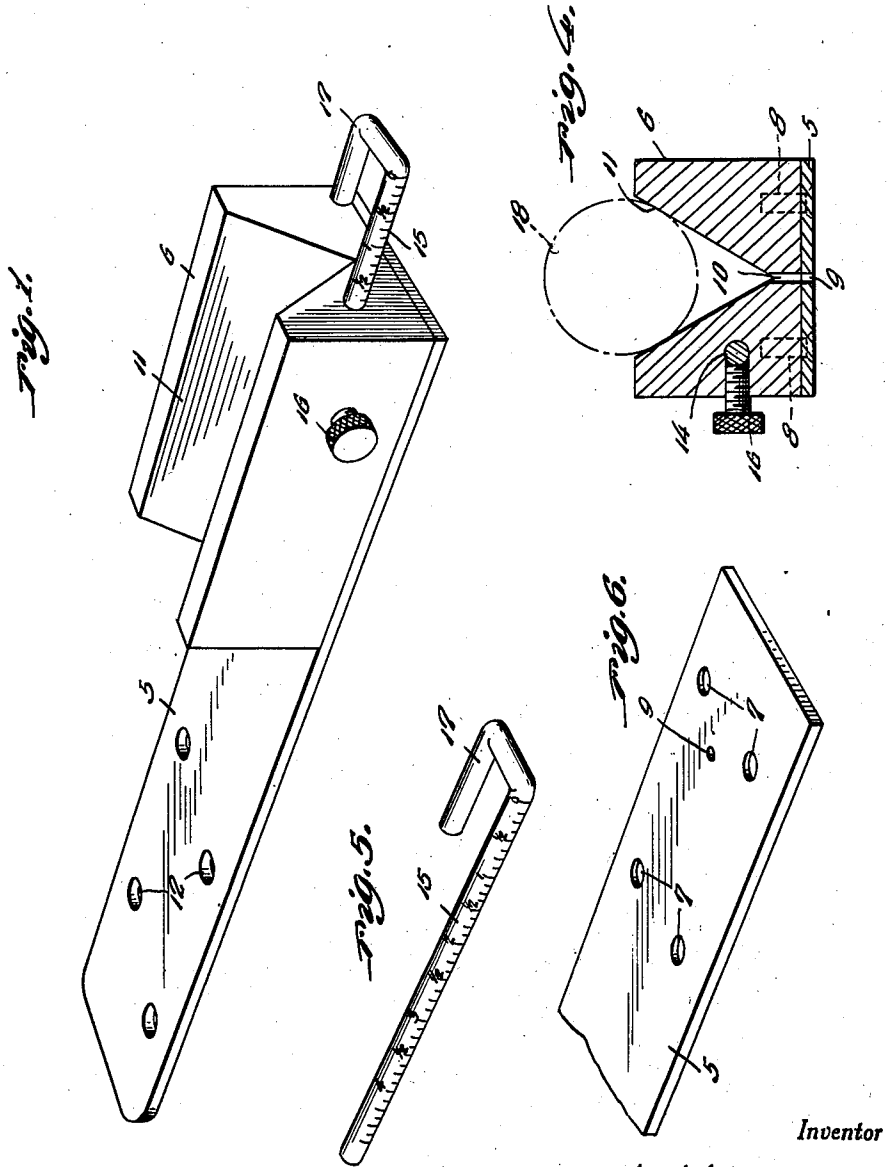
April 29, 1941. H. R. SCHLICHTING 2,240,230

V BLOCK

Filed March 26, 1940 2 Sheets-Sheet 1



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Filed March 26, 1940 2 Sheets-Sheet 2

