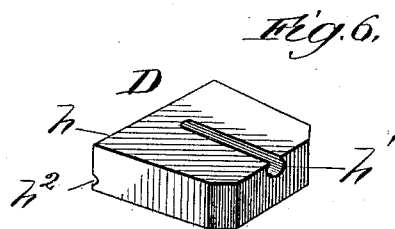
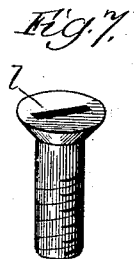
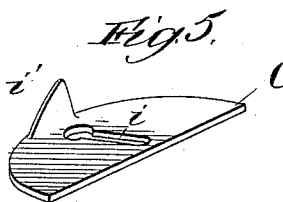
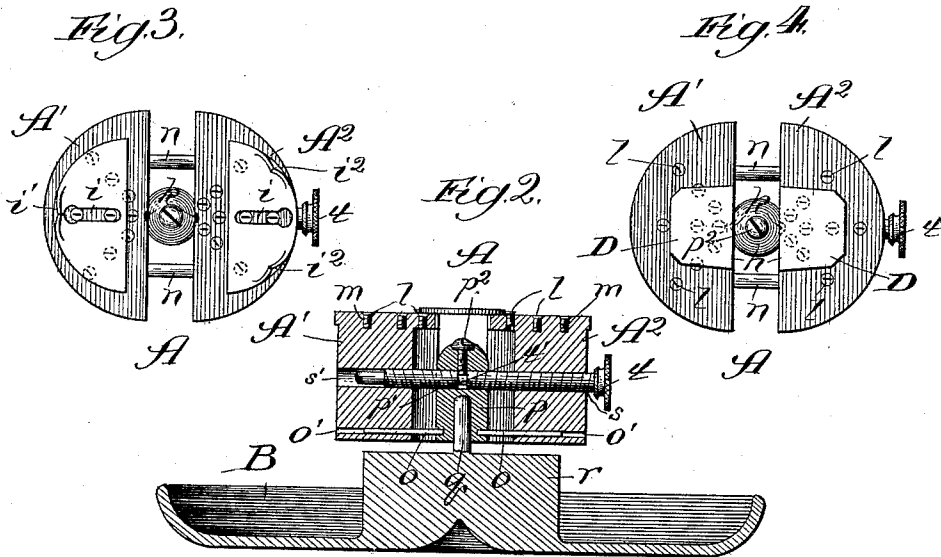
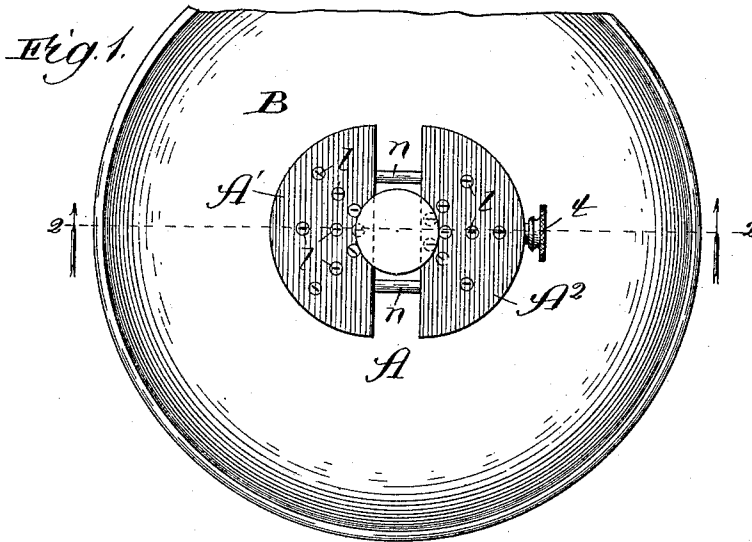


(No Model.)

T. H. WICKS.
ENGRAVING BLOCK.

No. 465,688.

Patented Dec. 22, 1891.



Witnesses:
E. C. G. G. G.
E. C. G. G. G.

Inventor:
Thomas H. Wicks,
By Dyrenforth and Dyrenforth
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS H. WICKS, OF CHICAGO, ILLINOIS.

ENGRAVING-BLOCK.

SPECIFICATION forming part of Letters Patent No. 465,688, dated December 22, 1891.

Application filed January 27, 1891. Serial No. 379,253. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. WICKS, a subject of the Queen of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Engraving-Blocks, of which the following is a specification.

