

(No Model.)

W. E. MELHORN.

PIPE CUTTER.

No. 330,253.

Patented Nov. 10, 1885.

Fig. 1.

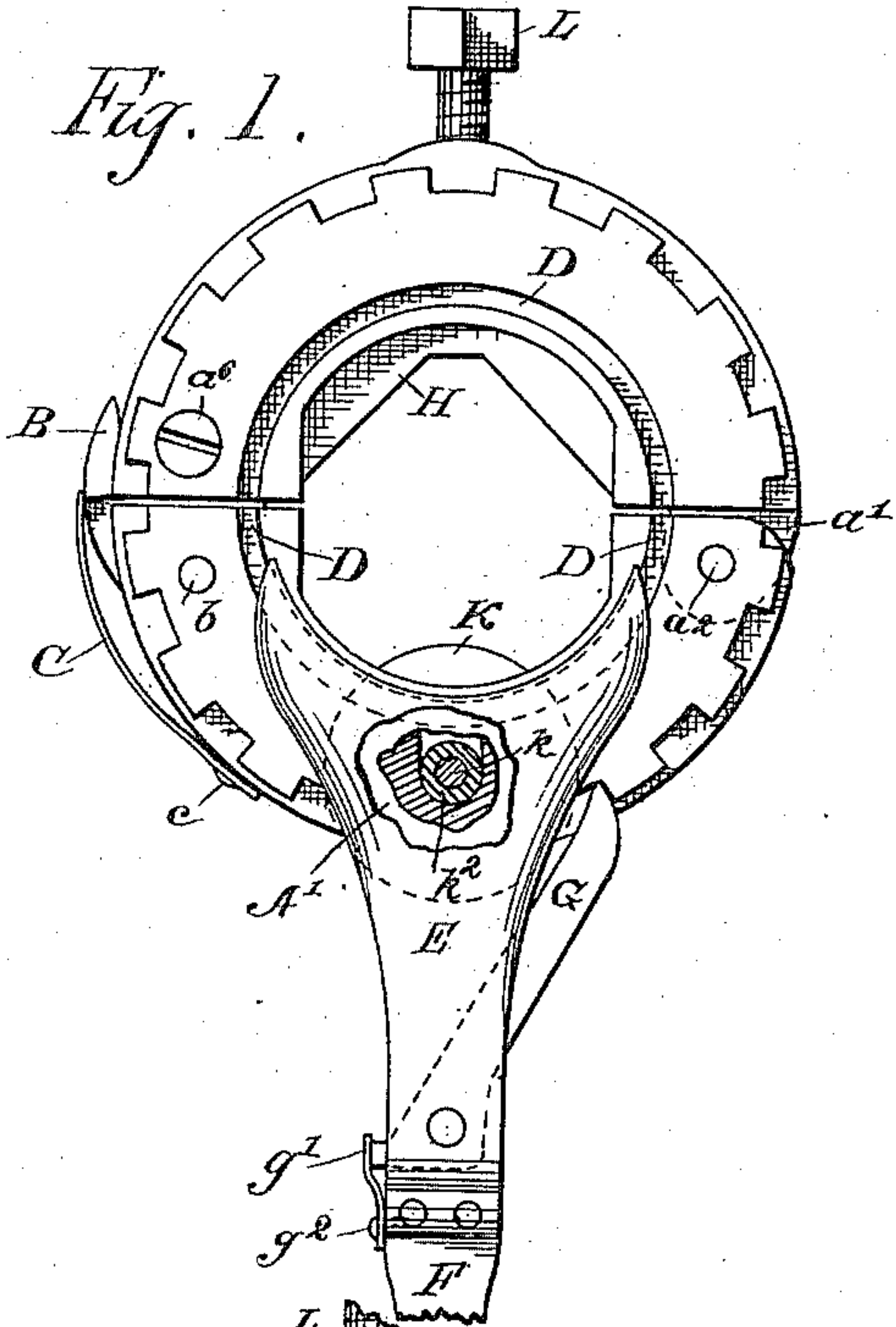


Fig. 2.

