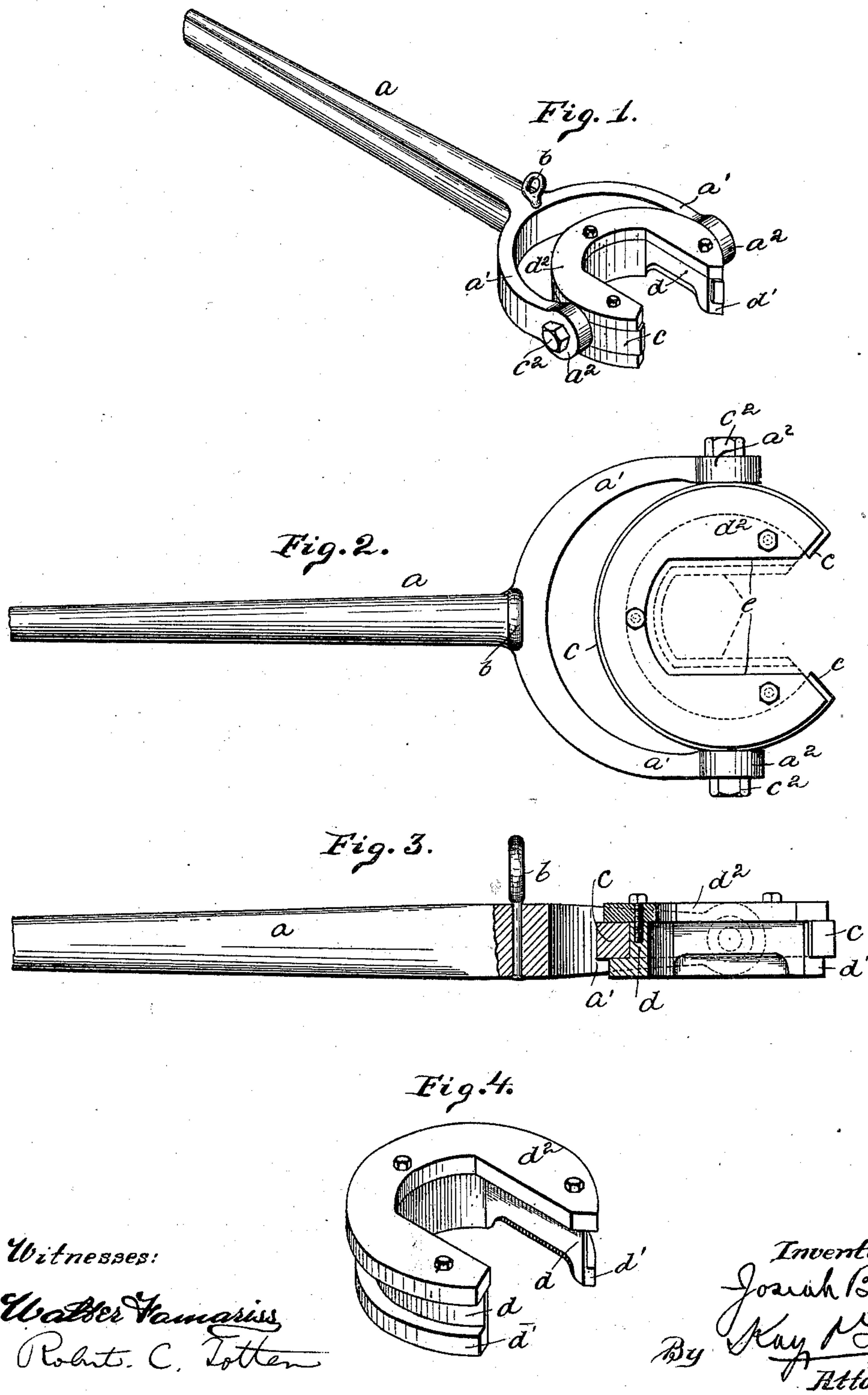


(No Model.)

J. BARRETT.
TOOL FOR HANDLING DRILL BITS, &c.

No. 561,305.

Patented June 2, 1896.



UNITED STATES PATENT OFFICE.

