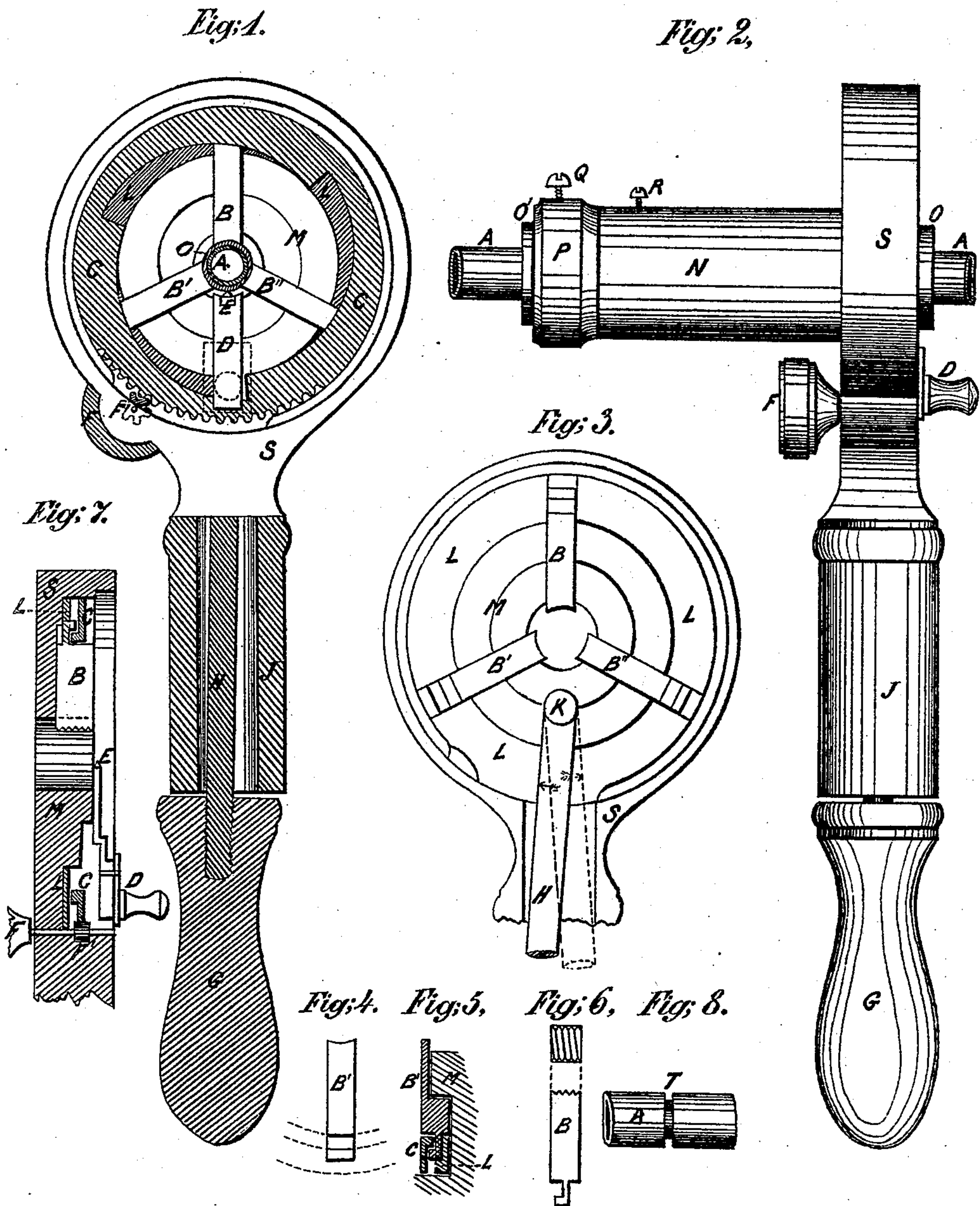


G. MULLER.
PIPE-CUTTER.

No. 184,652.

Patented Nov. 21, 1876.



Witnesses;
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GEORG MÜLLER, OF NEW YORK, N. Y.