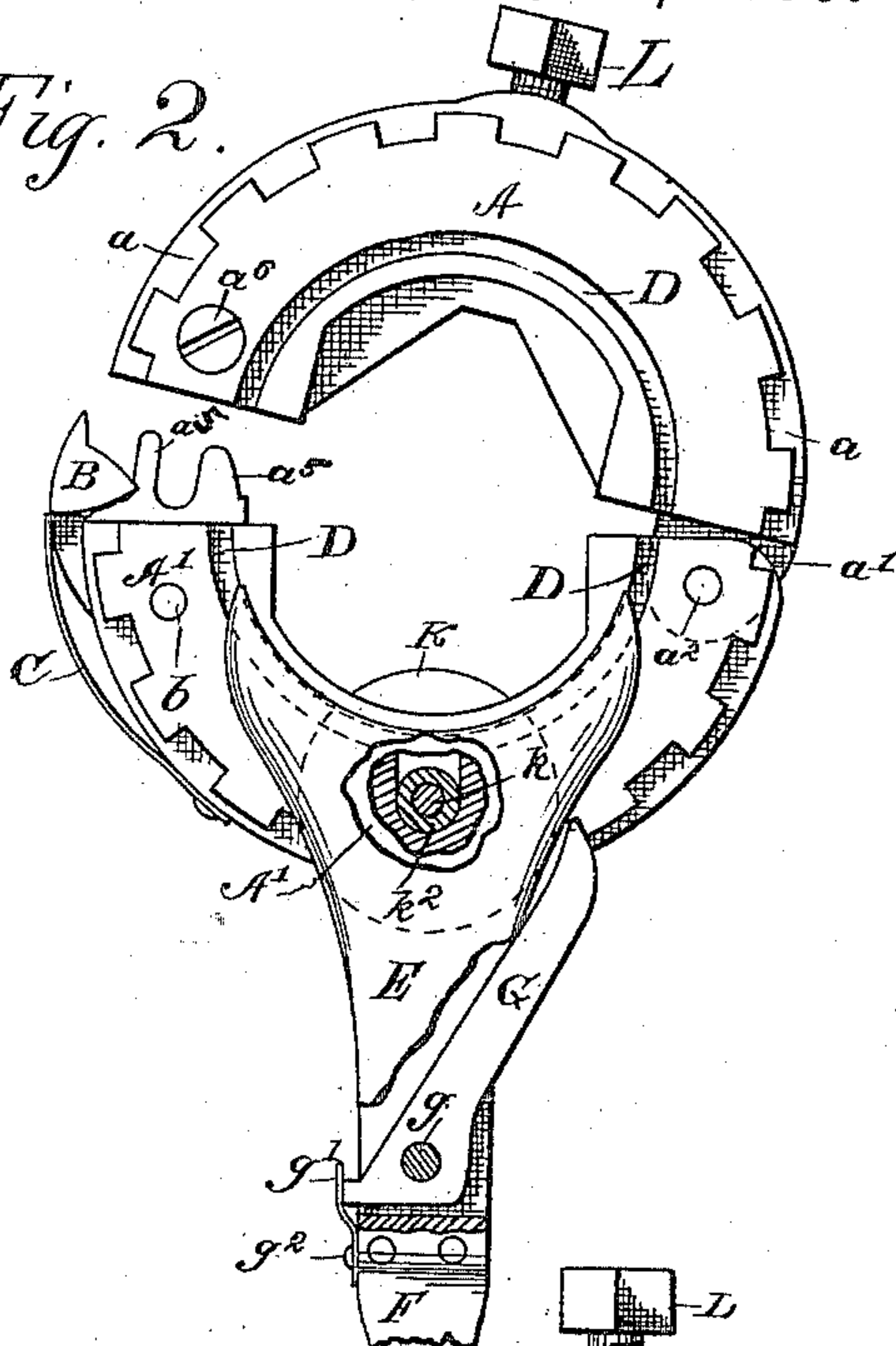


Fig. 3.