JOSIAH BARRETT, OF BELLEME, PENNSYLVANIA.

TOOL FOR HANDLING DRILL-BITS, &c.

SPECIFICATION forming part of Letters Patent No. 561,305, dated June 2, 1896.

Application filed April 6, 1896. Serial No. 586,296. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH BARRETT, a resident of Belleme, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Tools for Handling Drill-Bits or other Tools; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to tools for handling drill-bits or other tools used in drilling or operating Artesian wells and for like purposes, the tools being also applicable generally to the handling of any heavy parts to be screwed together when in a vertical position, whether in connection with Artesian wells or in other mechanical operations. It is an improvement on Letters Patent No. 527,103, dated October 9, 1894, issued to me, and is intended to meet a difficulty in the use of tools for handling heavy parts requiring to be screwed together, owing to the various sizes of such parts requiring as at present constructed a separate wrench adapted to each particular size of drill-bit or other heavy part requiring to be handled.

My invention consists, generally stated, in combining with the ring mounted in the lever, such as shown in said patent, a removable angular wrench portion, mounted within said ring and turning thereon, having an outer groove within which the ring fits, and one of the flanges forming said groove, formed of removable and interchangeable plates, having interior angular portions varying in size to suit the size of the parts to be screwed together.

To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a perspective view showing the removable angular wrench portion mounted in the ring. Fig. 2 is a plan view showing the removable angular wrench portion secured to the wrench-body, different sizes being shown by dotted lines. Fig. 3 is a vertical section through the wrench and the removable angular wrench portion, and Fig. 4 is a detailed view of the removable angular wrench portion.

Like letters indicate like parts in each of the drawings.

In the drawings, *a* represents the handle or lever of the wrench, which may be supported, if desired, by any suitable crane or derrick by means of a chain or block with a hook or ring passing through the eye *b*. This handle or lever *a* has at its forward end arms *a'*, which extend around and form the bearings for the ring *c*, swiveled on trunnions *c'* in bearings *a''* in the arms *a'*. This ring *c* is open at one side. The removable angular wrench portion *d* is mounted in the ring *c*, its exterior diameter corresponding to the interior diameter of the said ring *c*, and its interior dimension corresponding in size and shape to the largest size of drill-bit or other heavy article requiring to be screwed together. The removable angular wrench portion, which answers to the fixed tool-holder in the Letters Patent No. 527,103, above referred to, is made in two pieces, consisting of the main piece *d*, above referred to, and the removable flange-plate *d'*, although it is obvious that the flange *d'* may also be separate and the two flanges connected by bolts, the flange *d* and the flange *d'* serving to mount it in the ring *c*. This removable angular wrench portion has an opening in the side answering to the size of the largest drill-bit or other heavy part requiring to be screwed together. The loose flange *d'* may be attached in any suitable way—say by stud-bolts, as shown in the drawings. Any suitable number of these removable flanges *d'* may be employed with the main piece *d*, each such flange having a wrench-seat *e* therein of different size, as shown by dotted lines, and fitting a different size of wrench, so that by changing these plates or flanges the wrench can be employed with different-sized bits or tools and the bits or tools carried thereby to and centered in the tool into which it is to be screwed or engaged by the wrench when unscrewed and carried thereby away, being thus supported and centered with ease by the operation.

By using the tool-holders with the interchangeable flanges I am thus enabled to greatly reduce the cost of the wrench, doing away with the cost of making separate sets

of the other parts than the flange-plates for each size of drill-bit or other heavy parts requiring to be screwed together.

What I claim as my invention, and desire
5 to secure by Letters Patent, is—

In combination with a ring mounted in a lever, a removable angular wrench portion mounted within said ring and turning therein, having an annular groove within which
10 the said ring fits, and one of the flanges forming said groove formed of removable and in-

terchangeable plates, having interior angular portions, varying in size to suit the size of the parts to be screwed together, substantially as and for the purposes set forth.

In testimony whereof I, the said JOSIAH
BARRETT, have hereunto set my hand. 15

JOSIAH BARRETT.

Witnesses:

JAMES I. KAY,
ROBERT C. TOTTEN.