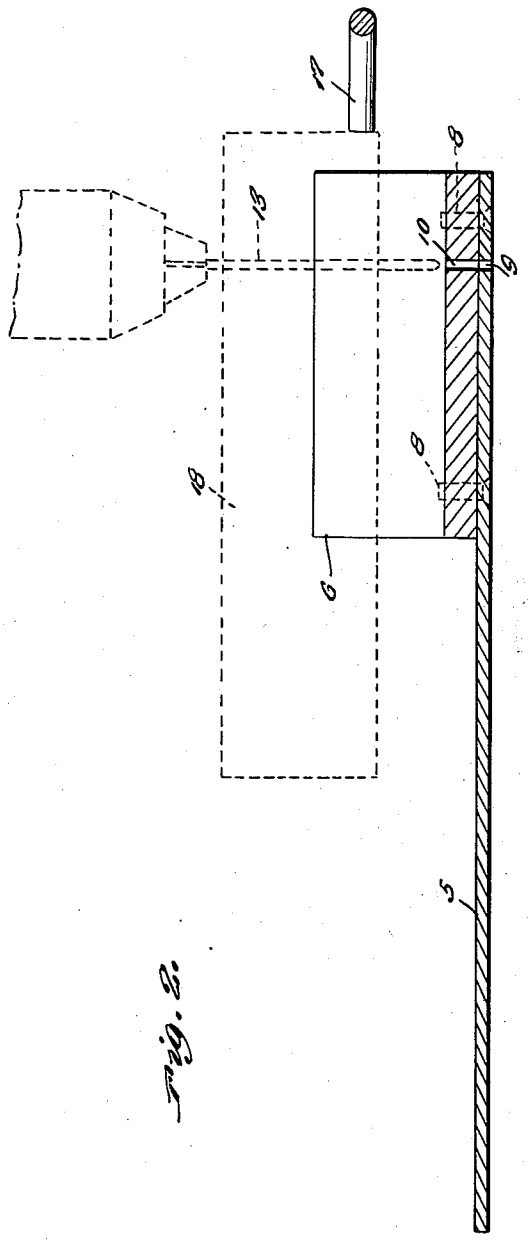


Fig. 3.

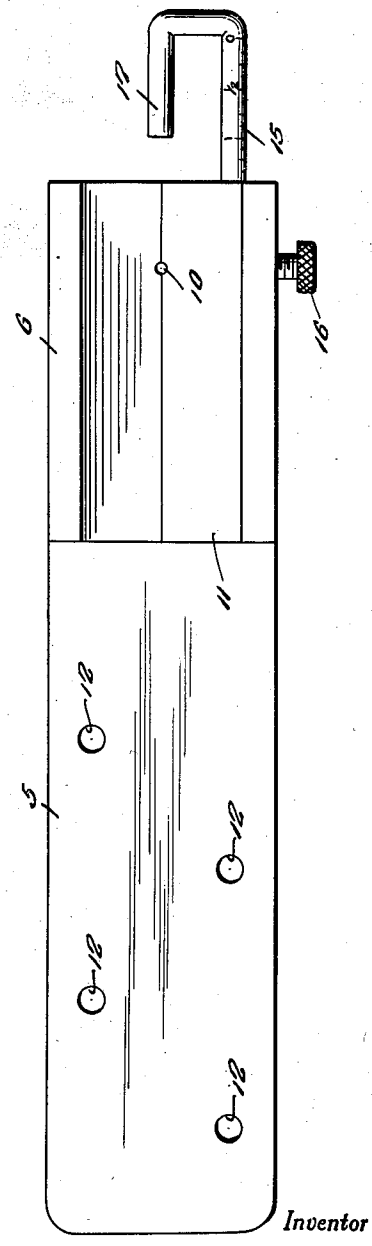


Fig. 5.

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V BLOCK

Harold R. Schlichting, Broad Brook, Conn.

Application March 26, 1940, Serial No. 326,096

1 Claim. (Cl. 77—62)

This invention relates to V blocks such as are used for retaining cylindrical bodies, such as shafts and the like in position for the accurate transverse drilling of the same; and among the objects of the present invention is to provide a V-block assembly which is comparatively simple in the structural parts thereof and in the assembly of such parts, and yet at the same time will fulfill the requirements of such a device.

The invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawings wherein—

Figure 1 is a perspective view of a V block embodying the features of the present invention.

Figure 2 is a longitudinal sectional view through the block and illustrating the application of the same.

Figure 3 is a to plan view of the block.

Figure 4 is a transverse sectional view through the block.

Figure 5 is a perspective view of a graduated scale rod, and

Figure 6 is a fragmentary perspective view of one end of the base plate forming part of the assembly.

Referring more in detail to the drawings it will be seen that in the preferred embodiment of the invention the same comprises an oblong base plate 5 which supports at one end thereof a V block 6, the plate 5 at said one end thereof being apertured as at 7 to accommodate screws or other fastening elements 8 through the medium of which the block 6 is detachably secured to the base plate 5.

At a predetermined position thereon the plate 5 at the referred to end thereof is provided with an aperture 9 with which aligns a vertical or perpendicular aperture 10 provided in the block 6 at the bottom of a substantially V-shaped groove 11 provided in the block and elongated of the block in the direction of the length of the base plate 5.

At the end thereof remote from the block 6 the base plate 5 is provided with a plurality of apertures 12 any two or more of which may be used to accommodate fastening elements through the medium of which the base plate is secured in a more or less permanent manner on the drill press table with the aligning apertures 9 and 10 aligning with the drill 13.

The block 6 at one side of the groove 11 is provided with a longitudinal bore 14 in which a graduated scale rod 15 has a sliding fit. For securing the rod 15 at the desired position of adjustment there is threadedly engaged with the block 6 a set screw 16 adapted to be threaded home against the rod 15 to secure the latter at the desired position of adjustment, one end of the block 6 acting as an index to be read against the graduations on the rod 15; it being noted in this connection that the rod 15 is graduated in terms of inches and fractions thereof.

At one end thereof the rod 15 is provided with a work-engaging head 17 the same being formed by substantially reversely bending the rod back upon itself with the extremity of the rod forming said head being of a predetermined length, in the present instance, substantially one inch as will be appreciated from a consideration of the rod as shown in Figure 5.

In using the device the base plate 5 is secured in position on the table of the drill press with the aligning apertures 9 and 10 aligning, as previously explained, and as shown in Figure 2, with the drill 13. Next, the distance from the end of the work at which the hole is to be drilled in the work, being determined, the gauge rod 15 is shifted to position and secured in position by threading home the screw 16; this position of the rod 15 being such that when the work 18 is placed in the groove 11 of the block 6 one end of the work will be brought into abutment with the work-engaging head 17 of the rod 15 so that the work 18 will be positioned on the block 6 with the end thereof properly positioned longitudinally of the block and with respect to the opening 10 in the block so that the hole to be drilled will be drilled at the exact point desired in the length of the work 18.

Thus it will be seen that with this V-block assembly a hole may be drilled in a cylindrical rod or similar work at any selected point in the length of such work with accuracy and with but a minimum amount of effort required on the part of the machinist to insure such accuracy.

It is thought that a clear understanding of the construction, utility and advantages of an invention of this character will be had without a more detailed description.

Having thus described the invention what is claimed as new is:

A device for holding a shaft while it is being drilled comprising a base plate having a hole in one end portion thereof, a block secured to the base plate at said end portion and having a longitudinally extending V-shaped groove in its top portion, said block having a drill bit receiving hole therein passing from the bottom of the groove through the bottom of the block and in

register with the hole in the plate, said block having a longitudinally extending hole therein placed to one side of the groove, a graduated rod slidably arranged in the longitudinally extending hole and having its outer end of substantially U-shape with the free end of the free limb of the U-shaped part adapted to contact the end of a shaft placed in the groove of the block and a set screw in the block for holding the rod in adjusted position, that part of the base plate not covered by the block having a plurality of spaced holes therein for receiving fastening means for fastening the device to a supporting member after the device has been adjusted to place the hole in the block in position to receive the bit.

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