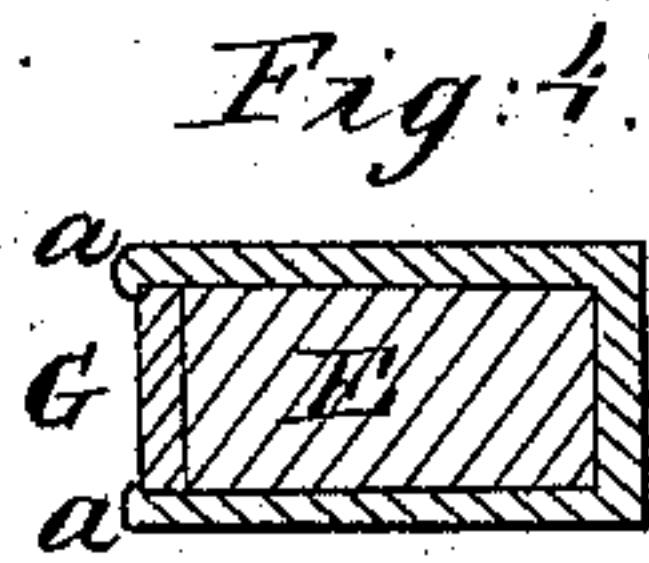
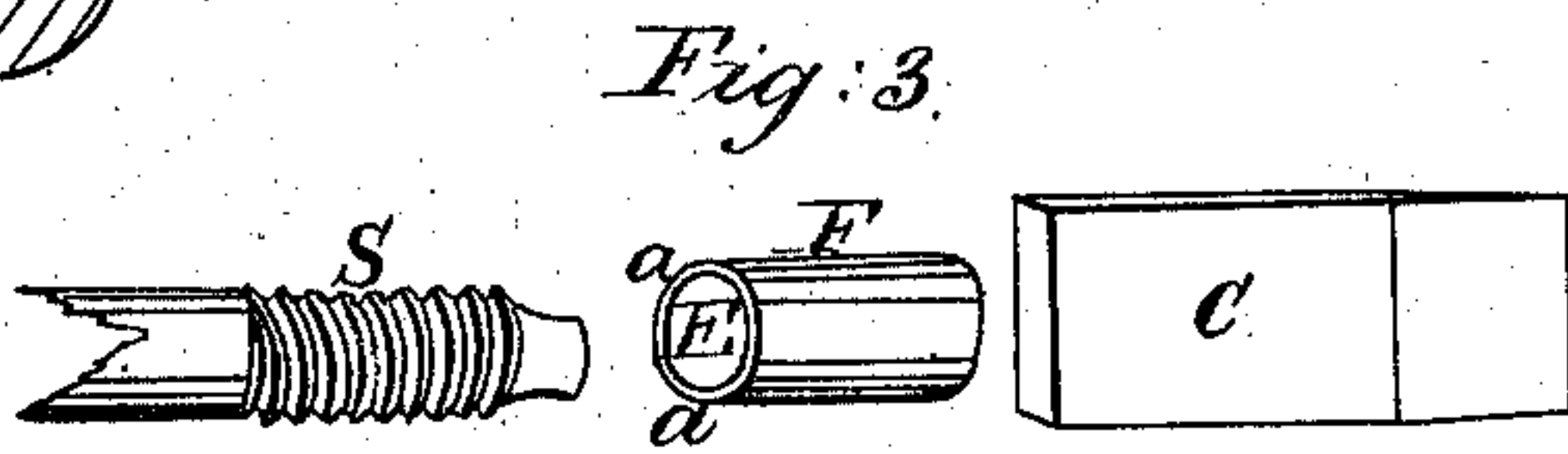
