

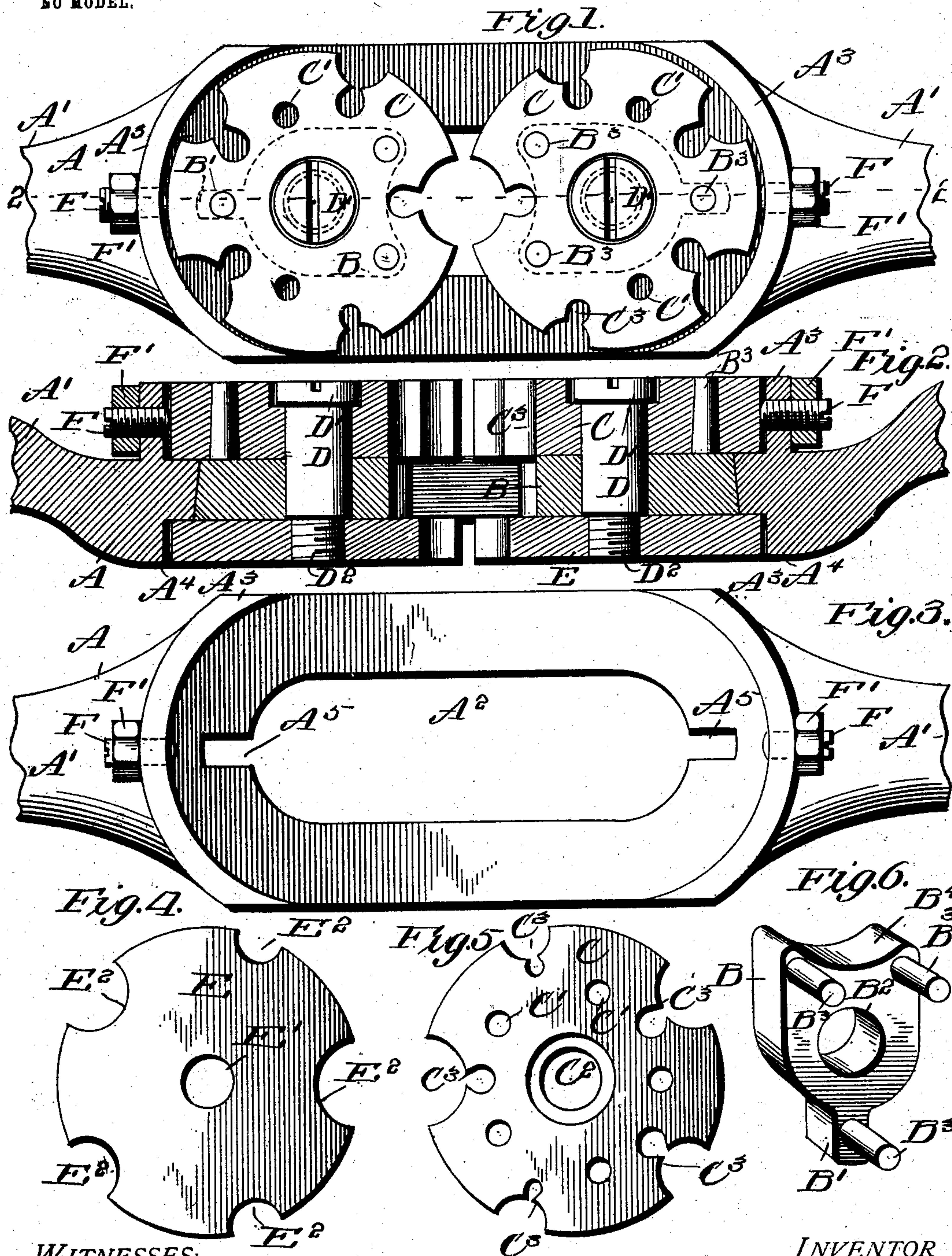
No. 720,441.

PATENTED FEB. 10, 1903.

G. A. KENNER.
DIE SOCKET.

APPLICATION FILED AUG. 18, 1902.

NO MODEL.



WITNESSES:

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GEORGE A. KENNER, OF EAST ST. LOUIS, ILLINOIS.

DIE-SOCKET.

SPECIFICATION forming part of Letters Patent No. 720,441, dated February 10, 1903.

Application filed August 18, 1902. Serial No. 120,121. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. KENNER, a citizen of the United States, residing at East St. Louis, in the county of St. Clair, State of Illinois, have invented certain new and useful Improvements in Die-Sockets, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a die-socket, and particularly to a device for mounting a screw-threading die in a stock so as to permit the adjustment thereof.

The invention has for an object to provide an improved construction of adjusting means adapted to support and carry a cutting-die and a guiding-die so as to permit the reciprocation thereof, but to prevent a rotary movement of the dies upon their pivot.

Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is a plan of the invention; Fig. 2, a vertical section on the line 2 2 of Fig. 1; Fig. 3, a plan of the stock; Fig. 4, a plan of the guiding-die; Fig. 5, a similar view of the cutting-die, and Fig. 6 a detail perspective of the sliding block for supporting both dies.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates a stock of any desired configuration and provided at opposite ends with the usual handles A', which are shown as broken away in the drawings. The central body of the stock is provided with an elongated aperture A², and upon one face thereof at the opposite ends a curved wall A³ is provided, while upon the opposite face a similar wall A⁴ is formed from the body of the stock. At each end of the elongated opening A² a recess A⁵ is provided, which is adapted to receive the lug B', projecting from the sliding block B. This block is of substantially equal diameter to the aperture A² and provided with tapered walls adapted to slide longitudinally therein as the dies carried by the block are adjusted. The block is provided with a central aperture B² (see Fig. 6) and with a series of tapering pins B³, adapted to pass through similar apertures C', formed in the body of the cutting-die C, and which rests

upon the face of the block from which the pins project. The end of the block opposite to the lug B' is provided with a curved face B⁴ to present a clearance for any material operated upon by the dies.

