No. 811,774. PATENTED FEB. 6, 1906.

W. C. GRIFFIN.

THREADER AND CUTTER.

APPLICATION FILED NOV. 6, 1903.

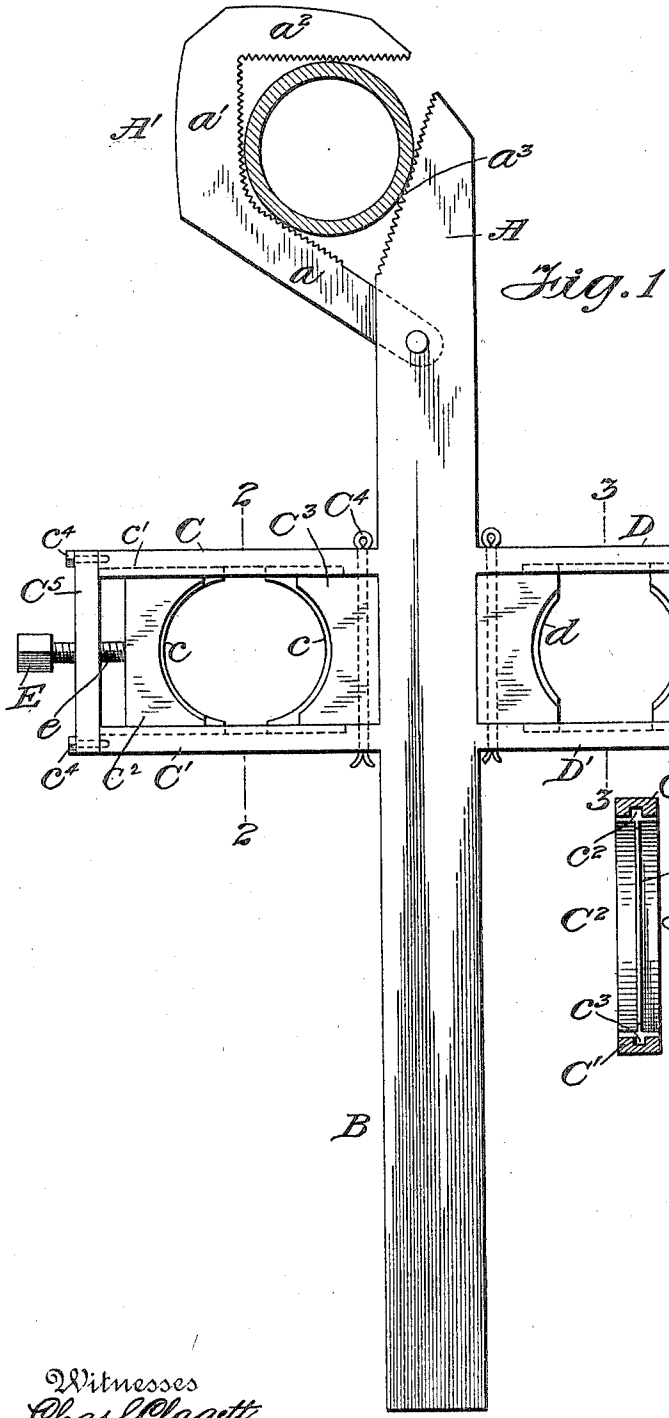


Fig. 1

Fig. 2

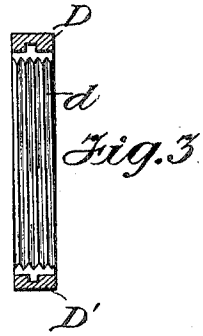


Fig. 3

Witnesses
Chas. F. Clagett
Chas. L. Wolf

Inventor
William C. Griffin.
By his Attorney
Charles A. Stephens

UNITED STATES PATENT OFFICE.

WILLIAM C. GRIFFIN, OF VERDIGRIS, NEBRASKA.

THREADER AND CUTTER.

No. 811,774. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed November 6, 1903. Serial No. 180,021.

To all whom it may concern:

Be it known that I, WILLIAM C. GRIFFIN, a citizen of the United States, and a resident of Verdigris, in the county of Knox and State of Nebraska, have invented certain new and useful Improvements in a Threader and Cutter, of which the following is a specification.

This invention is a combined pipe or rod wrench, cutter, and threader, and has for its more prominent objects compactness of form, durability of construction, and convenient adjustment for conditioning the tool to perform either of its several functions.

