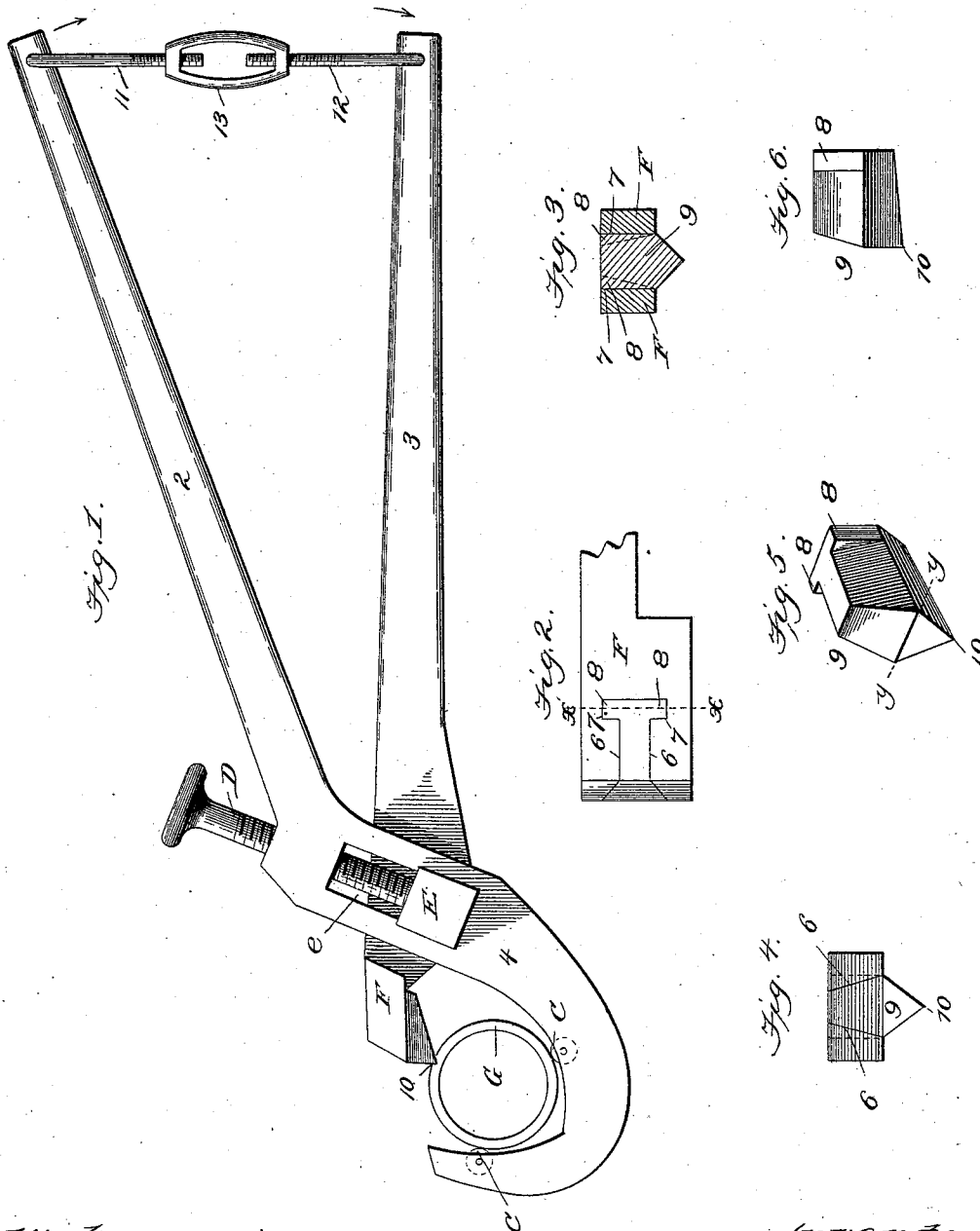


(No Model.)

JEREMIAH J. McCARTHY & JOHN J. McCARTHY.
PIPE CUTTER.

No. 531,549.

Patented Dec. 25, 1894.



Witnesses:
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UNITED STATES PATENT OFFICE.

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PIPE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 531,549, dated December 25, 1894.

Application filed April 9, 1894. Serial No. 506,872. (No model.)

