(No Model.)

J. MILLER.

Pipe Cutter.

No. 237,992. Patented Feb. 22, 1881.

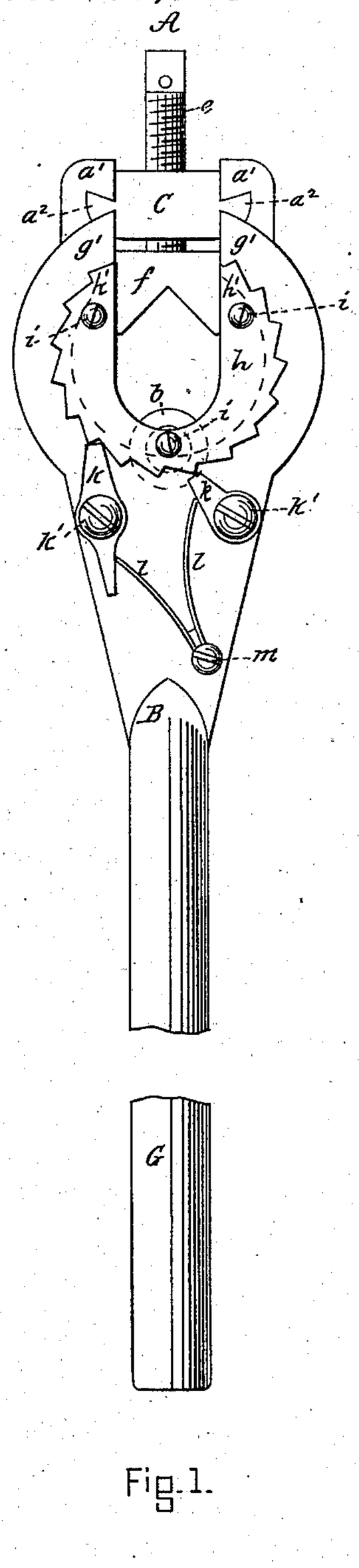

Fig. 1.

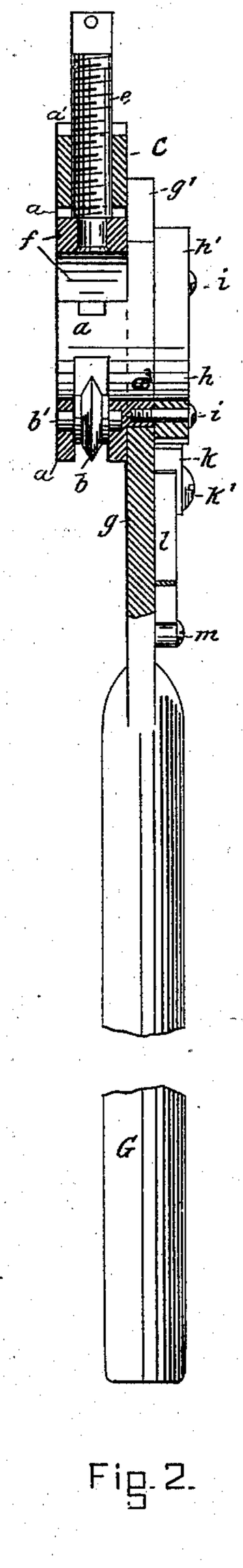

Fig. 2.

