(No Model.)

2 Sheets—Sheet 1.

A. V. ANDERSON.

PIPE CUTTER.

No. 406,077. Patented July 2, 1889.

Fig. 1.

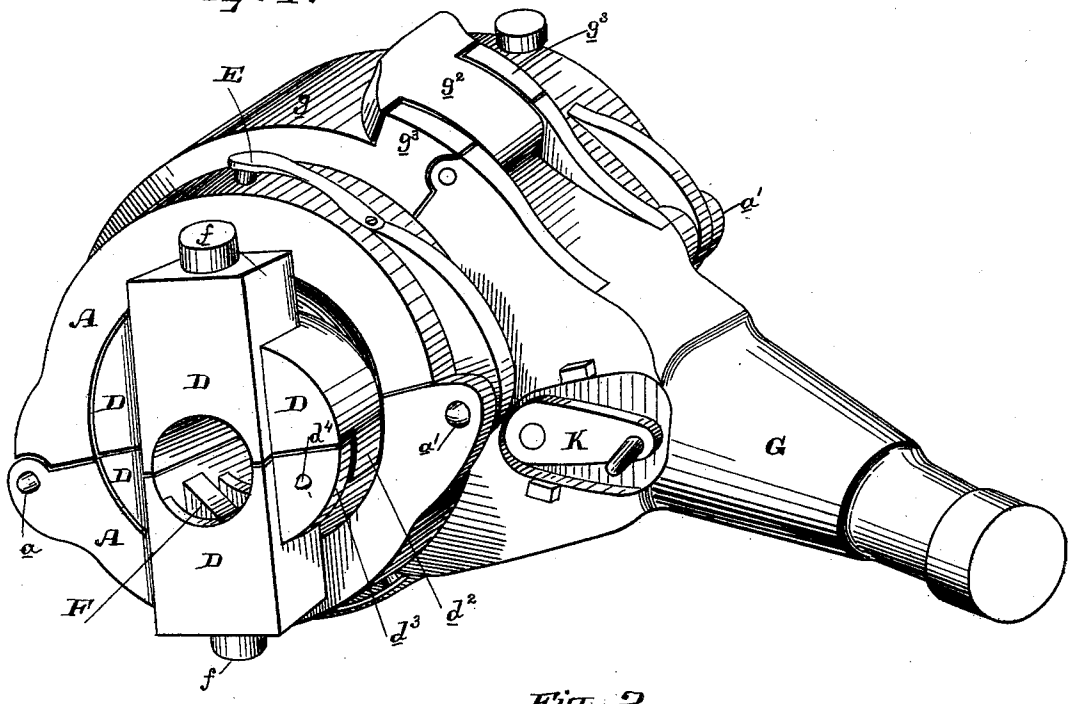
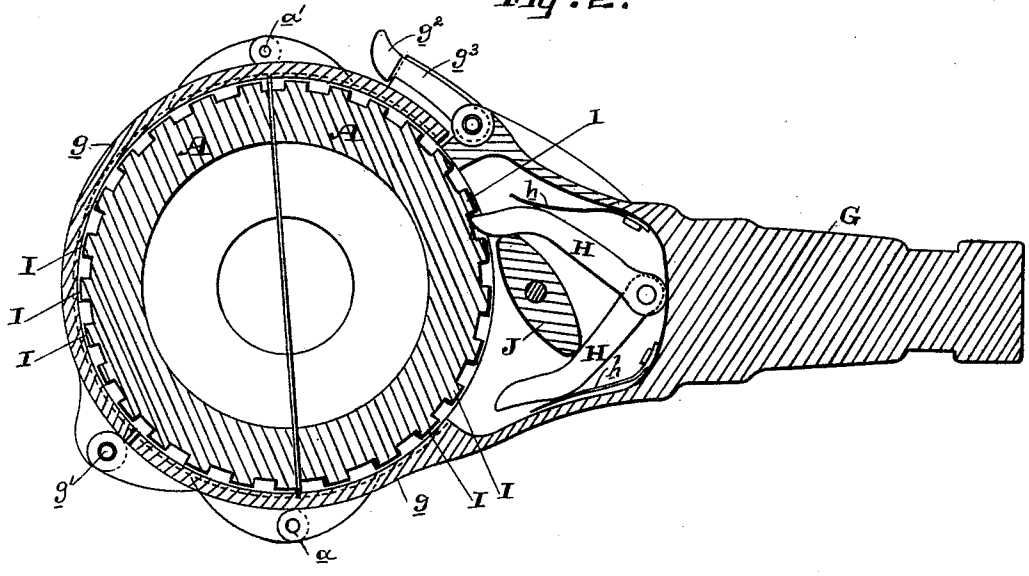


