J. F. BRINCKMANN.

Screw-Cutting Die-Holders.

No. 199,408. Patented Jan. 22, 1878.

FIG. 1.

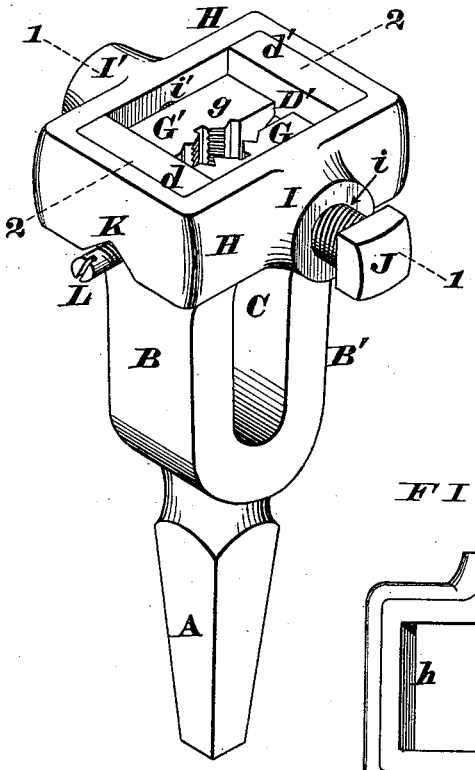


FIG. 2.

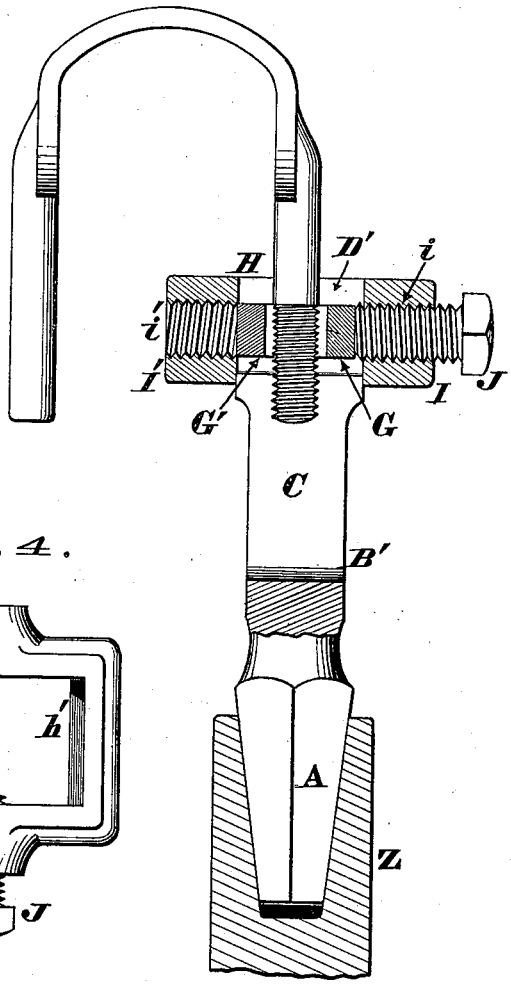


FIG. 4.

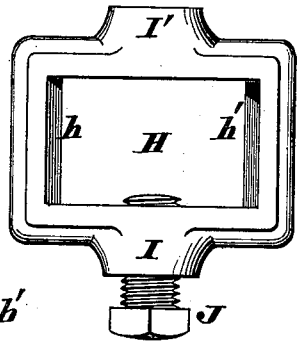


FIG. 3.

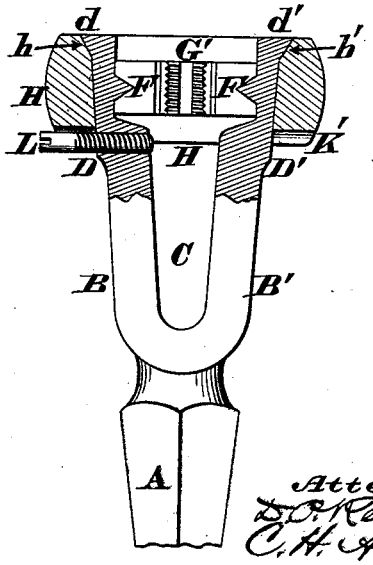
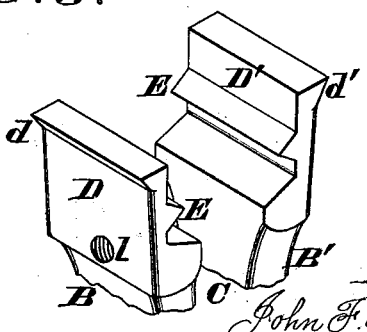


FIG. 5.



Attest.

