E. F. MUELLER.

ENGRAVER'S TOOL.

APPLICATION FILED JULY 5, 1910.

989,794.

Patented Apr. 18, 1911.

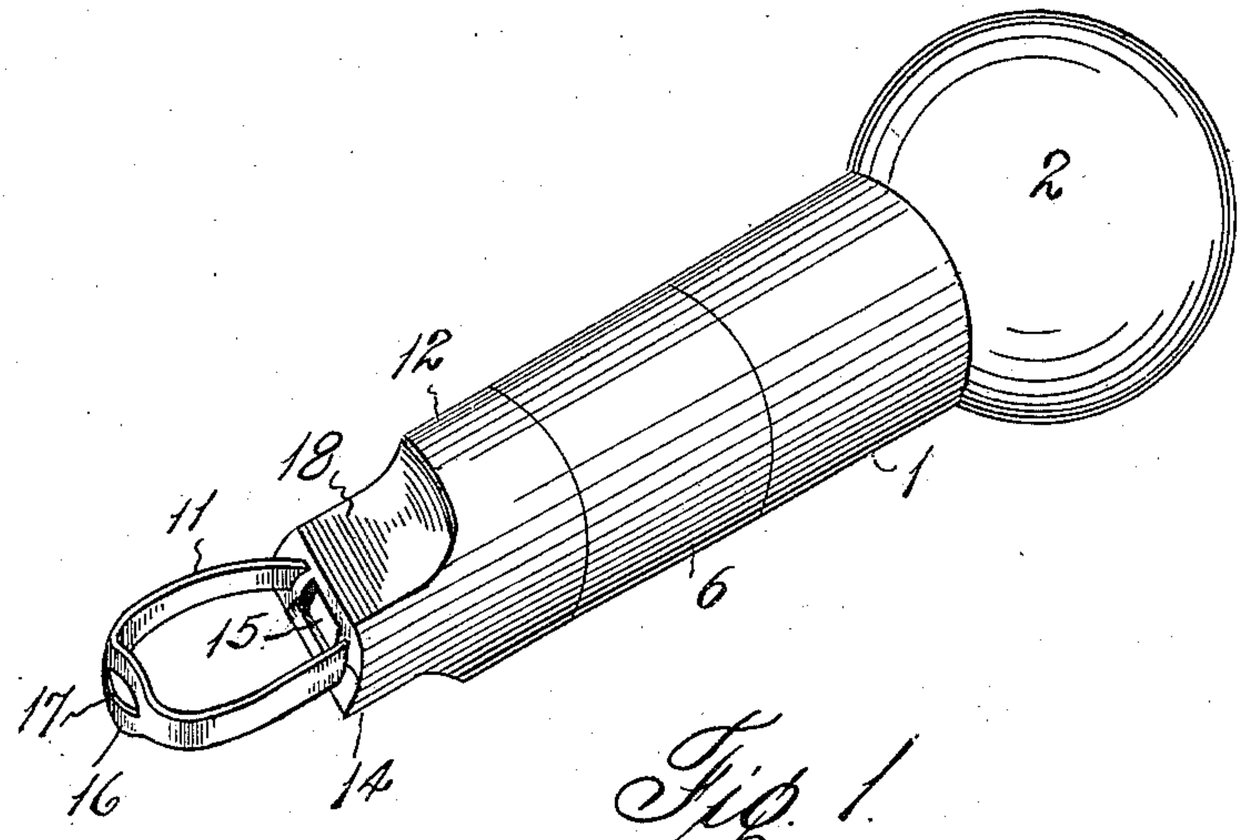

Fig. 1.

