

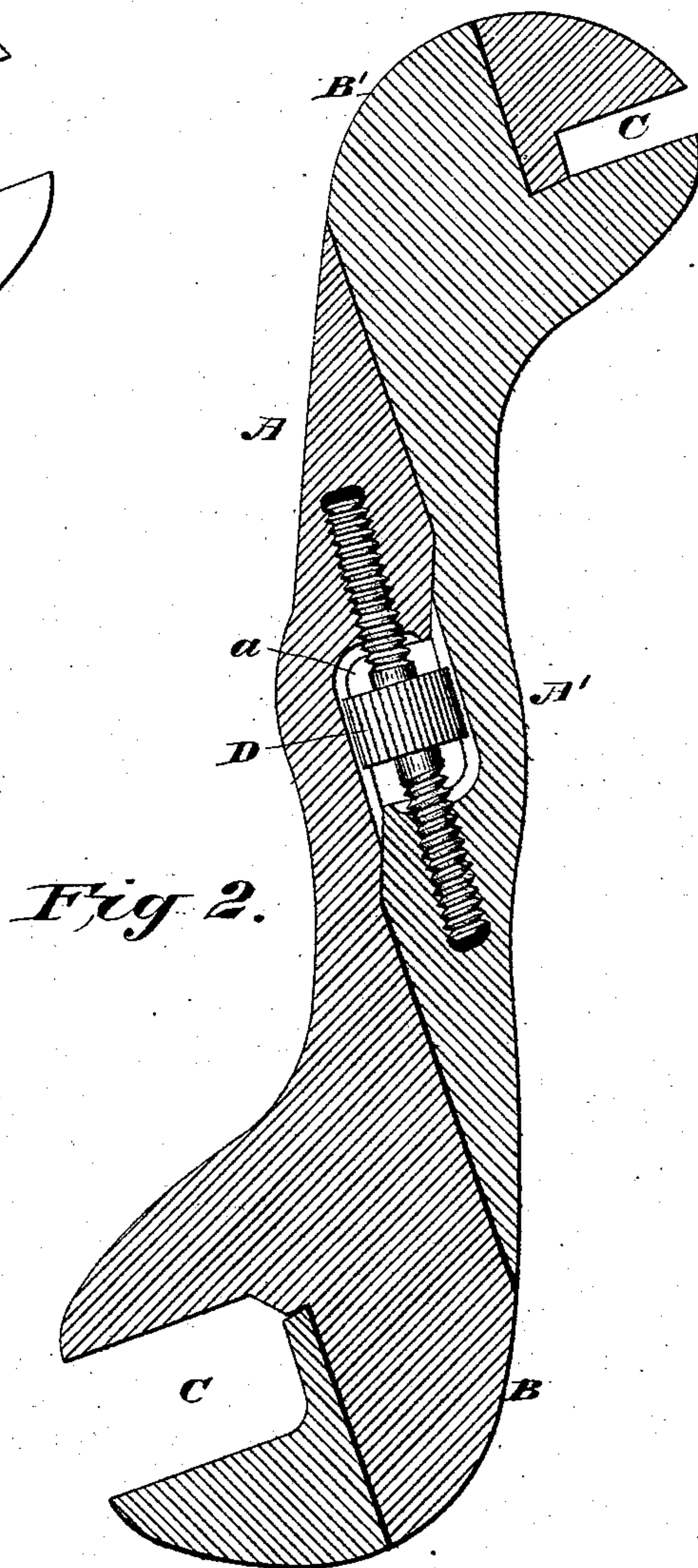
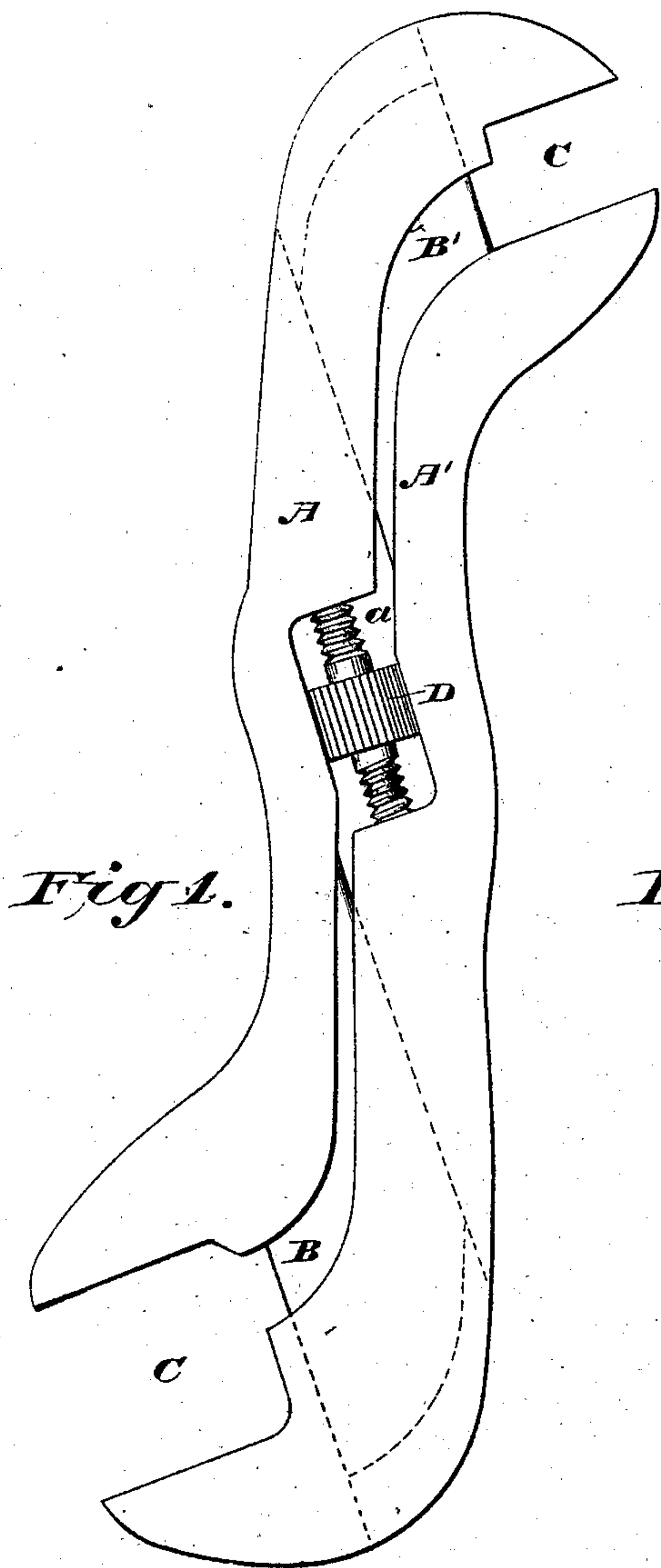
(No Model.)