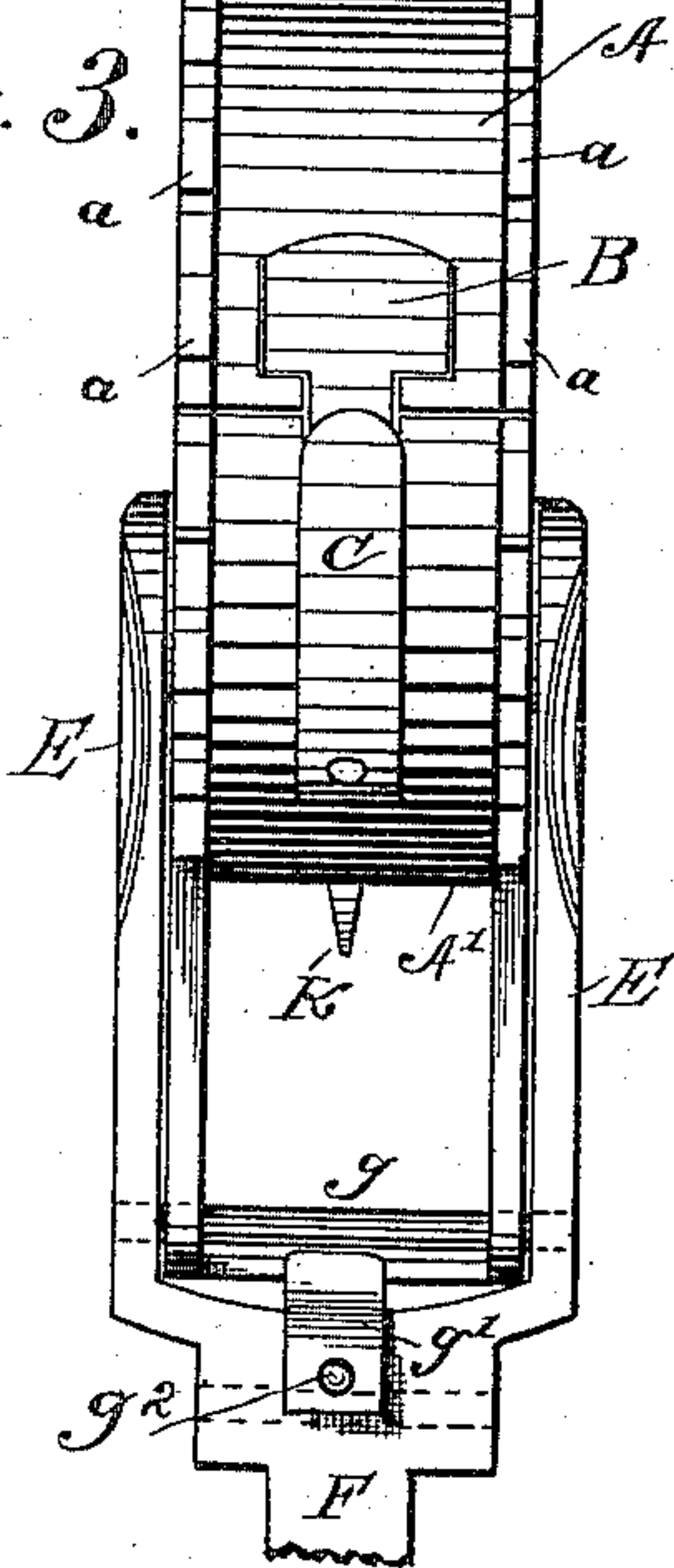
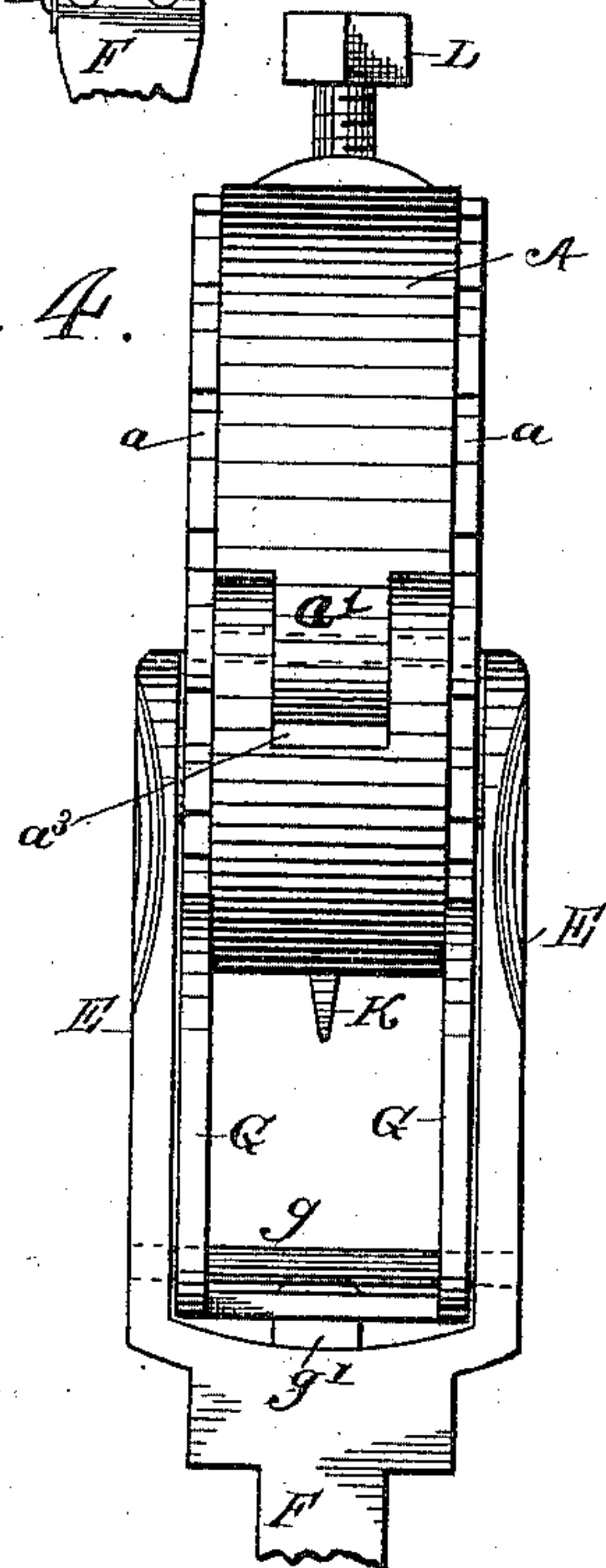
