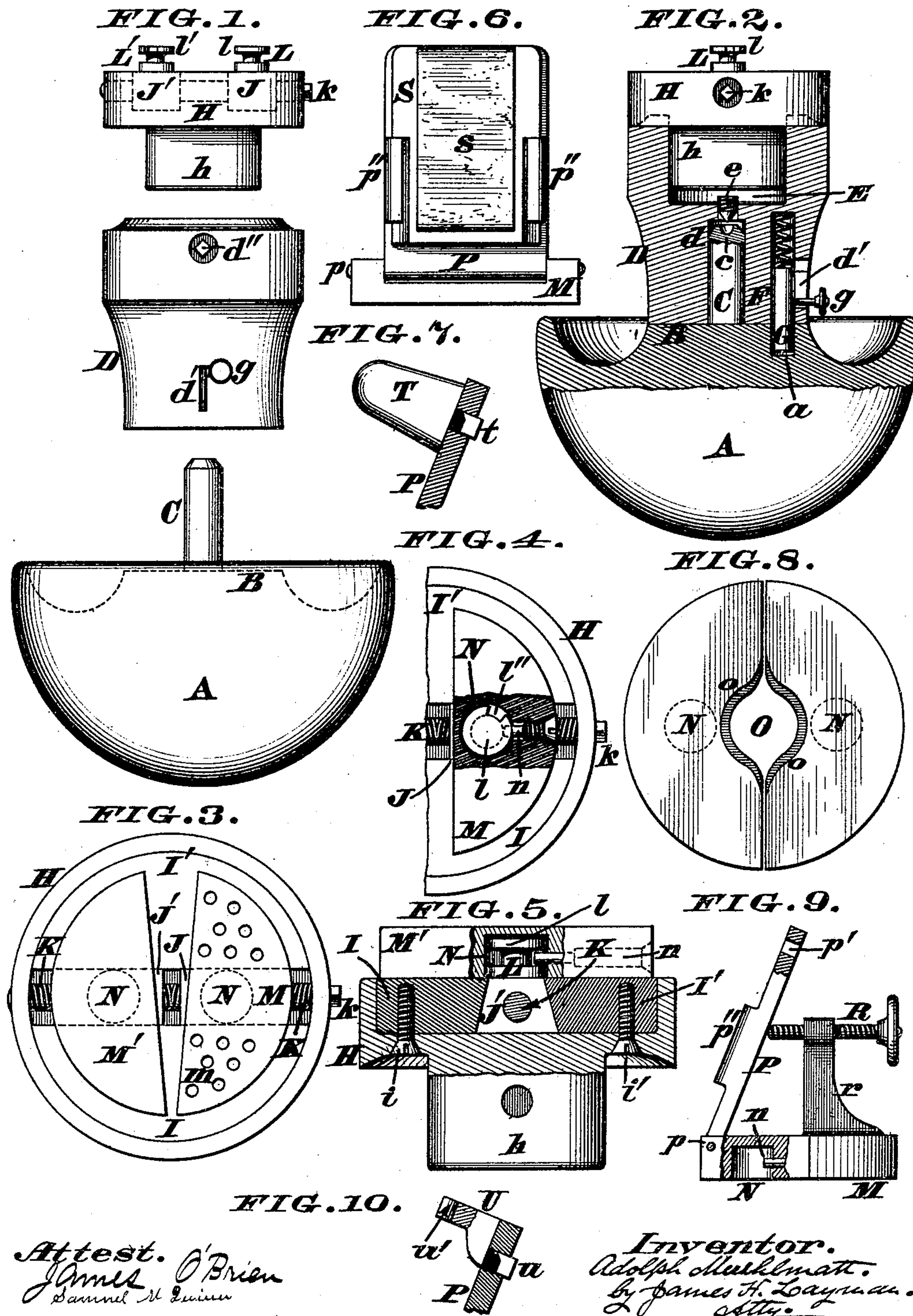


(No Model.)

A. MUEHLMATT.
ENGRAVER'S BLOCK.

No. 481,238.

Patented Aug. 23, 1892.



UNITED STATES PATENT OFFICE.

ADOLPH MUEHLMATT, OF NEWPORT, KENTUCKY.

ENGRAVER'S BLOCK.

