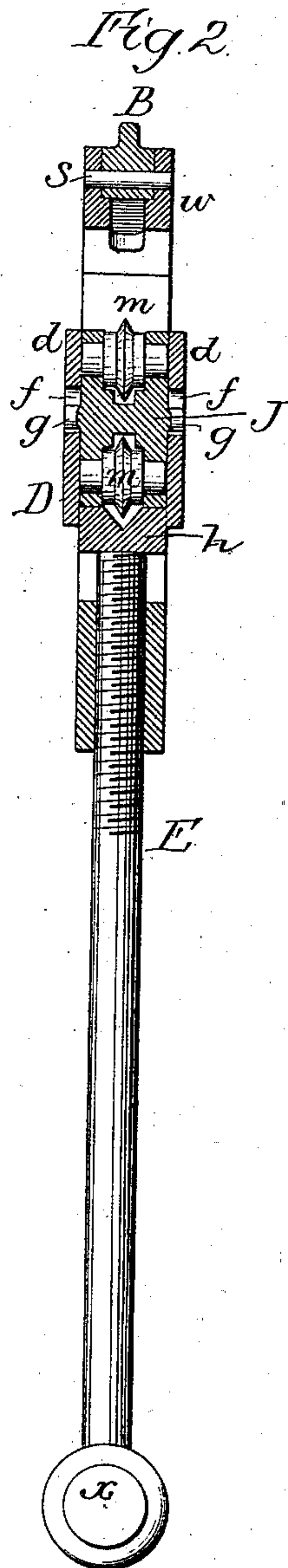
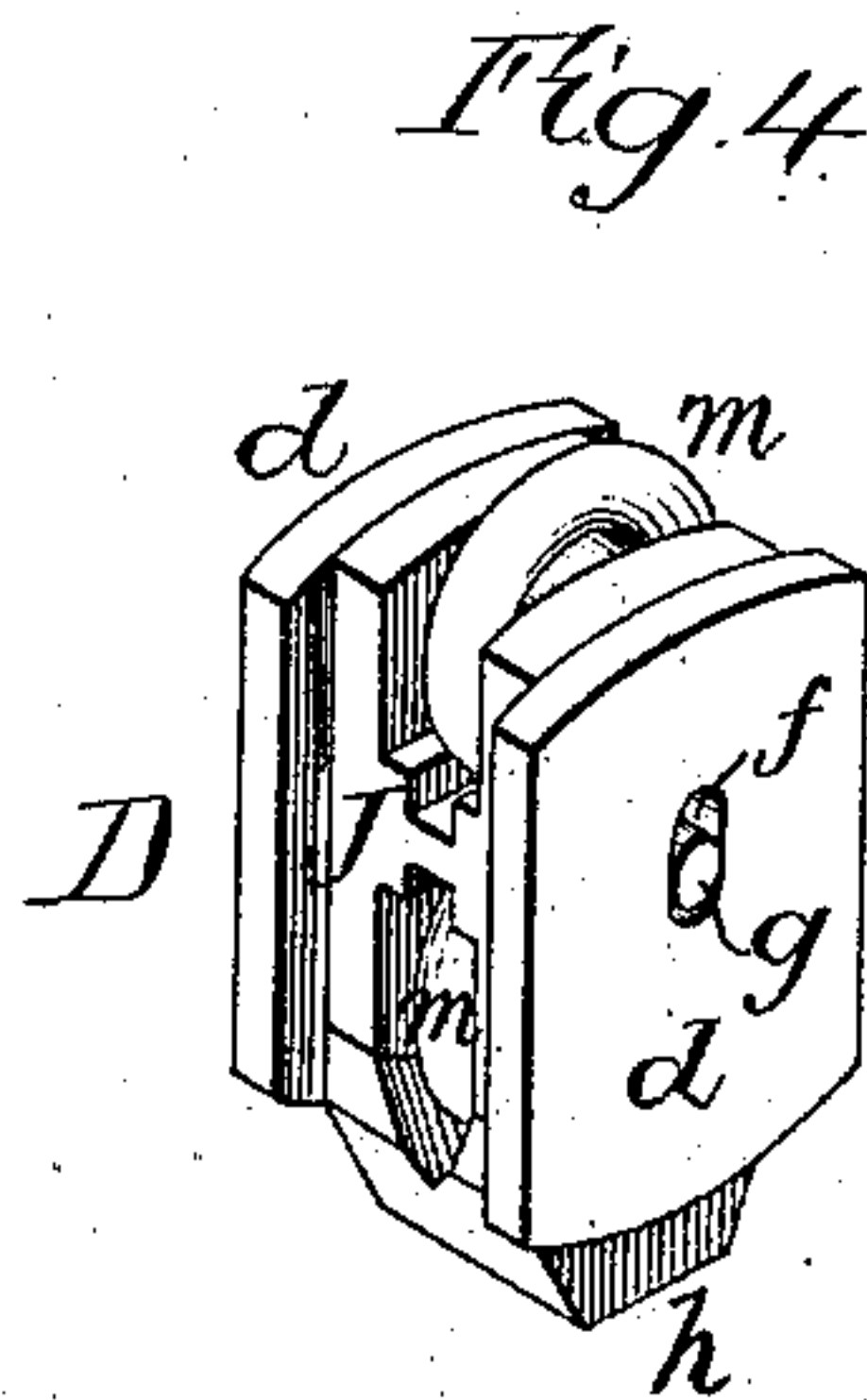
