F. A. GETTINGS.

TOOL HOLDER.

APPLICATION FILED DEC. 16, 1915.

1,184,340.

Patented May 23, 1916.

Fig. 1

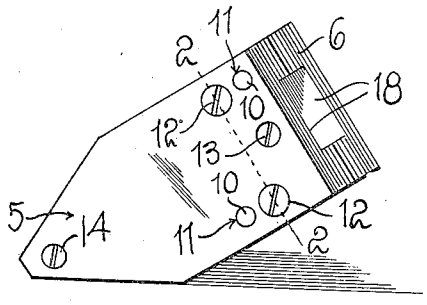


Fig. 2

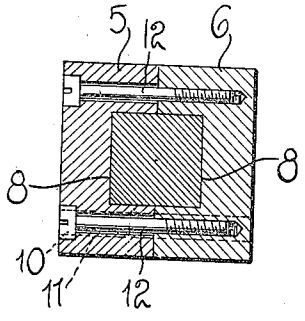


Fig. 3

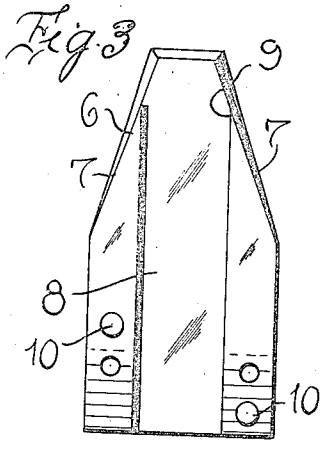
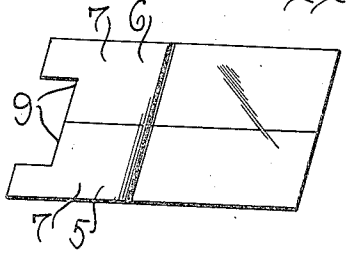


Fig. 4



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TOOL-HOLDER

1,184,340. Specification of Letters Patent. Patented May 23, 1916.

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To all whom it may concern:

Be it known that I, FRED A. GETTINGS, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Tool-Holders, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved tool holder and has for its primary object to provide a very simple, convenient and serviceable device for securely holding gravers, thread cutting bits and like tools while being ground or sharpened.

It is another object of the invention to provide a tool holder constructed in two sections, whereby the tool may be readily engaged therein, one of the sections having means for securely clamping the tool in the holder.

With the above and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which,

Figure 1 is a perspective view illustrating one embodiment of the invention; Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1; and Fig. 3 is an inner face view of one section of the holder.

Referring in detail to the drawing, 5 and 6 designate, respectively, the two sections of the tool holder, and each of these sections at one of its ends has its opposite longitudinal faces convergently inclined, as indicated at 7. The degree of inclination of these inclined faces will vary in the construction of holders to be used in connection with different types of tools employed for various purposes. Each section of the tool holder is provided in its inner face with a longitudinally extending channel 8, and these channels, when the sections are connected, provide a rectangular opening through which the shank of the tool extends. At the tapering end of each of the holder sections, the end face thereof is notched or recessed and these recesses together form a rectangular seat 9 which is adapted to receive the tool shank in one position of the holder. At the opposite end of the holder section 6, the same is provided with the dowel pins 10 projecting from its inner face, which are adapted to be received in spaced openings 11 in the other holder section 5. This latter holder section is also provided with openings to receive screws 12, the shanks of which are adapted for engagement in threaded openings provided in the holder section 6. Thus, the two holder sections may be positively and securely held in assembled relation. Adjacent each end of the holder section 5, the set screws 13 and 14, respectively, are threaded therein.

In the use of my improved tool holder as shown in Fig. 1, the shank of the tool is engaged in the rectangular channels 8, the holder sections being inserted from opposite sides upon the tool shank. The screws 13 and 14 may then be adjusted into binding engagement with the tool shank to hold the same securely against longitudinal shifting movement in the holder. As shown in Fig. 1, the lower inclined faces 7 of the tool sections rest upon a magnetic clutch or may be held in place by any other suitable means. The holder, with certain slight variations in construction, may be employed for the sharpening of threading tools used for cutting what are known as the "Whitworth standard thread," "The British Association thread" and the "Acme standard thread." The holder can also be used properly positioning tools for cutting square threads while being ground or sharpened by making the same of slightly larger size and allowing the necessary clearance on the angle sides of the holder sections. When the holder is in its working position upon the magnetic chuck, it being understood that the holder has been first adjusted to the desired angle with respect to the face of the emery wheel, the point of the tool is ground or sharpened as the holder passes back and forth beneath the emery wheel. After having ground one side of the tool point, the position of the holder on the chuck is reversed without removing the tool from the holder and the opposite face of the tool point is similarly ground or sharpened. It is only in cases such as above referred to where the tool is employed for the cutting of a particular kind of thread, that it is necessary to remove the tool from the holder and replace the same therein in a different position. It is, of course, understood that after grinding or sharpening the tool, the same is re-

moved from the holder and then placed in another holder or chuck on the machine in position to cut the thread.

When the holder is used in connection with tools for cutting the U. S. standard thread, the tool must be removed from the machine, and the holder placed on end. The tool is then engaged in the recesses 9 in the upper ends of the holder sections and clamped in place by the set screw 14.

In practice, I have found my improved tool holder to be extremely serviceable and convenient as it provides means for quickly and accurately positioning the tool in accordance with the required angle to which its cutting point must be ground. The holders will preferably be supplied to the trade in sets for use in connection with the various types of thread cutting tools, some of which I have above referred to.

While I have shown and described the preferred means for retaining the two sections of the holder in assembled relation, it is manifest that other means may be employed for this purpose, and the device also modified in many other respects as to the form and proportion of its detail structural features and I, therefore, reserve the privilege of adopting all such legitimate changes as may fairly fall within the spirit and scope of the invention as claimed.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. A tool holder of the character described comprising two similar sections having their opposed faces channeled to receive a tool shank, the opposite longitudinal faces of said sections at one of their ends being convergently inclined and one of such inclined faces constituting the base of the holder and determining the angular set position of the tool while being ground, means carried by one of said sections for positive connection with the other of the sections whereby said sections are secured in assembled relation upon the tool, dowel pins fixed in the latter holder section and the first named section being provided with openings to receive said pins, and additional means carried by one of the holder sections for coöperative engagement with the tool to prevent longitudinal movement of the same with respect to the holder.

2. A tool holder of the character described comprising two similar sections having their opposed faces channeled to receive a tool shank, the opposite longitudinal faces of said sections at one of their ends being convergently inclined and one of such inclined faces constituting the base of the holder and determining the angular set position of the tool while being ground, each of said holder sections at its tapering end being provided in its inner face with a notch communicating with the channel in said section, said notches when the holder is disposed in a vertical position constituting a seat for a tool shank, set screws threaded in one of said sections for binding engagement upon the tool when disposed in the channels to hold the tool against longitudinal shifting movement, one of said set screws being also adapted for binding engagement with a tool shank seated in said notches, and means for retaining the sections of the holder in assembled relation upon the tool.

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

FRED ALBERT GETTINGS.

Witnesses:
CLARENCE E. WALCOTT,
JOHN MANTELL.