No. 713,041. Patented Nov. 4, 1902.

E. L. TOWNSEND.

DENTAL BAND FITTING INSTRUMENT.

(Application filed Feb. 17, 1902.)

(No Model.)

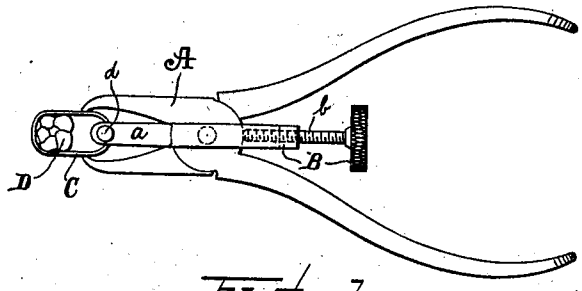


FIG. 1.

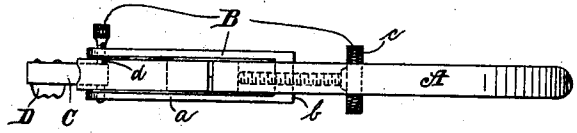


FIG. 2.

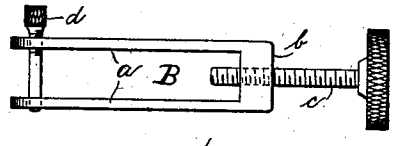


FIG. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

EMORY L. TOWNSEND, OF LOS ANGELES, CALIFORNIA.

DENTAL-BAND-FITTING INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 713,041, dated November 4, 1902.

Application filed February 17, 1902. Serial No. 94,543. (No model.)

To all whom it may concern:

Be it known that I, EMORY L. TOWNSEND, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented new and useful Improvements in Band-Fitting Instruments, of which the following is a specification.

My invention relates to an instrument to be used by dentists in forming bands to fit configuration of the sides and ends of teeth, which bands are to be used in dental work; and the object thereof is to produce a simple and efficient tool for that purpose.

Heretofore in dental work bands required in bridgework to hold the portion of the bridge which extends between the natural abutment-teeth in position in the mouth have been made to slip over the abutment-teeth, which teeth have of late years been filed to present straight vertical sides and ends and cemented thereto. In my improved bridge, for which I made application for United States Letters Patent by an application filed in the Patent Office November 4, 1901, the bands are formed to fit the natural configuration of the abutment or pier teeth, and one end of each band is removably attached to the portion between the pier-teeth, so that the bridge is held firmly in the mouth without the use of cement. In other dental work, such as orthodontia, it is desirable to have bands to fit the natural configuration of the teeth. I am able to successfully fit bands that will conform to the natural configuration of the teeth by means of the instrument described herein and illustrated in the accompanying drawings, forming a part hereof, in which—

Figure 1 is a plan of my band-fitting instrument with a band around the cast of a tooth ready to be formed to fit the configuration of the tooth. Fig. 2 is a side view of the same. Fig. 3 is an edge view of the band-slack taker.

In the drawings, A is a pair of pincers, and B is the band-slack taker, which is composed of a yoke having arms *a* and base *b*, through which works screw *c*. Passing through the front end of the arms *a* of the yoke is the removable pin *d*, which holds the band C attached to the pincers, as shown in Figs. 1 and 2.

In the operation of my device a metallic cast D of the tooth on which the band is required is made in the usual manner. A band of malleable metal of the required width, with the ends united, is formed, which is bent to substantially the form shown in Fig. 1. The slack-taker is slipped on the pincers and the band is fastened thereto by the pin, and the cast of the tooth is placed in the band, as shown in Figs. 1 and 2. Pressure is applied to the handles of the pincers, and the band is compressed upon the tooth as much as possible thereby. A mallet or hammer is then used to cause the edges of the band to conform to the configuration of the cast. The slack produced in the band is taken up by rotating the screw to draw the inner end of the band nearer to the pincer-joint. When the band has thus been fitted to the cast, it is removed from the slack-taker and fitted into the required work, one end of the band being detachably connected thereto, so that it may be slipped loosely over the natural tooth and then drawn tightly thereon and affixed to the work.

I have found this instrument specially adapted to fitting bands required in bridgework and other dental work.

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

A dental instrument for fitting bands to conform to the configuration of the teeth, comprising a pair of pincers and a band-slack taker; said band-slack taker comprising a yoke, a screw passing in threaded contact through the base of the yoke; and a pin in the front end of the arms of the yoke, said arms being adapted to pass over the joint of the pincers.

In witness that I claim the foregoing I have hereunto subscribed my name this 10th day of February, 1902.

E. L. TOWNSEND.

Witnesses:
G. E. HARPHAM,
HENRY T. HAZARD.