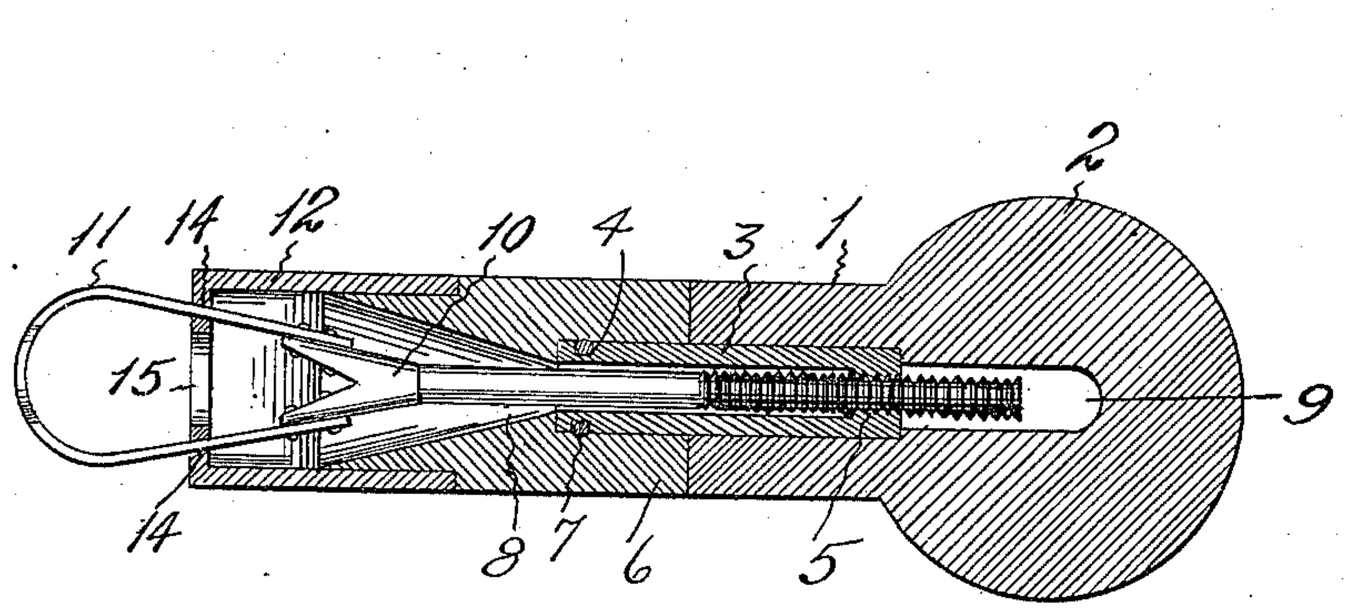

Fig. 2.

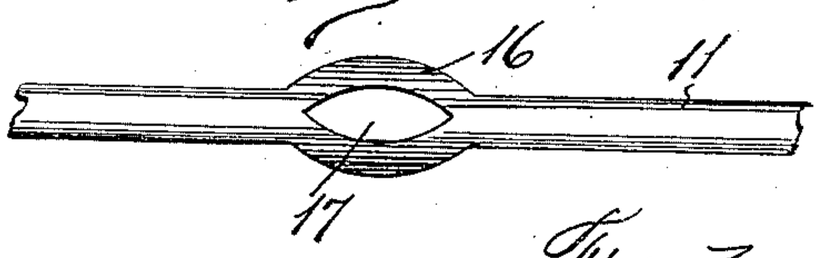

Fig. 3.

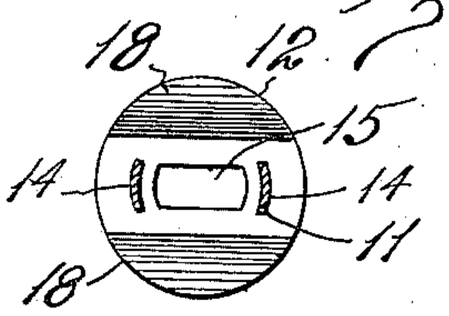

Fig. 4.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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ENGRAVER'S TOOL.

989,794. Specification of Letters Patent. Patented Apr. 18, 1911.

Application filed July 5, 1910. Serial No. 570,338.

To all whom it may concern:

Be it known that I, EDUARD FREDRICK MUELLER, citizen of the United States, residing at Caldwell, in the county of Burleson and State of Texas, have invented certain new and useful Improvements in Engravers' Tools, of which the following is a specification.

My invention relates to new and useful improvements in engravers' tools and is more particularly designed to assist in holding small articles to be engraved.

The object of my invention is to provide a device of the character described which will hold rings or other small objects to be engraved without marring or defacing their surface.

Another object of my invention is to provide a device of the character described which will hold a ring in such a manner that the setting will be held in position to be removed easily or replaced.

Finally the object of the invention is to provide means of the character described that will be strong, durable, efficient, and easy of operation, simple and comparatively inexpensive to construct, and also in which the several parts will not be likely to get out of working order.

