

C. W. MILLAR.
DENTAL INLAY HOLDER.
APPLICATION FILED MAR. 11, 1913.

1,124,498.

Patented Jan. 12, 1915.

FIG. 1.

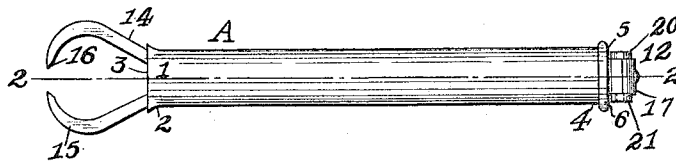


FIG. 2.

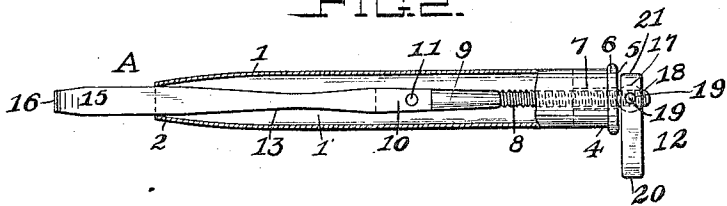


FIG. 3.

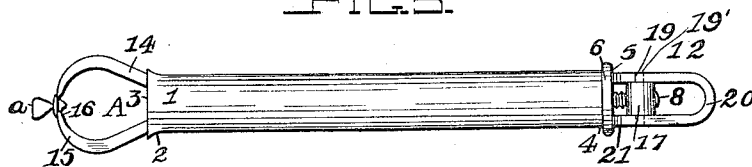


FIG. 4.

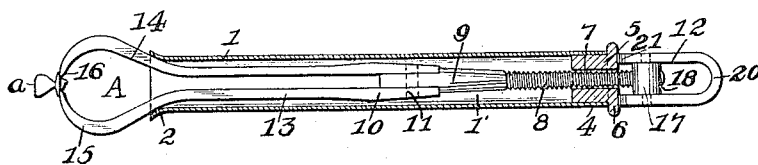
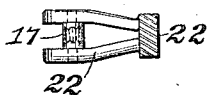


FIG. 5.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES W. MILLAR, OF CARNEGIE, PENNSYLVANIA.

DENTAL INLAY-HOLDER.

1,124,498.

Specification of Letters Patent.

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Application filed March 11, 1913. Serial No. 753,543.

To all whom it may concern:

Be it known that I, CHARLES W. MILLAR, a citizen of the United States, and a resident of Carnegie, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Dental Inlay-Holders; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to dental inlay holders and has special reference to such a device for holding inlays for use in dental work and one in which the inlay can be quickly and conveniently clamped and as readily removed.

The object of my invention is to provide a cheap, simple and efficient form of a dental inlay holder which will be simple in construction and light in weight and will consist of few parts which can be assembled with ease.

A further object of my invention is to provide a dental inlay holder which can be made to grip and firmly hold the smallest particles or inlays so that the same may be conveniently polished or have other operations placed upon the same without any handling which is very difficult with small objects.

My invention consists, generally stated, in the novel arrangement, construction, and combination of parts as hereinafter more specifically set forth and described and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved dental inlay holder, I will describe the same more fully referring to the accompanying drawing, in which:—

Figure 1 is a side elevation of my improved dental inlay holder when not in use. Fig. 2 is a longitudinal sectional view of the same on the line 2—2 of Fig. 1. Fig. 3 is a side elevation of the holder showing the same being used for holding an inlay for use in dental work. Fig. 4 is a similar view of the same with upper part of the barrel broken away. Fig. 5 is a modified form of the tension regulator.

Like symbols of reference herein indicate like parts in each of the figures of the drawing.

As illustrated in the drawing my improved dental inlay holder A has a round barrel 1 provided with a hollow interior 1' and said barrel is formed of any suitable

material such as brass, steel, etc., and may be nickel plated or knurled to prevent the same from slipping when held in the hand. The one end 2 of the barrel 1 is flattened in order to form an oblong opening 3 while the other end 4 of the same is provided with a suitable bushing 5 fitting into the hollow interior 1' of said barrel and having a flange 6 fitting against and completely covering the end section of said barrel. The bushing 5 is provided with a hole 7 extending centrally through the same for allowing a screw 8 to pass therethrough. The screw 8 extends a short distance within the hollow interior 1' of the barrel 1 and has a shank portion 9 which has a gripping member 10 secured at each of the two sides of the same by means of a pin 11 or by brazing or other suitable securing means, while the other end of said screw extends out through the hole 7 in the bushing 5 and is provided on the end of the same with a suitable tension regulating device 12 as later described and explained.

