

J. J. WILSON.
GRAVER.
APPLICATION FILED DEC. 6, 1910.

1,042,738.

Patented Oct. 29, 1912.

Fig. 1

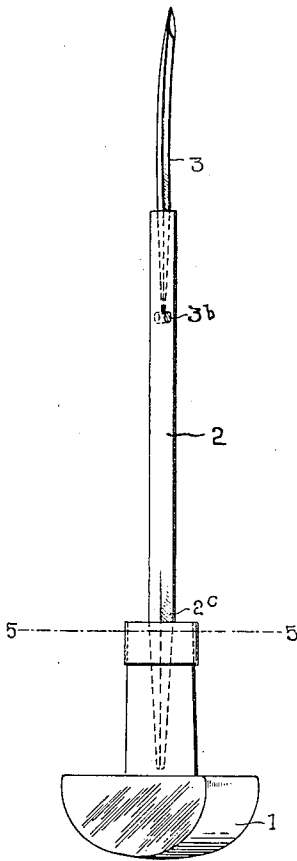


Fig. 2 Fig. 3 Fig. 4

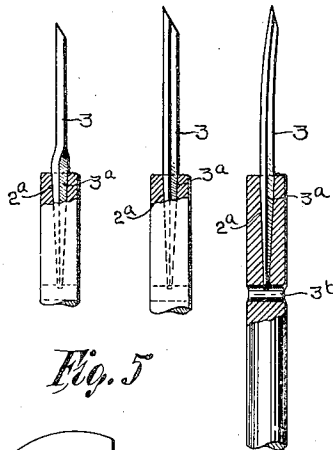
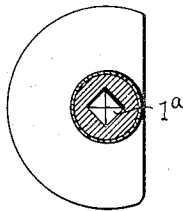


Fig. 5



Witnesses

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UNITED STATES PATENT OFFICE.

JEREMIAH JUDSON WILSON, OF DUNSMUIR, CALIFORNIA.

GRAVER.

1,042,738.

Specification of Letters Patent.

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Application filed December 6, 1910. Serial No. 595,962.

To all whom it may concern:

Be it known that I, JEREMIAH JUDSON WILSON, of Dunsmuir, in the county of Siskiyou and State of California, have invented certain new and useful Improvements in Gravers; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is a novel graver especially designed for use by engravers.

The object of the invention is to provide a graver with interchangeable tools which can be as conveniently and comfortably used by the engraver as the ordinary tools and in which all the objectionable features which appertain to the present known tools are obviated.

All of the present known changeable gravers have some thumb nut, or other contrivance, projecting from the shank thereof in such a manner that the engraver cannot use the tool without considerable discomfort to himself; and the old fashioned solid gravers have sharp edges or corners on them which cause blood blisters on the fingers of the person using the tool. In my improved graver all of these objectionable features are eliminated and it has a round shank that rests comfortably in the hand of the workman using it, and the points are so easily removed and replaced that the invention very much facilitates the work of the engraver using it.

I will describe my graver with reference to the accompanying drawings which illustrate the tool and several of the many forms of interchangeable graver points that are usable therewith.

In said drawings—Figure 1 is an enlarged side view of the complete graver. Figs. 2, 3 and 4 are detail views illustrating different forms of graver points usable with the tool. Fig. 5 is a section looking downward on line 5—5, Fig. 1.

The novel graver consists essentially of three members, to wit, a handle 1 made of wood and to suit any size hand; a stock or stem 2 made of steel or iron and provided in its outer end with a squared socket 2^a tapered to receive and hold firmly the shank 3^a of a graver point 3 while in use, and a transverse hole 3^b is made through the shank at the inner end of the socket therein and

intersecting the inner end of said socket, in which hole a small pointed tool or drift rod can be thrust to force out the points or cutters when it is desired to remove them from the shank; and on the other end of the shank is an angular tapered tang 2^c adapted to be inserted into a corresponding socket 1^a in the wooden handle 1. The other member of the tool is one of a set of interchangeable graver points 3, each having a tapered angular shank 3^a adapted to engage the socket 2^a, and to be inserted or removed therefrom, and interchanged, at will of the engraver using them.

When an engraver becomes accustomed to any tool he can work faster and surer therewith than if he has to change tools every time that he injures the graver point; in my tool he simply removes the injured graver point and inserts a perfect point, or if required substitutes a different shaped point, and proceeds with his work.

The point 3 shown in Fig. 3 is designed for the lozenge and square edged gravers used for engraving on flat surfaces. The curved point 3 shown in Figs. 1 and 4 is illustrative of one of the many curved points required for use in engraving spoon bowls, inside of rings, etc., and such curved points can have chisel edges, half round edges, liners, etc. The point 3 shown in Fig. 2 is twisted about $\frac{1}{4}$ turn so as to bring the chisel edge of the point in the proper position when inserted into the shank for cutting; and this style of point can be used with flat and round shaped edges as well as for lining tools, ovals, etc. I have not attempted to show all the various forms of interchangeable points but it is intended in practice to furnish all the shapes of points required by an engraver in interchangeable sets for use with my improved tool.

The particular advantages of my graver are the adaptability of the tool to hold any and all shaped points used in engraving by hand; the simple and easy manner of inserting and removing the points into and from the shank; the $\frac{1}{4}$ turn in the points (Fig. 2) to bring the chisel points or cutting edges into proper position for cutting; it is as rigid and firm as any old style solid stemmed graver; is much more comfortable in the hand of the workman using it; and will enable him to do better and faster work than any other graver. Also, owing to the

points or gravers being so small and short, the dressing, tempering and sharpening thereof requires but a very small amount of time.

5 I use a drift for removing the graver points from the shank, to facilitate the work of the users of the tool, and enable the shank to be made perfectly smooth and round, so that the workman can hold it comfortably in
10 his hand; whereas other changeable gravers have a thumb screw or other point fastening device that interferes with the comfortable and convenient holding of the tool in the hand.

15 What I claim is:

1. An engraver's tool comprising an ordinary engraver's handle having a socket, a shank removably inserted in a socket in the handle, and having a tapered socket in its
20 outer end angular in cross section, and a removable graver point having a corre-

spondingly tapered end adapted to be inserted in the socket in the shank.

2. An engraver's tool comprising an ordinary engraver's tool handle having a socket; 25 a smooth shank having one end fitted to the socket in the handle and having an angular tapered tool holding socket in its outer end, and a transverse hole intersecting the lower end of such tool holding socket; and a re- 30 movable graver point having a corresponding angular tapered end adapted to be inserted in the tool holding socket in the shank, substantially as described.

In testimony that I claim the foregoing as 35 my own, I affix my signature in presence of two witnesses.

JEREMIAH JUDSON WILSON.

Witnesses:

THOMAS MILNER,
L. H. LAHR.