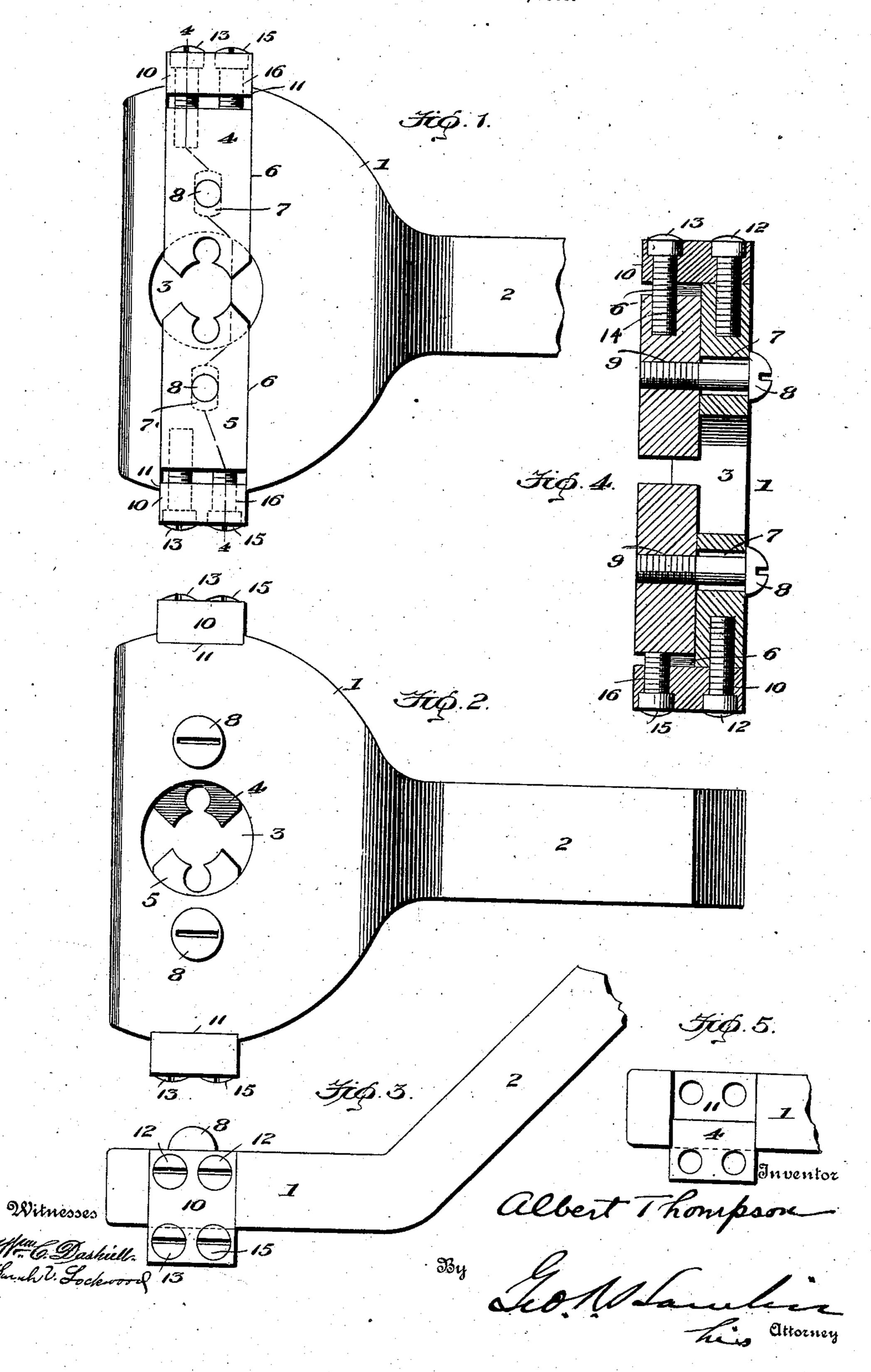
A. THOMPSON.

