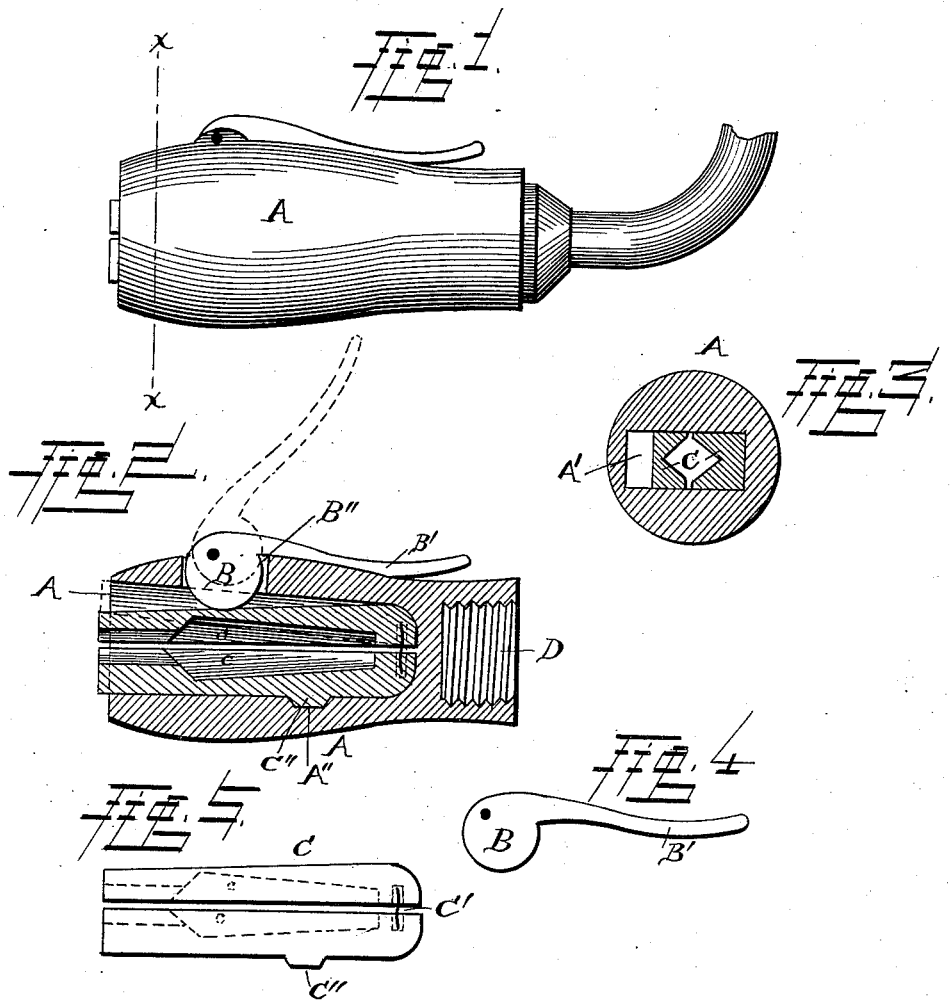
(No Model.)

J. W. JOHNSON.

BRACE.

No. 303,643. Patented Aug. 19, 1884.



WITNESSES:

Fred. L. Dieterich.

J. Fred. Reily.

James W. Johnson.

INVENTOR.

By Louis Bagger & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES WILLIAM JOHNSON, OF OTTAWA, KANSAS.

BRACE.

SPECIFICATION forming part of Letters Patent No. 303,643, dated August 19, 1884.

Application filed January 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. JOHNSON, a citizen of the United States, and a resident of Ottawa, in the county of Franklin and State of Kansas, have invented certain new and useful Improvements in Braces; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved brace. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a cross-sectional view taken on line *x x*, Fig. 1. Fig. 4 is a detail view of the lever or eccentric by which the clamping-jaws are locked in their closed position, and Fig. 5 is a similar view of the clamping-jaws.

Similar letters of reference indicate corresponding parts in all the figures.

My invention relates to that class of braces or bit-stocks in which a pivoted eccentric provided with a suitable handle is adapted to lock the auger or drill which is being used in its operative position in the brace; and it consists in the improved construction and combination of parts of a brace of the above-mentioned class, as will be hereinafter more fully described and claimed.

In the accompanying drawings, A represents the main portion or body of the brace, which is provided with a longitudinal recess, A′, which diminishes in width as it enters into the body A.

In one side of the wall of the recess A′, and communicating with the same, is a second and smaller recess, A″, for the purpose hereinafter specified. One side of the body A is provided with a slot, B″, communicating with the longitudinal recess A′, the said slot being preferably made on that side of the body A which is opposite to the side in which the smaller recess A″ is cut. Within this slot is pivotally secured the eccentric B, which is provided with a suitable handle, B′, which lies close against the side of the brace when the drill or other tool is locked in its operative position within the same.

C indicates the removable clamping-jaws, which are shown in detail in Fig. 5 of the drawings, the said jaws being suitably recessed upon their inner sides or faces at *c* for the reception of the upper end of the drill or other tool which it is desired to employ. These jaws are hinged together at their upper ends at C′, one of them—the larger or thicker—being provided with a lug or projection, C″, adapted to fit within the smaller recess A″ while the other jaw is beveled or cut away upon its outer side.

To operate my improved brace, the handle B′ of the eccentric B is thrown out into the position shown in dotted lines in Fig. 2 of the drawings, when the thinner clamping-jaw can be swung into its open position and the upper end of the tool readily inserted, when by pressing the handle of the eccentric back into its closed position the tool will be firmly locked within the brace, the lug or projection C″ on the thicker clamping-jaw serving to prevent the jaws from being forced out by the locking-eccentric or from being pulled out by the tool. The upper end of the body of the brace is provided with a suitable screw-threaded aperture, D, which admits of the brace being readily attached to any ordinary brace-stock or drill-stock.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of my improved brace will readily be understood without requiring further explanation.

It will be seen that my improved brace is simple in construction, and is therefore not liable to break or get out of order, while by constructing the clamping-jaws in the manner described they can, when worn through use, be readily removed and a new pair substituted, as will readily be understood.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

As an improvement in braces, the combination of the brace-body A, provided with a screw-threaded aperture, D, longitudinal recess A′, smaller recess A″, and slot B″, eccentric B, having an operating-handle, B′, and hinged clamping-jaws C, one of which is provided with a lug or projection, C″, all constructed and arranged to operate substantially in the manner and for the purpose shown and described.

JAMES WILLIAM JOHNSON.

Witnesses:
GEO. D. STINEBAUGH,
J. C. BARRICKMAN.