R. GROETCHEN.

DENTAL THREAD HOLDER.

APPLICATION FILED APR. 2, 1915.

1,205,732.

Patented Nov. 21, 1916.

Fig. 1.

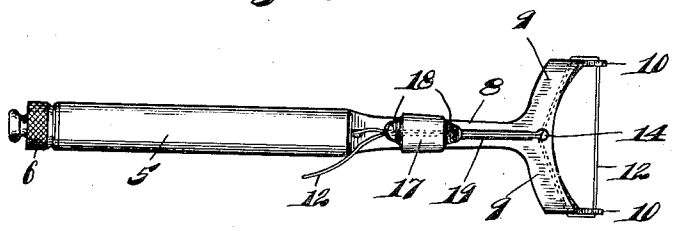


Fig. 2.

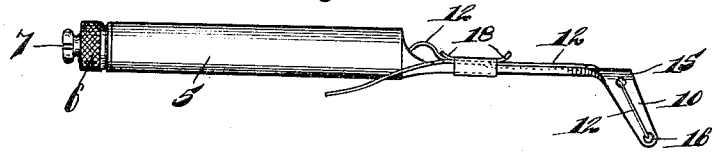


Fig. 3.

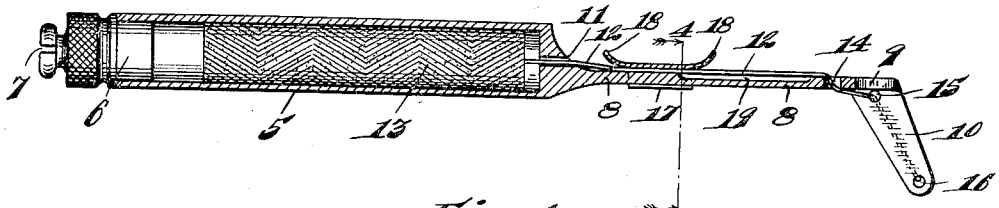
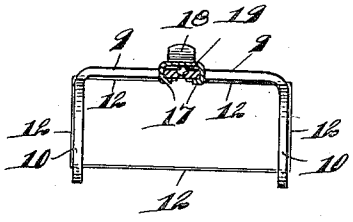


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

RICHARD GROETCHEN, OF CHICAGO, ILLINOIS.

DENTAL THREAD-HOLDER.

1,205,732. Specification of Letters Patent. Patented Nov. 21, 1916.

Application filed April 2, 1915. Serial No. 18,810.

To all whom it may concern:

Be it known that I, RICHARD GROETCHEN, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented a certain new and useful Dental Thread-Holder, of which the following is a specification.

My invention relates to a certain new and useful dental thread holder, and has for its object the provision of a simple and efficient device for holding dental thread while in use.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification, and in which,

Figure 1 is a plan view of a dental thread holder embodying my invention, Fig. 2, a side view of the same, Fig. 3, an enlarged longitudinal central section of the device, and Fig. 4, a section taken on line 4—4 of Fig. 3.

The preferred form of construction, as illustrated in the drawing, comprises a hollow handle 5 closed at one end by means of a removable plug 6 having an extension thereon provided with a lateral slot 7 adapted to constitute a thread cutter. The other end of handle member 5 is provided with a tapering handle extension 8 having a cross arm or cross head 9 at its outer end. Spaced arms 10 are provided at the ends of cross arm 9 and are adapted to hold a section of dental thread in position for ready use on the teeth.

A thread perforation 11 is formed in handle 5 adjacent the base of extension 8 to permit the passage of thread 12 from the interior of said handle to the exterior thereof, as indicated, a supply of said thread being provided in handle 5 on a suitable roll or spool 13.

A thread perforation 14 is provided centrally at the extreme outer end of extension 8 and other thread perforations 15 are provided at the bases of arms 10 and perforations 16 are provided at the extreme ends of arms 10. The thread 12 is passed outwardly from the interior of handle 5 through thread opening 11, thence along extension 8 through thread opening 14, thence to one side through the corresponding opening 15, thence outwardly along the outer side of the corresponding arm 10 and inwardly through the corresponding opening 16. The thread is then passed through the opposite opening 16 along the outer side of the opposite arm 10, inwardly through the corresponding opening 15, and outwardly through opening 14, as indicated, thus arranging the thread to span the gap between arms 10 in convenient position for use on the teeth.

A clamp 17 is slidably mounted on extension 8, and is provided at each end with an outwardly turned lip 18 adapted to facilitate manipulations of said clamp, and a pressure relieving recess 19 is provided centrally in extension 8 within the range of movement of clamp 17. The free end of thread 12 is passed over recess 19 adjacent the outgoing portion of said thread and under clamp 17. The arrangement is such that when clamp 17 is forced outwardly on extension 8, the pressure on the portions of thread 12 is relieved when the clamp passes over recess 19, so as to permit of the drawing of a fresh piece of thread to span the gap between arms 10. Then clamp 17 is moved back on extension 8 automatically tightening on said extension due to the taper thereof and also clamping the thread portions 12 when it moves beyond the range of recess 19.

This arrangement greatly facilitates the presentation of fresh portions of the thread when desired. When the free end of the thread becomes too long for convenience, the same may be readily severed by passing the same through slot 7.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A device of the class described comprising a hollow handle provided with a handle extension and an opening leading from said handle adjacent said extension; spaced arms on said extension perforated at their outer ends, there being a thread perforation at the extreme end of said extension between said

arms, a thread perforation at the base of each of said arms and a longitudinally disposed thread receiving groove on said extension; and a clamp slidably mounted on said extension arranged to clamp a thread thereto when moved to the end of said groove, substantially as described.

2. A device of the class described comprising a hollow handle adapted to contain thread and provided with a handle extension and a thread opening leading from said handle adjacent said extension; spaced arms on said extension perforated at their outer ends, there being a thread perforation at the extreme end of said extension between said arms and a thread perforation at the base of each of said arms; and a thread clamp slidable on said extension, there being a pressure relieving recess in said extension within the range of movement of said clamp, substantially as described.

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

RICHARD GROETCHEN.

Witnesses:

ARTHUR A. OLSON,

HELEN F. LILLIS.