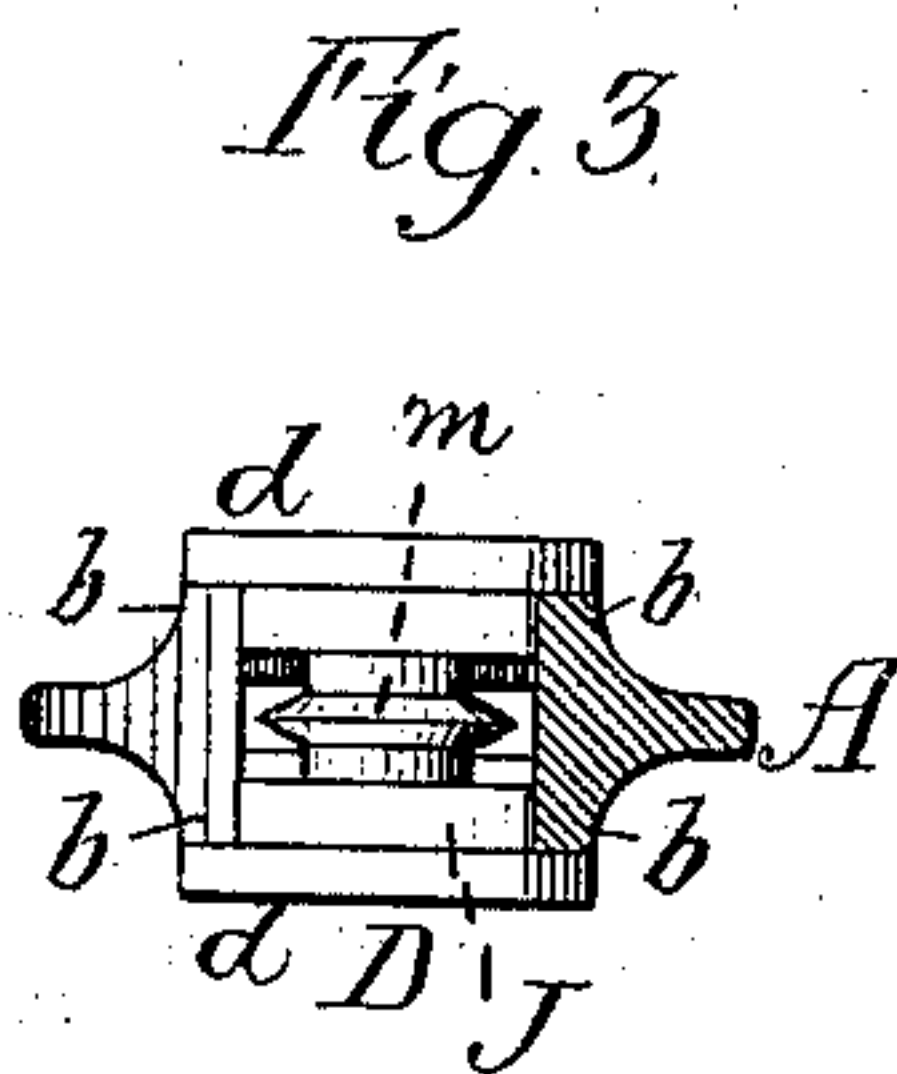
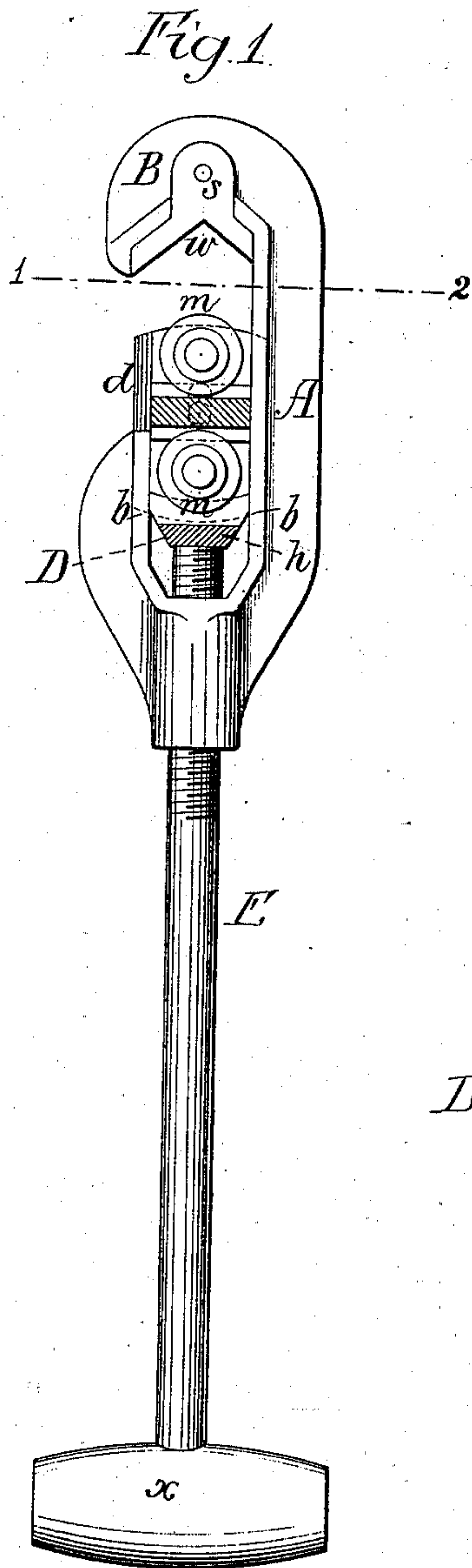