My invention relates to improvements in engraving-blocks of the class designed more especially for use in holding small metal articles while they are being engraved upon.

My object is to provide an engraving-block of this class of an improved construction, which will render it more convenient and in other ways more desirable than the engraving-blocks hitherto provided for holding such articles to be engraved upon, as coins and other metallic disks, watch-cases, spoons, &c.

In the drawings, Figure 1 is a broken top plan view of my device, showing a disk to be engraved upon held thereon; Fig. 2, a section taken on line 2 2 of Fig. 1 and viewed in the direction of the arrows; Figs. 3 and 4, similar plan views of the top of the block and showing, respectively, an attachment for holding watch-cases and the like, and an attachment for holding spoons, &c.; Fig. 5, an enlarged perspective view of one-half of the attachment shown in Fig. 3; Fig. 6, a similar view of one-half of the attachment shown in Fig. 4, and Fig. 7 an enlarged perspective view of a detail.

A is the block, which may, as shown, be made in two semicircular parts A' and A², of equal dimensions, held together by a right and left hand thumb-screw *t*, which works in threaded sockets *s s'*, extending in line with each other horizontally and centrally through the said parts.

B is the base portion of the device, which is flanged upward around the edge to afford a dish, and provided with a central boss *v*. Extending upward from the center of the boss is a pin *q*. A socket-post *p*, having a socket in its under side to receive the pin *q*, is provided with an opening *p'* through it for the screw *t*, and a screw-threaded opening in its top bisecting the opening *p'* for a set-screw *p²*, which enters a circumferential groove *t'* on the screw *t* between the right-hand and left-hand threads of the latter. The

socket-post *p* rotates upon the pin *q*, and the parts A' A², which are supported by the socket-post, rotate with it. Pins *o* extend from opposite sides of the socket-post in a direction parallel to the screw *t*, through guide-openings *o'* in the parts A' A² and pins *n*, each secured at one end to one of the parts A' A², extend in a direction parallel to the screw *t* into guide-sockets in the other part, the function of the pins *s* and *n* being to prevent any movement of the parts A' and A² with relation to each other and the socket-post, except in the line of the screw *t*. The screw *t* is held against longitudinal movement by the engagement with its groove *t'* of the set-screw *p²*, and turning of the screw *t* will thus cause the parts A' A² to recede from or approach each other and the central point of the socket-post, depending upon the direction of the turning of said screw *t*.

The tops of the parts A' A² present smooth flat surfaces in the same plane, and they are each provided with a series of threaded and countersunk sockets *m* to receive set-screws *l*. At the center of the meeting edge of each semicircular part A' and A² are vertical sockets *k*, which, when the parts are brought into contact, coincide to afford a round opening. The sockets *m* are preferably arranged, as shown in the drawings, in series of straight lines radiating from the central sockets *k*, one line of sockets on each part extending at an angle of ninety degrees to the meeting edge and two lines of sockets extending each at an angle of about forty-five degrees thereto. The last-named lines of sockets on each part are composed of openings, having each a companion opening in the other line which is equidistant with the other from the center of the socket *k*, and the central line of sockets on the other part is composed of sockets corresponding in distance from the center, respectively, with one of the said pairs on the first-named part. Thus each pair of companion sockets on one part and a particular socket in the central line of the other part will form a triangle, the center of which will be at the center of rotation of the block.

In operation to secure a coin or other disk upon the block, as shown in Fig. 1, the screw *t* is turned to cause the parts A' A² of the

block to separate, and two screws l on one part and one screw l on the other part, all the same distance from the center, are raised by unscrewing them until their heads project a distance somewhat less than the thickness of the disk to be engraved upon above the surface of the block. The disk is then placed between the said screws, and the screw t is turned to cause the parts to approach each other until the said three screws l engage the periphery of the disk, which may thus be held with desired firmness. The screws l are of peculiar construction, the slits extending only part way across the faces of the screws, whereby the peripheries of their heads present unbroken engaging-edges. This feature is important, as it causes the said engaging-edges to be stronger than would be the case if the slits extended, as is usual, entirely across the faces of the screws. Another advantage of this construction is that when for any reason the screws are turned while in engagement with the article being engraved upon they will not scratch the article, as would a screw of the ordinary construction.

