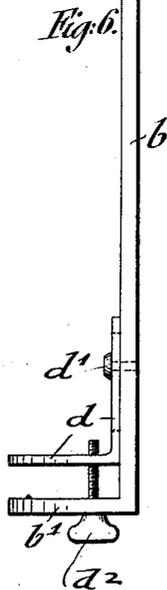
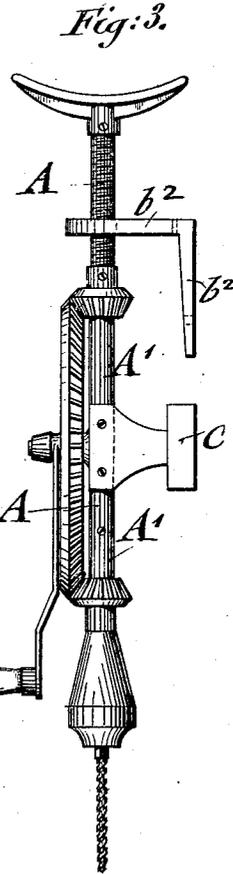
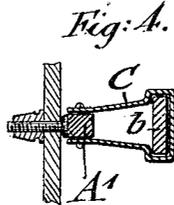
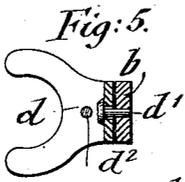
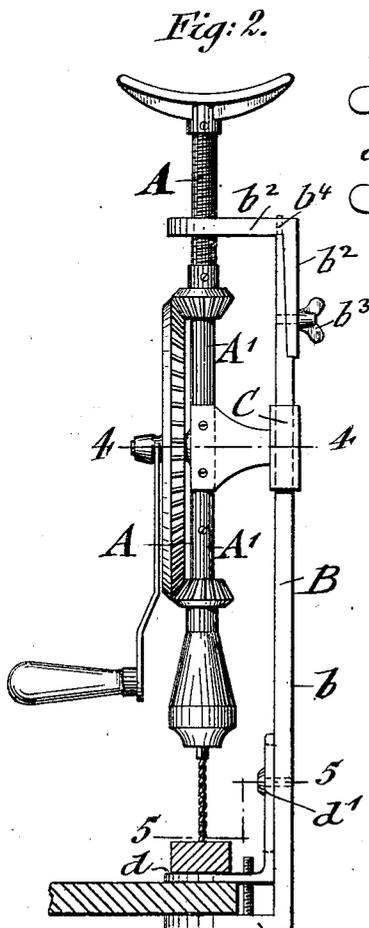
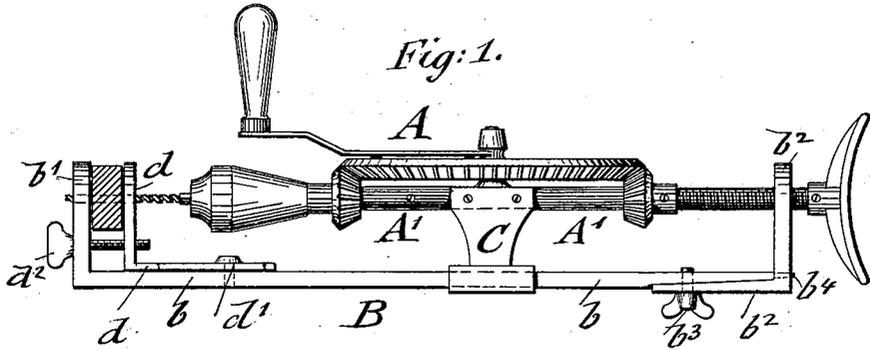


F. P. SHEK.
SUPPORT FOR HAND DRILLS.

(Application filed Oct. 26, 1901.)

(No Model.)



WITNESSES:
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SUPPORT FOR HAND-DRILLS.

SPECIFICATION forming part of Letters Patent No. 693,166, dated February 11, 1902.

Application filed October 26, 1901. Serial No. 80,054. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. SHEK, a citizen of the United States, residing in New York, borough of Brooklyn, and State of New York, have invented certain new and useful Improvements in Supports for Hand-Drills, of which the following is a specification.

