

Pipe-Cutter.

Fig. 2.

Patented Sept. 14, 1875.

Fig. 1.

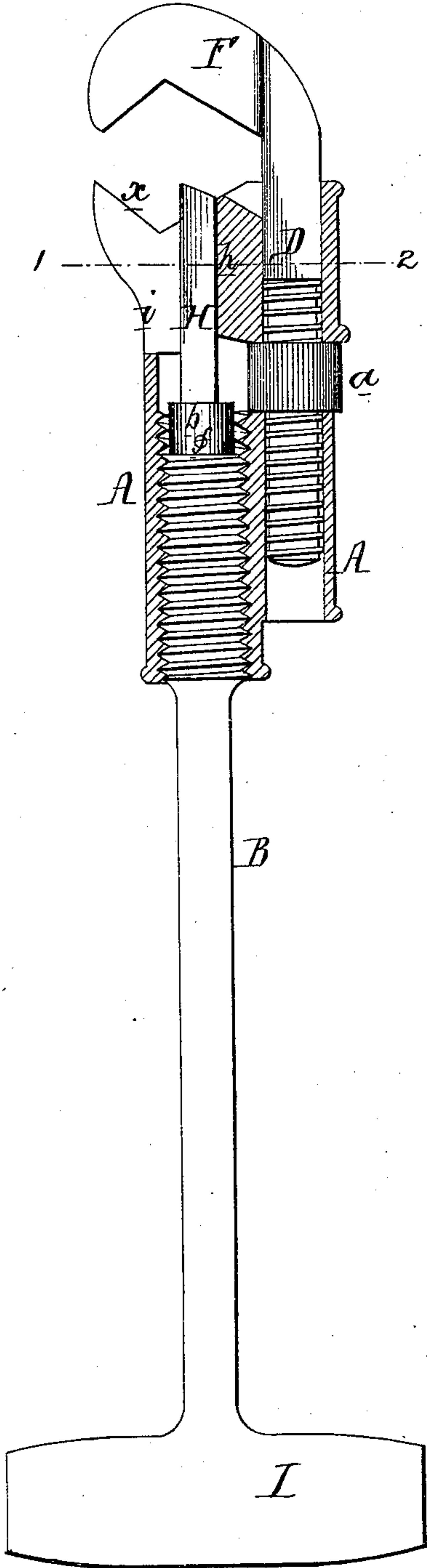
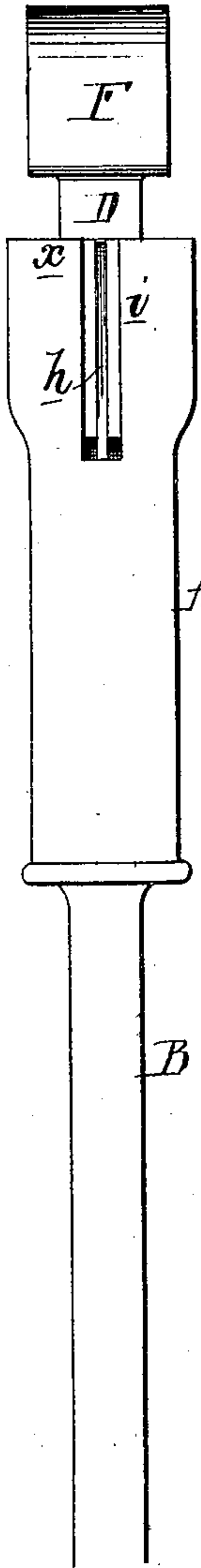


Fig. 3.