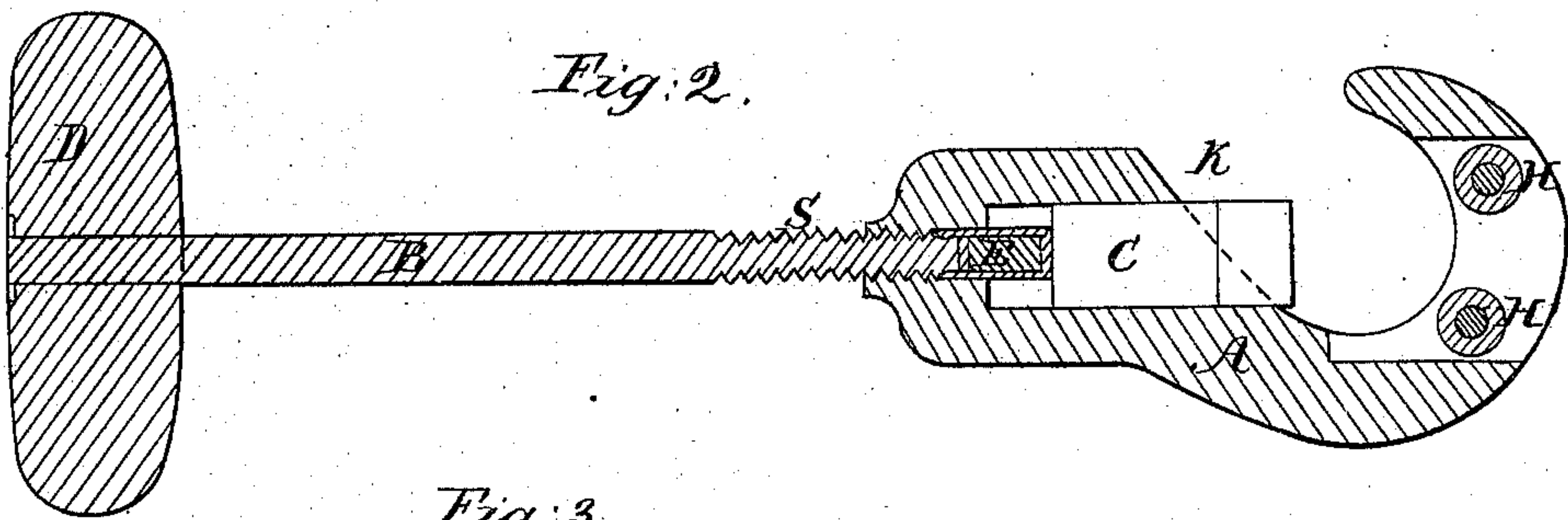
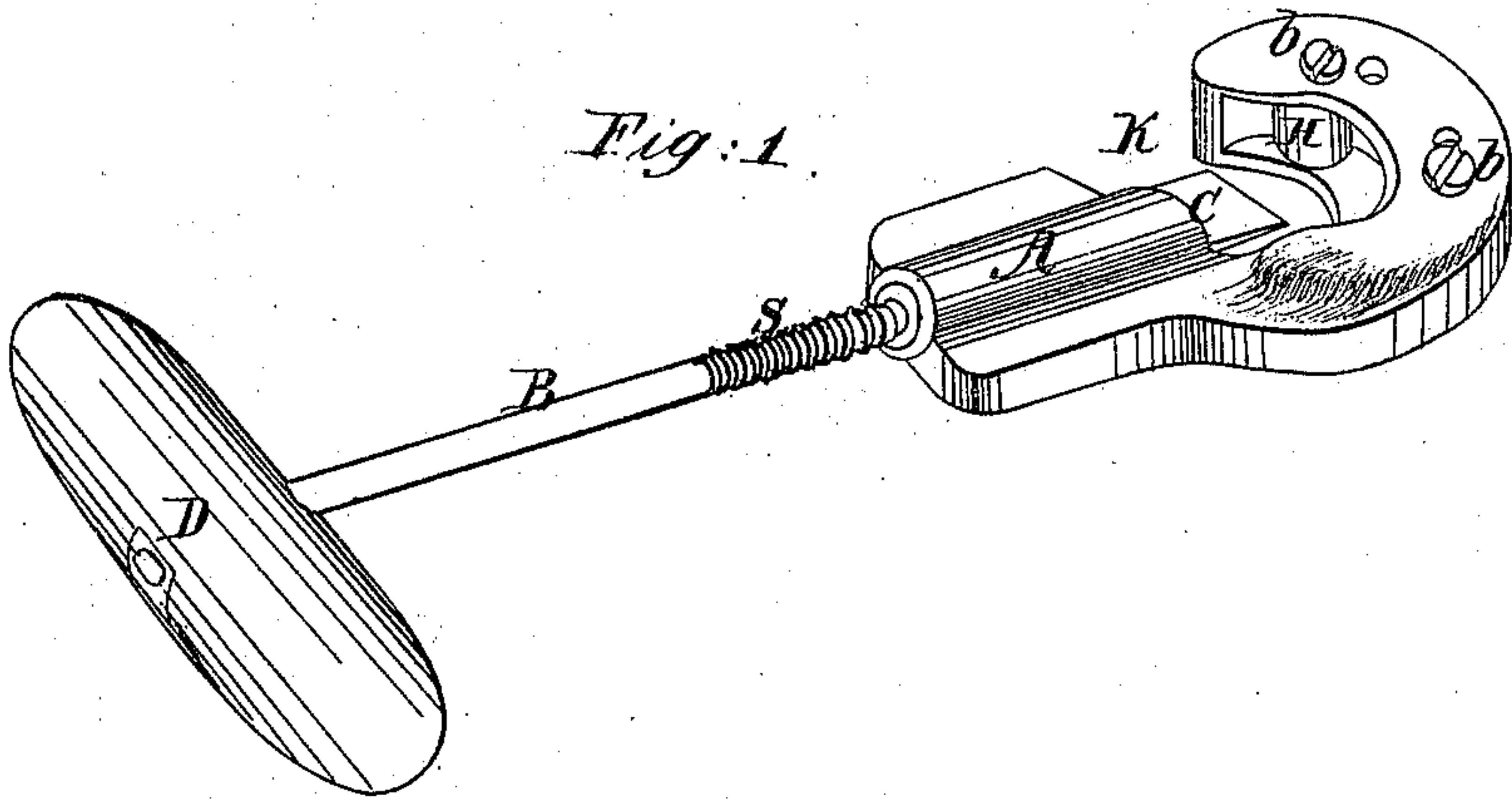


