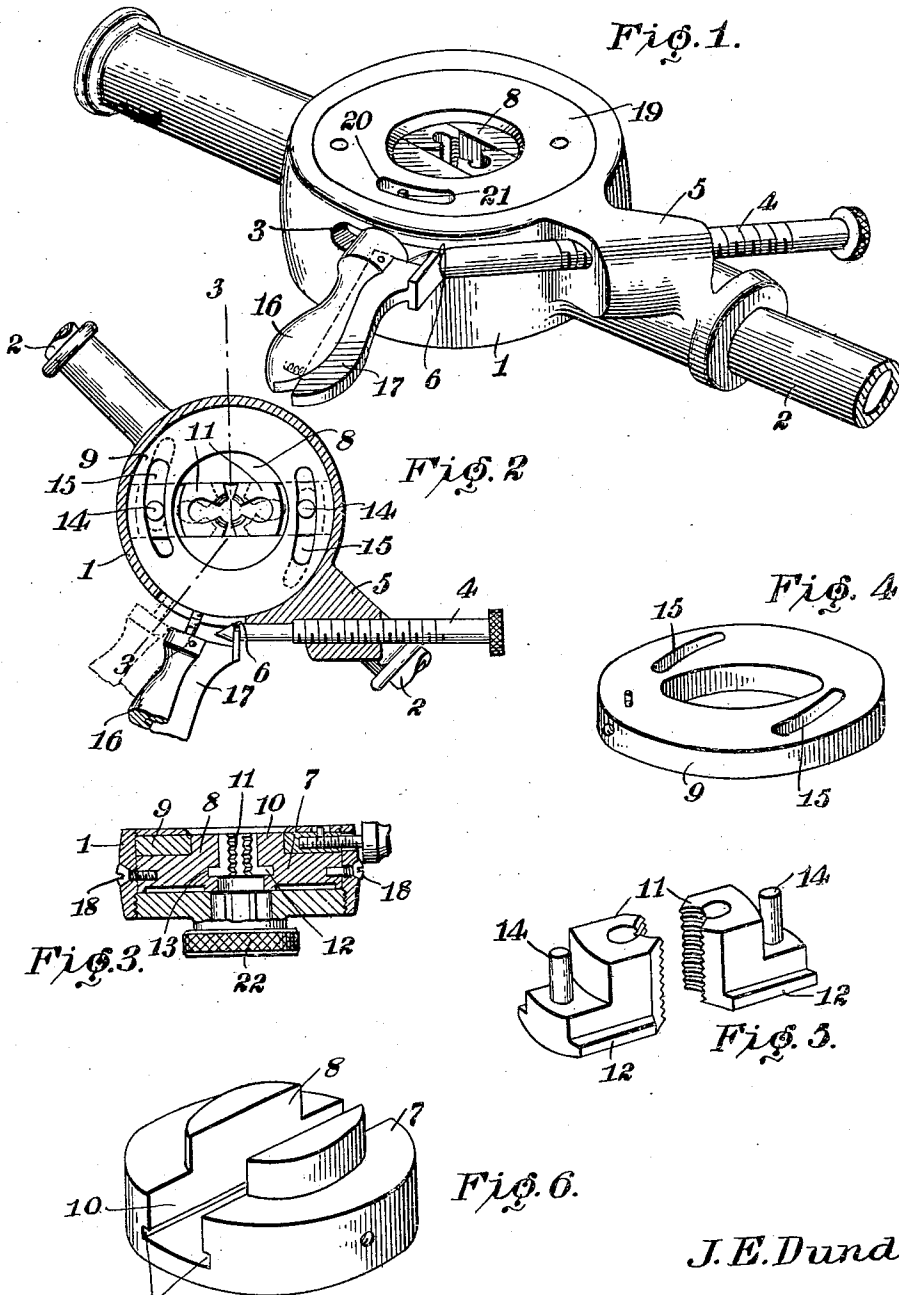


J. E. DUNDORE.
STOCK AND DIE.
APPLICATION FILED AUG. 3, 1908.

936,311.

Patented Oct. 12, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

JACOB E. DUNDORE, OF WILMERDING, PENNSYLVANIA.

STOCK AND DIE.

936,311.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JACOB E. DUNDORE, citizen of the United States, residing at Wilmerding, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Stock and Dies, of which the following is a specification.

The present invention provides a stock and die having means to admit of the dies being easily and quickly adjusted within certain limits to the diameter of a bolt, rod or the like to be threaded and at the same time admitting of the dies being separated at any time to release the work without requiring reversing of the stock to clear the work.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of a stock and die embodying the invention. Fig. 2 is a horizontal section, the dotted lines showing the position of the cam ring lever when moved to separate the dies to effect a quick release of the work. Fig. 3 is a transverse section on the line 3—3 of Fig. 2. Fig. 4 is a perspective view of the cam ring. Fig. 5 is a perspective view of the dies. Fig. 6 is a perspective view of the die holder.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The stock 1 is of annular form and is provided at diametrically opposite points with sockets in which handles 2 are fitted. A slot 3 is formed in a side of the stock near one edge to receive the stem of the cam ring lever. A set screw 4 has a tangential arrangement with reference to the stock and is mounted in a threaded opening formed in an extension 5 preferably at one side of a socket. The set screw 4 is provided at its outer end with a milled or knurled head to admit of its rotation by hand. The inner end of the set screw is pointed and formed

with an annular groove 6, the latter being located at the base of the point to engage with the inner end of the latch carried by the cam ring lever. The set screw 4 admits of the working position of the dies being fixed as will appear more fully hereinafter.