With the above and other objects in view, the invention has relation to certain novel features of construction and operation, an example of which is described in this specification and illustrated in the accompanying drawings, wherein:

Figure 1. is a perspective view of my invention, Fig. 2. is a longitudinal section of the same, Fig. 3. is a detail of a portion of the band used to hold the article to be engraved showing the opening through which the set of a ring may be passed to admit the resetting thereof, and Fig. 4. is an end elevation of my invention with the retaining band broken away.

In the drawings, the numeral 1 designates a hollow handle terminating in a ball shaped grip 2. Within the handle 1 a sleeve 3 is fixed and held against rotation. This sleeve carries an annular groove 4 at one end and internal threads 5 at its other end. A sleeve 6 engaging over the sleeve 3 is held in position by pins 7 which engage with the shoulders formed by the annular groove 4 in the sleeve 3. By turning the grip 2 the sleeve 3 may be rotated in the sleeve 6 and at the same time the internal threads 5 co-acting carried by a drawing rod 8 will cause the rod to move longitudinally through both sleeves and into a cavity 9 in the grip 2.

The forward end of the drawing rod 8 is forked at 10 and is arranged to engage with both ends of a concaved steel band 11 which is bent to form a loop after passing through a ferrule 12 which closes the end of the sleeve 6. The shape of the steel band 11 is best shown in Fig. 4 where the band is shown in section. It will be noted that while this band is concaved enough to prevent an object slipping therefrom, it is not concaved sufficiently to prevent the band from being drawn into a comparatively small loop without danger of kinking or bending it permanently out of shape. The apertures 14 in the ferrule 12 are curved to fit the concavity of the steel band, while an elongated aperture 15 in the end of the ferrule designed to assist in holding articles placed beneath the steel band, has its ends curved at substantially the same radius.

At 16 the band 11 is enlarged or made wider and an opening 17 is cut therein to admit the passing of the set of a ring therethrough. This opening 17 may be made large enough to allow the passage of a Tiffany setting or other two carat settings, but care must be used in selecting the material for the band, as a band of stiff material would likely bend or buckle at this point. The ferrule is reduced in thickness on either side to render the end of this tool less bulky and to make the work held in the tool more visible to the operator. These reductions are shown in Figs. 1 and 4 and are numbered 18.

It is obvious that this tool will be of great assistance to an engraver who wishes to make an inscription on the inner periphery of a ring as well as to a stone setter or manufacturing jeweler who has occasion to set stones in articles which are hard to hold in position for setting without defacing the article. When a ring is placed in this tool one side of the ring, no matter what its size may be, will extend into the elongated aperture 15, and the other side will be engaged by the band 11, after the same has been tightened by turning the grip 2, the concaved surface of the band in conjunction with the engagement of the ring with the

side walls of the aperture 15, will hold it securely in position as well as firmly against rotation.

It is believed that it is unnecessary to describe the many uses to which this tool may be used since its form makes it adaptable for holding almost any cylindrical body.

What I claim is:

1. In an engraver's tool, a grip, a handle member formed integral with the grip, the grip and handle having a continuous central opening, a sleeve abutting the handle member and having an opening contiguous with the opening of the grip and handle, a tubular member engaging partly in the opening of the grip and handle and partly in the opening of the sleeve, the tubular member being fixed against movement in the handle, the sleeve being rotatable on the tubular member, a fastening between the sleeve and the tubular member for holding the former against longitudinal movement, the sleeve having a flared recess at one end and an external shouldered portion, a drawing rod extending from the flared recess of the sleeve through the tubular member and terminating in the opening of the grip, the drawing rod having screw threads at its inner end portion engaging in the inner end of tubular member, a ferrule embracing the shouldered portion of the sleeve and extending outward from the same, the ferrule having a central ring receiving opening and an opening on each side thereof, and a loop band provided with a central ring exposing opening and having its free ends passed through the side openings of the ferrule and secured to the opposite sides of the outer end of the drawing rod.

2. The combination with a handle member, of a sleeve member having a flared recess at its outer end, a tubular member fixed in the handle member and on which the sleeve is rotatably confined, a drawing rod screw threaded in the tubular member and having a flared head disposed in the recess of the sleeve, a ferrule fixed on the sleeve provided with an elongated central opening and a curved slot on each side thereof, and a loop band concaved in cross section provided with an enlarged central portion having an elongated opening, the free ends of the band passing through the curved slots and secured on opposite sides of the head of the drawing rod.

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

EDUARD FREDRICK MUELLER.

Witnesses:

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R. G. SMITH.