

W. A. EDWARDS, JR.
DENTAL IMPLEMENT.

APPLICATION FILED SEPT. 27, 1917. RENEWED AUG. 22, 1919.

1,323,585.

Patented Dec. 2, 1919.

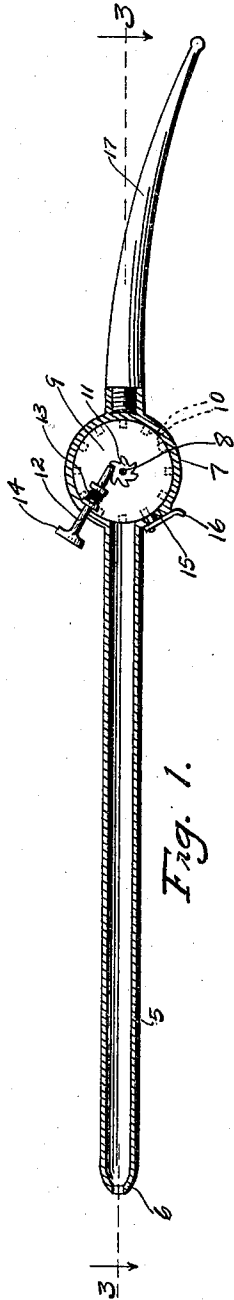


Fig. 1.

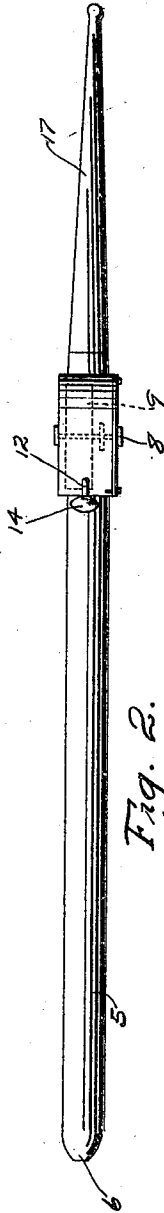


Fig. 2.

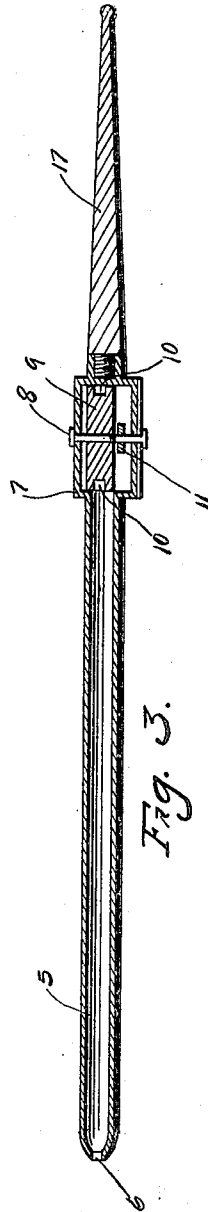


Fig. 3.

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DENTAL IMPLEMENT.

1,323,585.

Specification of Letters Patent.

Patented Dec. 2, 1919.

Application filed September 27, 1917, Serial No. 194,054. Renewed August 22, 1919. Serial No. 319,250.

To all whom it may concern:

Be it known that I, WALKER A. EDWARDS, Jr., citizen of the United States, residing at Austin, in the county of Travis and State of Texas, have invented certain new and useful Improvements in Dental Implements, of which the following is a specification.

This invention relates generally to dental implements, and particularly to a plugger.

The primary object of the invention is to provide a tool for use by dentists in filling teeth, and which is adapted to contain a number of pieces of filling material ready for instant discharge into the tooth being filled.

A further object of the invention is to provide a tool of this character provided with a storage magazine for fillings, and which is capable of being actuated so as to discharge the fillings from the magazine one at a time.

A still further object of the invention is to provide a tool of the character mentioned in connection with a plugger, whereby two instruments are combined into one, thus obviating the changing of implements after depositing the filling in the tooth and before the plugging operation.

A still further object of the invention is to provide a tool of the character set forth which shall be of extremely simple and inexpensive construction, which is composed of but few readily assembled parts, all so constructed and arranged as to minimize the opportunity for weakness or breakage, which is positive and easy in operation, and which is thoroughly efficient in practice.

With these objects in view together with others which will appear as the description proceeds, the invention resides in the novel formation, combination, and arrangement of parts, all as will be described more fully hereinafter, illustrated in the drawings, and particularly pointed out in the claims.

