

J. F. C. RIDER.
SCREW CUTTING DIES.

No. 175,380.

Patented March 28, 1876

Fig. 1.

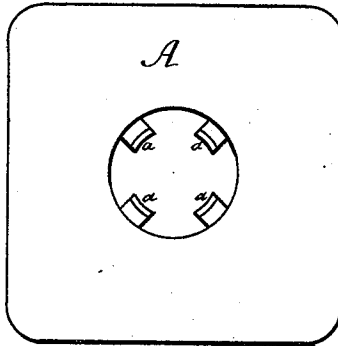
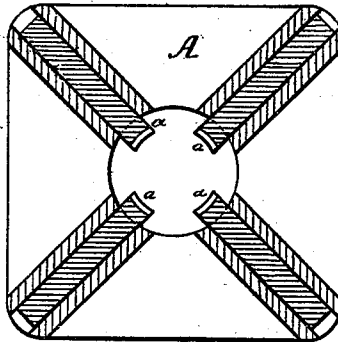


Fig. 2.



WITNESSES:

Saul F. Thompson
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INVENTOR:

John F. C. Rider
by his attorney
Jos B Gardner

UNITED STATES PATENT OFFICE.

JOHN F. C. RIDER, OF SOUTH NEW MARKET, NEW HAMPSHIRE, ASSIGNOR
TO HELEN A. RIDER, OF SAME PLACE.

IMPROVEMENT IN SCREW-CUTTING DIES.

Specification forming part of Letters Patent No. **175,380**, dated March 28, 1876; application filed
July 30, 1873.

To all whom it may concern:

Be it known that I, JOHN F. C. RIDER, of South New Market, county of Rockingham, State of New Hampshire, have invented an Improved Die for Screw-Cutting Die-Plates, of which the following is a specification:

This invention relates to an improved construction of die for cutting screws on pipes, bolts, and rods, to be used in an ordinary plate or stock, the cutters being of steel in small pieces, and inserted in a malleable-iron body in which they are fastened by brazing, as I will now describe in such a manner as to be removable.

In the drawings, Figure 1 is a plan, and Fig. 2 a section, of my improved die.

A is the blank in which the small cutters *a a a* are inserted, the inner ends of the same being properly formed for cutting the desired thread.

I form the die with openings or slots therein to receive the cutters *a a a a*, previously fitted for insertion, and braze the cutters tightly into the slots so formed in the blank. When so brazed the implement can be made at a greatly-reduced cost, and is a much better tool than as ordinarily made, and finer steel can be used and in very small bars, and

they can be repaired and made equal to new at slight expense. Besides, I avoid the loss of many tools consequent upon making the whole implement solid, and the tool is much lighter.

By this method of constructing dies I am able to insert hardened and tempered steel dies in malleable-iron blanks or receivers without danger of impairing their cutting qualities, making a die equally as good as a solid steel die and at a low cost.

The blank A may be formed of composition, and the cutters fastened in, as shown; but I prefer malleable iron on account of its cheapness, while it is otherwise well suited to the purpose, or the blank may be formed of other metal, if preferred.

I claim—

The within-described die as an article of manufacture, consisting of a stock and of steel bits or cutters securely and firmly connected therewith, and adapted to be removed and adjusted, substantially as shown and described.

JOHN F. C. RIDER.

Witnesses:

JOSEPH B. GARDINER,
SAML. F. THOMPSON.