This invention relates to an improved support for hand-drills by means of which the drill can be used in a more effective manner and in different positions relatively to the work to be performed, so that the efficiency and usefulness of the hand-drill are considerably enlarged; and the invention consists of a support for hand-drills, consisting of a frame having a main piece, an upper angular piece having an aperture at its outer end for engaging the threaded spindle of the hand-drill and an aperture adjacent its bend for receiving the pin of the upper end of the main piece, and an angular lower end which is provided with an angular clamping-piece for attaching the support to a bench or to the work to be operated on, while the main portion of the drill is guided in a holder that is permanently attached to the drill-stock, said upper end of the frame being detachable from the middle portion, so as to permit the removal of the supporting-frame from the drill when it is desired to use the same in the usual manner.

In the accompanying drawings, Figure 1 represents a side elevation of my improved support for hand-drills, showing the drill applied in a horizontal position to a stationary piece of work in which holes are to be drilled. Fig. 2 is a side elevation of my improved support for drills, showing the drill applied to a bench or other support and the work placed in position thereon. Fig. 3 is a side elevation showing the supporting-frame removed from the drill, so that the same can be used in the ordinary manner. Figs. 4 and 5 are horizontal sections on lines 4 4 and 5 5, Fig. 2. Fig. 6 is a side elevation of the main portion of my improved support, shown as detached from the drill; and Fig. 7 is a side view of the thumb-screw for connecting the parts of the supporting-frame.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a hand-drill of the usual approved construc-

tion, and B my improved support for the same, which is formed of a U-shaped frame composed of two pieces—a main piece b , having an angular end piece b' at its lower end, and a second angular detachable end piece b^2 at its upper end, which is applied to the screw-spindle of the drill A and connected with the tapering end of the main portion b by means of a thumb-screw b^3 , as shown in Figs. 1 and 2, the end of the main piece being provided with a pin b^4 , that engages a corresponding opening in the angular end piece b^2 . To the lower end of the main piece b is attached an angular piece d , one leg of which, adjacent the main piece, is slotted and guided thereon by a headed screw d' , while the other leg extends parallel with the lower end piece b' and is engaged by a thumb-screw d^2 , so that the angular piece d can be adjusted relatively to the end piece b' and either clamped to a suitable bench or other support, as shown in Fig. 2, or directly to the work in which holes are to be drilled, as shown in Fig. 1. The main piece b is guided in a holder C, the shank of which is riveted, screwed, or otherwise attached to the drill-stock A', said holder being preferably made of suitable sheet-steel and provided with a rectangular opening for the main piece b of the supporting-frame, as shown in Fig. 4. The supporting-frame B permits the application of the drill for many purposes in a more convenient manner, as it can be clamped directly to the work when holes are to be drilled in the same, as shown in Fig. 1, or by placing the work below the drilling-tool proper, as shown in Fig. 2, in which case the support is clamped to a bench or other support. In case it should be desired to use the drill without the support the main piece b is disconnected from the upper end piece b^2 by unscrewing the clamping-screw b^3 , so that the main frame can be drawn out longitudinally from the holder C and detached from the drill. The holder C is then used as a handle for holding the drill by one hand, while the other hand operates the crank-handle and transmitting-gears of the drill in the usual manner. The upper end piece b^2 is preferably permitted to remain in position on the threaded end of the drill-spindle, though it can also be removed therefrom by detaching the rest-piece at the

end of the same. In most cases, however, it is not necessary to remove the upper end piece.

My improved supporting-frame for hand-drills is preferably made of wrought-iron and forms a cheap and effective attachment by which the use of the drill is greatly facilitated and its scope considerably enhanced.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A support for hand-drills, consisting of a main piece, a holder supported permanently thereon and provided with a rectangular opening, said main piece having an angular lower end, an angular adjustable clamping-piece guided on the lower end of the main piece, a

clamping-screw passing through the lower end of the main piece and the clamping-piece, and an angular piece having an aperture at its outer end for engaging the threaded spindle of the hand-drill, and having an aperture adjacent its bend for receiving the pin provided at the end of said main piece and secured to the main piece by a clamping-screw, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FRANK P. SHEK.

Witnesses:

PAUL GOEPEL,
GEORGE C. GEIBEL.