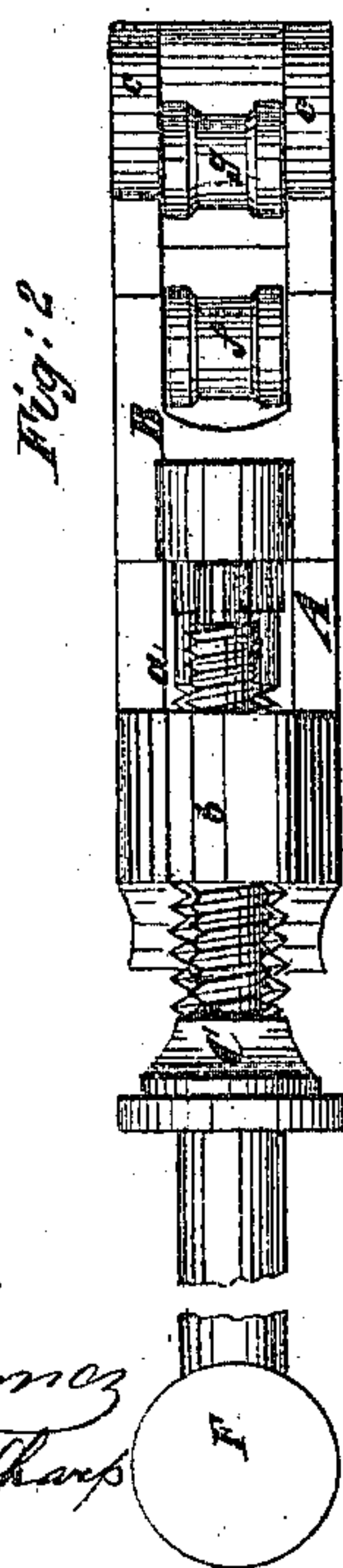
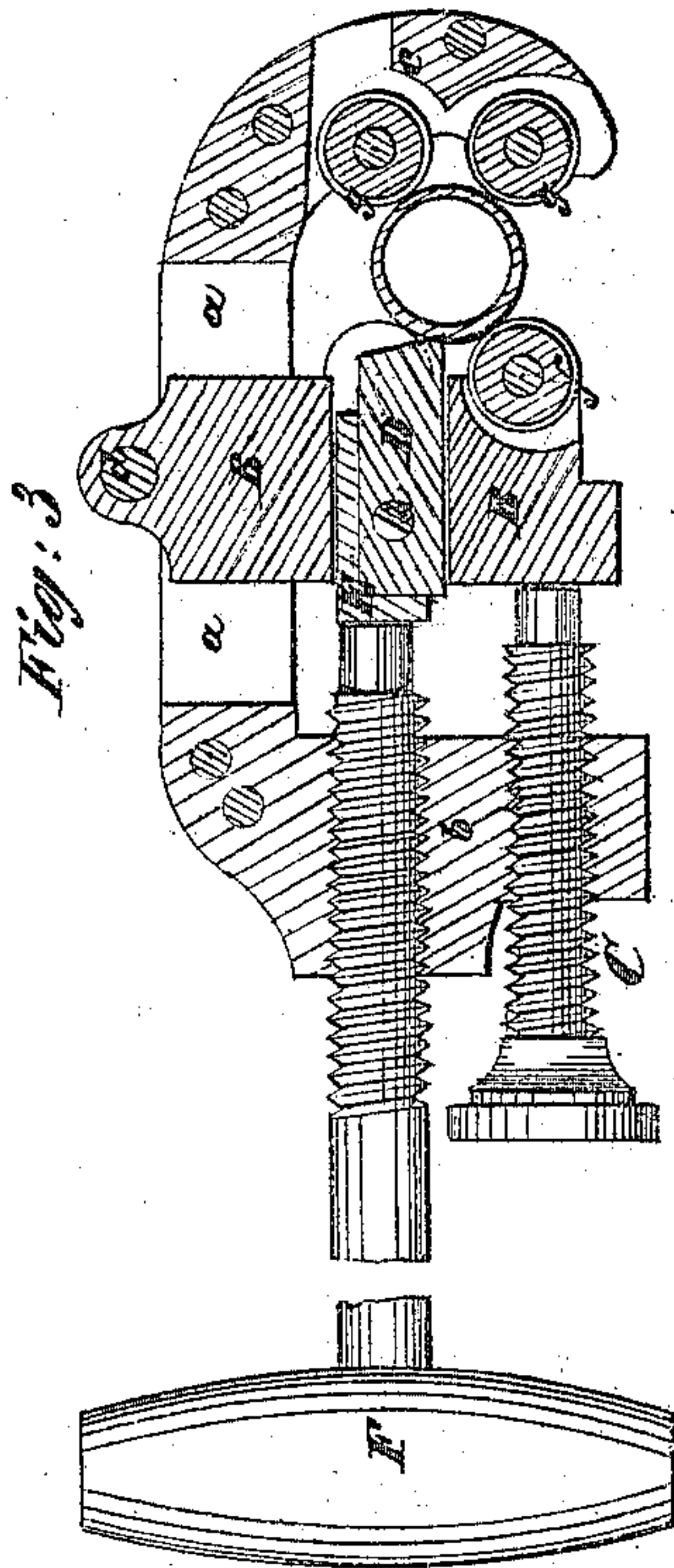
