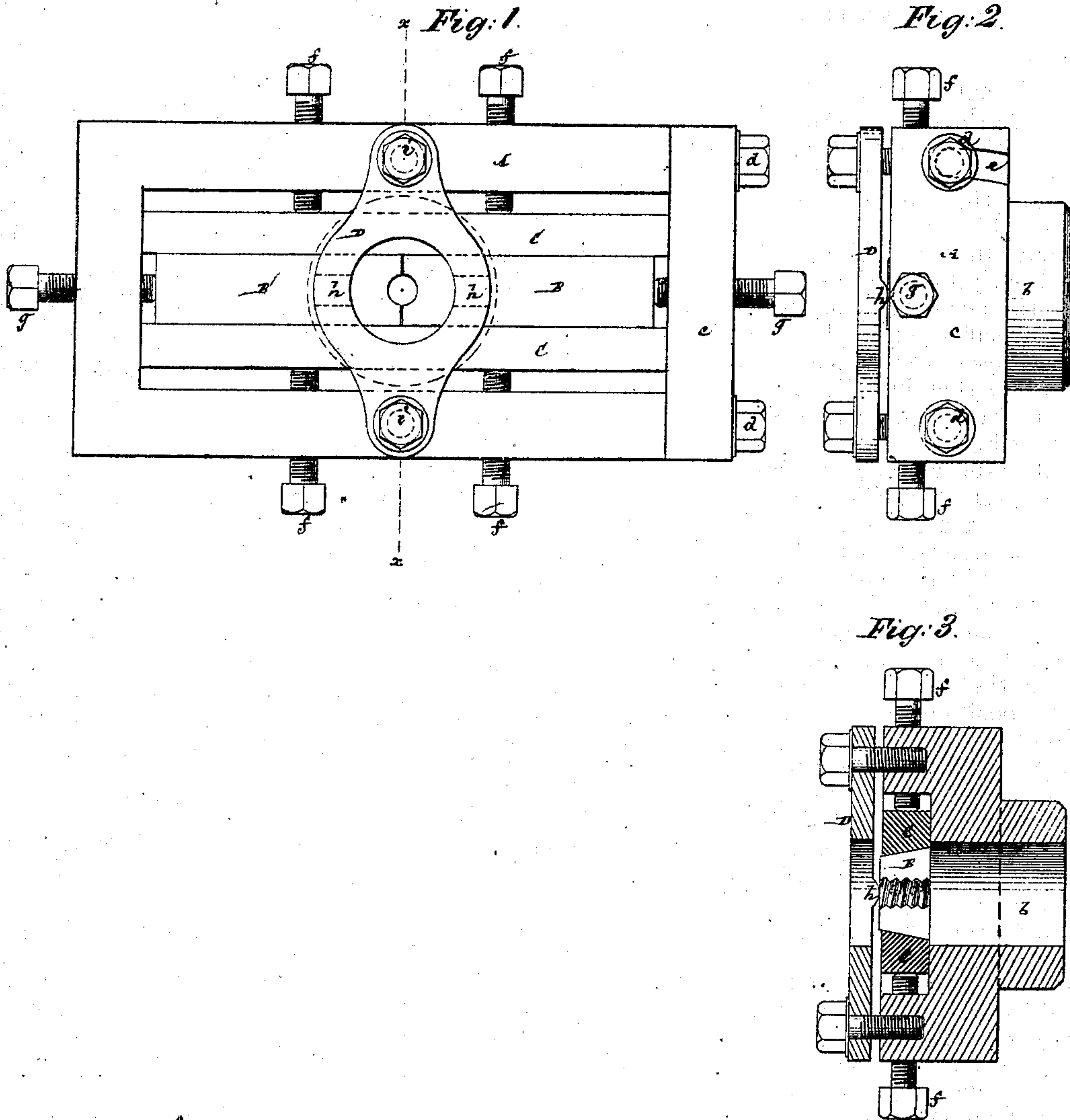


Benjamin L. Walker. Imp² in Holders for Screw Cutting Dies.

No. 120,351.

Patented Oct. 24, 1871.



Witnesses:
Fred Hayner
R. A. Ralston

Benj. L. Walker

UNITED STATES PATENT OFFICE.

BENJAMIN L. WALKER, OF SING SING, NEW YORK.

IMPROVEMENT IN HOLDERS FOR SCREW-CUTTING DIES.

Specification forming part of Letters Patent No. 120,351, dated October 24, 1871.

To all whom it may concern:

Be it known that I, BENJAMIN L. WALKER, of Sing Sing, in the county of Westchester and State of New York, have invented a certain new and useful Improvement in Holders for Screw-Cutting Dies while being tapped or cut; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a front view of my improved holder with dies therein; Fig. 2, an end view of the same; and Fig. 3, a transverse section through the line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts throughout the several figures.

My invention relates to a holder for tapping or cutting the screw-threads in dies, or for re-cutting the latter by means of a master tap firmly held by any suitable tool-holder, and centered in relation with the dies, as by a tool-holder adjustable in a straight course along the shears of a lathe, while the dies are rotated by a mandrel in concentric position therewith; and the invention consists in a novel construction of the die-holder, whereby provision is made for setting or adjusting the dies so that they may be set and retained true in various directions for the passage of the master tap through them. Dies thus cut are truer and more perfect than when cut in the ordinary way.

Referring to the accompanying drawing, A represents the frame of the die-holder provided with a central back socket or extension *b* for attachment of the holder to a revolving mandrel—as, for instance, a lathe-chuck is carried and driven. Said frame is formed of a back, sides, and ends, the one *c* of which latter may be removably attached so as to open and close to facilitate the entry and release of the dies and their clamping-strips. A convenient provision for this purpose is to secure the end piece *c* as by screws

d d, and to make a slot, *e*, in the end piece *c*, so that by simply slackening the one screw which fits through said slot, the end piece *c* may be swung to one side from the other screw as a center of motion when it is desired to open the frame. B B are the dies and C C the clamping-strips, which latter are beveled on their inner sides to conform with the bevel of the dies, and are fitted so as to be capable of adjustment across or from side to side and within the holder. Both dies are secured at their sides and adjustable laterally in common by these clamping strips which may extend the full length of the interior of the frame, but not so that they bind, and with provision for their lateral adjustment at different points, as by adjusting and clamping-screws *f f*. The dies B B are adjustable lengthwise within these strips, and clamped at their ends by means of end-screws *g g*. To set the dies in line on their faces a rocker, D, having an eye in its center, is caused to bear, as by projections *h h*, on both dies and made adjustable from opposite ends by screws *i i* fitted to enter the sides of the frame. By these combinations of devices the dies may be set and kept exactly true and in perfect line every way as required.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination of the frame A, with its end screws *g g*, the clamping-strips C C with their side-adjusting and clamping-screws *f f*, and the rocker D adjustable as by screws *i i*, substantially as specified.

2. The frame A, constructed with a swinging opening end piece, *c*, slotted as at *e*, and secured by a bolt or bolts, in combination with the adjustable clamping-strips C C, essentially as herein set forth.

BENJ. L. WALKER.

Witnesses:

G. B. HUBBELL,
EDGAR GREEN.

(14)