No. 861,874. PATENTED JULY 30, 1907.

R. H. MACY.

DENTIMETER.

APPLICATION FILED APR. 20, 1907.

Fig 1

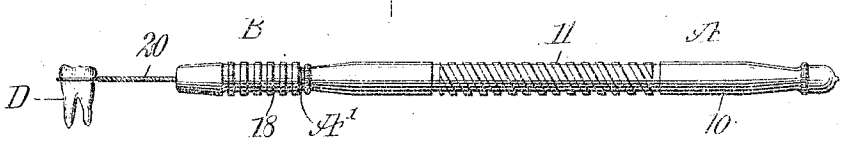
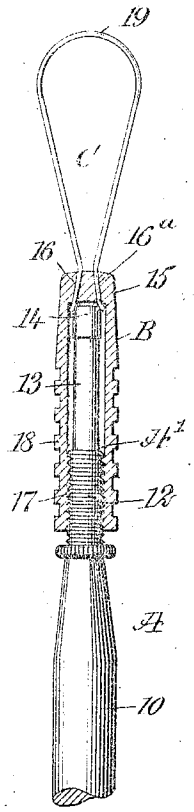


Fig 2.



WITNESSES

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DENTIMETER.

No. 861,874. Specification of Letters Patent. Patented July 30, 1907.

Application filed April 20, 1907. Serial No. 369,260.

To all whom it may concern:

Be it known that I, REUBEN HUBERT MACY, a citizen of the United States, and a resident of West Palmbeach, in the county of Dade and State of Florida, have invented a new and useful Improvement in Dentimeters, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a simple, economic and effective instrument, especially adapted for releasing and holding the ends of a wire when measuring a tooth or a root in crown bridge work.

Another purpose of the invention is to provide an instrument of the character described that will consist of but two members or sections, and to so construct and combine said members or sections that the ends of a loop of wire may be quickly and conveniently inserted into the instrument and locked thereto, and as speedily and readily released therefrom.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improved instrument applied to a tooth for measuring its circumference; and Fig. 2 is a sectional side elevation of a portion of the instrument and a loop of wire held thereby ready for application to a tooth, the view being drawn upon an enlarged scale.

The instrument consists of a handle A and a sleeve B that is carried by the handle. The body portion of the handle A is shown circular in cross section and is provided with spiral corrugations 11 whereby the handle may be readily grasped and conveniently turned, but the roughened surface 11 of the handle may be otherwise formed and the said handle may be made polygonal in cross section if so desired.

At the outer end of the body portion 10 of the handle A a fixed spindle A′ is provided, which spindle A′ is by preference an integral portion of the body 10 of the handle. This spindle A′ comprises an inner exteriorly threaded section 12 which is of lesser diameter than the least diameter of the body of the handle, and a plain outer section 13 of lesser diameter than the diameter of the threaded section 12 and at the extreme outer end of the fixed spindle A′ a head 14 is formed, as is best shown in Fig. 2.

The sleeve B is open at its inner end but its outer end 15 is closed, and the said closed outer end of the sleeve B is provided with two passages 16 and 16ª located one at each side of the center, and these passages extend in divergent lines to the interior of the sleeve B, as is best shown in Fig. 2. The inner face of the inner portion of the sleeve B is provided with a thread 17 so that it may be screwed upon the threaded section 12 of the spindle A′ and the exterior surface 18 of the said sleeve is milled or otherwise roughened in order to facilitate the handling of the instrument.

In operation a wire C is bent to form a loop 19, as is shown in Fig. 2, and the ends of the wire are introduced into the sleeve B through the aforesaid passages 16 and 16ª. Before the wire is thus introduced into the sleeve, the sleeve is held in one hand and the handle is turned to the left with the other hand, thus carrying the outer end of the sleeve away from the head of the spindle A′ and permitting the ends of the wire to enter the sleeve. When the wire has been properly set in the sleeve, the handle A is turned to the right until the head 14 of the spindle is in clamping engagement with the introduced ends of the wire loop 19. The wire loop is thus held firmly to the instrument and the loop is then passed over the tooth D to be measured, as is shown in Fig. 1, and the entire instrument is turned until the wire C is twisted upon itself, as is shown at 20 in Fig. 1, from the connection of the wire with the instrument to the point where the wire is drawn together around the tooth. In this manner the circumference of the crown, of the root, or the circumference of any portion of a tooth may be accurately and speedily obtained.

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

1. A dentimeter, comprising a handle member, a sleeve closed at its outer end and having screw connections with the handle member, the outer end of the sleeve being closed, and provided with passages for the introduction of the ends of a wire loop, and the outer end of the entering portion of the handle being adapted to closely approach the closed end of the sleeve to confine or secure the ends of the wire.

2. A dentimeter consisting of a sleeve closed at its outer end and provided with passages at its closed end, and a handle adjustable in the said sleeve, the outer end of the handle being adapted in one position to closely approach the closed end of the sleeve.

3. A dentimeter comprising a handle section having a spindle extension threaded at its lower portion and provided with a head at its outer portion, and a sleeve closed at its outer end and provided with passages to receive the terminals of an open wire loop, the sleeve being interiorly threaded for a portion of its length to engage with the threaded portion of said spindle, the head coöperating with the closed end of the sleeve to clamp the ends of the wire.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

REUBEN HUBERT MACY.

Witnesses:
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