SPECIFICATION forming part of Letters Patent No. 481,238, dated August 23, 1892.

Application filed December 4, 1891. Serial No. 414,034. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH MUEHLMATT, a citizen of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Engravers' Blocks; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form part of this specification.

This invention relates to those blocks or vises which are used for holding various articles of work while being ornamented by metal engravers or chasers; and the principal feature of my improvements include a novel combination of base, standard, and head, which devices are so arranged as to be manipulated with more or less freedom, according to the nature of the piece to be engraved, the details of these essential parts of my block and their method of operation being hereinafter more fully described.

My invention also includes certain attachments to be used in connection with the head of the device, which attachments enable a great variety of work to be readily and securely applied to the block, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation showing the base, standard, and head of the block separated from each other. Fig. 2 is an axial section showing said parts fitted together and the standard locked to the base. Fig. 3 is an enlarged plan of the head with a pair of swinging jaws pivoted thereon. Fig. 4 is a sectionized plan of one of said jaws and one-half of the head. Fig. 5 is a vertical section through the head and one of the jaws. Figs. 6, 7, 8, 9, and 10 show various attachments capable of being readily applied to the head.

A represents the base of the device, which base is usually hemispherical, so as to be seated upon a sand pad or other holder, and is generally made of cast metal to afford the desired firmness and stability. Furthermore, this base has at top a flat circular bearing B, from the center of which projects a vertical and unshiftable spindle C, having a small "center" c in its upper end, for a purpose that will presently appear.

D is a standard of such a size and shape as to be readily grasped by hand and having an axial bore d, (seen in Fig. 2,) which bore admits the spindle C.

E is a socket in the upper end of this standard to receive various attachments, and e is a screw tapped in the bottom of said socket and capable of being adjusted either up or down, as circumstances may suggest.

F is a small bore made in the standard D to receive a spring-bolt G, whose knob or handle g occupies a slot d' of said standard.

a is a pit in the base A to admit the lower end of this spring-bolt whenever it is desired to lock the standard to said base.

d'' is a screw tapped in standard D and near the upper end thereof for the purpose of bearing against any attachment that may be inserted within the socket E, the attachment generally used being a head H, having a downwardly-projecting cylindrical neck h capable of fitting snugly in said socket, as seen in Fig. 2. This head has a pair of practically-semicircular plates I I' secured in it by screws i i', the opposing faces of said plates being undercut, as seen in Fig. 5, and being a sufficient distance apart to serve as a guide for a pair of reciprocating slides J J', which latter are tapped to permit the engagement of a reversely-threaded screw K, having a square arbor k, to which a key can be readily applied whenever it is desired to shift said slides in either direction. The tops of these slides are flush with the upper surface of the head and have short cylindrical studs L L', provided with circumferential grooves terminating at tops with annular flanges or collars l l', and each collar has a break or interruption, as seen at l'' in Fig. 4. These studs permit various attachments being readily coupled to the head of the device, a pair of very convenient appliances being seen in Fig. 3, where M M' represent jaws of a semi-disk shape, which devices may be either solid or perforated, as seen at m, to admit pins for holding work in place. Furthermore, each jaw or equivalent attachment has on its under side a cylindrical socket N, adapted to fit snugly around either of the studs L L' and to be coupled thereto by a screw n, whose point engages under the collar l, as seen in Fig. 5.

In Fig. 8 a pair of jaws is shown with a circular opening O between them, the margin of the opening being counterbored at o to grasp bangles, lockets, coin-charms, and other disk-shaped articles; but in Fig. 9 a leaf P is pivoted to the jaw at p and is retained at any convenient angle by a screw R, tapped in a bracket r, projecting from said jaw, a slot p' being made near the free end of said leaf to admit other attachments. In addition to this slot, the leaf has a pair of undercut side flanges p'' (seen in Fig. 6) to admit a block S, whose front surface is provided with a cushion or pad s to hold the work.

T in Fig. 7 is a thimble-holder, whose shank t is inserted within the slot p' of the leaf, which slot serves, also, as a means for retaining the shank u of a holder U, to which studs and cuff-buttons are applied, the shanks of such devices being fitted in the notched part u' of said holder. (See Fig. 10.)

