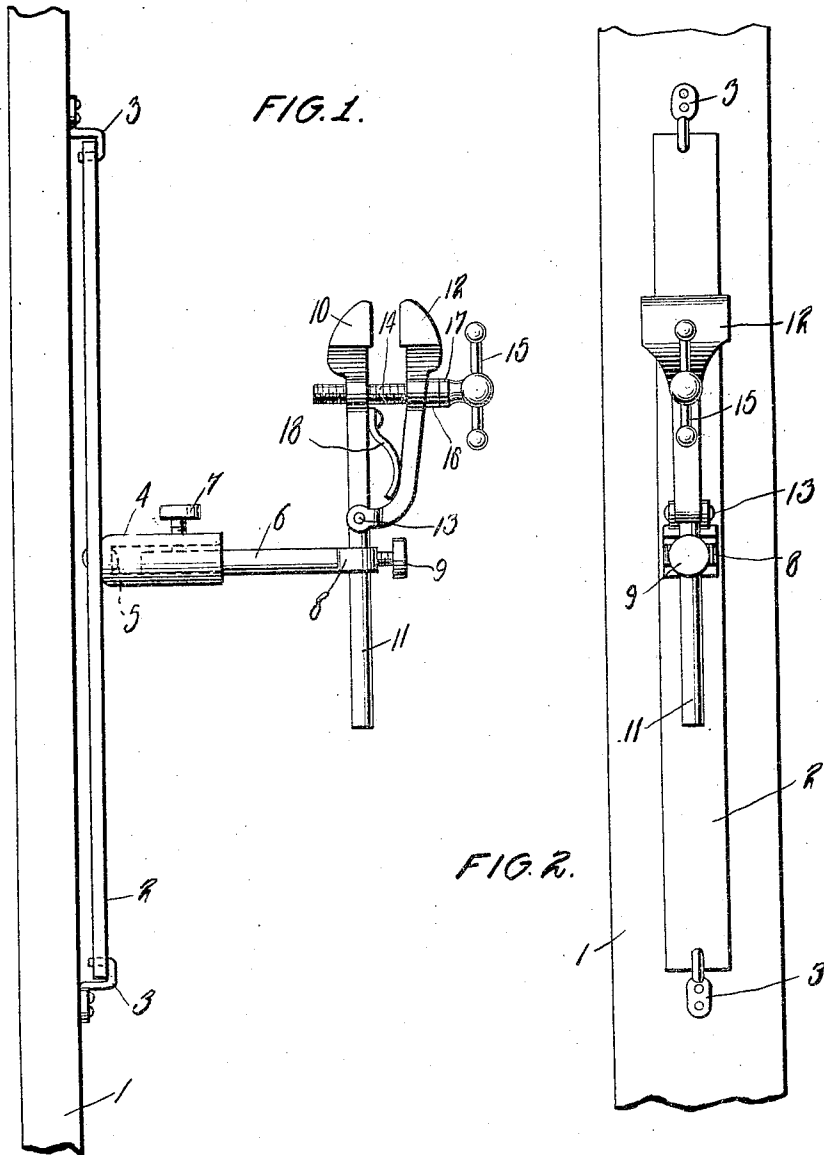


H. A. TOOKER.  
 VISE.  
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1,305,321.

Patented June 3, 1919.



WITNESSES

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# UNITED STATES PATENT OFFICE.

HAROLD A. TOOKER, OF SENECA, NEW MEXICO.

VICE.

1,305,321.

Specification of Letters Patent.

Patented June 3, 1919.

Application filed August 7, 1918. Serial No. 248,745.

*To all whom it may concern:*

Be it known that I, HAROLD A. TOOKER, a citizen of the United States, residing at Seneca, in the county of Union and State of New Mexico, have invented certain new and useful Improvements in Vises, of which the following is a specification.

My invention relates to new and useful improvements in vises.

10 The primary object of the invention is the construction of a vise particularly adapted for use on drilling machines for holding the work to be drilled beneath the boring tool.

15 A further object of the invention is the construction and arrangement of the several parts whereby the vise may be adjusted for holding the work at various angles.