The attachment C for holding watch-cases (shown in Figs. 3 and 5) comprises, preferably, two semicircular disks each provided with a slot i . The slots i are enlarged at one end to admit the passage through them of the heads of the screws l and are beveled laterally to extend along their lower edges below the heads of the said screws, whereby the attachment may be held in place. One of the parts of the attachment is provided with two gripping projections i' at its circular edge and the other with one such projection, all in substantially the positions shown.

In adjusting the attachment described upon the device a screw l in the central lines of openings on each of the parts A' A^2 is raised and the parts of the attachment passed over the said screws at the enlarged ends of their slots i and slid along until they bear at the opposite ends of their said slots against the said screws. For the purpose of greater firmness one of the parts of the attachment may be held by two screws l . The watch-case to be engraved upon is placed upon the attachment between the gripping projections i' , which engage and hold the watch-case when the screw t is turned to cause the parts A' and A^2 and consequently the two parts of the attachment to approach each other.

The attachment D (shown in Figs. 4 and 6) for holding spoons, &c., consists of two similar blocks, as shown, each with a straight engaging-edge h and a groove h' , of the nature of a dovetailed groove on its under side, extending from the edge opposite its edge h part way across the block. In the meeting edge of each block is a groove h^2 , which extends the full width of the block. The grooves h are of a size to receive the heads of the screws l and engage them under the heads, and the parts of the attachment are fastened in posi-

tion upon the device by raising screws l in the central line of screw-threaded openings of each part A' and A^2 and slipping the blocks from the open ends of their grooves h' over the heads of the said screws from the directions of the meeting edges of the parts A' A^2 . The spoons, &c., are held between the blocks in the grooves h^2 , which latter thus aid in maintaining them firm. The central sockets k are especially designed for receiving and holding the shanks of collar and cuff buttons, &c. With the disposition of the screws l described all articles held by them directly in the manner set forth will in the operation of engraving rotate upon a dead-center as the block A is turned, which is a material assistance to the operator, particularly in the production of fine engraving, and as the screws l engage the articles held at the edges and below the upper surfaces of the latter the screws are never in the way to interfere with the work of the operator. The plate-shaped base B will receive and prevent the waste of the particles of metal which drop from the block in the process of engraving, and is therefore desirable where the articles being engraved are of precious metal.

While, as stated, the disposition described of the threaded openings m is preferred, and it is desirable that they should be in series, the members of which are equidistant from a common center, I do not limit myself to the said disposition, nor do I limit each series to three, as more than three such openings provided with set-screws in each series may in some case be found desirable for the sake of the increased gripping effect they would afford.

What I claim as new, and desire to secure by Letters Patent, is—

1. An engraving-block provided in its upper side with clamp-bearings for the articles to be engraved, in the form of set-screws, substantially as and for the purpose set forth.

2. An engraving-block formed with separable and relatively-adjustable sections provided with threaded openings in their upper sides equidistant from a common center, and clamp-bearings for the articles to be engraved, in the form of set-screws, fitting the said openings, substantially as and for the purpose set forth.

3. An engraving-block formed with two separable sections uniformly adjustable simultaneously with relation to a common center and provided with threaded openings disposed in series of at least three over both said sections, the members of each series being substantially equidistant from the said common center, and clamp-bearings for the articles to be engraved, in the form of set-screws, fitting the said openings, as and for the purpose set forth.

4. An engraving-block formed with separable and relatively-adjustable sections and provided with countersunk threaded openings in

its upper side on said sections, and set-screws to afford clamp-bearings for the articles to be engraved in said openings, normally flush with or below the surface of the said sections, substantially as and for the purpose set forth.

5 5. The combination, with an engraving-block, of a base upon which the block is supported to rotate, flanged at its periphery to afford a dish, as and for the purpose set forth.

10 6. The combination, with an engraving-block, of an attachment D therefor in two parts, provided with gripping projections i' and slots i , substantially as and for the purpose set forth.

15 7. The combination, with an engraving-block, of an attachment D therefor, comprising two blocks, each having an engaging-edge h , provided with a groove h^2 and a dovetailed groove h' on its under side extending only

part way across the block, substantially as described. 20

8. An engraving-block mounted to turn upon a base and formed with separable and relatively-adjustable sections and provided with countersunk threaded openings in its 25 upper side disposed in series of three over both said sections, the members of each series being arranged in triangles, the centers of which correspond approximately with the center of rotation of the engraving-block, and set- 30 screws in said threaded openings, normally flush with or below the surface of the block, substantially as and for the purpose set forth.

THOMAS H. WICKS.

In presence of—

J. W. DYRENFORTH,

M. J. FROST.