(29.)

J. RICE.

Improvement in Bit Braces.

No. 122,652. Patented Jan. 9, 1872.

Fig. 1

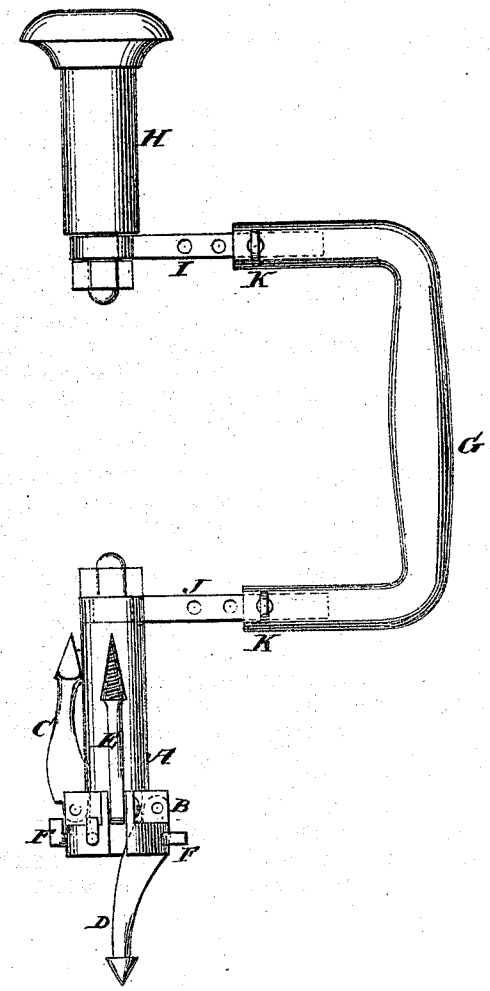
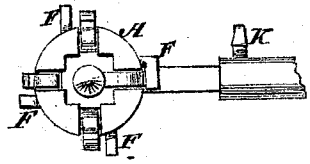


Fig. 2.



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UNITED STATES PATENT OFFICE.

JAMES RICE, OF PRAIRIE CREEK, INDIANA.

IMPROVEMENT IN BIT-BRACES.

Specification forming part of Letters Patent No. 122,652, dated January 9, 1872.

Specification describing certain Improvements in Boring-Brace, invented by JAMES RICE, of Prairie Creek, in the county of Vigo and State of Indiana.

My invention will first be fully described and then clearly pointed out in the claims.

In the accompanying drawing, Figure 1 represents the improved brace. Fig. 2 is an end view.

Similar letters of reference indicate corresponding parts.

A is the lower end or mouth portion of the brace. This portion is made tubular and provided with a fastening thumb-screw for the use of bits and other tools used in braces, and in this respect is like all ordinary braces. Around this mouth is a collar, B, which is slotted through to the central bit-tube. These slots may be more or less in number. In each of these slots a bit, reamer, screw-driver, countersink, or other similar tool is pivoted, the tools being so shaped that when not in use they may be turned up out of the way or turned down for use, as seen in the drawing. When turned down the form is such that the center corresponds with the center of the mouth A. C, D, and E represent tools thus arranged. When the tools are down (as D is seen) they are held in position by buttons F. G is the handle piece of the brace, the ends of which are tubular. H is the breast piece, and I and J are crank-bars, attached one to the breast piece H and the other to the mouth piece A, the ends of which bars enter the tubular ends of the handle piece G, and are made to slide back and forth, or are made adjustable therein, as seen in the drawing. K K are thumb-screws, by which the bars are fastened in the handle piece in any desired position.

By this means the sweep or leverage of the brace is increased or diminished, as may be desired. The crank-bars I J are made of steel and the handle piece of wrought or malleable iron.

I do not limit or confine myself to the precise form or arrangement of any of the parts described, as they may be varied in many ways without departing from my invention.

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

1. The bits C D E, collar B, and tube A, combined in a boring-brace, as and for the purpose described.

2. A brace-collar, B, having slots with pivots therein and buttons F, as and for the purpose set forth.

JAMES RICE.

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