

F. T. WALLEN.  
 DENTAL INSTRUMENT.  
 APPLICATION FILED JAN. 23, 1913.

1,076,534.

Patented Oct. 21, 1913.

Fig-1-

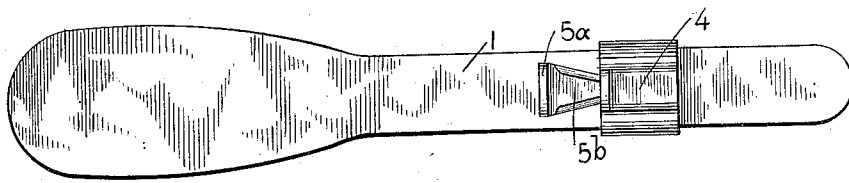


Fig-2-

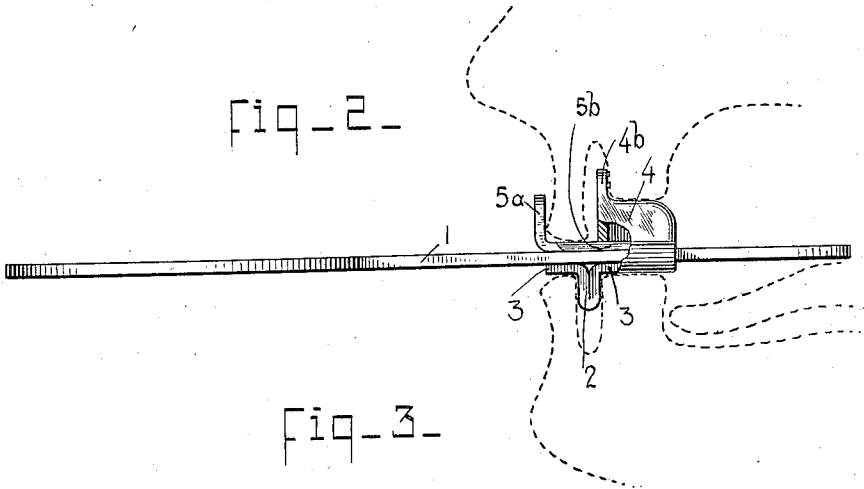


Fig-3-

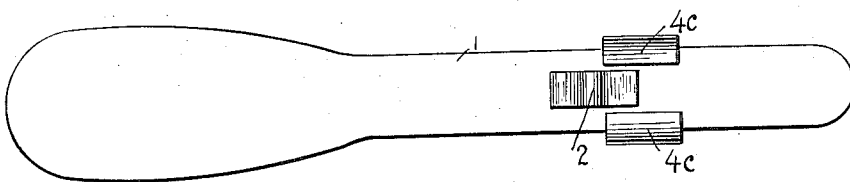


Fig-4-

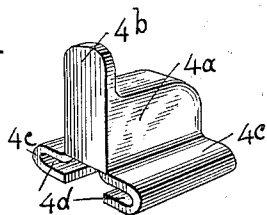
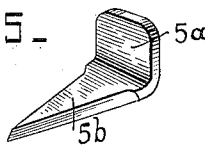


Fig-5-



WITNESSES

Frank C. Palmer.  
*L. J. [Signature]*

INVENTOR  
 Firman T. Wallen

BY *Wm. Co.*  
 ATTORNEYS

# UNITED STATES PATENT OFFICE.

FIRMAN TULLOCK WALLEN, OF BISMARCK, MISSOURI.

DENTAL INSTRUMENT.

1,076,534.

Specification of Letters Patent.

Patented Oct. 21, 1913.

Application filed January 23, 1913. Serial No. 743,738.

*To all whom it may concern:*

Be it known that I, FIRMAN T. WALLEN, a citizen of the United States, and a resident of Bismarck, in the county of St. Francois and State of Missouri, have invented a new and Improved Dental Instrument, of which the following is a full, clear, and exact description.

This invention relates generally to dental instruments, and more particularly comprehends a device used in taking a bite when preparing artificial teeth.

The principal object of the invention is to provide a dental instrument adapted to be positioned between the upper and lower processes in order to obtain the length of bite when the lips are together, whereby the fitting of teeth may be proper.

It is also of some importance in the design of the present instrument that a structure be provided which is easily adapted to sterilization and cleaning, and the preferred form of the inventive idea set forth in the drawings presents advantages in this respect.

