

No. 780,919.

PATENTED JAN. 24, 1905.

N. SHOCKLEY.
DENTOMETER.

APPLICATION FILED JULY 15, 1904.

Fig. 1.

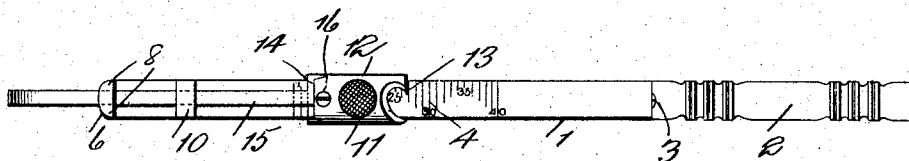


Fig. 2.

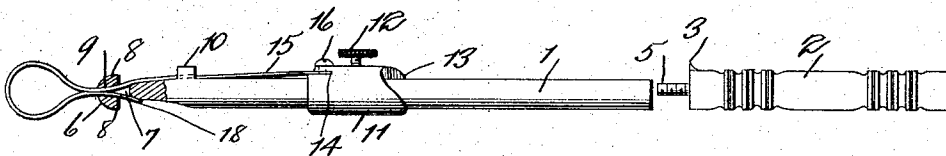


Fig. 3.

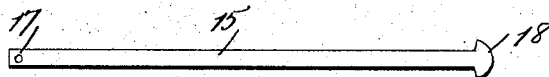


Fig. 4.

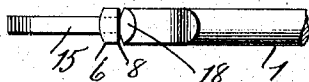
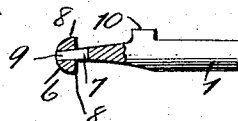


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

NED SHOCKLEY, OF FARRAGUT, IOWA.

DENTOMETER.

SPECIFICATION forming part of Letters Patent No. 780,919, dated January 24, 1905.

Application filed July 15, 1904. Serial No. 216,729.

To all whom it may concern:

Be it known that I, NED SHOCKLEY, a citizen of the United States, residing at Farragut, in the county of Fremont and State of Iowa, have
5 invented a new and useful Dentometer, of which the following is a specification.

This invention relates to dentometers.

The object of the invention is to provide an implement of the character specified which
10 shall be simple of construction, thoroughly efficient and durable in use, and which with readiness and ease may be manipulated to make exact the measurements of the circumference of teeth to which the bands are to be
15 applied.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts
20 of a dentometer, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding
25 parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion,
30 and exact manner of assemblage without departing from the spirit thereof.

In the drawings, Figure 1 is a view in elevation viewed from the graduated side of the shank. Fig. 2 is a view in elevation taken at
35 right angles to Fig. 1 with the handle detached from the shank. Fig. 3 is a detail view of the measuring-band. Fig. 4 is a view of one end of the shank, taken from the opposite side from that shown in Fig. 1. Fig. 5 is a sectional detail view of the terminal of the shank.

Referring to the drawings, 1 designates the shank or stock of the implement, and 2 a handle detachably connected therewith and provided with a scribe 3, the function of which
45 will presently appear. The shank may be made of any suitable material, preferably of steel and plano-convex in cross-section, the

plane or flat side being provided with a graduated scale 4, preferably laid off with the metric system. The handle 2 may be made of
50 any suitable material, such as wood or bone, having a ferrule combined therewith and provided with the scribe, or it may be of a solid piece of metal of the same or other character as the shank. The handle is provided with a
55 threaded stem 5, designed to engage a threaded opening in the end of the shank to hold the parts assembled. The end of the shank opposite the handle is approximately wedge-shaped and terminates in a rounded head 6,
60 which is provided with a transverse orifice 7, extending beyond the shoulders 8 of the head, forming thereby an opening 9, that extends entirely through the end of the tapered portion of the shank adjacent to the said shoulders. The tapered portion is further provided with a guide 10, which is by preference integral with the structure, although, if preferred, it may be made as a separate element and suitably combined therewith.
70

Mounted upon the shank is a slide 11, carrying a set-screw 12, by which to hold it at any desired adjustment, the slide being provided with a pointer 13, adapted to coact with the scale 4 in ascertaining measurements. The
75 slide is provided with a longitudinal slit 14, adapted to receive one end of a measuring-band 15, the same being held therein by a screw 16, passing through an opening 17 in the band and seated in the slide. The band may be made
80 of any suitable material, preferably of thin flexible steel, and is adapted to pass through the guide 10, then through the orifice 7, where it is formed into a loop the neck of which is disposed in alinement with the longitudinal
85 center of the shank and is held against separation from the shank by a head 18, which bears against one of the shoulders 8. The advantage of employing a thin metallic tape
90 over a wire is that it more readily conforms to the contour of the tooth to be measured and, further, can be readily inserted between the teeth that are closely juxtaposed, where an ordinary wire, such as usually employed,

could not readily be positioned. In assembling the band with the shank the end having the opening 17 is inserted from the back of the head through the orifice 7, thence bent
 5 into a loop, and the said end is again inserted through the orifice from the end of the shank, is passed through the guide 10, and is secured in the slit 14 in the manner described. It will be noted by reference to Fig. 5 that the
 10 metal of the shank contiguous to the head forms a septum for keeping the two limbs of the band divided, and by the coaction between the head 18 of the band and the shoulder 8 the former will positively be held against ac-
 15 cidental separation in use.