Fig. 2.



Witnesses,
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J. H. Innes

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By Dewey & Co.
Attys

N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

A. V. ANDERSON.

PIPE CUTTER.

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Fig. 3.

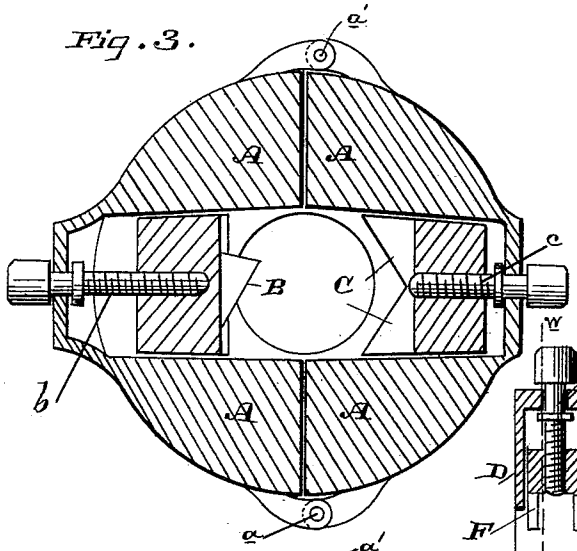


Fig. 4.

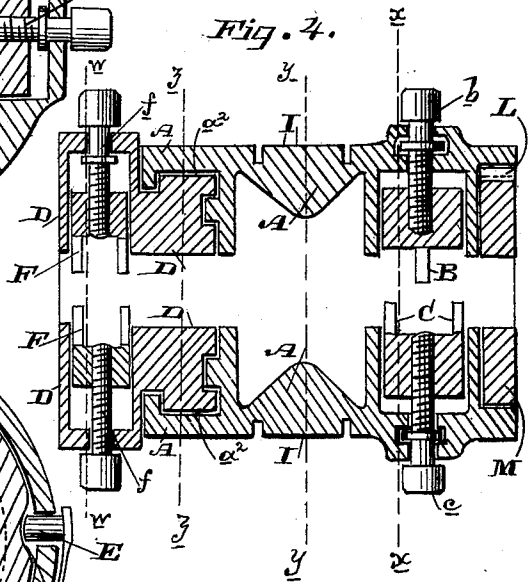


Fig. 5.

