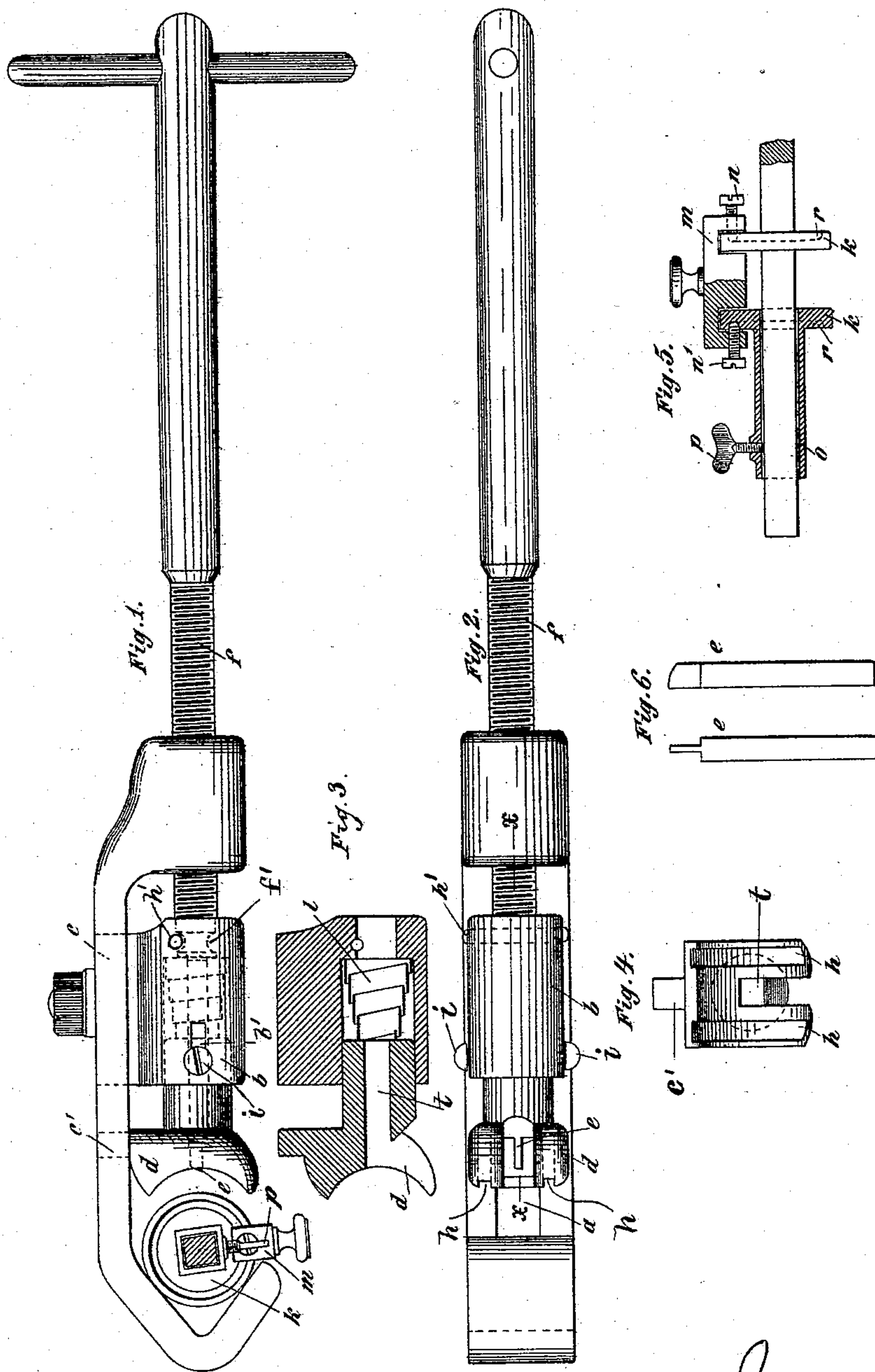


(No Model.)

W. BARHEINE.
ROD AND PIPE CUTTER.

No. 543,369.

Patented July 23, 1895.



Witnesses
In. v. Bidgood
C. M. Ott

Inventor:
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Attys.

UNITED STATES PATENT OFFICE.

WILHELM BARHEINE, OF MAGDEBURG, GERMANY.

ROD AND PIPE CUTTER.

SPECIFICATION forming part of Letters Patent No. 543,369, dated July 23, 1895.

Application filed May 5, 1894. Serial No. 510,158. (No model.)

To all whom it may concern:

Be it known that I, WILHELM BARHEINE, engineer, a subject of the King of Prussia, Emperor of Germany, and a resident of 23
5 Diesdorferstrasse, Magdeburg, in the Kingdom of Prussia and Empire of Germany, have invented new and useful Improvements in Rod and Pipe Cutters, of which the following is a specification, reference being had
10 therein to the accompanying drawings.