To all whom it may concern:

Be it known that we, JEREMIAH J. MCCARTHY and JOHN J. MCCARTHY, citizens of the United States of America, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pipe-Cutters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to pipe-cutters for severing soil and other pipes in required lengths and at desired points.

To cut pipes which are cast it is necessary that the metal be removed at the line of separation. Wrought and drawn pipes often have the metal pushed from the line of severance by a wedging action of the cutter. Cutters of this character will not operate with cast metal pipes which are of a crystalline and fragile nature and require the removal of the metal to produce the cut.

The primary object of the invention is the provision of a hand tool for the desired purpose which will be portable, light, efficient and easily manipulated and which will not unnecessarily burden the mechanic in carrying the same from place to place.

The improvement consists of the novel features which hereinafter will be more fully described and claimed and which are shown in the annexed drawings, in which—

Figure 1, is a side elevation of a tool constructed in accordance with and embodying the essence of the invention. Fig. 2, is a top plan view of the jaw carrying the cutter. Fig. 3, is a cross section of the jaw on the line $x-x$ of Fig. 2. Fig. 4, is an end view of the jaw shown in Fig. 3. Fig. 5, is a perspective view of the cutter. Fig. 6, is a side elevation of the cutter.

To illustrate the invention a pair of tongs of usual and well known construction is shown, comprising the levers 2 and 3 connected together by an adjustable pivot E to adapt the device to pipes of different sizes, the pivot E being adjustable in a slot e of the head 4, by a set screw D. Anti-friction rollers C are placed in the head 4 to receive the thrust of the pipe G and relieve friction in the operation of the tool. The jaw F of the

movable lever 3 is provided with a slot 6 which flares from the top to the inner face. The walls of the slot are enlarged at their inner ends as at 7, to provide recesses to receive lateral projections 8 at the inner end of the cutter 9 to retain the latter in place against longitudinal displacement. The walls of the recesses 7 are preferably parallel so that the retaining projections 8 may slide into place and permit the cutter 9 to seat itself in the slot 6.

The cutter 9 is of best steel, finely tempered and its sides taper in opposite directions from a line $y-y$. The upper portion of the cutter snugly fits the slot 6 and the lower portion has its sides tapering to a cutting edge. The front end of the cutter inclines forward to the cutting point 10. The lower edge inclines from the point 10 to the rear end of the cutter to give clearness for the tool. The cutter is slipped into place in the slot 6 from the inner face of the jaw F.

By having the cutter made removable it can be easily detached and sharpened and replaced by other cutters having differently shaped points, and the body of the tool can be made of cheaper material.

As shown the device is designed to be used by moving the free ends of the levers in the direction indicated by the arrow. Obviously, the tool can be used by moving it in a reverse direction by inclining the cutting edge of the cutter from the rear to the front so that the cutting point will be at the rear end of the cutter instead of at the front end as now shown.

In order that the tool may operate successfully it is necessary that some means be provided to positively draw the free ends of the levers together and hold them in the adjusted position. Any device that will perform this office may be provided. As shown two rods 11 and 12 are attached at their outer ends to the levers 2 and 3 and have their ends threaded to receive a turn buckle 13.

The tool is adjusted to the sides of the pipe by the set screw D and the cutter is caused to bite into the pipe by drawing the free ends of the levers 2 and 3 together in the manner set forth. The tool is turned around the pipe the cutter removing a shaving. After each

cut the levers are drawn together to cause the cutter to take a deeper bite. This operation is repeated until the pipe is severed.

We claim—

- 5 1. A tool for cutting soil or other pipe comprising a head to receive and retain the pipe in place, a relatively movable jaw having a slot which flares from the outer to the inner face, and having lateral recesses, and a cutter
10 removably attached to the jaw having lateral projections which enter the said recesses substantially as described.

2. The herein specified tool for cutting soil and other pipes comprising two levers adjust-
15 ably connected together by a movable pivot,

one lever having its jaw provided with a slot which flares from the outer to the inner face, and with lateral recesses, a cutter removably attached to the slotted jaw, having lateral projections which enter the said recesses and means for positively drawing the free ends of the levers together and holding them in the adjusted position, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JEREMIAH J. MCCARTHY.

JOHN J. MCCARTHY.

Witnesses:

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