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JOHN F. BRINCKMANN, OF CINCINNATI, OHIO.

IMPROVEMENT IN SCREW-CUTTING-DIE HOLDERS.

Specification forming part of Letters Patent No. **199,408**, dated January 22, 1878; application filed December 14, 1875.

To all whom it may concern:

Be it known that I, JOHN F. BRINCKMANN, a resident of the city of Cincinnati and State of Ohio, have invented certain new and useful Improvements in Die-Wrenches, of which the following is a specification:

My invention comprises a peculiar-shaped wrench or holder for securely retaining two ordinary screw-chasing bits, the latter being confined to their proper position within the implement by means of a set-screw that traverses a clamp or yoke fitted to the upper end of the wrench. The lower end of the implement is provided with a square shank of suitable size to fit into an ordinary brace-bit or socket-wrench, which arrangement enables the device to be employed in a comparatively contracted space. The peculiar construction of my device renders it very strong, durable, and compact, and ready of adjustment.

In the accompanying drawing, forming part of this specification, Figure 1 is a perspective view of my implement, the dies being shown separated. Fig. 2 is a vertical section of the same at the line 1 1, Fig. 1, the dies being shown in the act of cutting a thread on a carriage-clip, and the shank of the wrench represented as inserted in the stock of a brace-bit. Fig. 3 is a vertical section at the line 2 2, Fig. 1. Fig. 4 is a plan of the clamp detached from the wrench, and Fig. 5 is a perspective view of the jaws that hold the dies.

A represents a square or other non-circular shank, of such size as to fit snugly within a brace-bit or socket-wrench, as shown at Z in Fig. 2; or, if preferred, this shank may be grasped by a hand-vise. This shank or stem is forked at B B′, thereby forming an interval, C, of any suitable length. These forked members terminate at top in jaws D D′, having shoulders *d d′*, for a purpose that will presently appear. Projecting from the opposing faces of the jaws D D′ are tongues E, that are adapted to enter grooves F at the ends of the dies G G′. These dies are furnished with customary screw-chasers *g*.

Adapted to fit snugly around the jaws D D′ is a stout frame, yoke, or clamp, H, from whose opposite sides project bosses I I′, provided, respectively, with internal threads *i i′*, to receive a set-screw, J, which latter serves to impart the necessary pressure to the dies G G′. The inner upper edges of this yoke are chamfered off at *h h′*, so as to fit snugly against the inclined shoulders *d d′* when the various parts of the implement are fitted together. The ends of the yoke are notched on their under edges at K K′ to receive a screw, L, which latter is tapped into the jaw B at *l*. The object of this screw is to prevent the yoke slipping down after it has once been secured in position. The dies G G′ are fitted within the jaws D D′ previous to the application of yoke H, which latter is then slipped up until its chamfered edges *h h′* come in contact with the undercut shoulders *d d′*. These shoulders thus act as stops to prevent the yoke slipping off from the upper end of the implement. The screw L is now inserted in the cavity K, and engaged with the threaded aperture *l*, so as to prevent any accidental descent of the yoke.

After the dies have been secured within the implement, the rod to be threaded is inserted between the dies *g*, and the proper pressure is obtained by manipulating the screw J in the usual manner.

The implement is rotated by the application to shank A of any convenient tool, such as a hand-vise, socket-wrench, or brace-bit, as shown at Z in Fig. 2.

While the operation of threading the rod is being carried on, the jaws D D′ are prevented from spreading apart from each other by the yoke H, which is stout enough to preserve the implement in its proper shape. The threaded rod, as rapidly as it is cut, descends into the space C, that intervenes between the members B B′ of the wrench, and by making this recess from three to four inches long it will be capacious enough for all the light purposes that the implement is designed for, as it is not intended to use it for heavy work, where considerable of a screw is needed.

This illustration shows the wrench in the act of threading one of the stems of a carriage-clip, and it will be noticed that the jaws D D′ and yoke H I I′ J may be rotated in either direction without coming in contact with the other stem of the clip.

In case the nut *i* should be defective or become worn, the screw J may be engaged with the one *i′*, in which case the yoke H must be

turned around so that the recess K′ may embrace the retaining-screw L.

The entire implement, except the dies, may be manufactured of malleable iron.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a die-wrench, the branches B B′, provided at their extremities with shoulders *d d′*, in combination with the yoke, whose opposite upper inner edges are beveled to engage said shoulders, and screw L, substantially as and for the purposes set forth.

2. The die-wrench composed of the branched stock A B B′, provided with shoulders *d d′* and tongues E, and dies G, provided with grooves F and screw J, and the yoke provided with screw F, substantially as and for the purposes set forth.

JOHN F. BRINCKMANN.

Attest:
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CHARLES H. AVERY.