

JOHN J. GRANT.

Improvement in Bolt-Threading Machines

No. 126,802.

Patented May 14, 1872.

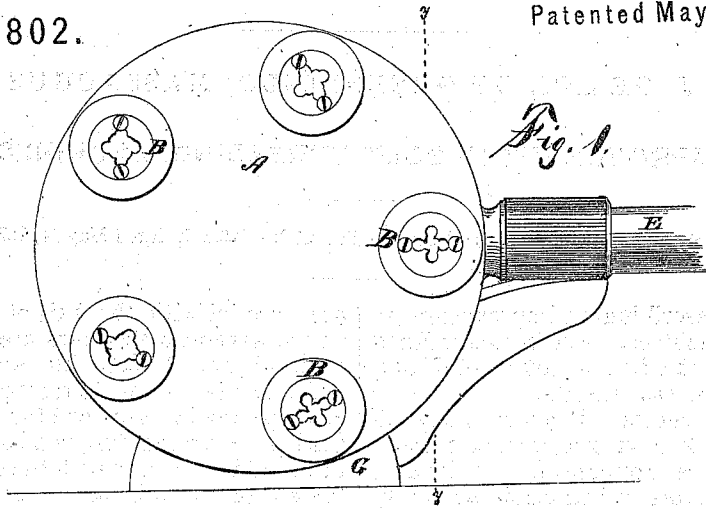


Fig. 1.

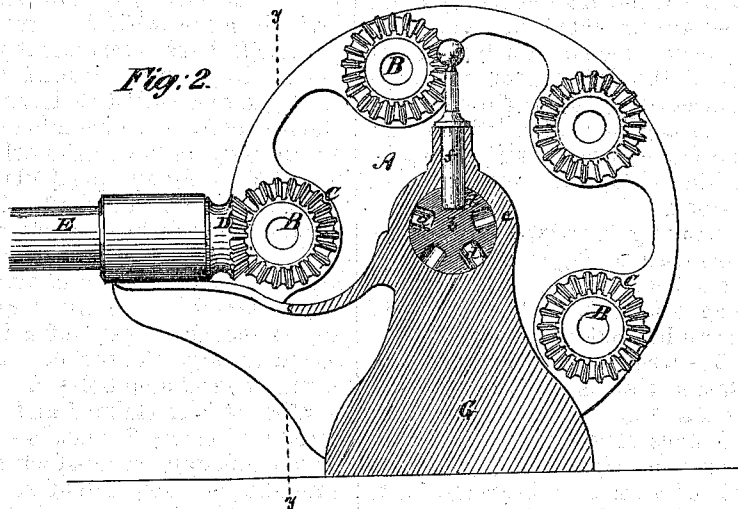


Fig. 2.

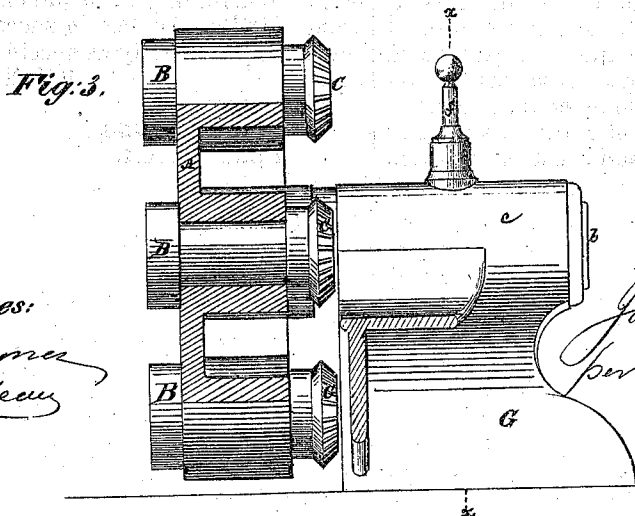


Fig. 3.

Witnesses:
Geo. Hume
R. K. Kabeau

John J. Grant
per R. M. Lamb
Attorney

UNITED STATES PATENT OFFICE

JOHN J. GRANT, OF GREENFIELD, MASSACHUSETTS.

IMPROVEMENT IN BOLT-THREADING MACHINES.

Specification forming part of Letters Patent No. 126,802, dated May 14, 1872.

Specification describing an Improvement in Screw-Cutting Machines, the invention of JOHN J. GRANT, of Greenfield, in the county of Franklin and State of Massachusetts.

This invention consists in a circularly adjustable head-stock having a number of independent die-holders arranged around its axis or center, and capable of being independently revolved by adjustment of the head-stock, so as to bring any one of the die-holders, by gears with which they are provided, in connection with a gear-wheel or pinion on a driving-shaft common to each of the die-holders, in succession, or as required. By this combination of devices, increased facility is afforded for cutting different pitches or sizes of screw-threads in the same machine without removing the dies from the head-stock.

In the accompanying drawing which forms part of this specification, Figure 1 represents a front view of a head-stock with a number of dies for doing different kinds or sizes of work fitted thereto in accordance with the invention. Fig. 2 is a section at the line *x x* in Fig. 3, which latter view is a section at the line *y y* in Figs. 1 and 2.

A is the head-stock of a screw-cutting machine, hung so as to be capable of adjustment around the axis of a stud or bearing-pin, *b*, by which it is carried, said stud being fitted so as to be capable of rotation within a socket, *c*, of a fixed support, G. Arranged around the axis or center of the adjustable head-stock A, at any suitable but equal distances from its center, are a number of independent die-holders, B B, made capable of rotation within or through the head-stock, and the axes of which

are parallel with the axis of the head-stock. These several die-holders are or may be constructed to cut different kinds or sizes of screws, and any one of them is rotated, as required, to cut a particular sized or kind of screw, by adjusting or turning the head-stock A, so as to bring said die in line with the holder that feeds the rod or pin to be screwed to the die, which holder should be arranged to occupy a lateral position relatively to the head-stock, so as to bring it in line with the driven die. The die-holders B B are independently revolved, as required, by means of gears C C on their backs, arranged to mesh with a driving-gear or pinion, D, on a shaft, E, common to all the die-holders, accordingly as the head-stock is turned or adjusted to bring any particular die in driving-connection with said shaft. The stud or bearing-pin *b* of the head-stock may be provided with a succession of stop-holes, *dd*, corresponding with the number and arrangement of the die-holders for retaining the head-stock at its adjustment, by means of a locking-pin, *f*, inserted through the socket *c*, and entering one of the several stop-holes *d*.

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

The adjustable head-stock A, provided with a number of independent revolving die-holders, B B, having gears C C, in combination with the driving-gear or pinion D, common to each of the die-holders in succession, or as required, substantially as specified.

JOHN J. GRANT.

Witnesses:

FRED. HAYNES,
FERD. TUSCH.