

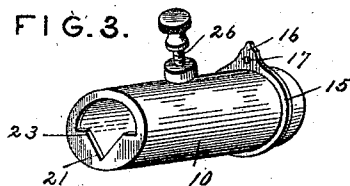
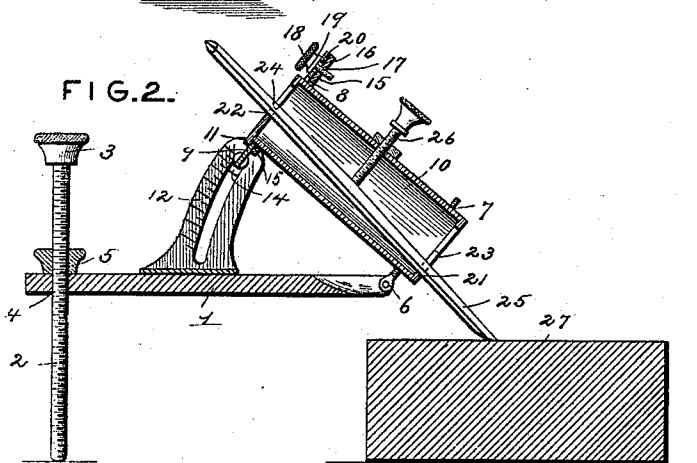
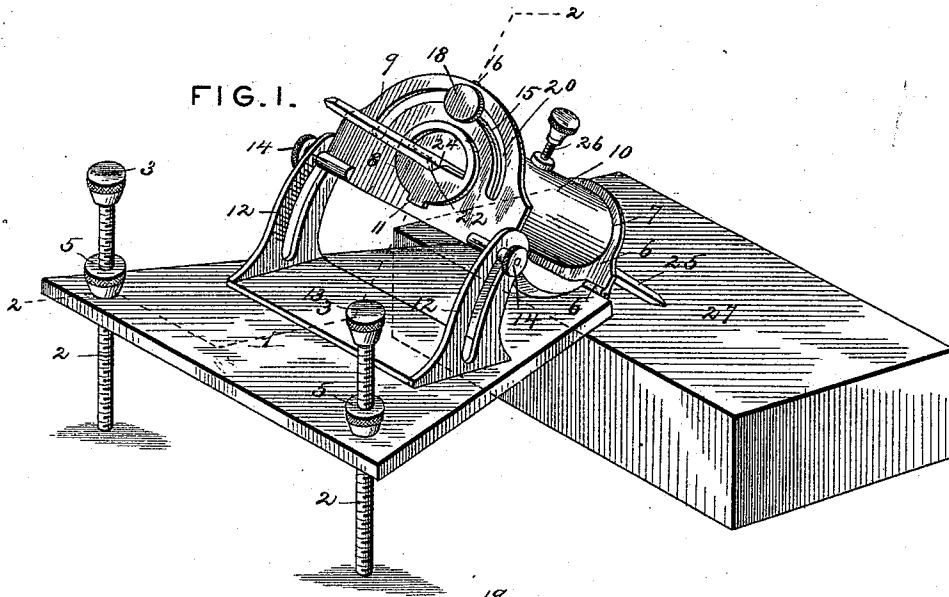
(No Model.)

J. J. VERNIER.

HOLDER FOR SHARPENING GRAVERS OR OTHER TOOLS.

No. 530,735.

Patented Dec. 11, 1894.



Inventor

Julius J. Vernier

Witnesses

Harry L. Amer.

By his Attorneys.

[Signature]

Ca Snow & Co.

UNITED STATES PATENT OFFICE.

JULIUS J. VERNIER, OF TOLEDO, OHIO.

HOLDER FOR SHARPENING GRAVERS OR OTHER TOOLS.

SPECIFICATION forming part of Letters Patent No. 530,735, dated December 11, 1894.

Application filed March 26, 1894. Serial No. 505,172. (No model.)

To all whom it may concern:

Be it known that I, JULIUS J. VERNIER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Holder for Sharpening Gravers or other Tools, of which the following is a specification.