A. G. Wilder

Pipe Cutter

N^o 89,959.

Patented May 11, 1869.



Witnesses;
 Marcus P. Norton
 Charles Kellum

Inventor;
 Ambrose B. Wilder

United States Patent Office.

AMBROSE G. WILDER, OF COHOES, NEW YORK.

Letters Patent No. 89,959, dated May 11, 1869.

IMPROVED PIPE-CUTTER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, AMBROSE G. WILDER, of Cohoes, in the county of Albany, and State of New York, have invented a new and improved "Pipe-Cutter;" and I do hereby declare that the following is a full, clear, and exact description of the same, reference being hereby had to the accompanying drawings, which form and make a part of this, my specification.

Like letters represent and refer to like or corresponding parts.

Figure 1 is a perspective view of my improved pipe-cutter, showing the different parts thereof more fully hereinafter described and set forth;

Figure 2 is a cross-section, showing the screw-handle, knife, and spring, more fully hereinafter described;

Figure 3 is an enlarged perspective view of the knife, cylinder, containing spring, and end of screw-handle, showing the relative position of each, as more fully hereinafter set forth; and

Figure 4 is a section through the cylinder containing the spring, and showing the same, which is used in connection with the knife and screw-handle, in the manner and for the purposes hereinafter fully described and set forth.

The nature of my said invention and improvements consists in the use and employment of a solid cast or malleable iron frame, in combination with a knife or cutter and suitable-shaped rollers or supports, between which said knife and rollers the pipe or tube to be cut is clamped, substantially in the manner and for the purposes herein more fully described and set forth.

It also consists in the use of a coiled spring, suitable piece of rubber, or other elastic substance, placed between and in combination with the screw-handle and the knife or cutter, whereby or by means whereof, the knife or cutter is allowed to give, and pass over any inequalities or hard substance in the pipe or tube being cut, substantially as hereinafter more fully described and set forth.

