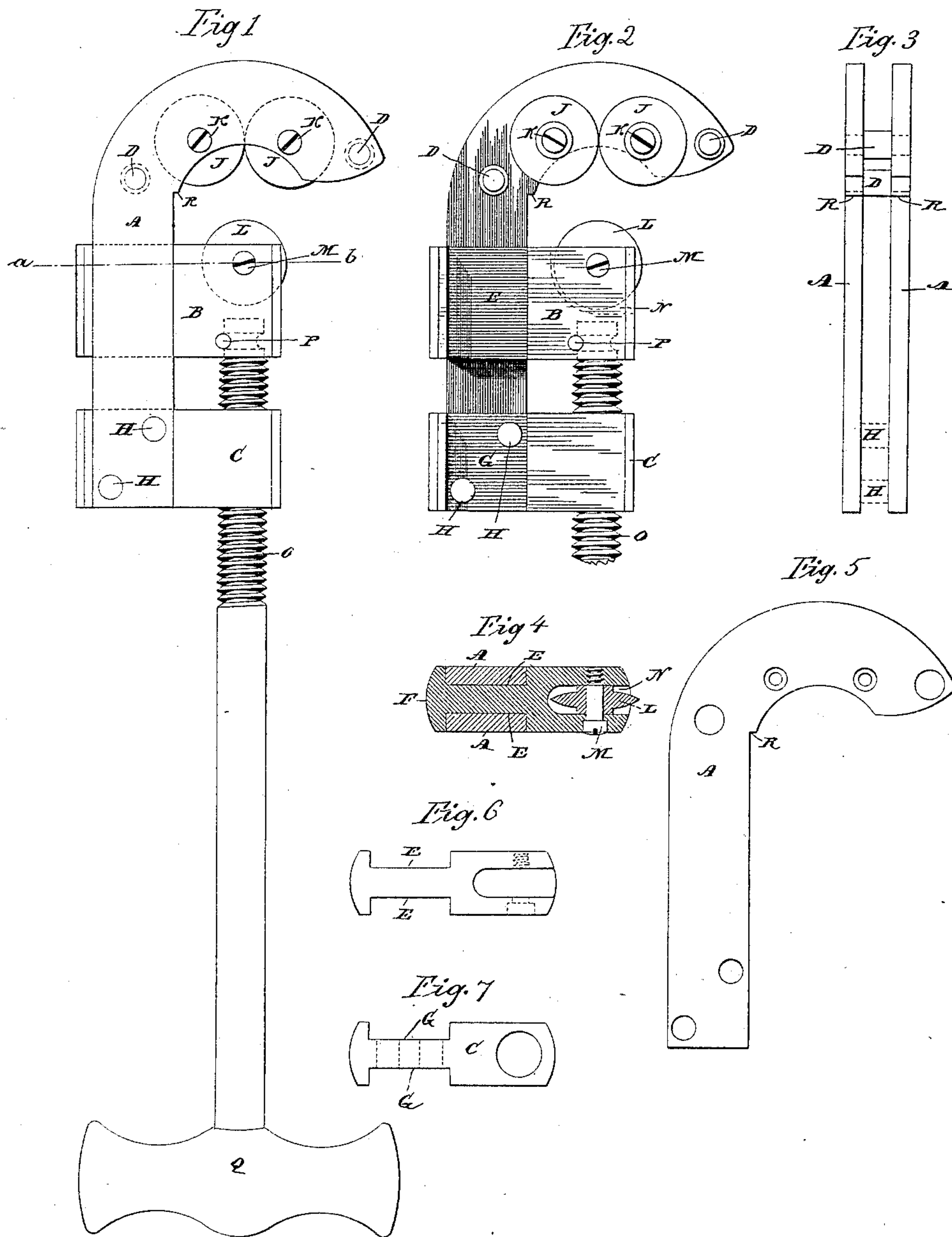


(No Model.)

M. V. B. HILL.
PIPE CUTTER.

No. 424,710.

Patented Apr. 1, 1890.



Witnesses:

Chas. B. Shumway
Harry A. Hall.

Inventor,

Martin V. B. Hill.

By George D. Seymour.