W. BAXTER.

WRENCH.

No. 281,432.

Patented July 17, 1883.



Attest:

Geo. T. Smallwood.

Philip Mauro

Inventor:

William Baxter

by A. Pollock

his attorney



# UNITED STATES PATENT OFFICE.

WILLIAM BAXTER, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO J. ASHTON GREENE, OF BROOKLYN, NEW YORK.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 281,432, dated July 17, 1883.

Application filed May 23, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM BAXTER, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Wrenches, which improvement is fully set forth in the following specification.

This invention has reference more particularly to that class of wrenches which have two movable parts or jaws adjustable by means of a double-threaded screw interposed between them, and is designed specially as an improvement on what is known in the trade as the Baxter "S" wrench. Such tools as ordinarily constructed comprise two movable parts or halves, the line of division between which runs the length of the tool and is parallel to the line of movement of the two parts. These parts terminate at each end in jaws, which, being curved from the body in opposite directions, give the wrench the S shape by which it is known. The adjustment is effected by means of a right and left threaded screw inclosed between the two parts, one end taking into a threaded opening in each, and the parts are held together and their movement guided by tenons and mortises, each part having a tenon at one end and a mortise at the other. The slot or opening between the jaws is rectangular, and at right angles to the line of division between the two parts. The tenons spring entirely from the upper ends of the two parts, or that portion which is at right angles to the main body thereof, and the screw—the milled part of which is placed in a slot between the two jaws—is in the same line with the length of the tool. In the present invention the dividing-line between the two parts is at an angle with the line of movement of the parts, and the adjusting-screw also is placed at an angle to the line of separation, so that in adjusting the parts they approach and recede from each other. This enables the tenons on the two parts, which are necessarily in their line of movement, to be extended from the jaw down the shank to or nearly to the opening formed for the adjusting-screw. This construction enables the mortise and tenon to be made deeper, and makes the wrench stronger and much less liable to breakage and derangement. The openings between the jaws

are at right angles to the tenons, and consequently oblique to the body of the tool and to the line of separation between the jaws, which makes the wrench more suitable for general use than one having the openings at right angles with the body or shank.

In the accompanying drawings, which form a part of this specification, Figure 1 is an elevation of an S wrench constructed in accordance with the invention, and Fig. 2 a longitudinal section of the same. The two parts or halves A A' of the wrench are connected by tenons B B', one on each part entering a corresponding mortise in the other part, and these tenons are oblique or at an angle to the line of division between the two parts, and extend from the bottom of the openings C between the jaws to or nearly to the slot *a*, which contains the adjusting-screw D. The said screw D, threaded at both ends, as customary, takes into threaded holes in the two parts A A', and its direction is in a line oblique to the line of separation of the two parts, and consequently in the operation of adjusting the jaws the two parts approach and recede from each other. The openings C, formed by the faces of the respective jaws, are made at a right angle to the tenons or to the line of movement of the parts, and consequently are oblique to the main body of the tool, instead of at right angles thereto, as heretofore made. The advantage of this construction is that the instrument can be used under circumstances where the old form of wrench could not be used.

The improved wrench is much stronger and less liable to derangement than the old construction, and possesses many of the advantages of the well-known diagonal wrench, while being much less costly.

I claim—

1. A wrench composed of two parts or halves placed edge to edge, and a right and left threaded screw inclosed between them, the direction of said screw being oblique to the line of separation between said parts, substantially as described.

2. An S wrench, or wrench composed of two like parts placed edge to edge, having the jaws oblique to the main body of the tool, substantially as described.

3. The combination, with the two parts of

the wrench connected by a tenon on each fitting a mortise in the other, of the adjusting-screw placed diagonally across the shank of the wrench, substantially as described.

5 4. An **S** wrench, or wrench composed of two like parts placed edge to edge, having the adjusting-screw oblique to the body of the tool and the faces of the jaws at right angles to the line of said screw, substantially as described.  
10 scribed.

5. A wrench of the character described, having two parts, with a tenon on each fitting

a mortise in the other, the tenons extending from the top of the wrench to or nearly to the opening for the adjusting-screw at the center 15 thereof, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WM. BAXTER.

Witnesses:

JOHN W. GREENE,  
GEO. C. PARKER.