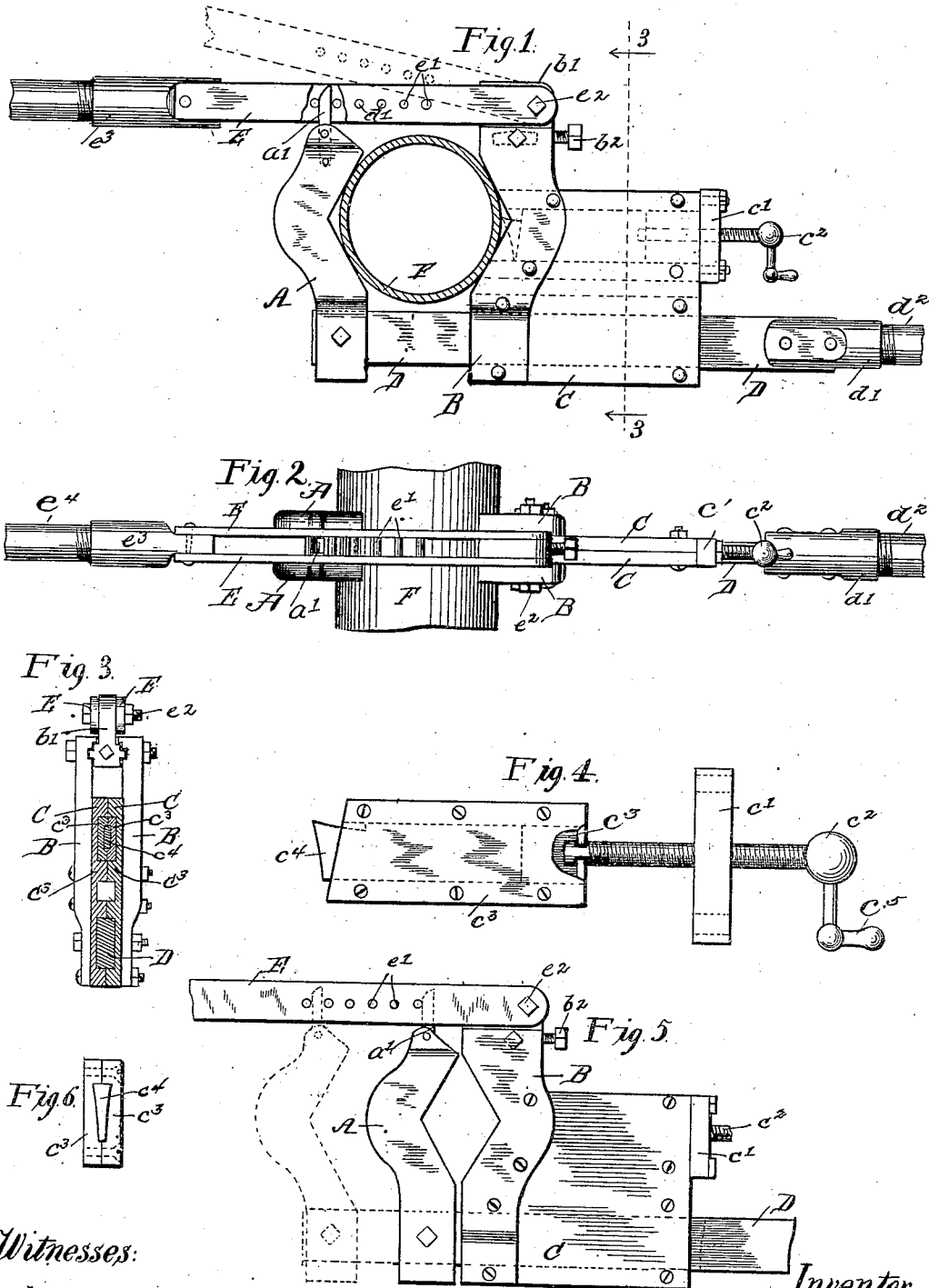


No. 824,764.

PATENTED JULY 3, 1906.

W. S. WAKELEY.
PIPE CUTTER.

APPLICATION FILED MAY 19, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM S. WAKELEY, OF HARVARD, ILLINOIS.

PIPE-CUTTER.

No. 824,764.

Specification of Letters Patent.

Patented July 3, 1906.

Application filed May 19, 1905. Serial No. 261,249.

To all whom it may concern:

Be it known that I, WILLIAM S. WAKELEY, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Pipe-Cutters, of which the following is a specification.

This invention relates to improvements in implements for cutting pipes or round rods; and the especial object of the improvements which form the subject-matter of this application is to produce a pipe-cutter that may be adjusted to pipes of greatly-varying diameters that will firmly plant the device during the cutting operation, that will make a clean cut leaving no ragged edge, and that will entirely sever the pipe by the cutting operation.

Other objects of general utility are secured through my improvements, as will be apparent to those skilled in the art.

In the accompanying drawings, which form a part of this application, I have shown a preferred embodiment of my invention in the following views.

Figure 1 is a side elevation of a pipe-cutter constructed according to my invention. Fig. 2 is a top plan view of said pipe-cutter. Fig. 3 is a vertical section on the line 3 3 of Fig. 1. Fig. 4 is an enlarged detail of the cutting elements proper. Fig. 5 shows the clamping-jaws and their attached parts, and Fig. 6 is a front end view of the cutting element proper.

