Nov. 13, 1928. 1,691,786

R. T. ROTH

DENTAL INSTRUMENT

Filed Oct. 25, 1927

Fig. 1.

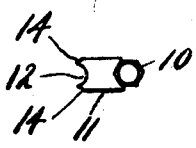


Fig. 3.

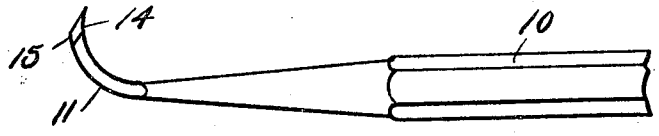


Fig. 2.

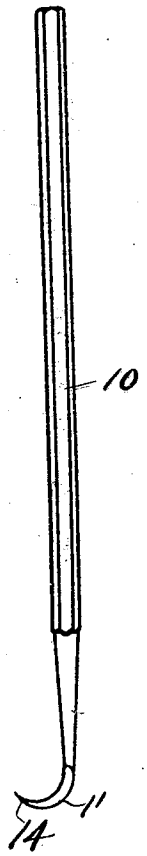
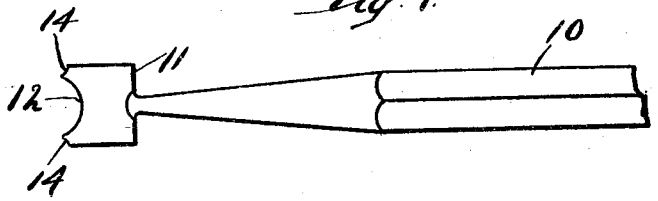


Fig. 4.



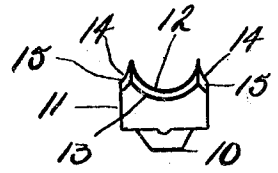
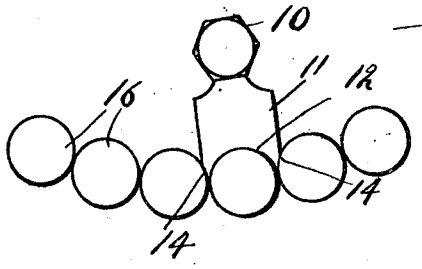


Fig. 5.

Fig. 6.



INVENTOR

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Patented Nov. 13, 1928. 1,691,786

UNITED STATES PATENT OFFICE.

ROBERT TRUMAN ROTH, OF PHILADELPHIA, PENNSYLVANIA.

DENTAL INSTRUMENT.

Application filed October 25, 1927. Serial No. 228,563.

My invention relates to new and useful improvements in a dental instrument, and more particularly an instrument generally known as a scaler and has for its primary object to provide a simple and effective device of this character which will remove the tartar or calcareous deposit from the backs or the so-called lingual sides of the six lower front teeth.

Another object of the invention is to provide a dental instrument so fashioned as to fit the lingual surfaces of the front teeth in order to expedite the removal of deposits thereon as the instrument is drawn outward or lengthwise of a tooth.

A further object of my invention is to provide a dental instrument, the blade of which is so fashioned as to provide a plurality of concaved cutting edges, which will remove the complete accumulation of tarter from the entire back surface of a single tooth as well as from the approximate or spaces between adjacent teeth at one time and with the same movement.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by numerals to the accompanying drawings forming a part of this application, in which:

Fig. 1, is an end view of a dental instrument embodying my improvement.

Fig. 2, is a side elevation thereof.

Fig. 3, is an enlarged fragmentary side elevation of the instrument.

Fig. 4, is a rear elevation of Fig. 3.

Fig. 5, is an end view thereof looking toward the blade.

Fig. 6, is an end view of the tool looking at the handle and illustrating the method of using the same on the back surfaces of the six lower front teeth, which are shown diagrammatically.

In carrying out my invention as herein embodied, 10 represents the handle of the dental instrument, one end of which carries a blade 11, which is curved longitudinally as plainly shown in Fig. 3. In the forward edge of the blade is formed a concaved cutting edge 12 to substantially fit the back or lingual surface of a person's front teeth and the cutting edge is produced by grinding back or under grinding the rear surface of the blade as indicated at 13.

In both sides of the blade, adjacent the forward end thereof, are formed supplementary concaved cutting edges 14, which meet or join with the ends of the concaved cutting edge 12, and said supplementary cutting edges are designed to engage teeth adjacent the one being mainly operated upon, so that contiguous surfaces of the adjacent teeth on both sides of another tooth will be cleaned at the same time said other tooth is cleaned, and any deposits in the spaces between the teeth will be removed. Like the cutting edge 12 said cutting edges 14 are produced by grinding back or under grinding the rear surface of the blade in the region of the cutting edges 14 as indicated at 15.

In using the instrument, the blade is positioned as near as possible to the root of a tooth, conventionally shown at 16, by pushing back the gum as much as possible with the instrument, and then drawing the same outward or longitudinally of the tooth which will remove the complete accumulation of tartar or calcareous deposits from the surface over which the instrument is drawn, and at the same time will remove the deposits from the contiguous surfaces of adjacent teeth and any accumulation between the spaces between adjacent teeth with one and the same movement.

This is due particularly to the shapes of the cutting edges and especially to the fact that the main cutting edge is of a length and shape to approximately fit the entire lingual surface of a tooth, said surface being the one on which deposits of the character mentioned usually accumulate.

The main advantages accruing from an instrument constructed in this manner are the speed with which the operator may remove the deposits, the thoroughness with which they may be removed to mitigate the pain which generally has to be endured by the patient.

Of course I do not wish to be limited to the exact details of construction as herein

shown, as these may be varied within the limits of the appended claim without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is:

A dental instrument comprising a handle and a longitudinally curved blade having a main concaved cutting edge in its forward end, and contiguous supplementary concaved cutting edges in its sides.

In testimony whereof, I have hereunto affixed my signature.

ROBERT TRUMAN ROTH.