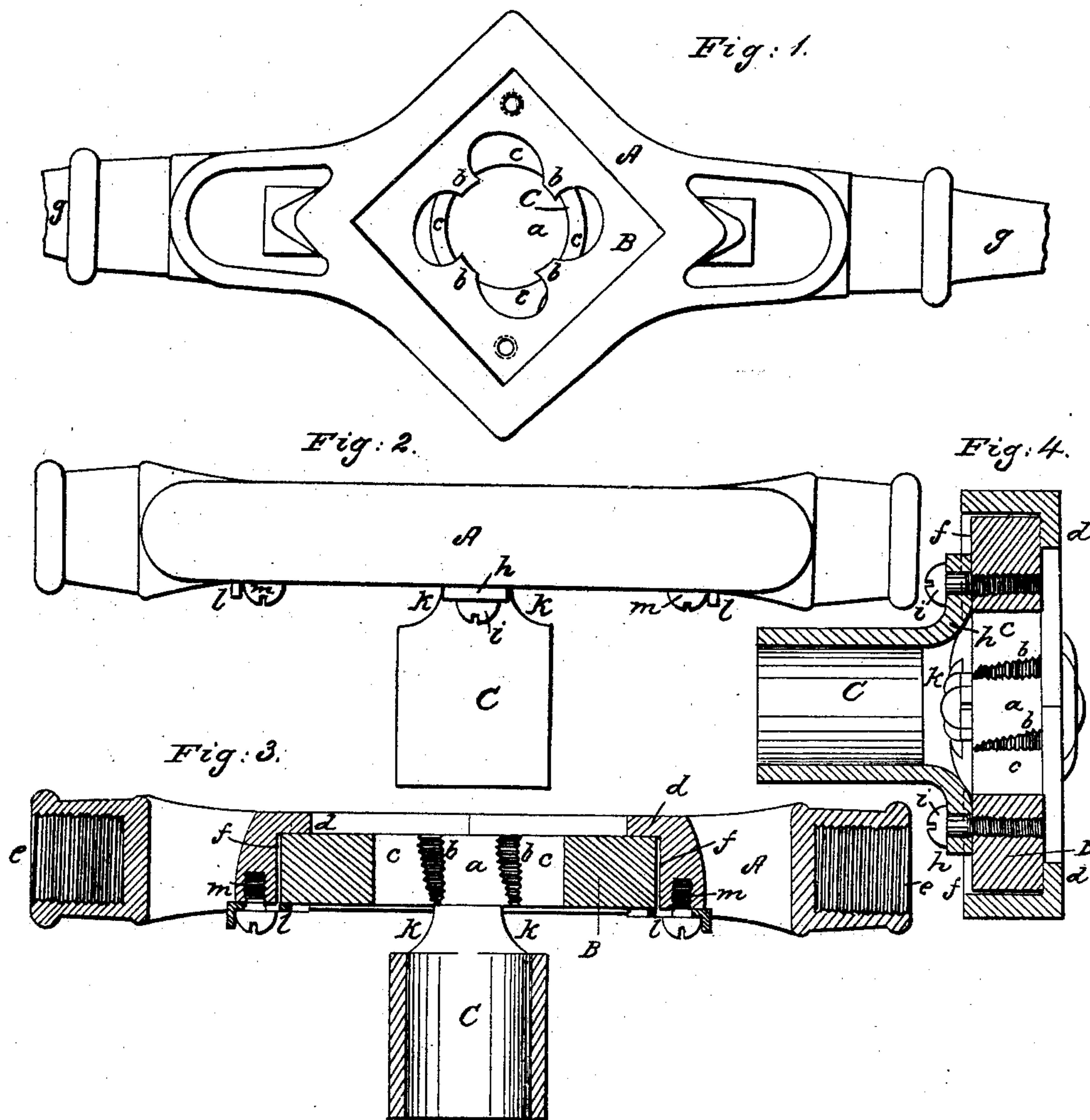


M. M. YOUNG.

Screw Cutter.

No. 55,571.

Patented June 12, 1866.



Witnesses:
D. J. Halper.
Samuel N. Piper.

Inventor:
Moses M. Young.
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R. U. Haddy.

UNITED STATES PATENT OFFICE.

MOSES M. YOUNG, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN SCREW-CUTTERS.

Specification forming part of Letters Patent No. 55,571, dated June 12, 1866.

To all whom it may concern:

Be it known that I, MOSES M. YOUNG, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented an Improved Screw-Cutter; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of it.

The principal parts of the said screw-cutter are a stock or die-holder, A, a die, B, and a tubular guide, C.

The die B is to be constructed of steel, and with a mouth *a*, extending through it, and provided with a series of screw cutters or chasers, *b b b*, each of which has a chip-throat or recess, *c*, arranged in advance of it.

The stock is to be made with a socket, *f*, to receive the die, which, when in place in the socket, as represented in the drawings, rests on ledges *d d*, projecting from and arranged with respect to the sides of the socket in manner as shown in Figs. 3 and 4. Furthermore, the stock is formed at each end with a female screw, *e*, to receive one of two handles, *g g*, which are to project from the stock and serve as means by which it may be revolved by a workman.

The guide C is a tube provided with two feet, *h h*, arranged so as to project below and from its lower end. These feet are to rest on and be fastened to the die B by means of screws *i i*, the same being to so raise the guide-tube from the die as to leave apertures *k k* between it and the die, such apertures being for facilitating the discharge of the shavings made by the cutters in order that they may not get into the guide and clog it while the implement may be in use. The die is kept in place in the socket of the stock by means of two slides, *l l*, held to the stock by screws *m m*, which, after going through slots in the slides, are screwed into the stock. By drawing the slides back from over the die the latter may be removed from the socket.

I am aware that a pipe-screw-cutting implement has been made with a pipe-guide socket to extend directly from its stock instead of being fastened to the die, as is the pipe-guide of my improved implement. In such case a

separate pipe-guide for each die of a set has been required, each pipe-guide, when used with its die, being placed in the pipe-guide socket for its reception. When the pipe-guides are thus separated from their dies they are very apt to become lost or misplaced; but by having each guide fastened directly to and projecting from its die, the two are not only always kept together, but when once properly arranged the guide will operate to centralize a pipe with respect to the cutters to better advantage than when it is projected from the stock, for when the guide extends from the stock the die-plate can play or move within its socket independently of the guide; but when the two are connected together any movement of one will be accompanied by a corresponding movement of the other. Thus it will be seen that with the guide fastened to the die the formation of a screw on a pipe, when inserted in the guide, is likely to be accomplished with more certainty of it being concentric with the axis of the pipe than when the guide is supported by the stock and is separate from the die.

I make no claim to the pipe screw-cutter, as described in the United States Patent No. 39,988, my invention being an improvement with reference thereto.

By my improved construction of the pipe screw-cutter the die is so applied to the stock and the centralizer or guide is so applied directly to the die that the die and centralizer can be removed together from the stock without the necessity of separating such centralizer from the die. This is an advantage not possessed by the pipe-cutter described in the said Patent No. 39,988.

I therefore claim—

1. The improved arrangement of the guide C, or its application directly to the die B, and so as to project therefrom, as specified, in combination with the application of the die to the stock, so as to enable the two to be separated without the necessity of first detaching the guide or centralizer from the die.

2. The combination and arrangement of chip-discharging passages *k k* with the guide and the die applied together, as set forth.

M. M. YOUNG.

Witnesses:

G. H. WASHBURN,
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