In using the device the slide is pushed forward toward the tapered end of the shank in order to distend or open the loop of the band, and this loop is then positioned around the
 20 tooth, after which the slide is drawn back, causing the band tightly to impinge the tooth. The operator then notes the graduation-mark on the scale opposite which the pointer stops, and the slide is then pushed forward to distend the band and permit its removal from
 25 the tooth. The slide is then returned to the graduation-mark to which it was moved in the measurement of the tooth, and the set-screw is tightened. The gold plate to form the band is then laid upon the flat side of the
 30 implement, with one end against the pointer and the scriber bearing against its under face. By giving a slight movement to the plate the scriber will make a mark, and the length of the plate from the pointer to the scriber-mark
 35 is exactly the length that the band is to be. The measurements secured are absolutely accurate and may be relied upon under all conditions.

40 While the device of the present invention is exceedingly simple of construction, it will be found thoroughly efficient and practical in use and may be readily and quickly operated to obtain the desired measurements. It is
 45 also exceedingly durable, the only portion liable to destruction being the measuring-band, and this may readily be replaced in case of breakage or any other accident which would render it unfit for use.

50 Having thus described the invention, what is claimed is—

1. A dentometer comprising a graduated shank having a longitudinally-orificed terminal, a slide on the shank coacting with the
 55 graduations thereof, and a looped measuring-band having its members disposed within the orifice and its neck arranged in alinement with the longitudinal center of the shank, one end of the band being provided with a head to hold
 60 it against separation from the shank-terminal, and its other end being connected with the slide.

2. A dentometer comprising a graduated

shank having a shouldered terminal provided with a longitudinal orifice, a slide on the shank
 65 coacting with the graduations thereof, and a looped measuring-band having its members disposed within the orifice and its neck arranged in alinement with the longitudinal center of the shank, one end of the band being
 70 provided with a head coacting with one of the shoulders to hold it against separation from the shank-terminal, and its other end being connected with the slide.

3. A dentometer comprising a graduated
 75 shank having a longitudinally-orificed terminal, a slide on the shank coacting with the graduations thereof and provided with a longitudinal slit, a looped measuring-band having its members disposed within the orifice
 80 and its neck arranged in alinement with the longitudinal center of the shank, one end of the band being provided with a head to hold it against separation from the shank and the other end disposed within the slit of the slide,
 85 and means for securing the latter end within the slit.

4. A dentometer comprising a graduated shank having a longitudinally-orificed terminal and a guide, a slide on the shank coacting
 90 with the graduations thereof, and a looped measuring-band having its members disposed within the orifice and its neck arranged in alinement with the longitudinal center of the shank, one end of the band being provided
 95 with a head to hold it against separation from the shank and the other end of the band being passed through the guide and secured to the slide.

5. A dentometer comprising a shank having
 100 a tapered end terminating in an orificed head, a slide on the shank, and a looped measuring-band having its members disposed within the orifice and its neck arranged in alinement with the longitudinal center of the shank, one end
 105 of the band being provided with means coacting with the head to hold it against separation from the shank-terminal and the other end being connected with the slide.

6. A dentometer comprising a shank pro-
 110 vided with a tapered end terminating in an orificed head and provided with a guide, a slide on the shank provided with clamping means, and a looped measuring-band having its members disposed within the orifice and
 115 its neck arranged in alinement with the longitudinal center of the shank, one end of the band being provided with means coacting with the head to hold it against separation from the shank, and the other end being detachably con-
 120 nected with the slide.

7. A dentometer comprising a graduated shank having at one end a longitudinally-orificed terminal and near its other end a scriber, a slide on the shank coacting with the gradu-
 125 ations thereof, and a looped measuring-band

having its members disposed in the orifice and its neck arranged in alinement with the longitudinal center of the shank, one end of the band being provided with the head to hold it
5 against separation from the shank-terminal, and its other end being connected with the slide.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

NED SHOCKLEY.

Witnesses:

A. D. COLEMAN,
E. N. CRAFT.