COMBINED TOOL POST DIE HOLDER AND ADJUSTABLE THREADING DIE.

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UNITED STATES PATENT OFFICE

ALBERT THOMPSON, OF NEWBURGH, NEW YORK.

COMBINED TOOL-POST DIE-HOLDER AND ADJUSTABLE THREADING-DIE.

No. 858,485.

Specification of Letters Patent.

Patented July 2, 1907.

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To all whom it may concern:

Be it known that I, Albert Thompson, a citizen of the United States, residing at Newburgh, county of Orange, and State of New York, have invented a new and useful Combined Tool-Post Die-Holder and Adjustable Threading-Die, of which the following is a specification.

This invention relates to a combined tool post die holder and adjustable threading dies.

The object of the present invention is the provision of an adjustable threading die which is adapted for use on engine or turret lathes to be held by the tool post and to take the place of a hand die or bolt cutter in cutting threads on studs, bolts, screws, or other stock, the device being intended to be of such improved construction that the twin dies may be removed entirely, adjusted to different positions and locked securely, and made to cut threads on pieces of stock such as studs, bolts, etc. of different diameters, the work being held in a rotary chuck and the adjustable threading die, constituting the invention, being secured in the tool post.

The invention is designed to constitute a simple, strong and durable, and comparatively inexpensive threading die, adaptable for use in different connections and designed to permit threading of the work close up to the chuck.

The invention is set forth fully hereinafter and recited in the appended claims, it being understood that it is susceptible of changes of construction falling within its spirit and scope.

In the accompanying drawings: Figure 1 is a front view; Fig. 2, a rear view; Fig. 3, a top view; Fig. 4, a section on line 4—4 of Fig. 1; and Fig. 5, a detail view with one of the brackets removed.

The die holder has a head 1 and a shank 2, preferably formed integral. The shank 2 may lie in the same plane with the head 1, but it is preferable to dispose it at an angle of about 45° thereto so that in using the device on an engine or turret lathe, the shank being held in a tool post, the dies may be worked very close up to the chuck. The head 1 has an opening 3 for the passage of the stock on which the thread is being cut, and this opening will be of sufficient size to accommodate the largest piece of work which it may be desired to thread.

The twin dies 4 and 5 are seated and adapted to slide in channels or ways 6 disposed in diametrical relation to the opening 3. The holes 7 which extend through the head 1 are elongated in the direction of the length 50 of the dies, and locking or clamping screws 8 pass through these holes and are threaded into the dies at 9. This construction permits adjustment of the dies toward and away from each other and provides for rigidly clamping the dies against their seats when they have 55 been properly adjusted.

Brackets 10 may be formed integral with the head 1, but for convenience of manufacture, these brackets are made as separate pieces and are received in seats 11 and firmly held to opposite sides of the head 1 by the 60 screws 12, one or more of which may be provided.

Extending loosely through the projecting portions of the brackets 10 are adjusting screws 13 which are threaded into the dies at 14 and by which the dies may be independently drawn apart. To lock the dies 65 where adjusted, as well as to adjust said dies toward each other, the screws 15 are provided which are threaded through the brackets at 16 and have their tips bearing against the ends of the dies.

To adjust the dies to bring them to the proper gage 70 to cut the desired screw-thread, the clamping screws 8 are loosened and the screws 13 and 15 are then manipulated to bring the dies to the desired position and to hold them against longitudinal sliding movement, after which the clamping screws 8 are tightened, and 75 the dies are then held against movement in any direction and the device is ready for use.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

In an adjustable die, the combination with a holder 80 having brackets, of dies movable toward and away from each other, adjusting or drag screws passing loosely through the brackets and threaded into and engaged with the respective dies for adjusting said dies away from each other, and adjusting and locking screws threaded through 85 the respective brackets and bearing freely against the respective dies and adapted for jacking said dies toward each other and for locking them against spreading.

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

ALBERT THOMPSON.

Witnesses:

CHAS. E. THOERNER, JAMES CULLEN.