In the drawings:—

Figure 1 is a longitudinal sectional view taken through a tool constructed in accordance with the invention.

Fig. 2 is a top plan view of the improved tool, and

Fig. 3 is a transverse sectional view taken substantially upon line 3—3 of Fig. 1.

Referring now more particularly to the drawings, 5 indicates a tubular shank having one end slightly reduced and open as at 6, and being enlarged at its opposite end to

provide a chamber 7. The tubular member is preferably straight and may be of any desired length and diameter, and the chamber 7 is substantially circular.

Rotatably mounted on a suitable axle 8 extending laterally and centrally through the housing or chamber 7 is a cylinder 9, the latter being of slightly less diameter than said chamber. This cylinder communicates at its periphery with the inner end of the tubular member 5, and the said periphery is provided with a plurality of spaced pockets 10, which are adapted to be moved into register with the tubular member one at a time. The cylinder is equipped with a ratchet wheel 11, the teeth of which are engaged by the inner end of an operating rod 12. A spring 13 normally holds this rod retracted from the ratchet teeth, and the outer end of the actuating rod is provided with a knob 14 to be depressed by the finger. It is obvious, therefore, that when it is desired to rotate the cylinder, the knob 14 may be depressed, and this action causes the rod 12 to engage one of the ratchet teeth and to rotate the cylinder 9 a degree equal to the distance between the spaced pockets 10 in the periphery of the cylinder. Immediately upon the release of the knob, the spring 13 will retract the rod, so that the inner end thereof will be disposed adjacent to the next ratchet tooth on the element 11.

The casing or housing 7 is provided in its periphery with an opening 15, normally held closed by a cover plate 16.

Extending from the casing 7 in a direction diametrically opposite to the tubular member 5 is a plugger shank 17, which is adapted to be used by the dentist in properly plugging the filling into a tooth.

In operation, the plate 16 is moved so as to uncover the opening 15, and pieces of metal or amalgam to be placed in the tooth are introduced to the pockets 10 in the periphery of the cylinder. When all of the pockets have been filled, the door 16 may be closed, and the tool is ready for use. When it is desired to insert one of the fillings in a tooth, the tubular shank is adjusted to the mouth so that the reduced open end 6 thereof is disposed over the hollow tooth. The knob 14 may then be depressed, whereupon the cylinder 9 is partially rotated. As soon as one of the pockets 10 comes into register with the inner end of the tubular member the filling contained therein will drop into

the tubular member and will pass out of the lower end thereof. The article is thus placed in the tooth without resorting to the use of tweezers and other like implements now employed. After the filling has been inserted in the tooth, the tool may be reversed, and the packing end 17 may be used to properly position the filling in the tooth and to work the same firmly in place.

10 From the foregoing it is obvious that I have provided a tool which is of extremely simple construction and which is capable of being very easily and quickly manipulated. The cylinder may be provided with more or less filling holding pockets than are shown in the drawings, and it is obvious that a tool equipped with a magazine filling holder of this character will greatly facilitate the work of a dentist.

20 While the present is a disclosure of what is believed to be the preferred embodiment of the invention, it is to be understood that the invention is not limited thereto, but that various changes in the minor details of construction, proportion, and arrangement of parts may be resorted to if desired without departing from the spirit of the invention as defined by the appended claims.

I claim:—

30 1. In a dental tool, a tubular shank, a cylinder rotatably mounted on said shank and being provided with pockets in its periphery, and means for rotating said cylin-

der to bring the said pockets one at a time into communication with said tubular shank. 35

2. In a dental tool, a tubular shank, a casing at one end of said shank, a cylinder rotatably mounted in said casing, the said cylinder being provided in its periphery with a plurality of pockets adapted to communicate with said shank, a ratchet wheel, the said ratchet wheel being connected with said cylinder, and an operating rod slidably arranged in said casing and being engaged at one end with the teeth of said ratchet wheel. 45

3. In a dental tool, a tubular shank, a casing at one end of said shank, a cylinder rotatably mounted in said casing, a ratchet wheel for rotating said cylinder, said cylinder being provided in its periphery with a plurality of spaced pockets adapted to communicate with said tubular member, a rod mounted for longitudinal sliding movement in said casing, one end of said rod being adapted to engage the teeth of said ratchet wheel, a spring for normally holding said rod out of engagement with the said ratchet teeth, and the opposite end of said rod extending to the exterior of the said casing. 50

In testimony whereof I affix my signature 60 in presence of two witnesses.

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Witnesses:

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