F. I. MAULE.
Rod and Pipe Cutter.

No. 225,403.

Patented Mar. 9, 1880.



Witnesses
Henry Howson Jr.
Harry Smith

Inventor
Francis I. Maule,
by his Attorneys
Howson and Son

UNITED STATES PATENT OFFICE.

FRANCIS I. MAULE, OF PHILADELPHIA, PENNSYLVANIA.

ROD AND PIPE CUTTER.

SPECIFICATION forming part of Letters Patent No. 225,403, dated March 9, 1880.

Application filed January 29, 1880.

To all whom it may concern:

Be it known that I, FRANCIS I. MAULE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improvement in Rod or Pipe Cutting Implements, of which the following is a specification.

The object of my invention is to so provide a rod or pipe cutting tool with a number of rotary cutters that in the event of one of said cutters becoming blunt by long-continued use another cutter may be readily brought into operative position.

My invention consists of certain combinations of parts for the attainment of this object, the combinations being too fully explained hereinafter to need preliminary description.

In the accompanying drawings, Figure 1 is a side view, partly in section, of a rod or pipe cutting tool with my improvement; Fig. 2, a transverse section of the same; Fig. 3, a sectional plan on the line 1 2, Fig. 1; and Fig. 4, a perspective view of part of the implement.

The body or frame A of the tool is hooked at its outer end to form the fixed jaw B, and the frame is recessed near its opposite end to form guides *b b* for the slide D, the adjustment of which toward the jaw B is effected by means of the threaded shank E, the latter being provided at its outer end with a suitable handle, *x*.

The slide D comprises a base, *h*, against which the end of the threaded shank bears, and the cheek-pieces *d d*, which are so adapted to the guides of the frame, Fig. 3, that the slide can have no lateral movement therein. A block, J, fits snugly between the said cheek-pieces and bears on the base *h* of the slide, and from the opposite sides of the block project pins *g* through slots *f* in the said cheek-pieces, Fig. 4.

The pins on the block prevent its detachment from the slide when the tool is not in use, the slots being of such dimensions that when the block bears on the base *h* the pins are free from contact with the ends of the slots, and therefore cannot be subjected to strains when the tool is being used. When the block is moved outward from the base *h* to the limit permitted by the slots the said block can be turned in the slide.

The block J is slotted at each end for receiving the rotary cutters *m m*, the journals of which have their bearings in the block at such

points that the cutting-edge of one cutter shall project beyond one end and that of the other cutter beyond the opposite end of the said block, so that when the edge of one cutter has become blunt by long-continued use the slide may be withdrawn from its guides in the frame, after which the block J can be moved outward from the slide so far as to clear the base-piece *h*, and then turned on its pins to the extent of half a revolution, when the sharp cutter will be presented in a proper position for active duty.

A detachable block, *w*, is fitted to the fixed jaw B of the frame, and is connected thereto by a pin, *s*, the smooth hardened face of the block bearing against one side of the pipe or rod to be cut, and moving freely on the same while the tool is turned and while one of the rotary cutters acts on the opposite side of the pipe or rod.

Although I have shown in the drawings a slide, J, carrying two rotary cutters, and although this number will be generally used in practice, more than two cutters may be combined with the block, if desired.

I am aware that a slide sharpened at both ends has been so combined with the jaw of a pipe-cutter that it could be detached and reversed, and I therefore do not claim, broadly, the combination of a reversible cutter with the jaw of the tool; but

I claim as my invention—

1. The combination of the frame of a pipe or rod cutting tool having a fixed jaw and a slide with a reversible block carrying two or more rotary cutters, substantially as set forth.

2. The combination of the frame of the tool with a slide, D, having a base, *h*, and the reversible block J, carrying rotary cutters *m*, and adapted to the said slide, so as to bear on the base *h* when in use, all substantially as described.

3. The combination of the slide D, having slotted cheek-pieces *d d* and base *h*, with the cutter-carrying block J, having pins adapted to said slots, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS I. MAULE.

Witnesses:

ALEXANDER PATTERSON,
HARRY SMITH.