The die holder 7 is of circular formation and provided upon one side with a circular projection 8, the latter receiving the cam ring 9 and fixing the position thereof. A diametrical groove or channel 10 is formed in the side of the die holder provided with a circular projection 8, said groove or channel extending through the latter. The dies 11 are mounted in the groove or channel 10 and are directed in their sliding movements thereby to prevent displacement of the die which is formed at its base with an outer flange 12 and the groove or channel 10 has a groove 13 at the base of each wall to receive the flange 12. The dies 11 are of L-form in elevation, the inner thickened ends extending to the outer side of the projection 8, whereas the outer ends terminate about flush with the side of the holder 7. A pin 14 projects from the outer end of each die and is adapted to enter a cam slot 15 of the cam ring 9. When the cam ring is in place its outer side is about flush with the outer face of the projection 8 and the inner thickened ends of the dies 11. Rotation of the cam ring about the circular projection 8 effects inward or outward movement of the dies according to the nature of the work and the results to be effected. A lever 16 is provided for operating the ring 9 and by reason of its function is designated cam ring 11 and is provided at its inner end with a stem which passes through the slot 3 and is threaded into an opening formed in an edge of the cam ring 9. A latch 17 is pivoted to a side of the cam ring lever 16 and is fitted in a groove formed therein. The inner end of the latch is formed with an extension which is notched in its extremity to fit the groove 6 at the inner end of the set screw 4 so as to hold the parts 16 and 9 in an adjusted position and thereby fix the position of the dies 11. The die holder fits snugly within the stock 1 and is retained in place by means of screws or fastenings 18 which are threaded into openings formed in the sides of the stock, their inner ends entering openings formed in the edge of the die holder.

A cap plate 19 covers the cam ring and

the joint formed between the cam ring and the circular projection 8. The cap plate is of ring form and is threaded into an end of the stock. A slot 20 is formed in a side of the cap plate 19 and receives the outer end of a pin 21 which passes through an opening formed in the cam ring 9 and through an opening in the threaded end of the stem of the cam ring lever 16 to prevent loosening or turning of the latter when properly positioned.

A guide 22 is threaded into the opposite end of the stock and is formed with an outer projection which is milled or knurled to enable the hand to obtain a firm grasp thereon when placing the guide in position or removing it from the stock. The opening in the center of the guide is of a size corresponding with the diameter of the rod, pole or like work to be threaded so as to properly position the stock and dies when the tool is in operation.

From the foregoing it will be readily understood that the position of the dies is fixed and determined by the cam ring 9. Corresponding marks or graduations may be provided upon the dies 11 and the circular projection 8 to determine a fixed adjustment of the dies according to standard work. When the cam ring 9 is moved in one direction, the dies are separated and movement of the cam ring in the opposite direction serves to bring the dies together. Movement of the cam ring is facilitated by the lever 16 and when the latch 17 is engaged with the set screw 4 the lever 16, cam ring 9 and dies 11 are held in the adjusted position. Upon disengaging the latch 17 from the set screw 4 and moving the lever 16, the dies 11 are separated, thereby admitting of a quick release of the work without requiring the reversing of the stock to clear the work when inspection thereof is desired. Movement of the set screw 4 determines the distance between the dies 11, whereby the same may be adjusted to the required work.

Having thus described the invention, what is claimed as new is:

1. In combination, a stock, relatively adjustable dies carried by said stock, a cam ring for separating or advancing said dies, a lever projected from the cam ring, a latch mounted upon said die, and a tangentially arranged set screw carried by the stock and having its inner end formed with an annu-

lar groove to make positive engagement with the aforesaid latch and hold the dies and adjunctive parts in an adjusted position.

2. In combination, a stock, dies mounted within the stock, a cam ring for adjusting the dies, a lever connected with the cam ring and passing through a slot in the stock, a tangentially arranged set screw carried by the stock and having its inner end pointed and formed at the base of the point with an annular groove, and a latch mounted on said lever and adapted to ride upon the pointed end of the set screw in any adjusted position thereof and engage the groove at the base of the point to secure the lever in adjusted position.

3. In combination an annular stock having a slot in a side thereof, a die holder secured within the stock and having a circular projection upon one side and formed with a diametrical groove extended through said circular projection, dies mounted in the groove of the die holder and having their outer ends reduced in height, pins projected from the reduced portions of the dies, a cam ring encompassing the circular projection of the die holder and formed with cam slots to receive the pins extended from the reduced parts of the dies, and means for operating the cam ring and securing the same in an adjusted position.

4. In combination, a stock having a slot in the side thereof, a die holder secured within the stock and provided with a centrally disposed circular projection and having a diametrical groove passing through said projection, dies mounted within the groove of the die holder, a cam ring for adjusting the dies, and encompassing the circular projection of the die holder, a pin extending vertically from the upper face of the cam ring, plates closing the ends of the stock, one of the plates having a slot formed therein for the reception of the pin of the cam ring, and means extending through the slot in the stock and operatively connected with the cam ring for actuating the latter to effect the adjustment of the dies.

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

JACOB E. DUNDORE. [L.S.]

Witnesses:

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