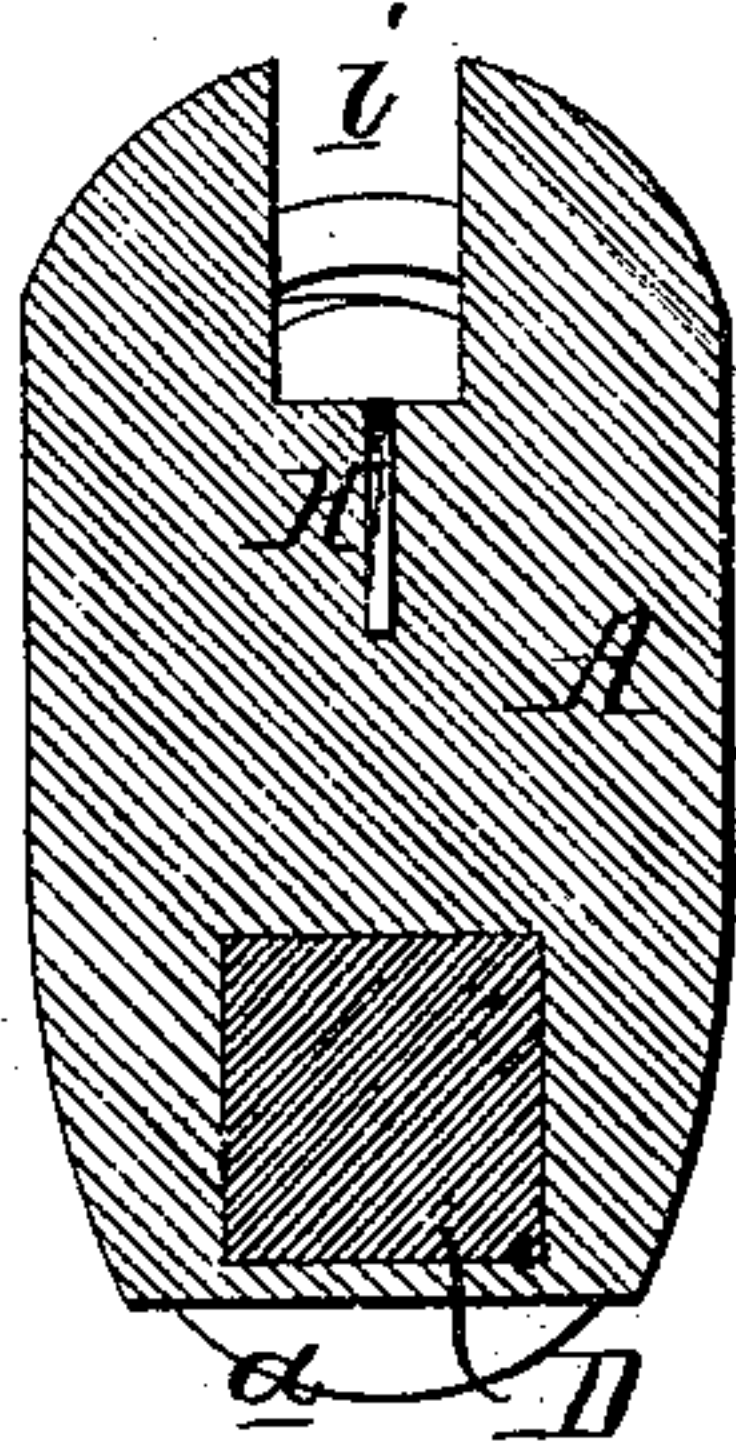
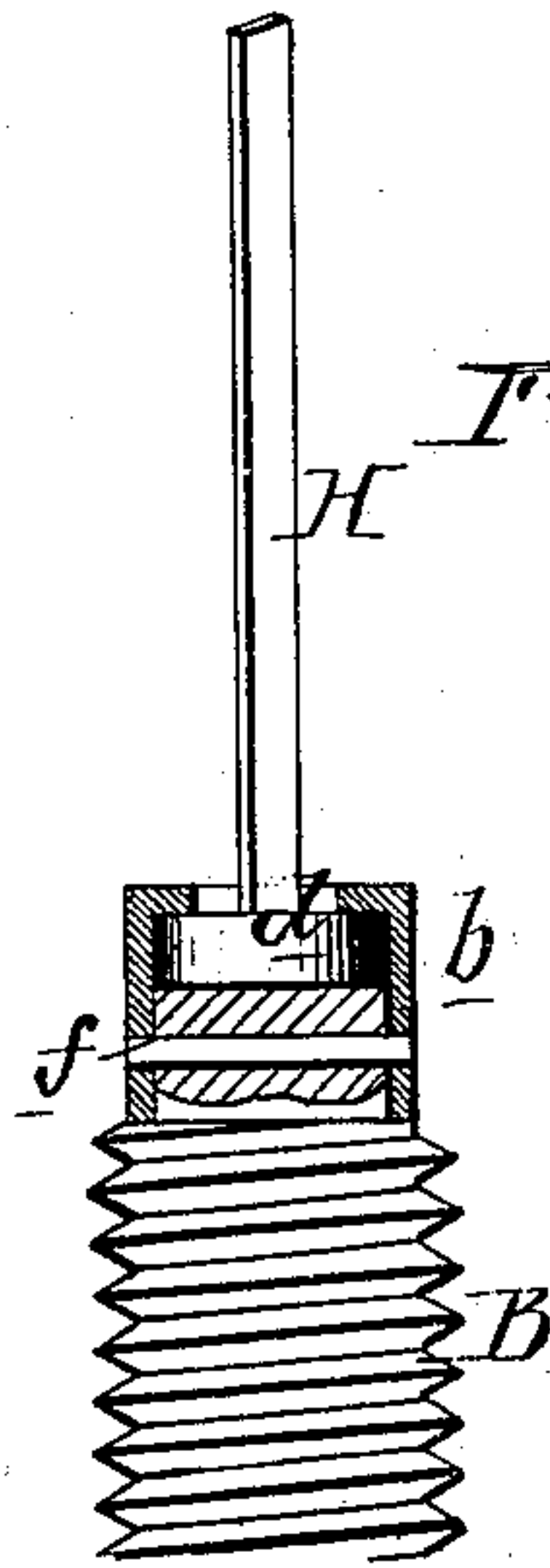