The subject-matter of this invention is a rod and pipe cutter, which permits a uniform cut of the metal in consequence of its peculiar construction.

15 In order that my invention may be better understood, I will now proceed to describe the same, reference being had to the accompanying drawings and to the letters marked thereon.

20 Figure 1 is a side elevation of my improved rod and pipe cutter. Fig. 2 is a plan bottom view thereof. Fig. 3 is a longitudinal section of the adjustable sleeve and spring-sliding jaw on the line $x x$, Fig. 2. Fig. 4 is an end
25 view of the spring-sliding jaw. Fig. 5 is in part a longitudinal section and in part a side view of the brace holding a rod. Fig. 6 shows side views of the cutter.

A metal fixed jaw has a longitudinal slot a
30 through its back, in which is guided a sleeve b by means of a prismatic projection c . This sleeve slides within the jaw and lengthwise of the latter. In its front opening the sleeve carries a sliding jaw d guided in the sleeve
35 by screw-pins i in slots b' and in the longitudinal slot a by a projection c' and is perforated longitudinally by an opening t square in cross-section, in which is held a cutter e ,
40 (shown in Fig. 6,) the cutting-faces of the cutter being of any desired shape. The sliding jaw is operated by a screw f adjustable in the fixed jaw, so as to force the cutter against the article to be cut and is held to the sleeve by
45 a cross-pin h' seated in its annular groove f' . The jaw d is pressed out of the sleeve by a volute spring l located in the front opening of the sleeve, (see Fig. 3,) one end of which rests against the jaw and the other end of which strikes against a projection within the
50 sleeve. The sliding jaw d has two curved recesses h at its front end, in which are fitted

two circular disks k of a brace. Each of these disks is provided with a hole in its center corresponding to the section of the article to be operated upon. These holes are shown square 55 in cross-section in Fig. 1. The article to be operated upon is passed through these holes and then gripped in a vise or by any other suitable clamp. If now the device is rotated around the article, the disks k , occupying re- 60 cesses of the movable jaw d , form a bearing for the latter, and the cutter (being forced against the article by the operating-screw f) is carried around the article as desired. The spring-pressure produces very even cut- 65 ting.

In order to allow of the convenient handling of the cutter and to provide a reliable coupling for the disks k , the latter are connected, as shown in Fig. 5, by a bridge-block 70 m , in which are provided screw-pins n and n' corresponding with the circular grooves r in the disks. In order to prevent the turning over or canting of the piece to be cut off, the disk k on that side of the cutter is provided 75 with a sleeve o and a clamp-screw p .

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A rod and pipe cutter comprising a fixed 80 jaw, a sleeve sliding longitudinally in ways of said fixed jaw, a sliding jaw, carried by the sleeve, a volute spring located within the sleeve and bearing against the sliding jaw, a cutter mounted in the sliding jaw, and an op- 85 erating screw coupled to the sleeve; substantially as described.

2. A rod and pipe cutter comprising a fixed jaw having a longitudinal slot, through its back, a sliding sleeve, having a projection 90 guided in the slot, a sliding jaw, carried by the sleeve having a projection guided in the slot pin and slot connections with the sleeve, and curved recesses at its end, a spring located within said sleeve, and bearing against 95 the sliding jaw, a cutter mounted in the sliding jaw, a pair of disks for supporting the article operated upon and fitted to the curved recesses, and an operating screw connected with the sleeve; substantially as described. 100

3. A rod and pipe cutter comprising a fixed jaw, a sleeve sliding within said fixed jaw, a

sliding jaw carried by the sleeve, having curved recesses, a cutter mounted in the sliding jaw, a spring located within the sleeve and bearing against the sliding jaw, a pair of disks for supporting the article to be operated upon, fitted to the curved recesses of the sliding jaw and an operating screw connected with the sleeve, substantially as described.

4. A rod and pipe cutter comprising a fixed jaw, a sleeve sliding within said fixed jaw, a spring sliding jaw carried by the sleeve, having curved recesses, a cutter mounted in the sliding jaw, a pair of disks having circular grooves and fitted to the curved recesses of the sliding jaw, and a brace consisting of a bridge-block and pins working through the

bridge-block and entering the grooves of the disks; substantially as described.

5. A rod and pipe cutter comprising a fixed jaw, a sleeve sliding within said fixed jaw, a spring sliding jaw carried by the sleeve, having curved recesses, a cutter mounted in the sliding jaw, and a pair of disks fitted to the curved recesses of the sliding jaw, one of the disks also being provided with a sleeve and clamp-screw; substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

WILHELM BARHEINE.

Witnesses:

PAUL FISCHER,
HANS BAUERLEIN.