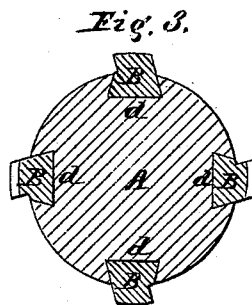
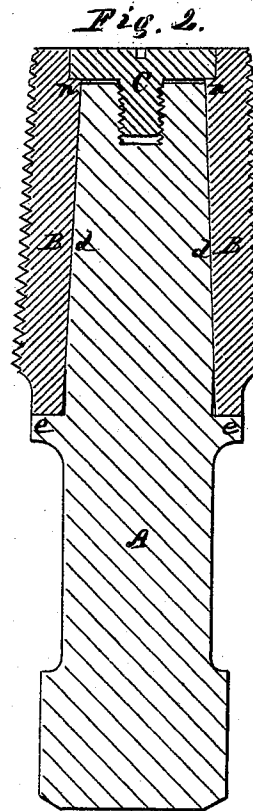
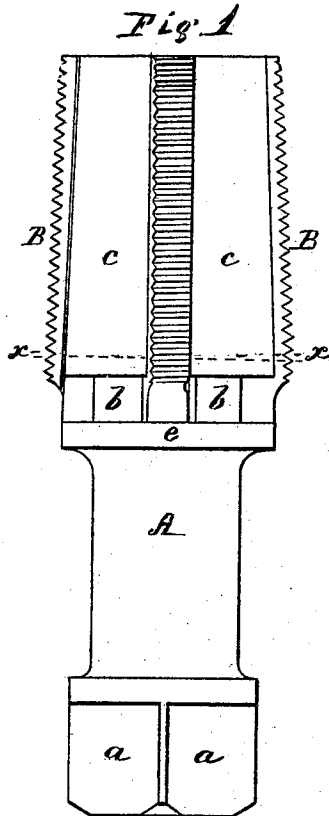


J. J. GRANT.

TAPS FOR CUTTING SCREW-THREADS.

No. 171,795.

Patented Jan. 4, 1876.



Witnesses.

Wm. B. Curtis
John S. Peters

Inventor.

John J. Grant
by Theo. G. Ellis, attorney

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN TAPS FOR CUTTING SCREW-THREADS.

Specification forming part of Letters Patent No. **171,795**, dated January 4, 1876; application filed December 16, 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 Taps for Cutting Screw-Threads; and I do hereby declare 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 drawing, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My invention relates to an improved construction of taps for the purpose of cutting a thread upon the interior of a nut or pipe, to form a female screw; and it consists in the peculiar manner of constructing, combining, and arranging the several parts, as hereinafter described.

In the accompanying drawing, Figure 1 is side view of my improved screw-tap. Fig. 2 is a longitudinal section of the same, and Fig. 3 is a cross-section on the line *x x* of Fig. 1.

A is the stock or body of the tool. It has a square head, *a*, of the usual form for turning with the ordinary tap-wrench. The part forming the holder for the cutters B is turned cylindrical or slightly tapering, as shown in the drawing at *c*, and a deep channel or groove, *b*, is cut around it so as to leave a circular

flange, *e*, against which the inner ends of the cutters B abut. Longitudinally through the part *c*, between the groove *b* and the end, are cut the dovetailed channels *d*, into which the cutters B are driven. They are held in place by the screw C, the head of which fits into a circular recess in the end of the part *c*, and rests upon steps or notches *n* in the ends of the cutters B. The slides or cutters B each fit in one of the dovetailed slots *d*, and when in place are firmly held at the ends from moving longitudinally by the flange *e* and the screw C. The cutters B are furnished with portions of a screw-thread, and each one is made of the proper angle for cutting in the usual manner. The groove *b* allows the slots *d* to be cut entirely through the part *c*, and leaves the slots clear from end to end.

By means of my invention the main body of the tool can be used for a long time, the cutters only requiring replacing as they are worn out, thereby saving much trouble and expense.

What I claim as my invention is—

The stock A, with its dovetailed slots *d*, flange *e*, and groove *b*, in combination with the screw C for holding the cutters B, substantially as described.

JOHN J. GRANT.

Witnesses:

THEO. G. ELLIS,
WENDELL R. CURTIS.