J. C. SCOGGINS.

DRILL VISE.

APPLICATION FILED JULY 6, 1908.

927,381. **Patented July 6, 1909.**

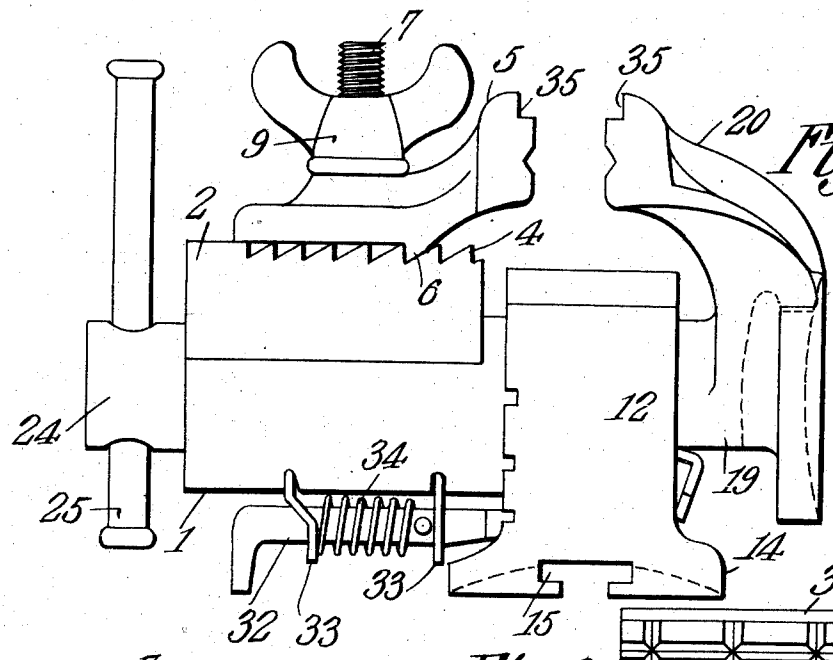


Fig. 1.

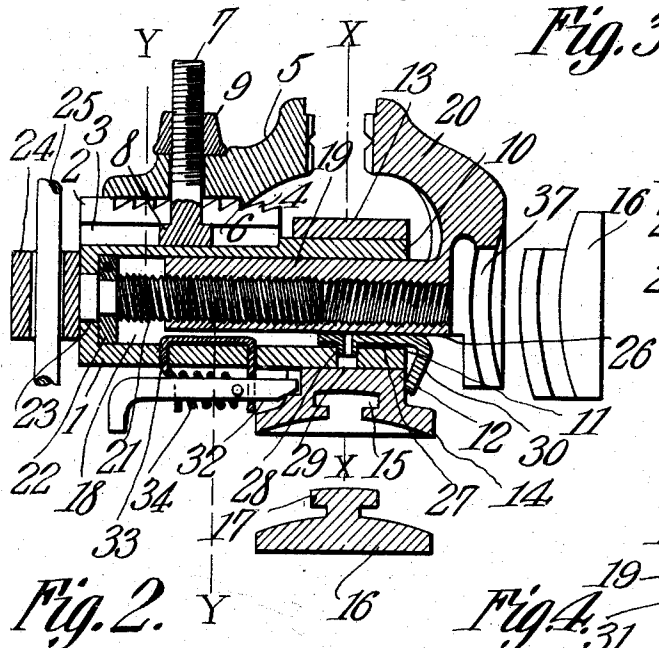


Fig. 2.

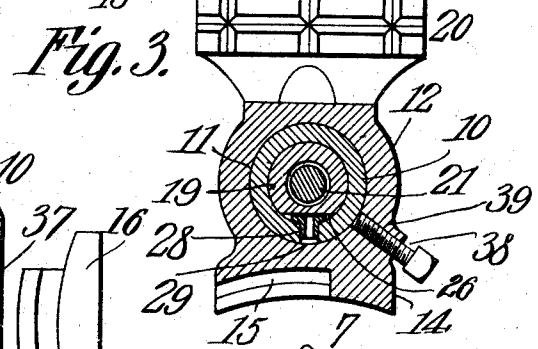


Fig. 3.

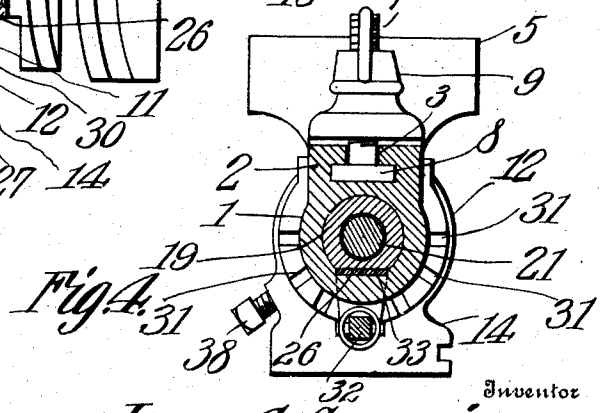


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

JESSE C. SCOGGINS, OF WICHITA, KANSAS.

DRILL-VISE.

No. 927,381. Specification of Letters Patent. Patented July 6, 1909.

Application filed July 6, 1908. Serial No. 442,055.

To all whom it may concern:

Be it known that I, JESSE C. SCOGGINS, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented a new and useful Drill-Vise, of which the following is a specification.