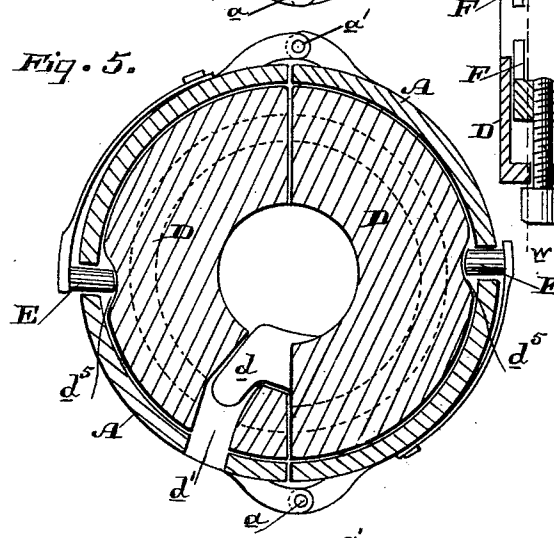
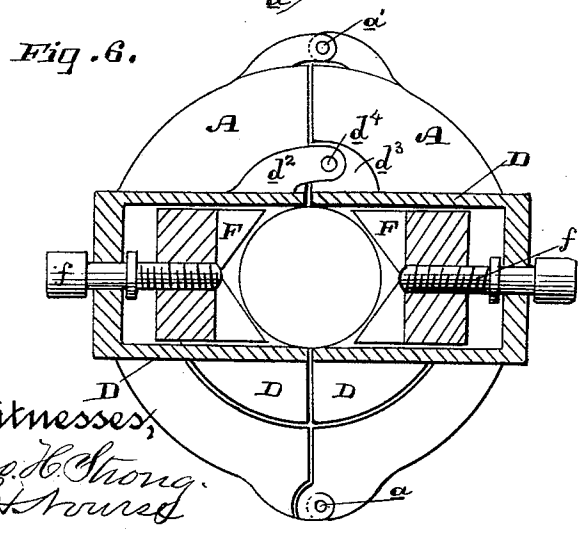


Fig. 6.



Witnesses,
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UNITED STATES PATENT OFFICE.

ADOLPH V. ANDERSON, OF SAN FRANCISCO, CALIFORNIA.

PIPE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 406,077, dated July 2, 1889.

Application filed June 23, 1888. Serial No. 278,037. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH V. ANDERSON, of the city and county of San Francisco, State of California, have invented an Improvement in Pipe-Cutters; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of pipe-cutters; and my invention consists in the construction and arrangement of the stock carrying a cutter-bit and guide-jaw, the bearing-ring carried by the stock and about which such stock rotates, and the clamps or jaws of the bearing-ring by which it is fixed on the pipe, the operating-handle with its connecting-strap and pawl-and-ratchet connection with the stock, and other details, all of which I shall hereinafter more fully describe.

The object of my invention is to provide a pipe-cutter which can be readily applied to the pipe and operated conveniently in any position.

Referring to the accompanying drawings, Figure 1 is a perspective view of my pipe-cutter. Fig. 2 is a central cross-section through the stock on line $y\ y$, Fig. 4, and longitudinal section of lever and strap, showing the pawls and ratchet. Fig. 3 is a cross-section through the stock on line $x\ x$, Fig. 4. Fig. 4 is a longitudinal section through the stock. Fig. 5 is a cross-section on line $z\ z$, Fig. 4. Fig. 6 is a cross-section on line $w\ w$, Fig 4.

A is the stock of the implement, made in two parts, hinged at a at one side and fastened together at a' at the other side by means of removable pins passing through lugs, as shown. The inner portion or center of the stock is curved out in order to fit around the pipe. Seated within one part or section of the stock near its end is the cutting bit or blade B, secured to or formed with a body portion, which is affected by a set-screw b to move in or out, in order to hold the bit up to its work on the pipe or to relieve it. In the corresponding portion of the opposite part or section of the stock is seated a V-shaped guide-jaw C, which is adjusted by a set-screw c, so that it may be set up to or withdrawn from the pipe. In the other ends of the stock sections or parts are made grooves a^2, in which are seated the halves or sections of the bearing-ring D. This ring is so fitted in the grooves a^2 that it may remain fixed while the stock A rotates around it. Its two sections or halves are independent, but are held together by means of a hook d on one side fitting a slot d' in the other, and a lug d^2 of the last-named section fitting a slotted or grooved lug d^3 of the opposite section, a removable pin d^4 holding the parts. In order to prevent the sections of the bearing-ring D from falling from their seat when the device is being fitted to the pipe, I have the spring-actuated catches E working through the stock and engaging sockets d^5 in the ring D. The catches are sufficient to hold the ring-sections so that they will not drop out, but they do not hold them so tightly as to prevent the proper rotation of the stock on said ring. Within each section of the bearing-ring is seated a sliding V-shaped clamp or jaw F, each of which is operated by a screw f.