Att'y.

UNITED STATES PATENT OFFICE.

MARTIN V. B. HILL, OF NEW HAVEN, CONNECTICUT.

PIPE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 424,710, dated April 1, 1890.

Application filed May 27, 1889. Serial No. 312,192. (No model.)

To all whom it may concern:

Be it known that I, MARTIN VAN BUREN HILL, residing at New Haven, in the county of New Haven and State of Connecticut, have
5 invented certain new and useful Improvements in Pipe-Cutters; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a
10 part of this specification.

My invention relates to an improvement in pipe-cutters, the object being to produce a cheap, light, durable, and very strong tool.

With these ends in view my invention consists of a pipe-cutter having certain details
15 of construction and combinations of parts, as will be hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is
20 a view in side elevation of a pipe-cutter embodying my invention. Fig. 2 is a similar view of the tool with one of the frame-plates removed, the lower end of the screw being broken away. Fig. 3 is a view in front elevation of the said frame-plates with the sliding
25 block, the fixed block, and the cutters removed. Fig. 4 is a view of the tool in transverse section on the line *a b* of Fig. 1. Fig. 5 is a detached view of one of the frame-plates. Fig. 6 is a detached plan view of the
30 sliding block, and Fig. 7 is a similar view of the fixed block.

The frame of my improved tool consists of two corresponding flat frame-plates *A A*, between which a sliding block *B* and a fixed
35 block *C* are interposed. The said plates are formed from bar or plate steel of suitable weight, and each has a straight and a bowed portion. They are secured together, in part,
40 by rivets *D*, which are shouldered, so as to secure the requisite space between them. The sliding block has two parallel transverse slots *E E* respectively formed in its opposite faces and near its outer end, and adapted to
45 receive the straight portions of the frame-plates between which the block slides. The fixed block *C* has formed in it corresponding slots *G G*, respectively receiving the extreme
50 ends of the straight portions of the plates, which are secured to it by rivets *H H*. The

slots of the said blocks are adapted in depth to let the plates into them, so that the same will be set in flush with their faces, whereby the sides of the tool are smooth.

Two wheel-cutters *J*, of ordinary construction, are mounted side by side upon screw-pivots *K K* in the bowed portions of the plates and co-operate with a similar cutter *L*, mounted upon a screw-pivot *M*, and located
55 in a slot *N*, formed in the adjacent edge of the sliding block, the opposite edge whereof is chambered to receive the grooved end of the operating-screw *O*, which is loosely
60 coupled with the said block, so as to turn independently thereof, by a pin driven into the block and entering the groove in the screw,
65 as shown by dotted lines in Figs. 1 and 2 of the drawings. The said screw passes through a threaded opening formed in the fixed block, and is provided at its outer end with a trans-
70 verse handle *Q*. Shoulders *R R*, formed in the frame-plates, prevent the sliding block from being moved out far enough for the engagement of its wheel with those carried by
75 them. One of the rivets *D* is placed so as to assist the said shoulders in the performance of this function, and might replace them altogether.

My improved tool, being composed of steel, may be made smaller than a malleable-iron
80 tool of equal strength, and is much lighter and more convenient to use. The slots in the blocks are milled out both at one operation, and the parts are all very readily assembled and finished.
85

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

A pipe-cutter composed of two steel frame-plates, each having a straight and a bowed
90 portion and secured together with a space between them, a sliding and a fixed block, each inserted at one end between the frame-plates, having their opposite faces slotted to receive the respective frame-plates, with
95 which their faces are flush, an operating-screw passing through a threaded opening in the fixed block and coupled with the adjacent edge of the sliding block, which it actuates, so as to turn independently thereof,
100

two wheel-cutters mounted side by side in
the bowed portions of the plates, and a simi-
lar wheel-cutter mounted so as to co-operate
with them in the sliding block, the described
5 construction of plates and blocks securing a
compact and convenient frame for the tool,
substantially as set forth.

In testimony whereof I have signed this
specification in the presence of two subscrib-
ing witnesses.

MARTIN V. B. HILL.

Witnesses:

CHAS. B. SHUMWAY,
HARRY A. HALL.