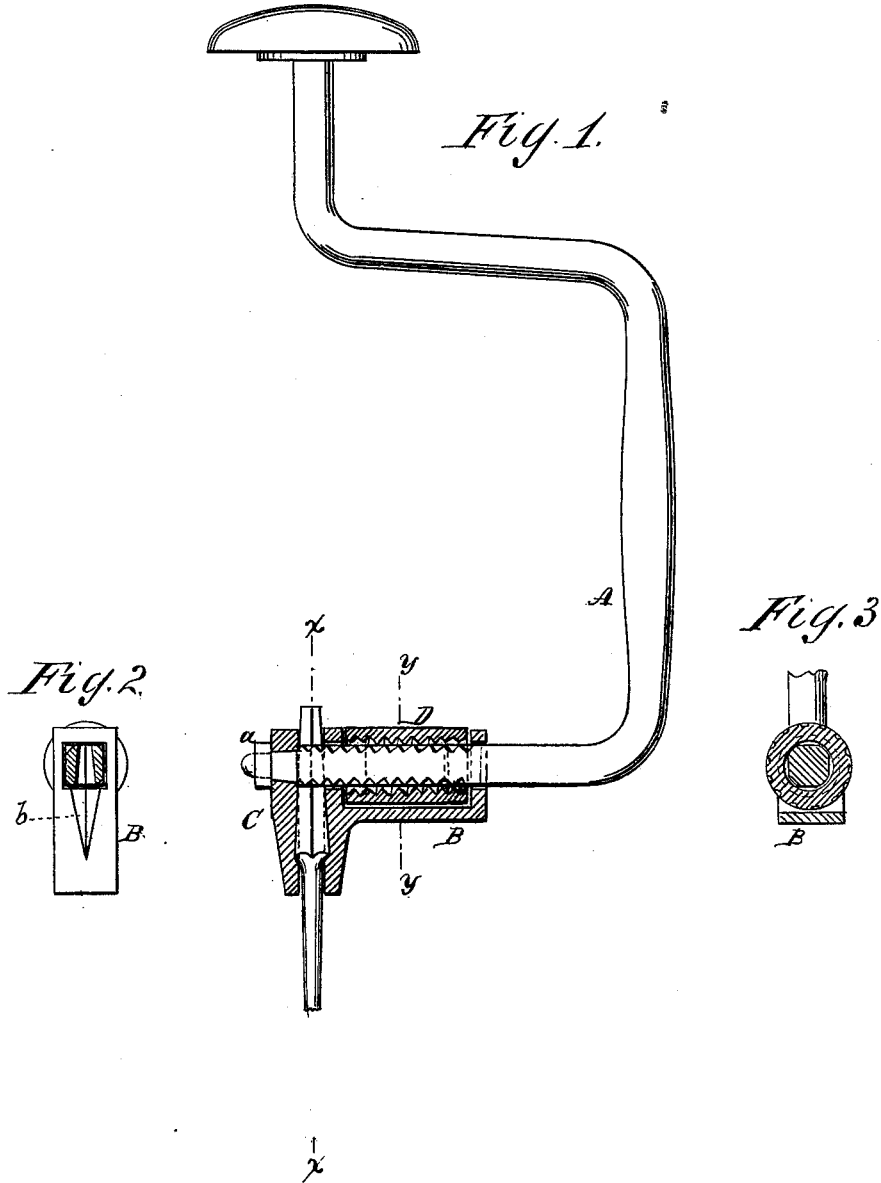


E. C. MERRYMAN.
Bit-Brace.

No. 208,623.

Patented Oct. 1, 1878.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDWARD C. MERRYMAN, OF MONKTON, MARYLAND.

IMPROVEMENT IN BIT-BRACES.

Specification forming part of Letters Patent No. **208,623**, dated October 1, 1878; application filed September 29, 1877.

To all whom it may concern:

Be it known that I, E. CLINTON MERRYMAN, of Monkton, in the county of Baltimore and State of Maryland, have invented a new and Improved Bit-Brace, of which the following is a specification:

Figure 1 is a side elevation in section of my improved bit-brace. Fig. 2 is a vertical section on line *x x* in Fig. 1. Fig. 3 is a transverse section on line *y y* in Fig. 1.

The object of my invention is to construct a bit-brace that may be used for turning bits, taps, and similar tools, and may also be used as a wrench for turning nuts, &c.

Referring to the drawing, A is the body of a bit-brace of the usual form, except that its lower arm extends straight out from the handle, and is squared to receive the movable wrench-jaw B and the fixed jaw C, the latter being secured in place by a nut, *a*. The movable jaw is cut away to receive the internally-threaded sleeve D, which is fitted to the arm of the brace, the corners of which are threaded. A tapering V-shaped groove, *b*, is made in the face of each jaw, and a mortise is made through the arm of the brace to receive the shank of a bit or tap.

I am aware of the fact that a brace has been provided at its lower extremity with a wrench having a separate screw for adjusting the movable jaw, as shown in the patent to W. F. Cross, March 28, 1876; but the said screw, by reason of its location, affords an impediment to the

swing of the brace when two or more bolts are adjacent to each other, while the rosette for turning said screw is liable to catch in the clothing. I therefore confine my invention to the sleeve arranged concentrically upon the arm of the brace, which dispenses with the necessity of a rosette, and allows the arm to swing freely over the projecting end of a bolt close to the one being operated upon.

In arranging the V-shaped groove, also, the same is located in the inner or upper portion of the jaws, and extends only about two-thirds the distance to their extremities. This preserves flat and strong faces for the jaws at their extremities, which adapts them to nuts, and also, by inclosing partially the shoulder of the bit, prevents the latter from slipping out from its position in the grooves and the perforation in the arm.

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

The jaws B C, having flat faces near their outer ends and V-shaped grooves formed in the inner portion of their faces, in combination with the brace-arm having a perforation there-through to receive the end of the bit, substantially as shown and described.

EDWARD CLINTON MERRYMAN.

Witnesses:

JAMES L. ILGENFRITZ,
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