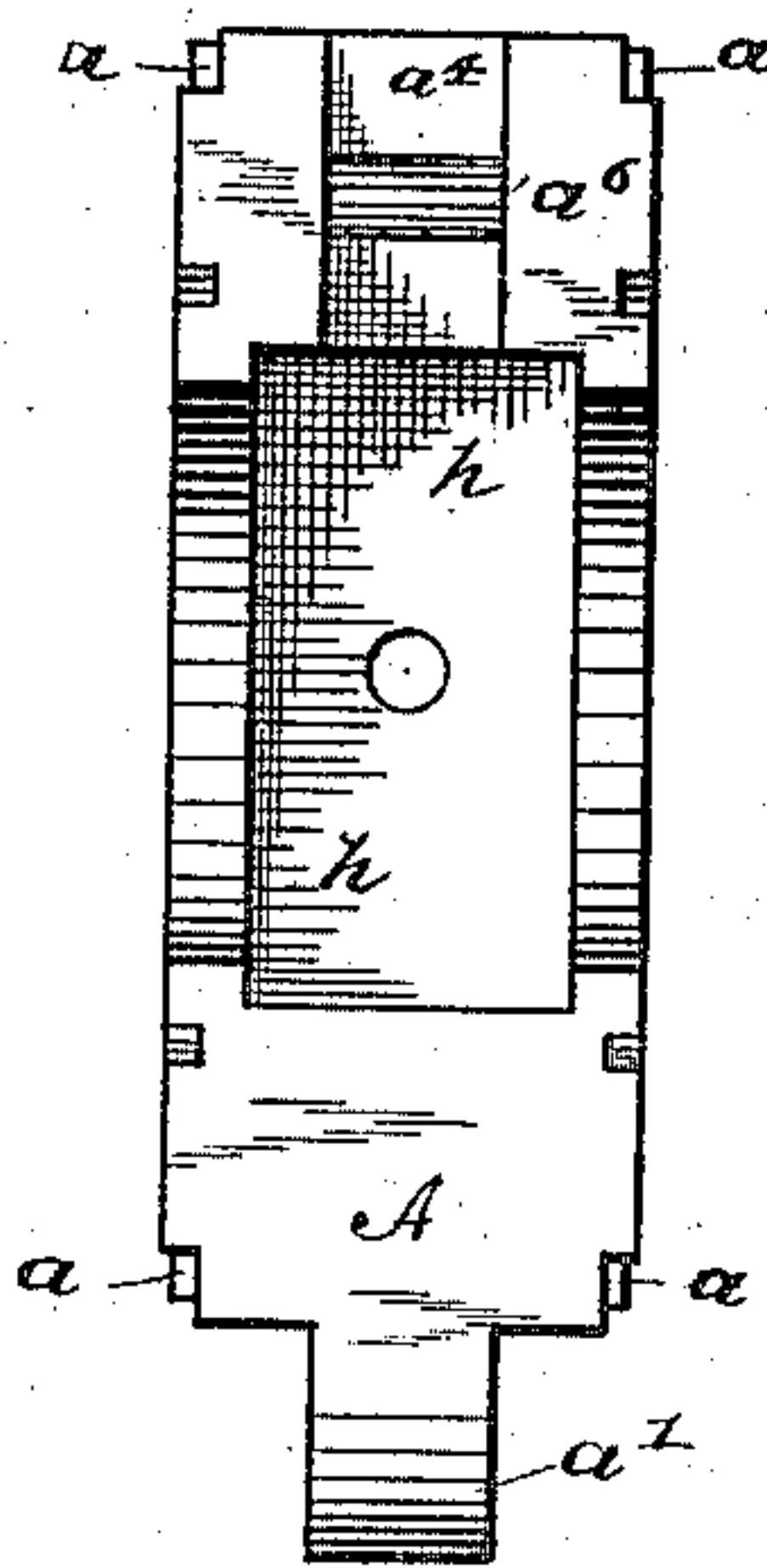