The gripping members 10 which are attached to the shank portion 9 of the screw 8 are formed of spring steel or other spring material and have a straight portion 13 beyond which is a slightly inclined portion 14 which terminates in a curved jaw 15, said jaw having a sharp edge 16 for gripping the inlay or other object *a*.

The gripping members 10 are adapted to rest in the barrel 1 in such a position that the inclined portion 14 of the same bear against the small sides of the oblong opening 3 in said barrel as later explained.

The tension regulating device 12 consists of a nut portion 17 which has a threaded hole 18 therein for fitting onto the end of the screw 8 and such nut portion 17 is provided with a trunnion 19 on each side of the same for fitting into holes 19' on the U-shaped tension piece 20. The ends 21 of the tension piece 20 extend beyond the periphery of the nut portion 17 for fitting against the flanged end 6 of the bushing 5, as later explained.

Fig. 5 shows a modified form of the tension regulating device wherein the U-shaped tension piece 20 is dispensed with and the nut portion 17 operates in a pair of arms 22 which terminate at their outer ends in a thumb piece 22' which is knurled as shown to prevent the fingers slipping from the same.

The use and operation of my improved

dental inlay holder A is as follows:—The tension regulating device 12 is first turned around so that the nut portion 17 will turn on the screw 8 in order to allow the curved jaws 15 to extend from the barrel 1, the proper distance required, and the inlay *a* or other object to be worked upon is then inserted between the open ends of the curved jaws 15 and such jaws pressed together by the fingers in order to allow the sharp edges 16 of the same to hold the inlay *a* in place. The tension regulating device 12 which is in the position shown in Fig. 1 with the sides of the U-shaped tension piece resting against the flanged end 6 of the bushing 5 is now turned to the position such as shown in Fig. 3 whereupon the ends 21 of said U-shaped tension piece will rest against the flanged end 6 of said bushing which will draw the screw 8 toward the same and the inclined portions 14 will be drawn into the oblong opening 3 on the end of the barrel 1 which will bring the curved jaws 3 tight together and the sharp edges 16 of said jaws will bite into the inlay *a* and thus grip the same tight to prevent its being removed. When the large piece of gold has been removed from the inlay *a* and said inlay has been polished, the U-shaped tension piece will be pressed to its original position such as shown in Fig. 1, whereupon the jaws 15 will be released and the inlay will fall from the holder.

It will be readily seen that my improved dental inlay holder may be used in other lines of work than dentistry and that the jaws can be regulated to give any size of opening between the same by the turning of the U-shaped tension regulator.

The device can also be made of any size in order to provide for work which has no small portion for gripping by the jaws.

What I claim as my invention and desire to secure by Letters Patent is:—

1. A holder having a barrel portion, gripping jaws extending from one end of said barrel and connecting with a screw in said barrel, said screw being adapted to extend through the other end of said barrel and being provided with a tension regulator thereon, said tension regulator being normally at right angles to said screw and adapted to regulate the distance between said gripping means when rotated while in this position and to draw said jaws together when moved to a position similar to said screw.

2. A holder having a barrel portion, gripping jaws extending from one end of said barrel and connecting with a screw which extends from the other end of said barrel, and a tension regulator pivoted to the outer end of said screw, said tension regulator having a portion pivoted therein and rotatably adjustable on said screw and means for engaging with the end of said barrel to draw said gripping jaws together.

3. A holder having a barrel portion, gripping jaws extending from one end of said barrel and connecting with a screw which extends from the other end of said barrel, and a tension regulator pivoted to the outer end of said screw, said tension regulator having a portion pivoted therein and rotatably adjustable on said screw and portions extending beyond said pivotal portion for engaging with the end of said barrel to draw said gripping jaws together.

In testimony whereof, I, the said CHARLES W. MILLAR, have hereunto set my hand.

CHARLES W. MILLAR.

Witnesses:

J. N. COOKE,

T. B. HUMPHRIES.