

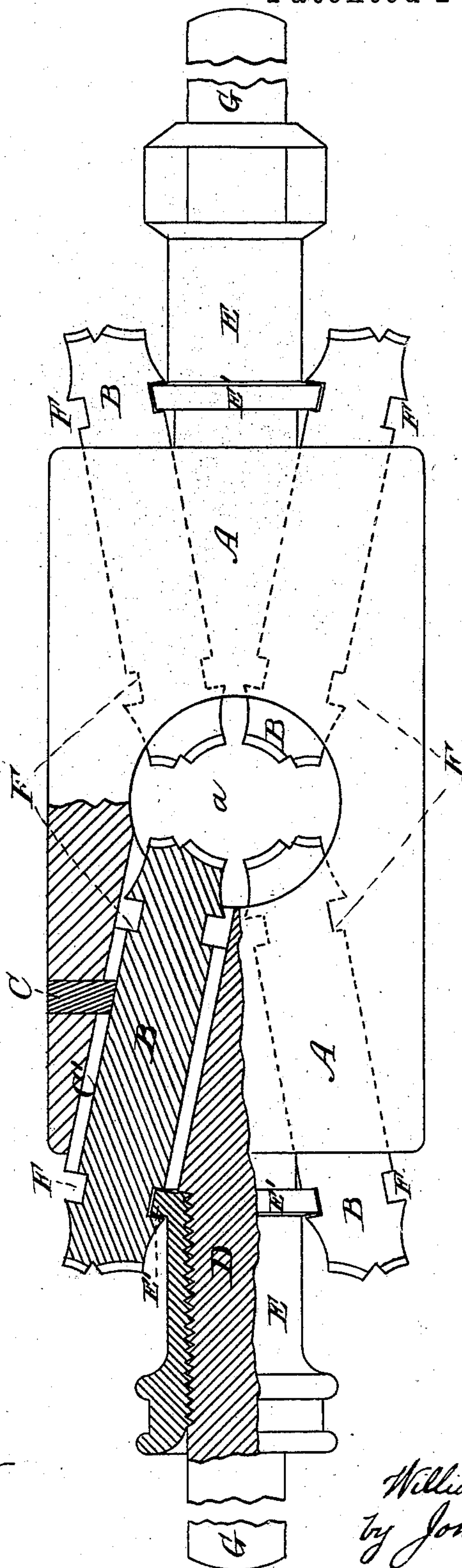
(No Model.)

W. J. McCORMACK.

SCREW STOCK AND DIE.

No. 294,143.

Patented Feb. 26, 1884.



Witnesses.

Chas. R. Abell.
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UNITED STATES PATENT OFFICE.

WILLIAM J. McCORMACK, OF PAIGNTON, COUNTY OF DEVON, ENGLAND.

SCREW STOCK AND DIE.

SPECIFICATION forming part of Letters Patent No. 294,143, dated February 26, 1884.

Application filed July 16, 1883. (No model.) Patented in France May 28, 1883, No. 155,707; in England May 29, 1883, No. 2,665; in Germany May 30, 1883, and in Belgium May 30, 1883, No. 61,540.

To all whom it may concern.

Be it known that I, WILLIAM JOHN McCORMACK, a subject of the Queen of Great Britain, residing at Paignton, in the county of Devon, England, have invented new and useful Improvements in Screw Stocks and Dies, of which the following is a specification.

This invention relates to improvements in the construction of that class of stocks and dies chiefly applicable for cutting screw-threads on pipes, (for which Letters Patent of the United States were granted to me, No. 232,533, dated September 21, 1880;) and the object of my present improvements is to simplify the construction of such apparatus; also to so construct the apparatus as to render it more suitable for screw-threading bolts of different sizes for engineers' use.

To make my invention better understood, I will proceed to describe the same by reference to the accompanying drawing, which represents a plan partly in section of my improved stock and dies.

A represents the stock or die plate, which is formed with a central hole, *a*, into which open four horizontal holes or openings passing edgewise through the stock A from the ends and in a nearly radial direction with the center of the hole in the stock, as shown, all as described in the specification of my said former patent.

B B are the dies or bits, which are provided with two sets of threads or teeth at both ends, so that they may be reversed and placed in four different positions, and they are preferably formed of round steel. The said dies B pass into the hereinbefore-described radial holes, and when the dies B are made of round metal the said holes are provided with a key, C, and the dies with a keyway, C', so that the dies B are held perfectly firm, as in my former patent. The dies can, however, be made of other section of steel, the radial holes in the stock corresponding in shape, and in this case no key or keyway will be required. The dies B are, according to my present improvements, provided near each end with a groove, F.

Each end of the stock or die plate A is formed with a screw-threaded projection, D, on which screws a collar or ferrule, E, as be-

fore; but the said ferrule is now formed with a flange or rim, E', which flange E' takes into the grooves F of each pair of dies B. By this arrangement, if the ferrules E be turned by means of a key or otherwise, the dies B are moved toward or withdrawn from the center of the stock or die plate.

G G are the handles of the apparatus.

The placing of the dies radially, or nearly so, in the manner described enables them to be adjusted to any circle, and their being reversible and being cut with two sets of teeth or threads at both ends allows of their being placed in four different positions, so as to screw four or more sizes of bolts to "Whitworth" pitch.

Having thus described my said invention and the manner of performing the same, what I claim is—

1. The combination, with a screw stock or die plate and with a screw-ferrule, of reversible dies or bits having at each end two kinds of threads or teeth, the dies being adapted to be turned axially to bring into position for operative action either kind of such teeth at a given end of the bit, and means for securing the bits in place.

2. In combination with a die-stock, the dies or bits having each a groove or grooves near each end, a screw-ferrule provided with a flange arranged to work in such grooves, and serving to force the dies up to their work or to withdraw them, and a threaded support for such ferrule, substantially as shown and described.

3. In combination, the screw stock or die plate A, reversible dies or bits B, provided with grooves, as described, and having two sets of threads or teeth at each end of the bit, stops C, the threaded piece for supporting the ferrule, and the ferrule E, provided with a flange working in a groove in the dies or bits, all substantially as and for the purposes set forth.

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Witnesses:

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