Reference is to be had to the accompanying drawings forming a part of this specification, in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a top view of the instrument; Fig. 2 is a side view, partly sectional, showing the instrument in operative relation in the mouth; Fig. 3 is a bottom view; Fig. 4 is a perspective view of the slider; while Fig. 5 is a perspective view of the removable element for locking the slider in position.

The preferred embodiment of the inventive idea comprises a holder 1, of any suitable size and shape, also serving the purposes of a handle, to the lower side of which a shoulder 2 is secured. The shoulder may be separate from the holder and may be secured thereto in any suitable manner, or may be cast integral therewith. As shown in the drawings, the shoulder is preferably made of a single piece of material having its middle portion bent, as shown, and its end portions 3 lying alongside of and fastened to the holder by brazing or by riveting.

Referring particularly to Fig. 4, it will be noted that the slider, which is designated as a whole as 4, comprises an intermediate elevated portion 4<sup>a</sup> having a shoulder 4<sup>b</sup> at one end, the under side of the elevated por-

tion being provided with bent parts 4<sup>c</sup>, pockets 4<sup>d</sup> being thereby provided, the said pockets being adapted to embrace opposite edge portions of the holder, whereby the slider may be moved back and forth and held in position on the holder. As shown particularly in Fig. 3, the adjacent edge portions of the bent parts 4<sup>c</sup> of the slider are sufficiently spaced to permit the slider to move longitudinally of the holder and free of engagement with the said shoulder.

The particular form of the slider 4 may, of course, be widely varied, but as shown particularly in Fig. 2, it comprises a box-like structure having a hollow interior, whereby the weight of the element is materially decreased.

In the use of the instrument the holder 1 is brought into the position shown in Fig. 2, with the said shoulder 2 lying between the under lip and the lower process, and the slider 4 in engagement with the upper process, with the upstanding part or shoulder 4<sup>b</sup> of the slider between the upper lip and the upper process; if the lips of the patient do not naturally come together, or if they come too closely together, the slider 4 is taken off and another one of different height substituted therefor, the idea being to provide each instrument with a plurality of sliders of varying heights, whereby the depth of the bite of different persons may be obtained. After the proper slider has been found and positioned on the holder, as shown, the movable locking element shown in Fig. 5 is then brought into engagement with the lower portion of the upstanding part 4<sup>b</sup> of the slider, thereby effectively wedging the slider into position. This locking element is preferably of integral construction, and comprises the right-angularly extending parts 5<sup>a</sup>—5<sup>b</sup>, the part 5<sup>a</sup> serving as a handle, and the part 5<sup>b</sup> adapted to extend longitudinally of the holder 1 in the position shown in Fig. 2.

The slider in the position shown in Fig. 2 is a measure of the length of bite of the particular patient on which that slider has been used; if now the wax or compound in which the impression is taken is heated sufficiently to permit the instrument to be inserted therein, the wax or compound and the instrument being then placed in the mouth, the correct impression, and also the length of bite, will be obtained by bringing the upper

and lower processes into engagement with the wax or compound until they can move no farther because of engagement with the said slider.

5 The instrument shown is easily made, and consists of parts so shaped that cleaning is easily performed; it is, of course, clear that many changes may be made in the particular form of the elements shown without departing from the inventive idea.

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

15 1. An instrument such as described, comprising a holder having a shoulder on the under side thereof, said shoulder being adapted to be positioned between the lower process and lip, and a slider movably mounted on the holder, having a portion adapted to be engaged by the upper process, and provided with an upstanding part adapted to lie between the upper process and lip.

20 2. In an instrument such as described, a holder, a slider movably mounted thereon, the slider being adapted to be positioned between the upper and lower processes and in engagement therewith, the slider having on its upper side an elevated portion provided at its outer end with an upstanding part

adapted to lie between the upper process and lip. 30

3. In an instrument such as described, a holder, a slider movably mounted on the holder and adapted to be engaged by the upper and lower processes, the slider being provided with an upstanding part adapted to be positioned between the upper process and lip, and means for locking the slider in position on the holder. 35

4. An instrument such as described, comprising a holder having a shoulder on its under side adapted to lie between the lower process and the under lip, a slider removably carried thereby, the slider being adapted to be positioned between the upper and lower processes and in engagement therewith, the slider being provided with an upstanding part adapted to be positioned between the upper process and lip, and a locking device inserted between the holder and slider for maintaining such parts in engagement. 40 45 50

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

FIRMAN TULLOCK WALLEN.

Witnesses:

H. P. ROBINSON,  
C. L. BEARD.