My invention relates to a holder for use in sharpening gravers and other small tools which require accurate presentation to the stone, and it has for its object to provide a simple, inexpensive, and efficient device, capable of easy adjustment and manipulation.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of a device embodying my invention, showing a graver held therein and applied to a sharpening stone. Fig. 2 is a central sectional view of the same. Fig. 3 is a detail view of the socket, detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a base-plate of substantially triangular shape, which is provided at its rear angles with adjustable supports 2, consisting of threaded pins having milled heads 3 at their upper ends; said supports being threaded in perforations 4 in the base-plate and being held at the desired adjustment by the jam-nuts 5. A front bracket 6 is hinged or pivotally connected to the front end of the base-plate and is provided with a circular opening 7 which registers with a corresponding opening 8 in the adjustable bracket 9, and in these registering openings is mounted for rotation the cylindrical socket 10, provided at its rear end with a lateral lug or ear 11 to prevent it from being accidentally detached from the brackets when loosened for adjustment. The rear bracket is adjustable toward and from the plane of the base-plate by means of the segmentally slotted gage-guides 12, consisting of the upturned terminals of a bar 13 which is secured transversely to the upper surface of the base-plate; and shouldered

thumb-screws 14 which extend through the slots of said gage-guides and engage threaded sockets in the side edges of the bracket. By loosening these thumb-screws the rear bracket is released and may be moved toward and from the plane of the plate to alter the inclination of the tool-socket 10, and when the desired inclination is attained the parts are secured by means of the thumb screws.

A ring 15 encircles the socket contiguous to the front surface of the rear bracket and is provided with an ear 16 having a threaded perforation 17, and a set-screw 18, provided with a shoulder 19, is passed through a segmental slot 20, formed in the rear bracket concentric with the opening 8, and engages said threaded perforation. By means of this set-screw the socket may be locked in any desired position to secure the necessary side bevel to the tool.

The socket is provided at its extremities with rests 21 and 22, provided respectively with notches 23 and 24, of which the former, which is located at the front end of the socket is V-shaped, while the latter, located at the rear end of the same is right-angled. By this construction the front end of the graver, one of which is shown at 25, is held from vibration, during the operation of sharpening, irrespective of its cross-sectional shape. The socket is provided at an intermediate point with a locking or retaining screw 26 which is adapted to bear at its inner end upon the side of the graver or other tool to hold it firmly in the notches of the rests.

The use of tools of this class is well known in the art and therefore it will be unnecessary to give a detailed description of the manner of manipulating the same in the operation of sharpening a graver, it being sufficient to state that by means of the adjustable supports, the base-plate may be arranged in a horizontal plane irrespective of the height of the stone, which is shown at 27, and the extent of projection of the graver. By means of the gage-guides the angular adjustment of the graver may be regulated; and the rotary adjustment of the socket enables the operator to produce the desired bevel.

After the desired adjustment of the sup-

ports 2 and of the other parts of the device to suit the widths of the stone 27, the entire holder with the tool attached, is reciprocated or moved forward and backward with the end of the graver in contact with the surface of the stone, and the lower ends of the standards in contact with the surface upon which the stone rests. The legs maintain the base-plate in a horizontal position, while the end of the graver is upon the stone, and at the same time serve to guide the holder as it is moved to produce the desired frictional contact with the stone.

It will be understood, furthermore, that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, I claim—

1. In a device of the class described, the combination with a base-plate, of a tool socket supported thereon, means for adjusting the tool-socket revolvably upon its axis as a center and angularly with relation to the base-plate, and means for securing a tool in the socket approximately in alignment with the axis thereof, substantially as specified.

2. In a device of the class described, the combination with a base-plate, of a front bracket pivotally connected to the base-plate, a rear bracket provided with means for adjustment toward and from the plane of the base-plate, a revolvably adjustable tool socket mounted at its extremities in aligned openings in said brackets, and means for locking the socket in the desired position and securing a tool therein, substantially as specified.

3. In a device of the class described, the combination with a base-plate, of a front bracket pivotally connected thereto, segmentally slotted gage-guides, a rear bracket, shouldered thumb-screws extending through the slots of the gage-guides and engaging

sockets in the rear bracket, a tool-socket removably and revolvably mounted in registering openings in said brackets, and means for securing the socket in the desired position and locking a tool therein, substantially as specified.

4. In a device of the class described, the combination with a base-plate, of a front bracket pivotally connected thereto, a rear bracket, means for adjusting the rear bracket toward and from the plane of the plate, a tool-socket fitting loosely and revolvably in openings in said brackets and provided at one end with a lug, a ring fitted on the socket and provided with a radial ear, a set-screw extending through a segmental slot in the rear bracket and engaging a socket in said ear, and means for securing a tool in the socket, substantially as specified.

5. In a device of the class described, the combination with a base plate, of a tool-socket provided with terminal rests having notches of which the one adjacent to the front end of the socket is V-shaped, means for locking a tool in said notches, and means for adjusting the socket angularly and revolvably, substantially as specified.

6. In a device of the class described, the combination of a base-plate, adjustable supports threaded in perforations at the rear angles of the plate, jam-nuts to secure the supports at the desired adjustment, an angular and revolvably adjustable tool-socket mounted upon the plate, and means for securing a tool in said socket, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JULIUS J. VERNIER.

Witnesses:

ZORA BORTNER,

FRANK J. DOWNEY.