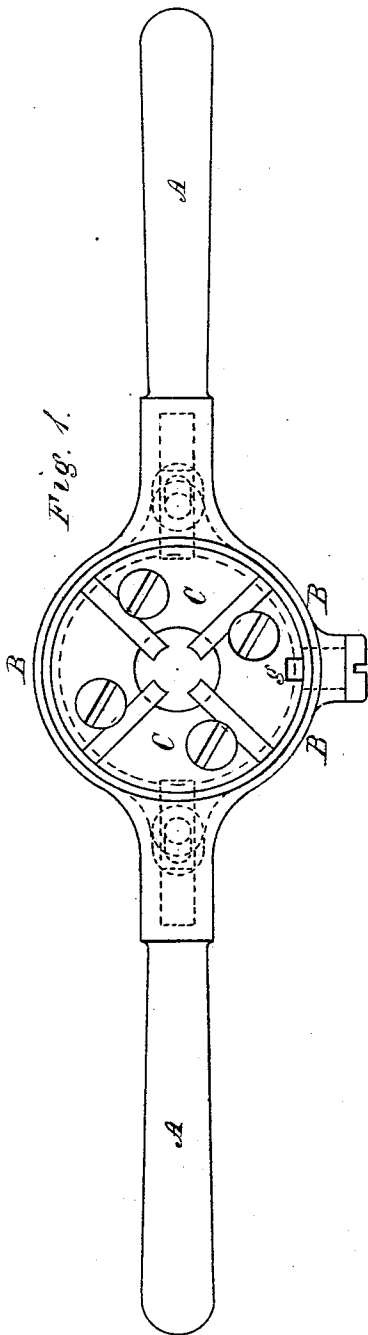


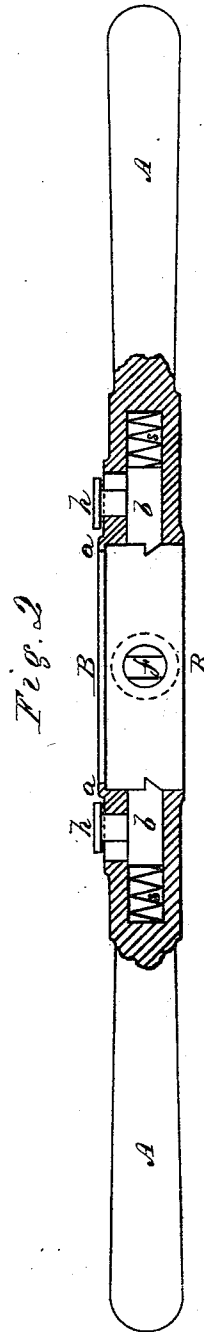
J. J. GRANT.
Die-Stock.

No. 167,165.

Patented Aug. 31, 1875.



Witnesses
Trindell R. Curtis
John L. Peters



Inventor
John J. Grant
by Thos. B. Ellis
Attorney

UNITED STATES PATENT OFFICE.

JOHN J. GRANT, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE PRATT & WHITNEY COMPANY, OF SAME PLACE.

IMPROVEMENT IN DIE-STOCKS.

Specification forming part of Letters Patent No. **167,165**, dated August 31, 1875; application filed June 4, 1875.

To all whom it may concern:

Be it known that I, JOHN J. GRANT, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Die-Stocks; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to that class of tools used for cutting screws upon bolts.

My invention consists in a novel arrangement of devices for holding the die in the stock, and the construction of the several parts so as to hold the die firmly in the stock, and permitting of its easy removal when desired.

In the accompanying drawing, Figure 1 is a view of the side of the stock with the die inserted. Fig. 2 is a longitudinal section through the middle with the die removed.

A A are the handles of the stock. B is the central portion, in which there is a cylindrical opening, furnished on one side of the stock with the circular lip or flange *a*. C is the die, fitting into the cylindrical opening, and resting upon the flange *a*, which serves as a seat to prevent its passing beyond its proper position. The die is retained in its place in the stock by latch-bolts *b*. These bolts slide back into the handles, and are pressed forward by springs *s*. A handle, *h*, passes through the stock to

the outside, for the purpose of drawing back the bolts and releasing the die. The ends of the bolts are made of the usual latch form, and enter into recesses cut in the die. Upon one side of the die is a slot, *g*, which fits upon a pin, *f*, forming part of the stock. This is for the purpose of preventing the rotation of the die in the stock when in use, and to relieve the ends of the bolts *b* from strain. In place of the circular recess in the stock and the circular die fitting into it, these parts may be made square or polygonal. In this case the slot and pin are not required. The die intended to be used with my improvement is formed of a collet with a hole through the middle. Into this collet are inserted adjustable cutters, secured with set-screws, so that they can be removed for sharpening.

By means of my invention any number of different dies may be made to fit the same stock, and they can be removed or replaced at will, without the use of a wrench or pin, merely by pushing back the bolts by the handles *h*.

What I claim as my invention is—

1. The combination of the bolts *b* and the shoulder *h* with a die-stock, for the purpose of securing the die in its place when in use, substantially as herein described.

2. A die-stock with a circular collet or disk, held in place by spring-bolts and slot and pin, substantially as herein described.

JOHN J. GRANT.

Witnesses:

THEO. G. ELLIS,
WENDELL R. CURTIS.