Referring to the details of the drawings, A A represent two vertical clamping members or jaws which have their inner edges inwardly inclined, so as to adapt them to grip the surface of the pipe F. The members A are bolted at their lower ends to a horizontal bar D and between their upper ends have secured a finger or pin a' , which serves as a catch or locking element.

B B represent two clamping members which are bolted together with a space therebetween and have their inner edges formed similarly to the opposite edges of the complementary members A A. Between the lower portions of the members B a slideway is provided for a flat metal bar D. Bolted between the members B B are two flat plates C C, the lower portion of which is cut away to provide a slideway for the bar D, and the upper portion of which is cut away to provide a slideway for the knife-holder to be described. To the outer end of the bar D is bolted a socket d' , into which is screwed a suitable handle-bar d^2 . Between the upper ends of the clamp-

ing elements B B is bolted a slotted block b' , on which are pivoted flat bars E E, which, together with the socket e^3 , to which they are secured, and the handle e^4 , which is screwed into the socket, form a lever which is adapted to lock on the members A A through the engagement of the finger a' with pins e' , which extend transversely between the bars E. Bolted to the rear edge of the plates C C is a block c' , in which a threaded opening is formed to receive the screw-bolt c^2 , the inner end of which engages the plates $c^3 c^3$, which are connected by screws and are recessed to form a housing for the cutting-knife c^4 , the latter being held between said plates by frictional contact with the inner sides of said plates. A suitable crank c^5 is secured to the bolt c^2 , and by turning the same said bolt and the knife-holding plates c^3 will be advanced or retracted in the slideway between the plates C C and the clamping members B B, thus providing the necessary adjustment for said cutting-knife c^4 .

A pipe F, inserted between the jaws A and B, will be frictionally embraced by the latter; and when they are as close as they can be brought by manual operation the lever formed by E, e^3 , and e^4 will be brought down over the finger a' , whereupon the latter will engage one of the pins or fit tightly between two of said pins e' , and thus lock the pipe in position. If necessary to effect a close engagement between the finger a' and the pins e' , longitudinal adjustment of the bars E may be effected by screwing in or out the set-screw b^2 , which has a threaded engagement with the block b' , so that its inner end bears against the bolt which holds the block and which passes through the slot in the block.

When the pipe has been locked in position, the point of the knife c^4 is brought into close engagement with the periphery of the pipe by driving the screw c^2 forward, whereupon the device as a whole will be revolved around the pipe in the usual manner, the screw c^2 being tightened from time to time as the pipe metal is cut away by the knife c^4 . It will be apparent that as the point of the knife c^4 is worn away by grinding and use the knife may be adjusted longitudinally in its bearings in the plate c^3 . For purposes of description the jaws A may be designated as "fixed" jaws, while the jaws B may be termed "slidable" jaws, though as a matter of fact both jaws are slidably mounted relative to each other.

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

1. In a cutting-tool of the class described, 5
a bar having a handle secured at one end thereof and a clamping-jaw fixed on the other end, a clamping-jaw slidably mounted on said bar, a cutter slidably adjustable in said sliding jaw, and means for locking together said fixed and sliding jaws. 10

2. In a cutting-tool of the class described, bar, a clamping element secured to said bar, a clamping element slidably mounted on said bar, a cutter slidably adjustable on said sliding element, means for adjusting said cutter, 15
and adjustable means for locking together said fixed and slidable clamping elements.

3. In a cutting-tool of the class described, a bar, a clamping element secured to said bar 20
and having a pin projecting therefrom, a clamping element slidably mounted on said bar, a cutter adjustably mounted on said slidable element, means for adjusting said cutter, a lever pivoted on said slidable element, and means on said lever adapted to engage said pin and lock said clamping elements together. 25

4. In a cutting-tool of the class described, a bar, a clamping element secured to said bar 30
and having a pin projecting therefrom, a clamping element slidably mounted on said bar, a cutter-holder adjustably mounted on said slidable element, means for adjusting

said holder, a cutter adjustably held by said holder, a lever adjustably pivoted on said 35
slidable element and means on said lever adapted to engage said pin and lock said clamping elements together.

5. In a cutting-tool, a bar, a clamping member fixed on one end of said bar, a second clamping member slidably mounted on 40
said bar, a cutter adjustably mounted on said slidable member, a lever pivoted on said slidable member and means for locking said lever to said fixed clamping member. 45

6. In a cutting-tool, a bar, two clamping members arranged on said bar, a cutter adjustably mounted on one of said clamping members, a lever pivoted on one of said clamping members and adjustable means for 50
locking said lever to the other clamping member.

7. In a cutting-tool, a bar, two clamping members arranged on said bar and adjustable relative to each other, a cutter adjustably 55
mounted on one of said clamping members, a lever adjustably pivoted on one of said clamping members, and means for adjustably locking said lever to the other clamping member.

In testimony whereof I affix my signature 60
in presence of two witnesses.

WILLIAM S. WAKELEY.

Witnesses:

EUGENE SAUNDERS,
N. J. EMERSON.