20 Another object is the provision of means for connecting the vise to the drill support.

With these and other objects in view, the invention consists in the novel details of construction and arrangement of parts 25 which will be more clearly understood from the following description and drawings, in which

Figure 1 is a side elevation, and  
Fig. 2 a front elevation.

30 In the drawings the usual drill support is indicated at 1 and has a plate 2 secured thereto by means of the hook brackets 3 which engage in openings adjacent the end of the plate. A socket member 4 is connected to the outer face of the plate 2, intermediate the ends thereof, by means of a rivet or other suitable fastening means 5. A rod 6 is carried by the socket 4, one end of the rod extending into the socket, and 40 a set screw 7 passes through a threaded opening in the socket and engages the rod 6 for securing it within the socket. The opposite end of the rod 6 is provided with an enlargement 8 having a central opening therethrough for the purpose as will be presently described, and a set screw 9 45 passes through the end of the enlarged head 8 as more particularly illustrated in Fig. 1 of the drawings, and for the purpose as will be presently described.

50 The stationary arm of my vise is indicated at 10 and is provided with the shank 11 which is adapted to pass through the opening in the enlarged head 8 and be engaged by the set screw 9. An arm 12 is pivotally connected to the stationary arm

at 13 and forms the adjusting member of the vise. The arm 10 is provided, beneath the upper end thereof, with a threaded opening through which passes a threaded 60 rod 14 having the handle 15 on one end thereof whereby the threaded rod may be turned. The arm 12 is provided with an opening through which the threaded rod passes and this opening is of a sufficient 65 size whereby the arm may swing on the pivot point 13 without engaging the threads on the rod 14. A collar 16 is preferably formed around the opening in the arm 12 and a collar is formed integral with the 70 rod 14, as indicated at 17 and is adapted to bear against the collar 16 as indicated in Fig. 1 of the drawings.

A spring 18, of the shape illustrated in Fig. 1 of the drawings, is secured to the 75 arm 10 and engages the arm 12 and normally holds the arm 12 away from the arm 10.

Having fully described the detailed construction it is thought that the advantages 80 and operation of my vise will be clearly understood. As stated in the objects of the invention the vise is adapted to be connected to the usual support carrying a drilling machine and is connected in such a position as to hold the work beneath the boring tool. In the past considerable difficulty 85 has been experienced in holding the work to be bored and it has been found that if the work should slip or become misplaced 90 in any manner the drill is apt to be broken as well as spoiling the work. It will be seen that I have provided means whereby the vise may be adjusted for holding the work in various positions with relation to 95 the boring tool and that it may also be adjusted to accommodate work of various sizes or thickness. By adjusting the set screw 7 the rod 6 may be turned in the socket and the vise thereby swung at an 100 angle to the support 1. If it is desired to adjust the vise vertically the set screw 9 is adjusted whereby the shank 11 may be raised or lowered to the desired height. By turning the handle 15 the threaded rod 105 14 will be adjusted and the collar 17 engaging the collar 16 on the pivoted arm will swing the arm so as to tightly grip the work between the two arms 10 and 12. When the rod is adjusted to loosen the jaws 110 or arms the spring 18 will force the arm 12 outwardly and away from the arm 10

whereby the work may be easily removed. It will also be seen that I have provided a bracket of simple construction whereby the vise may be connected to the drill support. These brackets comprise hook members which engage in openings adjacent the ends of the plate 2.

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

1. In combination with a support, vertically spaced hooks secured to the support, a plate secured to and between the hooks, a socket secured to the plate intermediate of its ends, a horizontal rod rotatably mounted in the socket, and a vise secured to the rod.

2. In combination with a support, vertically spaced hooks secured to the support, a plate secured to and between the hooks,

a socket secured to the plate intermediate of its ends, a horizontal rod rotatably mounted in the socket, and a vertically adjustable vise carried by the rod.

3. In combination with a support, vertically spaced hooks connected to the support, a plate carried by and between the hooks, a socket secured to the plate intermediate of its ends, a horizontal rod rotatably mounted in the socket and having an opening in the outer end thereof, a vertical rod passing through the opening in the horizontal rod, and a vise carried by the vertical rod.

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

HAROLD A. TOOKER.

Witnesses:

C. R. KISER,

C. C. CALDWELL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."