

(No Model.)

F. ARMSTRONG.
ADJUSTABLE DIE.

No. 469,622.

Patented Feb. 23, 1892.

FIG-1.

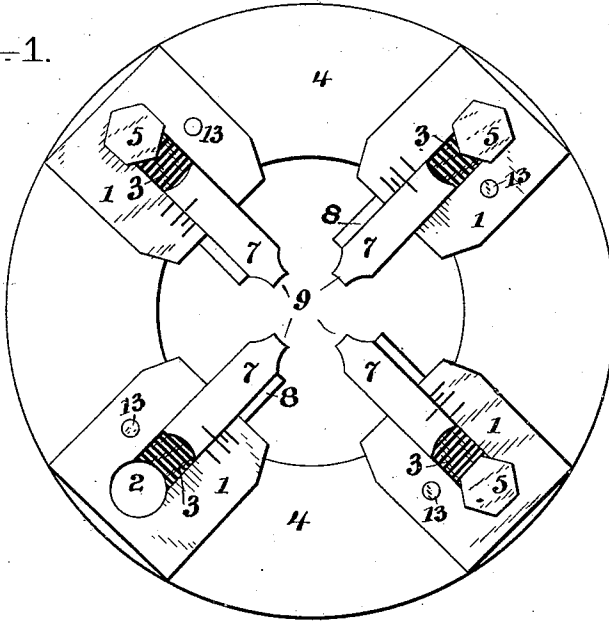


FIG-3.

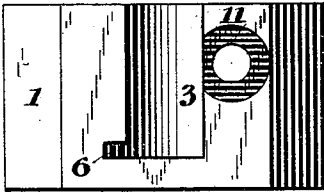


FIG-4.

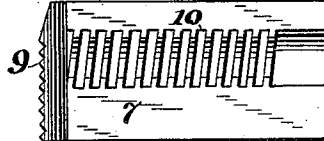
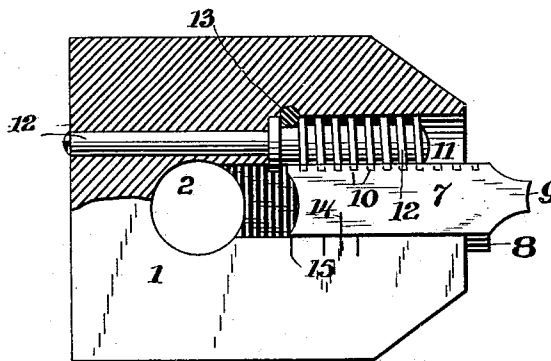


FIG-2.



WITNESSES:

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ADJUSTABLE DIE.

SPECIFICATION forming part of Letters Patent No. 469,622, dated February 23, 1892.

Application filed May 7, 1891. Renewed February 2, 1892. Serial No. 420,039. (No model.)

To all whom it may concern:

Be it known that I, FRANK ARMSTRONG, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Adjustable Dies; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in adjustable dies for threading rods, pipes, and the like; and the object of my invention is to produce a device of this description adapted for use either upon a rotary machine-head or upon a die-stock and which shall be capable of adjustment to accommodate various sizes of work; and with these ends in view my invention consists in the construction and combination of elements hereinafter fully explained, and then recited in the claims.

In order that those skilled in the art to which my invention appertains may fully understand how to make and use my improved die, I will now describe the same in detail, reference being had to the accompanying drawings and the numerals marked thereon, which form a part of this specification.

Figure 1 shows four of my improved dies in plan view upon a rotative machine-head. Fig. 2 is a partial horizontal section. Fig. 3 is an end view of the die-block with the die and operating-screw removed, and Fig. 4 a side elevation of the die.

In Fig. 1 the fastening-screw is left out of one of the die-blocks to show the shape of the hole in the die-block. The die-block 1 is made of steel or iron, preferably of the shape shown at Figs. 2 and 3. A fastening-hole 2 extends through the block from top to bottom to provide for its attachment either to a machine-head 4, such as is shown at Fig. 1, or to an ordinary die-stock. The means of attachment may be the screws 5 or other suitable fastening. In the die-block 1 is cut a seat 3, having near its bottom a sidewise recess 6, and in the seat is arranged a die 7, held as against vertical displacement by a fin

8, engaging with the recess 6. Said die is also provided with a cutting-edge 9 and with a partial screw-thread 10 in one side. Alongside the seat just referred to and opening into it at one side is a screw-seat 11, which at its rear end, in diminished size, passes entirely through the die-block. In this is held a screw 12, meshing with the partial thread on the die 7. Said screw is held in position by means of a cross-pin 13, engaging a groove in the screw, and the shank of the latter, which is provided with a drive-slot, extends through the hole in the die-block, so as to be accessible from the rear end. The top of the die 7 is provided with a standard mark 14, and upon the abutting edge of the block are further standard marks 15, indicating the measurements.

In operating my invention two or more of the die-blocks are secured upon the die-stock or machine-head. The dies are then, by means of the operating-screw, moved in their seats until the standard marks indicate that their cutting-faces are at the required distance apart. The dies may then be used for performing any required work, but may be shifted from one size to another by means of a screw-driver applied to the screw 12, which is capable of moving the die backward and forward in the seat. As the screw is of low pitch it not only moves the die, but holds it firmly as against displacement.

I claim—

1. The combination, with the die-block having means for its attachment to the stock or head, of a die seated in said block and movable therein, and a screw having its axis parallel to the length of the die and engaging and adapted to operate and also to hold the latter, substantially as described.

2. The combination, with the die-block having the seat, as described, of the die arranged in said seat and provided with a partial thread in one edge, a screw seated in the die-block parallel to and engaging with the threads upon the die, and means accessible from without the die-block for the operation of the screw.

3. The combination, with the die-block having means for attachment to the head and

provided with a seat longitudinal thereof, of the sliding die arranged in said seat and provided with a partial thread upon one side, a screw-holding recess whose edge impinges the
5 edge of the seat and is provided with a screw held as against longitudinal movement and engaging the surface of the die, and standard marks arranged, respectively, upon the

abutting edges of the die and block, substantially as described. 10

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

FRANK ARMSTRONG.

Witnesses:

SHERMAN HARTWELL HUBBARD,
MINNA C. HINCHCLIFFE.