It also consists in the use and employment of a screw-handle, in combination with a spring, of suitable elastic substance, and a knife or cutter, all arranged and combined in the manner and for the purposes herein fully described and set forth.

It also consists in the use of adjustable rollers or supports, fastened to the upper part of the metallic frame of my said pipe-cutter, for the purpose of guiding and clamping the pipe or tube to be cut, and the said rollers are made adjustable, so as to conform to different sizes of pipe, substantially as more fully hereinafter described and set forth.

To enable others skilled in the art to which my invention relates to make and use the same, I will here proceed to describe the construction and operation of the same, which is as follows, to wit:

A, figs. 1 and 2, is the body or frame of my improved "pipe-cutter," and may be made of any metal deemed best, and in as many parts as desired; but I prefer to

cast the same in one solid piece of malleable or cast-iron, and of such size and strength as I may desire.

This frame A has a core or opening through the lower part of the same, as shown at fig. 2, the upper part of which opening has a thread cut therein, which thread corresponds with the thread S on the screw-handle B.

This screw-handle B is a metal rod of any length and strength required, and is for the purpose of regulating and working the knife or cutter C, as hereinafter more fully described.

D, figs. 1 and 2, is a hard piece of wood or other material, fastened to the outer end of the said screw-handle B, and is for the purpose of aiding in working the same, as hereinafter described.

The knife or cutting-tool C, figs. 1, 2 and 3, is made of steel, and may be of any shape and size deemed best to use, but is made at its upper end of a size and shape to correspond with the upper part of the slot or core in the frame A, and fits closely in the same, as seen at figs. 1 and 2.

Between this knife or cutting-tool C and the screw-handle B, and in the core or slot in the frame A, I place a coiled spring, or a piece of hard rubber or other elastic substance, of suitable size and shape, marked E in the accompanying drawings, and shown at figs. 1, 2 and 3.

I prefer to enclose this coiled spring or elastic substance in a metal drum or covering, F, fig. 4, and cover the same with a cap, G, same figure, so as to give stability and firmness to said spring E, the knife C resting against the top of said drum, and the screw-handle B resting against the cap G, which cap G is made of metal and fits loosely on the inside of said drum F, and is prevented from being forced out by the flange or rim a, shown at figs. 3 and 4.

The rollers or supports H H, &c., I design to make of any metal deemed best to use, and they are fastened to the upper part of the frame A by means of the screws b b, fig. 1.

The upper part of said frame A may be slotted or pierced with holes, as seen at fig. 1, whereby, and by means whereof, the said rollers or supports, H and H, may be adjusted to support any size of pipe that the said frame A will admit into the opening K, figs. 1 and 2.

The manner of operating my said machine is as follows, to wit:

The pipe or tube to be cut is placed in the frame A through the opening K, resting between the rollers H and H and the knife C. The said knife C is then screwed down close to the pipe by means of the screw-handle B and hand-piece D. The whole device or pipe-cutter is then turned or made to revolve once around the pipe or tube being cut, after which the knife is again screwed down, and the operation described continued until the pipe or tube is completely severed or cut into. Should the knife C encounter

any hard substance or inequality in the pipe, it will give back, by means of the spring E, and pass over the same. If desired, the knife C may be removed at any time, and be sharpened or repaired.

By the means and in the manner hereinbefore described, I am enabled to construct a pipe-cutting tool which, for durability and cheapness, exceeds any like machine now in market.

Having thus described the nature of my said invention,

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The arrangement of the knife or cutting-tool C and the spring E, operated upon by the screw-handle B, and in combination with the adjustable rollers H

H, in the manner and for the purposes substantially as herein described and set forth.

2. The employment of the self-adjusting knife or tool or cutter C, arranged and operating within the frame A, and in combination with the adjustable rollers H H, in the manner, by the means, and for the purposes substantially as herein described and set forth.

In testimony whereof, I have hereunto set my hand, this 14th day of November, 1868.

AMBROSE G. WILDER.

Witnesses:

CHARLES D. KELLUM,

JAMES DALY.