For chasing and other comparatively heavy work the various parts of the device are arranged as seen in Fig. 2, the standard D being passed down over the spindle C and temporarily locked to the base A by means of a spring-bolt G. Neck h of head H is then inserted within the socket E and secured by the screw d'', after which act the appropriate jaws M M' or other attachments are applied to said head. These jaws are readily applied by simply bringing their screw-points n vertically above the break l'' of the collars l l' and then lowering said jaws until they rest upon the head. They are then swung around in either direction, the studs L L' serving as pivots for this swinging movement, and the engagement of the screws under the collars preventing any accidental detachment of said jaws. Screw K is now turned to advance the slides J J', and thereby cause the jaws to grasp the work in the most effective manner, the device being quite rigid and incapable of turning, except as the heavy base A is intentionally swung around upon its supporting pad or ring; but if a less rigid support is required the spring-bolt G is retracted and held up by engaging its knob g with the side branch of slot d'', thus leaving the standard D free to be turned upon the circular bearing B of the base.

When very fine light work is to be engraved, the screw e is run down until its point bears within the center c of spindle C and raises the standard D out of contact with the bearing B. Consequently said standard can now be turned in either direction and with the greatest facility. In some cases, however, the head H can be omitted and a cylindrical block be inserted in the socket E, which block can have a coating of cement or other adhesive medium at its upper end to permit the attachment of a certain class of articles, or said socket can serve as a receptacle for holding various pieces of cylindrical work—such as cane-heads, umbrella-handles, and

numerous other articles to be engraved or chased.

I claim as my invention—

1. The combination, in an engraver's block, of a base, an unshiftable spindle projecting therefrom, and a bodily-detachable standard having an axial bore traversed by said spindle, the upper end of said standard being provided with a cylindrical socket to receive the neck of a work-holder, substantially as herein described.

2. The combination, in an engraver's block, of a detachable head carrying a reversely-threaded screw, a pair of nut-slides engaged with said screw, and an unshiftable stud projecting from each slide, each stud being provided with a circumferential groove having an annular collar at top, and each collar having a break or interruption in it, for the purpose described.

3. The combination, in an engraver's block, of a base, an unshiftable spindle projecting therefrom, a center in the upper end of said spindle, a bodily-detachable standard having an axial bore traversed by said spindle, a cylindrical socket in the upper end of said standard, and a concealed screw engaged with the bottom of said socket, which screw can be brought to bear against said center for the purpose of elevating said standard, as herein described.

4. The combination, in an engraver's block, of the base A, having a flat bearing B, provided with an unshiftable spindle C and a pit a at one side of said spindle, and the bodily-detachable standard D, having an axial bore d, traversed by said spindle, a secondary bore F, and a spring-bolt G, fitted within this bore F, all as herein described.

5. The combination, in an engraver's block, of a jaw having a socket N and a screw-point n, entering at one side of said socket, for the purpose described.

6. The combination, in an engraver's block, of a jaw having a hinged leaf P and adjusting-screw R, for the purpose described.

7. The combination, in an engraver's block, of a jaw having an adjustable hinged leaf P, with a slot p' near its top, for the purpose described.

8. The combination, in an engraver's block, of a jaw having an adjustable hinged leaf P, provided with a pair of undercut side flanges p'' p'', for the purpose described.

9. The combination, in an engraver's block, of a base, an unshiftable spindle projecting therefrom, a center in the upper end of said spindle, a bodily-detachable standard having an axial bore traversed by said spindle, a concealed screw fitted within said standard and adapted to bear against said center, and a locking device wherewith the standard can be temporarily fastened to said base, substantially as herein described, and for the purpose set forth.

10. The combination, in an engraver's block,

of a detachable head carrying a reversely-
threaded screw, a pair of nut-slides engaged
with said screw, an unshiftable stud project-
ing from each slide, a circumferential groove
5 in each stud, an annular collar at the top of
the groove, a break or interruption in the col-
lar, a jaw having a socket to surround either
stud, and a screw tapped in said jaw, the
point of said screw being adapted to engage

with said groove, in the manner described, **10**
and for the purpose stated.

In testimony whereof I affix my signature in
presence of two witnesses.

ADOLPH MUEHLMATT.

Witnesses:

JAMES H. LAYMAN,
SAMUEL M. QUINN.