Fig. 5. Fig. 4.



WITNESSES

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WILLIAM E. MELHORN, OF ERIE, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
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PIPE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 330,253, dated November 10, 1885.

Application filed July 18, 1885. Serial No. 171,935. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. MELHORN, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Pipe-Cutting Mechanism, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The object of this improvement is an adjustable ratchet mechanism adapted to cutting pipes or rods of different diameters. These results are attained by the means illustrated in the drawings herewith filed as part hereof, in which the same letters of reference denote the same parts in the different views.

Figure 1 is a front elevation, partly in section, of a pipe-cutting appliance embodying the features of my improvement. Fig. 2 is a sectional view of the same, representing one of the parts differently adjusted from the position shown in Fig. 1. Fig. 3 is a side elevation. Fig. 4 is a view of the same as seen from the side opposite to that shown in Fig. 3. Fig. 5 is a detail.

25 A A' are adjustable jaws, provided with ratchet notches or detents *a*. The jaw A is provided with an integral reduced extension, *a'*, which fits a slot, *a³*, in the jaw A', to which it is pivoted, as shown at *a²*, Fig. 2. The opposite end of the jaw A' is provided with a recess, *a⁴*, as shown in Fig. 5, for the reception of a transversely-slotted integral extension, *a⁵*, of the jaw A, for the purpose of preventing lateral movement of the jaws A A'. A screw, *a⁶*, is transversely affixed in the recessed end *a⁴* of the jaw A, for the purpose of compensating for the reduction in strength accruing from the slot *a⁴*.

40 B is a latch pivoted, as indicated at *b*, within a groove in the jaw A', and actuated by a spring, C, secured to the rim of the jaw A' by pin *c*.

45 E E F is the operating handle or lever, the parts E E of which are provided on their inner sides with heads which enter the grooves

D D in the jaws A A', and thus form a movable connection with the same. F is the operating-handle proper, which may be of any suitable length.

50 G G is a pawl pivoted within the parts E E by a transverse pin, *g*, and provided with an actuating-spring, *g'*, affixed, as shown at *g²*, to the shoulder of the part F.

55 K is a rotating cutter set in a suitable recess in the jaw A', within which it revolves on a transverse pin, *k*, and lateral extensions forming journals *k²*, which have bearings in the jaw A'.

60 L is an adjusting-screw, connected through the jaw A with a movable bearing-piece, H, which is fitted within a suitably-formed recess in the jaw A. (More fully shown at *h h* in Fig. 5.)

65 The operation is as follows: The pipe or rod is set between the jaws A A', and the same closed, as shown in Fig. 1, in which position they will be secured by the latch B and spring C. By operating the screw L the block H will be moved inward and cause the pipe or rod to bear more or less on the cutter K, which will be put in action for the purpose desired by operating the jaws A A' through the handle E E F and pawl G, and as the cutting process progresses the depth of the cut can be increased by means of the screw L and block H until completed.

80 Having explained the features of my improvement, what I claim as new, and desire to secure by Letters Patent, is—

85 The hinged jaws A A', provided with movable bearing-piece H, cutter K, and latch mechanism B C, and the operating-handle E E F, provided with pawl G G, and arranged to operate substantially as specified, for the purpose set forth.

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

WILLIAM E. MELHORN.

Witnesses:

D. D. WESCHLER,
JACOB WESCHLER.