

W. Newsham,
Threading Screws

No. 104,985,

Patented July 5, 1870.

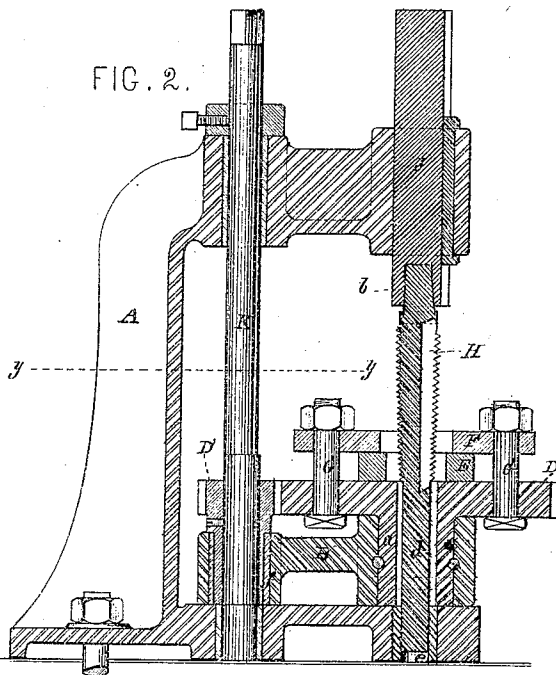
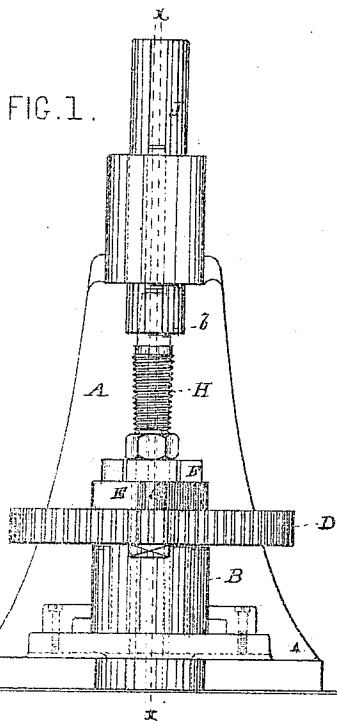
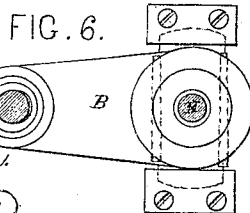
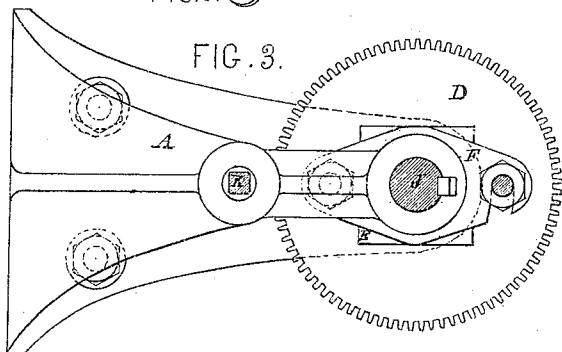
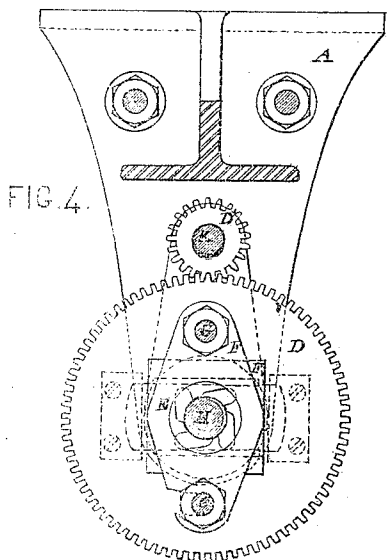


FIG. 5. (X)



INVENTOR.

William Newsham.

By his Attorney
Stephen Wicks,

WITNESSES.

J. H. Lloyd
Thomas J. Dewey

United States Patent Office.

WILLIAM NEWSHAM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
MORRIS, TASKER, & CO., OF SAME PLACE.

Letters Patent No. 104,985, dated July 5, 1870.

IMPROVED MACHINE FOR CUTTING DIES.

The Schedule referred to in these Letters Patent and making part of the same

I, WILLIAM NEWSHAM, of the city of Philadelphia and State of Pennsylvania, have invented a new and improved Mode of Cutting Dies Eccentrically, of which the following is a specification.

The nature of my invention consists in giving eccentricity to the cutters by means of a vibratory movement imparted to a bed-plate on which the die is confined, the said movement being effected by means of a revolving eccentric shaft, while the tap is advanced through the die, as hereinafter described.

To enable others skilled in the art to which my improvement appertains to make and use my invention, I will now give a detailed description thereof.

In the accompanying drawing which makes a part of this specification—

Figure 1 is a front elevation of a machine having the improvements.

Figure 2 is a vertical section through the line *x x* of fig. 1.

Figure 3 is a plan of the machine.

Figure 4 is a cross-section at the line *y y* of fig. 1.

Figure 5 is an end view of the eccentric shaft K.

Figure 6 is a plan of the reciprocating bed-plate B and cross-section of the lower end of the tap H and shaft K.

Like letters in all the figures indicate the same parts.

A is the permanent part of the machine.

B is a reciprocating bed-plate which receives the hub *a* of the gear-wheel D, on which the die E to be cut is secured by means of the clamp F and bolts G G.

The tap H is connected at its upper end in the socket *b* of the vertical shaft J, which is elevated and depressed by any suitable mechanism.

The lower end of the tap has a projection, *d*, which slides in the socket *e*, seen in fig. 2.

The pinion D' on the vertical shaft K gears into the wheel D above described, and the said shaft, being rotated in any convenient manner, the wheel is rotated with the die E as the tap H is advanced through the die.

The eccentricity is given to the die by means of the eccentricity of the shaft K within the eye *f* of the bed-plate B as the shaft revolves. The eccentric formation is represented in figs. 4 and 5.

The hub of the pinion D is also concentric, as seen in fig. 2, so as to increase or decrease the vibration of the bed-plate B.

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

The combination of the eccentric shaft K, reciprocating bed-plate B, gear-wheel D, and pinion D', the several parts being constructed, arranged, and operating in relation to the tap H, substantially in the manner and for the purpose above described.

In testimony that the above is my invention, I have hereunto set my hand and affixed my seal this 12th day of May, 1870.

WILLIAM NEWSHAM. [L. S.]

Witnesses:

THOMAS J. BEWLEY,
JOSEPH C. MILLER.