IMPROVEMENT IN PIPE-CUTTERS.

Specification forming part of Letters Patent No. **184,652**, dated November 21, 1876; application filed May 2, 1876.

To all whom it may concern:

Be it known that I, GEORG MÜLLER, of New York city, county and State of New York, have invented a new Improvement in Pipe-Cutters, which improvement is fully set forth in this specification, reference being had to the accompanying drawing.

This invention has for its special object a new and useful method for cutting iron pipes with glass lining.

In my drawing, Figure 1 represents an open top view of my cutter. Fig. 2 illustrates a side view of the external appearance of said Fig. 1. Fig. 3 represents details of Fig. 1 after some parts are removed. The figures, 4, 5, 6, and 7, are detail drawings of Fig. 1, and will be described hereafter. Fig. 8 shows the groove cut in the iron pipe.

In my drawings, A represents an iron pipe with glass lining, to be parted. B, B', and B'' are dies with which I cut the iron pipe. C represents a feeding-cam with a number of teeth attached thereto, regulated by the pinion F F'.

Figs. 4 and 5 show the arrangement in what manner the dies B, B', and B'' are connected with the feeding-cam C.

D represents a die, on the end of which a diamond, E, is inserted, for the purpose of cutting the glass pipe-lining. G is a movable handle, screwed on the lever H, as seen in Fig. 1. J is another handle, stationary, fastened to the frame-work S M, drilled out, as seen in Fig. 1, to allow ample space for the movement of the lever H. As seen in Fig. 3 of drawings, the lever H is fastened to the frame M through the pin K. L represents a movable ring, which, attached to the lever H, makes, through the latter, the movements as indicated by the arrows, Fig. 3, and, as the dies B, B', and B'' are fastened in the ring L, the same have to follow the same movements from the right to the left as are produced through the lever H.

N in Fig. 2 of drawing is a pipe fastened to the frame S, and serves as a guide for the pipe A. O and O' in Fig. 2 represent collars, which can be taken out and replaced by others of such size as to correspond with the width of the respective pipe A. P in Fig. 2 is a movable ring, on which the pipe A is screwed through Q. The screw R is for the purpose of holding the movable ring P and the guide N together.

In Fig. 6, B represents a die for the purpose of cutting a thread on the iron pipe A. Three dies of this construction are used, and are worked in the same manner for a screw-plate as the above-described three dies B, B', and B'', for cutting the pipe.

T in Fig. 8 shows the groove made by the dies, uncovering thus the glass lining, and making it fit for cutting with diamond or speed-wheel.

In the operation of my improved pipe-cutter I take a collar, O, of such opening as to fit over the pipe A, Fig. 2, insert it in P and S, and, after the pipe A has been brought in its proper position, I fasten A, through screw Q, to the movable ring P. Then I bring the dies B, B', and B'' in their place, as represented in Fig. 1, by turning the pinion F F'. The pinion-wheel F' engages with the teeth of the feeding-cam C, which latter again produces a movement of the dies B B' B'' toward the pipe A. Then I take hold of the handle J with my left hand, and, with the handle G in my right hand, I commence to make constant movements from the right to the left. The edges of the dies B, B', and B'' are thus cutting the iron pipe, as described above. After said dies have made a groove of certain depth, it is necessary to regulate the position of the dies B, B', and B'' by turning the pinion F F'.

Having thus finished in making a groove that has cut the iron pipe around the glass lining, I bring the diamond E in contact with the glass pipe. The knob D, Figs. 2 and 7 of drawings, regulates the position of said diamond E. By turning the whole cutter once around the pipe A the diamond E cuts the glass pipe.

Having thus described the nature of the said invention, and in what manner the same is to be performed, I declare that I claim as new and desire to secure by Letters Patent—

The combination of the feeding-cam C, die-holder M, and dies B B' B'' with the die D, provided with diamond E, all operating as described, and for the uses and purposes set forth.

In testimony whereof I hereunto subscribe my name in the presence of two witnesses.

GEORG MÜLLER.

Witnesses:

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