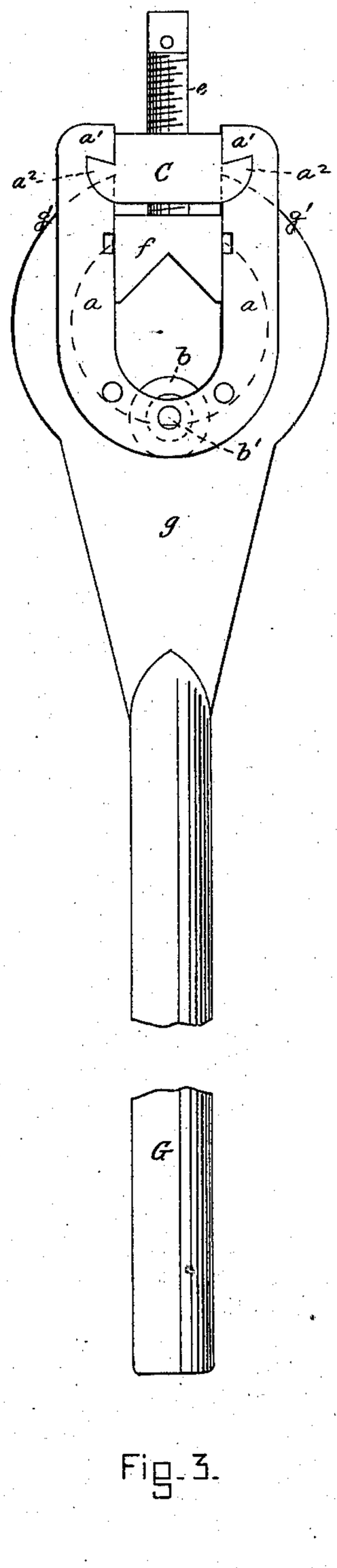

Fig. 3.

WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN MILLER, OF CAMBRIDGEPORT, MASSACHUSETTS.

PIPE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 237,992, dated February 22, 1881.

Application filed January 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN MILLER, a citizen of the United States, residing at Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Pipe-Cutters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in pipe-cutters; and it is especially adapted for cutting off pipes that are located in proximity to walls, floors, or ceilings of rooms, or to other objects which would prevent the handle of the tool from being swung completely round the pipe to be cut; and for this purpose the invention is carried out as follows, reference being had to the accompanying drawings, on which—

Figure 1 represents a front elevation of my improved pipe-cutter. Fig. 2 represents a central longitudinal section on the line A B, shown in Fig. 1; and Fig. 3 represents a rear view of the invention.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

a is the vise, provided with the loosely-revolving cutter-wheel *b*, as shown, which is free to rotate on the line *b'*, secured to the lower part of the vise *a*, as represented in Figs. 2 and 3. The vise *a* is forked and provided with open ends *a' a'*, having dovetailed recesses *a'' a''*, in which the detachable nut *c* is held during the operation of cutting a pipe, and detached, together with its pressure-screw *e* and laterally-adjustable jaw *f*, for the purpose of enabling the pipe that is to be cut to be introduced within the vise, as well as allowing it to be removed after it is cut off. The forked vise *a* is loosely journaled by neck a^3 in a circular opening in the forked blade *g*, as shown by dotted lines in Figs. 1 and 3. The lower end of blade *g* constitutes the handle G, as shown. The forked blade *g* is provided with the upper open ends, *g' g'*, as shown in Fig. 1, and on the top of it is located the forked ratchet-piece *h*, having open upper ends, *h' h'*, as shown. Said ratchet-piece is secured to the forked vise *a* by means of the fastening-screws *i i i*. On the forked blade *g* is arranged a pair of pawls, *k k*, movable on fulcra *k' k'*, and provided with a pressure-spring, *l l*, held to the blade *g* by means of the set-screw *m*, as shown in Fig. 1, by which arrangement the handle G can be reciprocated to impart an intermittent rotary motion to the ratchet-piece *h* and its vise *a*, for the purpose of cutting off the pipe by means of the cutter *b* and laterally-adjustable jaw *f*, as described.

As both the vise *a* and its ratchet-piece *h*, as well as the blade *g*, are forked and open on one side, it will be seen that by moving them to the relative positions, as shown in Fig. 1, and by detaching the nut *c*, pressure-screw *e*, and jaw *f* from the vise, that a pipe can be easily inserted within the vise, after which the jaw *f*, nut *c*, and screw *e* are located on the vise *a* in the positions shown in the drawings, and by gradually tightening the screw *e*, and reciprocating the handle G to impart an intermittent rotary motion to the vise *a* and its cutter *b*, the pipe is speedily cut off at the desired place without the necessity of turning the handle G completely around the pipe.

The tool may be used as an ordinary pipe-cutter if sufficient space is at hand to enable the handle to be swung in a complete circle; but I prefer to use it at all times in the manner above described.

Two pawls, *k k*, are shown, so as to insure at all times at least one pawl acting on the ratchet *h*, particularly so when the open end of said ratchet comes opposite to the said pawls.

What I wish to secure by Letters Patent and claim is—

The herein-described improved pipe-cutter, consisting of the forked handle G *g g'*, forked vise *a*, having detachable nut *c*, screw *e*, and jaw *f*, cutter *b*, combined with the forked ratchet *h*, with its pawls *k k* and springs *l l*, as and for the purpose set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOHN MILLER.

Witnesses:

ALBAN ANDRÉN,

HENRY CHADBOURN.