This invention relates to vises for holding work in various positions, and has especial reference to vises for supporting work beneath a drill during the drilling operation.

The invention has for its object to provide an improved vise of this kind by means of which the work may be supported on a base, and held at any angle while being drilled.

The invention also has for its object to provide a vise of this kind which may be used either vertically or horizontally.

The invention consists of an improved vise of this character, and in details thereof as hereinafter set forth and claimed.

Referring to the drawing: Figure 1 is a side view of a vise constructed in accordance with this invention. Fig. 2 is a side view thereof in longitudinal section. Fig. 3 is an end view in vertical section on the line X—X Fig. 2. Fig. 4 is a vertical section on the line Y—Y Fig. 2.

In carrying out the invention the vise is constructed with cylindrical member 1, formed with the rectangular portion 2 on its top having an open ended longitudinal T-shaped slot 3 and a serrated top surface 4, mounted on the top of the portion 2 is a relatively fixed jaw 5 having a transverse tooth 6 adapted to engage with the serrated surface 4. The jaw 5 is movable over the top of portion 2 and is held in adjusted position thereon, by means of screw 7 having a square head 8 located in the slot 3 and slidable therein.

A wing nut 9 on the upper part of screw 7 clamps the jaw 5 in adjusted engagement with the serrated surface 4 on the top of portion 2. The cylindrical member 1 is formed at one end with a tubular projection 10, which rests, and is adapted to turn in the cylindrical passage way 11 of a work supporting standard 12 having a square top or table 13 on which the work is supported. The standard 12 is formed with a circular base 14, which is concave on its underside, and has a T-shaped slot 15. A convex base plate 16 having a T-shaped projection 17 is seated in the base 14 and is secured thereto by means of the projection 17 which is movable in the slot 15 in the base 14 and engages therewith. Extending through the tubular projection 10, and into a cylindrical chamber 18, in the cylindrical member 1 is the tubular internally threaded shank 19 of a movable jaw 20, said shank being in screw threaded engagement with a screw rod 21 having its outer end held to turn in a fixed collar 22 and projecting through an opening 23 in the end of chamber 18 and terminating in a socket head 24 with a handle 25 slidable therein.

The lower side 26 of a shank 19 is formed flat, and located between the flat side 26 of shank 19 and the inside of tubular projection 10 is a flat pin 27 having a projection 28 engaging a hole 29 in the side of tubular projection 10. By this means the shank 19 is held from turning in the tubular projection, moving lengthwise on the tubular projection 10, by the bent end 30, of a pin 27 which projects in front of the lower part of base 12.

It will readily be seen that the jaws 5, and 20 and their several parts and connections being carried by the tubular projection 10, and the latter being adapted to rotate in the standard 12, that the jaws 5 and 20 and the work held thereby may be located at any angle relative to the base while the work is supported on the table 13.

To hold the jaws and the several parts of the vise in such adjusted positions, one end of the standard 12 is provided with a circular series of notches 31 in one end with which a detent or pin 32 mounted in hangers 33 on the cylindrical portion 1 is adapted to adjustably engage. The pin is thrown into engagement with notches 31, and held in locked engagement thereby by means of a coiled spring 34, mounted on and secured to the pin 32 and abutting against one of the hangers 33. Each of the jaws 5, and 20 is formed with an offset 35, to adapt a flat piece of metal to be gripped edgewise between them.

The outer end of the tubular shank 19 is formed with a concave base 36 with a T-shaped slot 37 formed therein similar to the base 14 whereby the vise may be secured to the base plate 16. By this means the vise may be located in a vertical position for drilling purposes, as well as in the horizontal position when standard 12, with its base 14 and plate 16 is used.

As an additional means for holding the vise from turning in its base, a screw 38 is

provided which extends through a hole 39 in the side of the standard 12 and impinges against the tubular projection 10.

Having thus described the invention, I claim:

1. In a device of the character described, a standard having a work supporting table on its top, a vise adjustably rotatable in said standard; and means for locking the vise in adjusted position with respect to said work supporting table.

2. In a device of the character described, a standard having a concave slotted base; a detachable convex base plate seated in and secured to said concave base; a vise having a fixed jaw and a movable jaw mounted on a slidable shank the outer end of said shank having a concave slotted base adapted to receive and retain said convex base plate.

3. In a device of the character described, a standard having a cylindrical passage way, and a work supporting table on its top; a vise adjustably rotatable in the standard and having a main portion with a tubular projection located in said cylindrical passage way in the standard and adapted to turn therein; a fixed jaw mounted on the main portion of the vise; a movable jaw provided with a shank extending through, and slidable in said tubular projection, and means for locking the vise in adjusted position with respect to said work supporting table.

4. In a device of the character described, a standard having a cylindrical passage way, and a work supporting table; a vise adjustably rotatable in said standard, and having a main cylindrical portion formed with a tubular projection located in and adapted to turn in the standard, a relatively fixed adjustable jaw mounted on the main portion of the vise, a movable jaw with a cylindrical shank extending through and slidable in said tubular projection; means for holding said shank from turning and means for locking the vise in adjusted position with respect to said work supporting table.

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

JESSE C. SCOGGINS.

Witnesses:
T. A. NORRIS,
P. L. PHELPS.