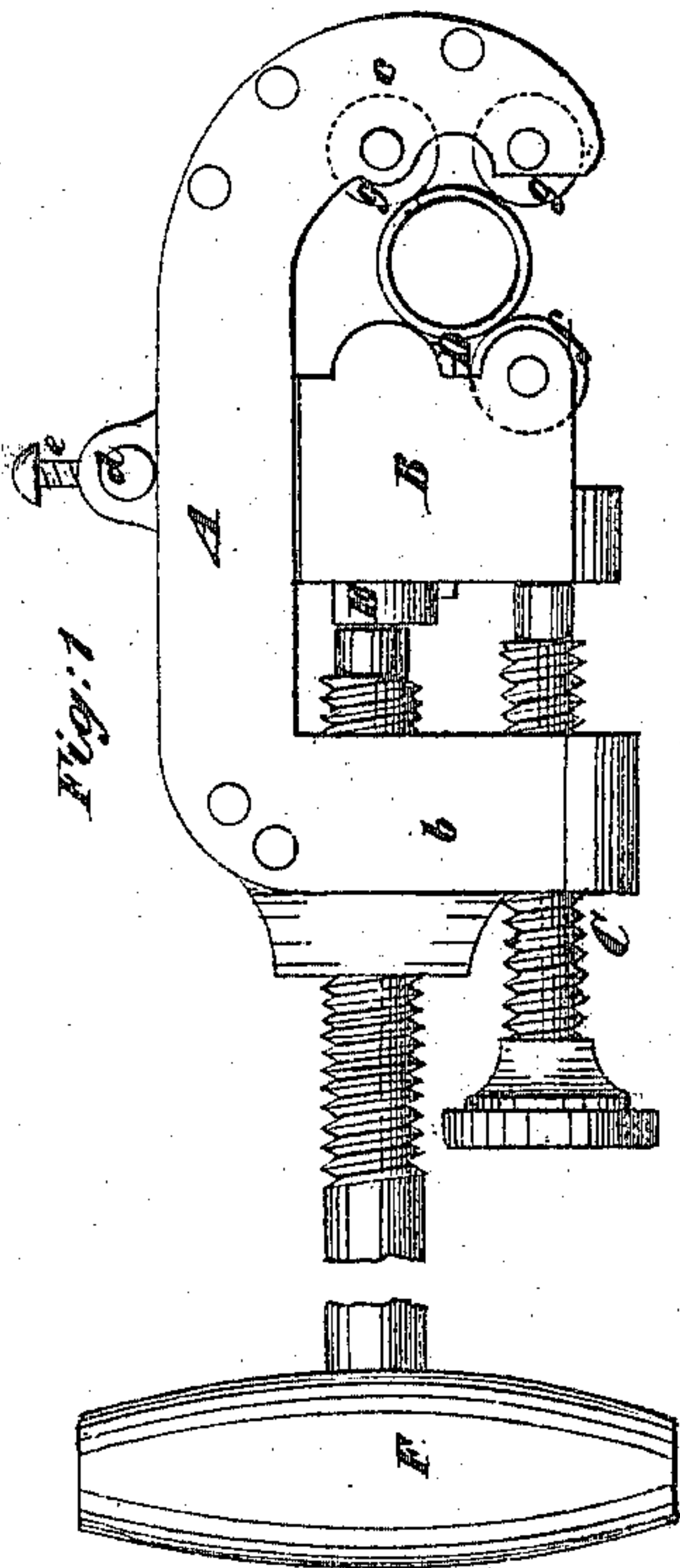