G is the handle for operating the tool. The handle has a strap g, connected or formed with its head, said strap being made in two sections hinged together or jointed at g', the sections being detachably connected at the other side by a swinging latch g^2, which engages a bearing on lug g^3 opposite. In the head of the handle are seated opposing reversed pawls H, which have springs h behind them. These pawls are adapted to engage the teeth I, which are formed on the outer surface of the center of the stock A. The strap g is fitted around the stock, and the pawls are adapted to engage the teeth to turn the stock in either direction. To effect this a rock-cam J is located between the pawls, and said cam is operated by a swinging short arm or lever K on the outside, so that it may be made to force either pawl to one side to clear the ratchet-teeth I and allow the other to engage said teeth. By moving the arm or lever K to a central position the cam is turned to hold both pawls out of engagement, so that the handle may be moved without affecting the stock.

To use the tool, the swinging latch g^2 is thrown back, so that the handle-strap may be opened. The securing-pins are then removed from the stock and from the bearing-ring, so

that their sections may be separated and the whole thrown open. Then the tool is fitted to the pipe and the stock and bearing-ring closed upon it and secured by the pins. The handle-strap is also closed and secured. The clamps or jaws F are then set up firmly against the pipe, so that the bearing-ring D is rendered immovable. Then the guide-jaw C is set up against the pipe and the bit B is set up to its work. Then, according to the direction in which it is most convenient or desirable to move the handle, one or the other of the pawls is thrown by the rock-cam to its engagement with the teeth I, and the handle is moved back and forth after the manner of ordinary ratchet-levers. The stock A is thus rotated about the bearing-ring D, which is steady on the pipe, and as the bit is fed in the pipe is cut.

In the end of the stock A opposite the end in which the bearing-ring is seated is made a socket L for the reception of a die M, for cutting the thread on the end of the pipe.

It will be seen that the tool is adapted to be readily applied to the pipe and to be operated conveniently in any position.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An improved pipe-cutter consisting of the combination of a two-part hinged stock having the groove a^2 formed in one end thereof, the two-part bearing-ring fixed in said grooved part, said bearing-ring having one of its sections or parts provided with a hook d, adapted to fit a slot in the adjoining section, and the cutting-bit and opposing guide-jaw in the opposite end of the stock, and the set-screws for adjusting the jaws, as herein described.

2. An improved pipe-cutter consisting of the combination of a two-part hinged stock, the adjustable jaws seated in one end of the stock, and a groove a^2, formed in the opposite end of the stock, a two-part separable bearing-ring fitted in the grooved end of the stock, the V-shaped jaws adjustably secured in the bearing-ring, and the spring-actuated catches E, bearing against the section of the bearing-ring, as herein described.

3. An improved pipe-cutter consisting of the combination of a two-part hinged stock carrying at one end the adjustable jaws B and C, and having a groove a^2 formed in the opposite end, the two-part separable bearing-ring secured in said groove and provided with adjustable V-shaped jaws F, said ring having one of its sections provided with the hook d, and the opposite section formed with an engaging-slot d', and both sections having the sockets d^5, and the spring-actuated catches E, secured to the stock and working through slots therein, whereby they engage the sockets d^5, substantially as herein described.

4. An improved pipe-cutter consisting of the combination of a two-part hinged stock having at one end the groove a^2, a two-part ring D, fitted in said grooves and provided with adjustable jaws F, the adjustable jaws B and C in the opposite end of the stock, the spring-actuated catches bearing against the sections of the ring, the operating-handle with its jointed strap pivoting it to the stock, the pawls in the handle engaging the ratchet-teeth of the stock, and cam for governing the pawls, all constructed and arranged to operate as herein described.

In witness whereof I have hereunto set my hand.

ADOLPH V. ANDERSON.

Witnesses:
S. H. NOURSE,
H. C. LEE.