rear end of the rubber tube is a plug *c* corrugated to hold it in place in the tube. By seizing the tube between the thumb and finger, it can be squeezed and the liquid drawn in in a limited quantity and expelled when required. The length of the tube may be made greater or less according to the amount of liquid required but generally speaking for dental purposes only one or two drops are required and this quantity being all that is required, the shape and size of the syringe enables it to be freely manipulated inside of the mouth, the liquid to be placed exactly where it is needed.

I claim;

The herein described dental syringe consisting of a section of rubber tubing having an elongated flexible non-resilient metal nozzle inserted on one end and a plug in the other end held frictionally in position.

In witness whereof I have hereunto set my hand this 26th day of August, 1908.

HARRY F. HAMILTON.

Witnesses:

S. W. BATES,
E. W. DENNIS.