

J. M. CARPENTER.
SCREW-CUTTING DIE-PLATES.

No. 178,270.

Patented June 6, 1876.

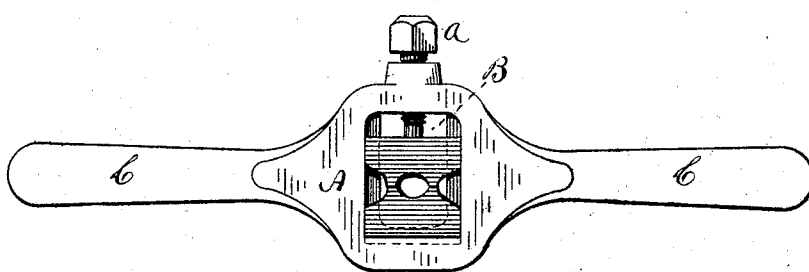


FIG. 1.



FIG. 2.



FIG. 3.

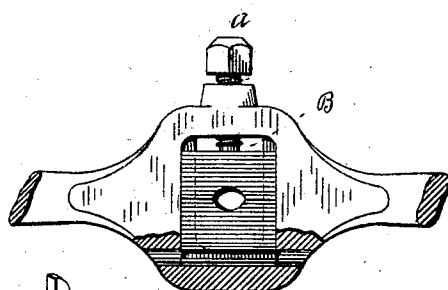


FIG. 5.

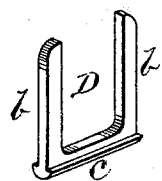


FIG. 4.

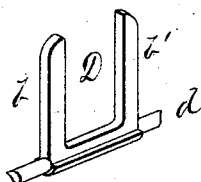


FIG. 6.

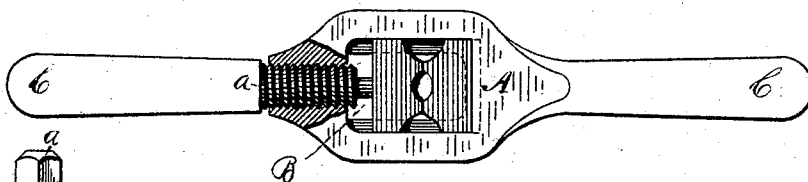


FIG. 7.



FIG. 8.

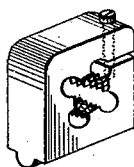


FIG. 9.

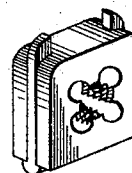


FIG. 10.

WITNESSES.

J. C. B. Woods.
George S. Miller

INVENTOR.

James M. Carpenter

UNITED STATES PATENT OFFICE.

JAMES M. CARPENTER, OF PAWTUCKET, RHODE ISLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO DANIEL G. LITTLEFIELD, OF SAME PLACE.

IMPROVEMENT IN SCREW-CUTTING DIE-PLATES.

Specification forming part of Letters Patent No. 178,270, dated June 6, 1876; application filed February 14, 1876.

To all whom it may concern:

Be it known that I, JAMES M. CARPENTER, of Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Die-Holders; and I do hereby declare that the following specification, taken in connection with the drawings, making a part of the same, is a full, clear, and exact description thereof.

In the drawings, A represents a metallic block constructed with a mortise, B, for receiving a pair of threading-dies, and two handles, C C, extending from the block in opposite directions, the tool having the general appearance of the ordinary die-plate used by machinists.

The usual method of securing the dies in the holder-plate has been to form a V-shaped rib upon two opposite faces of the mortise B, except for a distance at one end equal to or a little greater than the width of each of the halves of the die. The ends of the die are made with a V-groove, and, upon entering the dies successively into the mortise at the ends of the V-shaped ribs, they can be mounted upon the ribs and be slid into their places in the mortise. The dies are then held from slipping out by means of a clamp-screw applied similarly to that shown at *a* in the several figures of the drawing.

The purpose of my improvement is to enable the dies to be more readily removed from, or inserted in, the plate by mounting them in a frame, which is supplemental to the plate, and is combined therewith by a hinged joint connection, so that it can be moved back and forth angularly with respect to the plane of the face of the plate.

D, Figure 4, represents the frame referred to. It consists of two legs, *b b'*, united by a cross-bar, *c*. The cross-bar has its outer edge rounded or otherwise formed, so as to fit into a recess or groove, of corresponding form, cut in one of the sides of the mortise in the frame.

The dies are grooved on their ends, and are to be set in the frame, and when the frame is mounted in the plate, it, and the dies which it supports, will occupy the relation to the plate, shown at Figs. 1, 5, and 7. The side of the uppermost die should have a recess or hole made in it, into which the end of

a set-screw, *a*, can be made to enter, so that when the dies are set in the plate the set-screw will, in combination with the groove in the plate before mentioned, confine the frame in its place, as well as perform the usual function of enabling the dies to be brought nearer together to increase the depth of the thread being cut.

The frame may be held to the plate by a joint-pin, *d*, as shown at Fig. 6, if preferred, and, instead of dies in halves, a single solid die may be used, as shown at Fig. 10.

I am aware that a break-down screw-plate, made in two parts and pivoted together for the purpose of enabling one-half of the plate to be tilted down to facilitate the introduction and removal of the dies, is described in the Letters Patent granted to Geo. C. Sweet, dated July 16, 1867.

I am also aware that disconnected guides, independent of the screw-plate, but hinged thereto, are shown and described in the Letters Patent granted to George R. Stetson, dated March 2, 1875.

In my improvement a frame for the reception of the dies is used as distinguished from disconnected guides, and this frame is supplemental to the screw-plate, and, though hinged thereto, is capable of being bodily removed therefrom, so that dies can be adjusted to the frame while the latter is out of the plate, and then the frame, with the dies in it, can be readily combined with the plate.

This mode of construction is attended with great convenience in manipulating the tool, for the back edge of the cross-bar *c* of the frame, being rounded and fitted to a corresponding recess in the plate, makes a knuckle-joint, which does not necessarily require a joint or hinge pin to hold the frame with its die in the plate when pressure from the clamp-screw *a* is applied to the same.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a solid screw-plate, of a supplemental frame for holding the dies knuckle-jointed to the plate, and a clamp-screw for holding the frame with its dies in the plate, substantially as described.

JAMES M. CARPENTER.

Witnesses:

J. C. B. WOODS,
GEORGE FULLER.