J. V. JEPSON.

Tube-Cutters.

No. 134,477.

Patented Dec. 31, 1872.



Witnesses:  
Thos. Harnes  
Bry. P. Sharp

John V. Jepson  
per Rom & Allen

Attorneys



# UNITED STATES PATENT OFFICE.

JOHN V. JEPSON, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN TUBE-CUTTERS.

Specification forming part of Letters Patent No. 134,477, dated December 31, 1972.

*To all whom it may concern:*

Be it known that I, JOHN V. JEPSON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Tube-Cutters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figures 1 and 2 represent longitudinal views, from the side and front, of a tube or pipe cutter constructed in accordance with my improvement; and Fig. 3, a longitudinal sectional view, as seen from the side of the cutter.

Similar letters of reference indicate corresponding parts.

A main object of my invention is to produce a pipe-cutter that shall be better adapted to different kinds or sizes of work than those heretofore in use without adding to its bulk or weight. It also avoids the objection, which is incidental to other cutters, of cutting a spiral upon the pipe instead of dividing or cutting it off square. To these ends the cutting-tool is made independently adjustable to its work through a cutter-head arranged to slide within a frame of peculiar construction, and the whole implement or cutter made to take its bearing upon the pipe as a center, about which it revolves, entirely distinct from the cutting-tool as a bearing-surface or clip. Also, the invention includes a certain construction of cutting-tool and fit of the tool-holder, which facilitates the cutting-tool being sharpened or renewed; and, by said tool having a pointed or clean cut, no burr is left on the outside nor stricture on the inside of the pipe at its cut, as is invariably the case in those cutters which employ knives or wheels that press apart the fibers of the pipes.

Referring to the accompanying drawing, A represents the frame of the cutter. This frame is of elongated form, being composed, in part, of a slotted back, *a*, which serves to support and guide the sliding cutter-head B, and, in part, of ends *b* and *c*. The sliding cutter-head or block B is reduced to form a bearing-surface or shoulder against the inner face of the back *a*, and is secured in its sliding connection with said back by a cross-pin, *d*, and set-screw *e*, which admit of its speedy removal, when desirable, for extraction of the cutter or

otherwise. The advance surface of the cutter-head is provided with bearing rollers or projections *f*, and the outer end *c* of the frame with corresponding bearing projections or rollers *g*, to receive the pipe in between them, and which form surfaces for the whole cutter's rotation around the pipe as a center.

The cutter-head B is set up to its clip of the pipe by an adjusting-screw, C, working through the inner end *b* of the frame, and bearing in a loose or free manner against the rear of the cutter-head. The cutting-tool D is of a beveling and pointed nose-edge shape at its cutting extremity, and of a generally-flat solid construction, the same being arranged to fit a longitudinal groove made in a circular bolster, E, which is fitted to freely slide through the cutter-head, and which, together with the cutting-tool, is prevented from turning by causing a projecting edge of the cutting-tool to play through a slot or groove in the cutter-head. Said cutting-tool D is held in the slot of the bolster E by a screw, *h*, which facilitates its adjustment or removal. It is fed up to its cut, as required, after the whole implement has been adjusted to its clip of the pipe, as hereinbefore described, by turning the lever or handle F of the implement, said lever having a screw-thread on it, which works through a female thread in the end *b* of the frame, and having a loose or free bearing on the back of the bolster E.

A pipe-cutter constructed as described, while free from objectionable bulk or weight, provides within its frame for a large range in the sizes of pipe it is capable of operating on; is prevented from cutting spirally by its clip (independently of the cutting-tool) of the pipe as a center about which it revolves; the tool cuts clean and square, without leaving burr or stricture on the pipe; and every facility is afforded for sharpening or renewal of the cutting-tool and adjustment or replacement of the various parts of the implement.

What is here claimed, and desired to be secured by Letters Patent, is—

The combination of the bolster E with the cutting-tool D, constructed and arranged in relation with the cutter-head B, as specified.

JOHN V. JEPSON.

Witnesses:

HENRY T. BROWN,  
FRED. HAYNES.