With the above and other purposes in view the invention comprises a main or body portion, preferably a drop-forging, and presenting in one piece the fixed jaw of the wrench, besides a handle, and the inner vertical walls and upper and lower horizontal members of laterally-disposed stocks for the cutter and threader, respectively, suitable cutting and threading dies, of steel, being secured in the stocks, together with die-adjusting provision, whereby either the cutter or threader may be quickly arranged for the reception of a tube or rod of one of several sizes and the same conveniently severed or threaded, as the case may be.

There are other important features connected with the invention which in addition to those alluded to are clearly set forth in the subsequent detailed description.

In the accompanying drawings, forming part of this specification, Figure 1 is an elevational view of the improved tool. Fig. 2 is a vertical section on the broken line 2 2, Fig. 1, and showing more particularly one of the cutting-dies. Fig. 3 is a similar view on the line 3 3, Fig. 1, and illustrating more especially one of the threading-dies.

Similar reference characters are employed to designate corresponding parts throughout the several figures wherein they occur.

The main or body portion, which, as before intimated, is in the form of a drop-forging, presents in a single piece the upper stationary jaw A of the pipe-wrench, the lower handle B, and intermediately-located and laterally-extended upper and lower horizontal members C C′ and D D′ of the cutter and threader stocks.

Pivotally attached to the main or body portion contiguous to the jaw A is a hook-jaw A′, generally of the configuration indicated in Fig. 1 and embodying integrally the lower inclined part a, merging in the vertical portion a' and concluding with the upper horizontal terminal a^2, extending toward and adapted under some conditions to overhang the extremity of the jaw A. The contiguous edge faces of the jaws A A′ are provided with transverse serrations in order to provide the required biting capacity for the jaws. The serrated face a^3 of the stationary jaw is beveled or inclined in order to appropriately cooperate with the pivotal jaw in securing the cam-like grasping effect of the latter.

As the arrangement and operation of both the cutter and threading stocks are substantially alike, with the exception that the working faces of the dies in one instance are equipped with cutting-ribs c, while the dies in the threading-stock having threading-ribs d, a description of one of these stocks and parts coactive therewith will serve for an understanding of both.

The horizontal members C C′ are longitudinally grooved in their opposite faces, as indicated by dotted lines c' in Fig. 1 and in full lines, Fig. 2. In these grooves and slidingly engaged are the upper and lower lugs c^2 c^3 of the inner and outer companion dies C^2 C^3, the grooves extending only sufficiently far to permit the back of the die to bear against the inner end wall of the stock-opening, which wall is presented by the contiguous edge of the main or body portion. The die C^3 is retained in position after being seated by a cotter-pin C^4, insertible in both members C C′ and intermediate part of the die C^3.

A vertical section C^5 connects the members C C′ at their outer ends through the medium of machine-screws c^4, said section having a centrally-located threaded perforation in which bears the threaded shank e of a screw or bolt E, the inner extremity of the shank bearing against the back of the movable die C^3 for forcing it in the direction of its companion and retaining it against recession.

From the description thus far it will be appreciated that when required the tool may be used as a pipe or rod wrench, the pivotal jaw being caused to take over the pipe or rod and the tool oscillated in a manner and for a purpose obvious to those familiar with such wrenches.

When it is desired to either sever or thread a tube or rod, the latter is introduced into position in one or the other of the stocks and the movable die thereof properly adjusted.

I prefer that the dies shall be of hardened steel. The employment of the cotter-pins

permits companion pairs of dies to be superceded by another pair the working faces of which will be differently conditioned—as, for instance, having a thread of a different pitch or degree of coarseness—or shaped to serve as a nut or tap wrench.

The improved tool is comparatively simple and inexpensive, extremely useful, and highly durable.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A device of the character described, comprising a handle provided with integral laterally-extending fixed members, each having a longitudinal groove in its inner face and a transverse hole, inner and outer dies having lateral projections engaging and slidable in the said grooves the inner die having a hole registering with the holes in the laterally-extending members, a pin C^4 removably engaging said holes, a removable section C^5 connecting the ends of said arms, a threaded hole in said section and a screw E projecting through said hole and arranged to engage with one of said dies for the purpose of adjusting it inwardly, substantially as described.

Signed at Verdigris, in the county of Knox and State of Nebraska, this 1st day of October, A. D. 1903.

WILLIAM C. GRIFFIN.

Witnesses:
B. STEVENSON,
V. J. PROKOP.