Fig 4.



Harry Smith
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by his Attorneys,
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UNITED STATES PATENT OFFICE.

FRANCIS I. MAULE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN PIPE-CUTTERS.

Specification forming part of Letters Patent No. **167,773**, dated September 14, 1875; application filed April 17, 1875.

To all whom it may concern:

Be it known that I, FRANCIS I. MAULE, of Philadelphia, Pennsylvania, have invented certain Improvements in Pipe-Cutting Instruments, of which the following is a specification:

The object of my invention is to construct a substantial, compact, and effective instrument for severing metal pipes, and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section of my improved pipe-cutting instrument; Fig. 2, a front view of the same; Fig. 3, a sectional plan on the line 1 2, Fig. 1, drawn to an enlarged scale; and Fig. 4, a detached view of part of the instrument, also drawn to an enlarged scale.

The body A of the instrument is threaded internally for the reception of the threaded end of the stem B, on the outer end of which is a suitable handle, I. This body A, on which is formed the fixed jaw *x*, has, at the rear, a chamber for the reception and guidance of the stem D of the movable jaw F, the chamber being adapted at its upper end to the squared portion of the said stem, so as to prevent the jaw from turning laterally. The jaw may be moved to and fro by operating the nut *a*, adapted to the threaded portion of the stem, and contained in a recess in the body A.

The cutter H is guided by a slot, *h*, in the body of the instrument, and may be advanced and retracted by the action of the screw-stem B, to which the cutter is connected, as shown in Fig. 4. This tool consisting of a flat strip of steel, on the upper edge of which is formed the cutting-edge, the lower end of the strip having an enlargement, *d*, over which fits the ferrule *b*, adapted and connected to the end of the stem B, in the manner shown in Fig. 4, so that the ferrule can turn freely on the cutter while the latter is being advanced or retracted by manipulating the screw-stem B.

An opening, *i*, is formed in the front edge of the body A during the manufacture of the

same, in order to facilitate the formation of the slot *h* for guiding the cutter.

The edges of both the fixed and movable jaws are made V-shaped, in order to effectually embrace the pipe to be operated upon, and to insure the effective action of the cutter H.

The operation of the instrument is as follows: The cutter H is first retracted, in order to prevent the injuring of its cutting-edge while the instrument is being adjusted to the pipe to be severed.

A sufficient hold of the pipe having been effected, the instrument is turned around the said pipe while the latter is held in a vise or otherwise, the cutter H being gradually fed forward until the pipe is completely severed.

I wish it to be understood that I lay no claim to the combination of a jaw, A, with a cutter connected to, and made adjustable through, the medium of a screw-stem, B, as pipe-cutting instruments containing such a combination have been heretofore made.

The main aim of my invention has been to obtain a jaw, A, of a substantial and solid character, and free from the opening covered by a detachable plate, and hitherto deemed necessary for the admission of the cutter, and a slide attached to the same. This desirable end I have attained by the combination of parts which permit the ready application of the cutter and screw-stem to a solid jaw.

I claim as my invention—

A pipe-cutting instrument, in which are combined a screw-stem, B, a cutter, H, having an enlargement, *d*, and a flanged ferrule, *b*, by which the said enlargement is connected to the stem, the whole being adapted to the body A of the instrument, as set forth.

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

FRANCIS I. MAULE.

Witnesses:

HUBERT HOWSON,
HARRY SMITH.