The cutting-die C is provided with a central pivoting-aperture C², through which a securing-screw D may be passed, and one end of the aperture is countersunk to receive the head D' of this screw and present a flush surface, while the opposite end of the screw is threaded, as at D², and engages a threaded socket E', formed centrally within the guiding-die E, which is thereby clamped against the opposite side of the block B from the die C. The cutting-die C is provided upon its periphery with a series of cutting-threads C³, the same being of different pitches, so that the die when rotated in connection with its associate member may be adjusted to present cutters for different characters and pitches of threads. The guiding-die E is provided with a similar series of cut-away recesses E² upon its periphery, which correspond in size with those upon the cutting-die and hold or guide the material, such as the bolt or pipe passing through the socket, so as to secure a perfectly straight cut and most desirable form of thread.

As shown in Figs. 1 and 2, two sets of dies and sliding blocks are mounted in the stock, and for the purpose of securing the proper adjustment upon the work these are adapted to be adjusted by means of set-screws F, threaded in the end walls A³ and provided with lock-nuts F' for holding the screws at their adjustment. These screws bear against the body of the die C and adjust the same longitudinally of the stock, as is customary in this art, and it will be observed that the movement of the die carries with it the sliding block B and guiding-die E, so that all of the parts are adjusted, while the dies are prevented from rotation by means of the locking-pins upon the block B, which is also positively guided in its movement by the lug B' thereof traveling within the recess A⁵ at each end of the elongated aperture. In removing or adjusting the dies to secure the different threads it is only necessary to loosen the bolt D, when both of the dies can be turned or adjusted and reengaged with the pin of the sliding-block.

It will be obvious that changes may be made in the details of construction and configuration without departing from the spirit of the invention as defined by the appended claims.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a die-socket, a stock having an elongated aperture therein, a sliding block mounted to travel in said aperture, a cutting-die upon one face of said block, and a guiding-die secured to the opposite face thereof; substantially as specified.

2. In a die-socket, a stock having an elongated aperture therein, a sliding block mounted to travel in said aperture, a cutting-die upon one face of said block, a guiding-die secured to the opposite face thereof, means for adjusting said block longitudinally of the aperture, and means for adjusting said dies rotatably upon said block; substantially as specified.

3. In a die-socket, a stock having an elongated aperture therein, sliding blocks disposed at the opposite ends of said aperture, cutting-dies carried by said blocks, and guiding-dies secured to the said blocks upon the opposite face from said cutting-dies; substantially as specified.

4. In a die-socket, a stock having an elongated aperture therein, sliding blocks disposed at the opposite ends of said aperture, cutting-dies carried by said blocks, guiding-dies secured to said blocks upon the opposite face from said cutting-dies, projecting lugs from said blocks adapted to enter recesses at the ends of said aperture, and means for adjusting said blocks longitudinally of the aperture; substantially as specified.

5. In a die-socket, a stock having an elongated aperture therein, sliding blocks disposed at the opposite ends of said aperture, cutting-dies carried by said blocks, guiding-dies secured to said blocks upon the opposite face from said cutting-dies, projecting lugs from said blocks adapted to enter recesses at the ends of said aperture, means for adjusting said blocks longitudinally of the aperture,

and holding-pins upon one face of said blocks adapted to enter openings in the body of the cutting-dies; substantially as specified.

6. In a die-socket, a stock having an elongated aperture therein, sliding blocks disposed at the opposite ends of said aperture, cutting-dies carried by said blocks, guiding-dies secured to said blocks upon the opposite face from said cutting-dies, projecting lugs from said blocks adapted to enter recesses at the ends of said aperture, means for adjusting said blocks longitudinally of the aperture, holding-pins upon one face of said blocks adapted to enter openings in the body of the cutting-dies, and a securing-bolt for said dies passing through the cutting-dies and blocks and threaded into the guiding-dies; substantially as specified.

7. In a die-socket, a stock having an elongated aperture therein, sliding blocks disposed at the opposite ends of said aperture, cutting-dies carried by said blocks, guiding-dies secured to said blocks upon the opposite face from said cutting-dies, projecting lugs from said blocks adapted to enter recesses at the ends of said aperture, means for adjusting said blocks longitudinally of the aperture, holding-pins upon one face of said blocks adapted to enter openings in the body of the cutting-dies, a securing-bolt for said dies passing through the cutting-dies and blocks and threaded into the guiding-dies; end walls concentric to one face of said cutting-dies, and set-screws adjustably mounted in said walls to bear upon said cutting-dies; substantially as specified.

8. In a die-socket, a stock provided with a central elongated aperture and die-seats upon its opposite faces, a sliding block mounted within said aperture, dies upon the opposite faces of said blocks and disposed within said seats, and means for securing said dies to said block; substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. KENNER.

Witnesses:

CHAS. A. GROESCHEF,

MIKE WICKHAM.