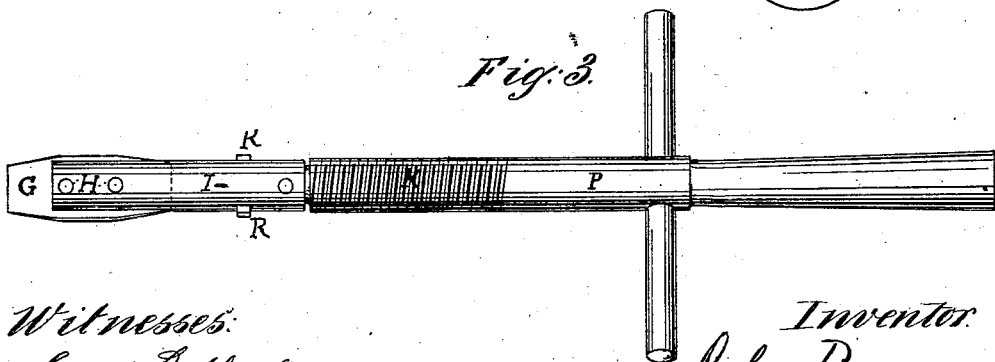
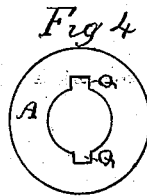
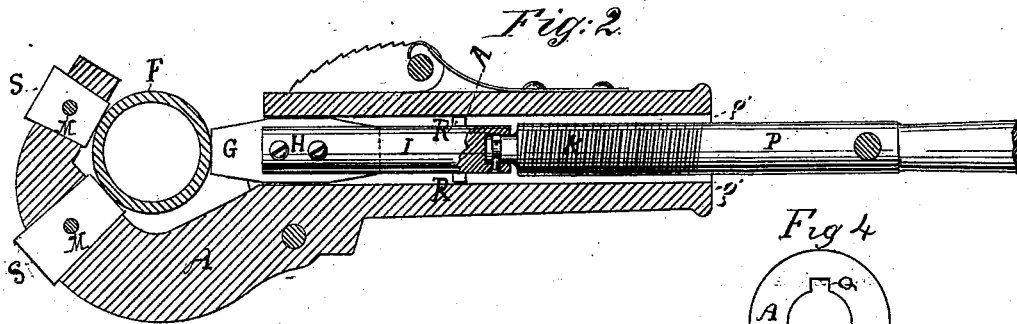
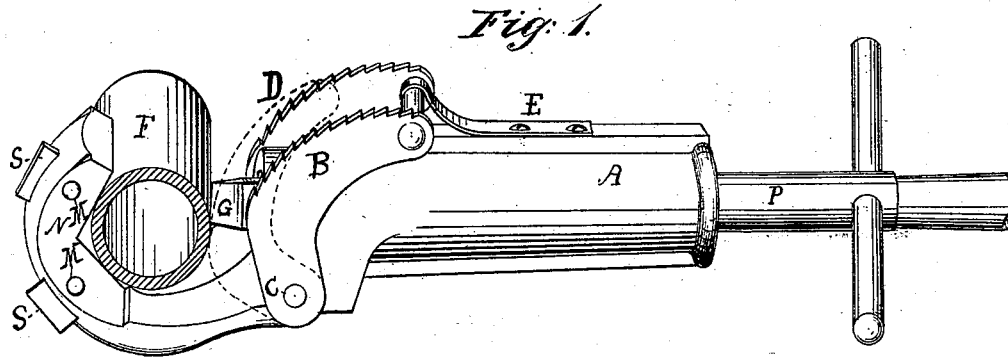


J. BREWER.

COMBINED WRENCH AND PIPE-CUTTER.

No. 183,485.

Patented Oct. 24, 1876.



Witnesses:
Emat Bilhuber
A. White

Inventor:
John Brewer
Per G. Staekpol
atly

UNITED STATES PATENT OFFICE.

JOHN BREWER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN COMBINED WRENCH AND PIPE-CUTTER.

Specification forming part of Letters Patent No. **183,485**, dated October 24, 1876; application filed June 2, 1876.

To all whom it may concern:

Be it known that I, JOHN BREWER, of the city of Brooklyn, in Kings county, and State of New York, have invented an Improvement in a Combined Pipe-Cutter and Pipe-Wrench, of which the following is a specification:

My invention consists in an improved pipe-cutter and pipe-wrench combined in one implement, making a good and efficient tool for either purpose, it being very simple, and adapted to pipes of all sizes, either as a wrench or a cutter, the parts which form the combination being so constructed that either may be separated from the other, or so that the dog which completes the implement as a wrench, or the knife which makes it a cutter, may be left off at the will of the manufacturer.

My object is to produce an implement that shall automatically adjust itself as a wrench to any sized pipe, and that may be adjusted to any sized pipe as a cutter, both tools to be combined in one implement when desired, so as to be cheap, simple, and efficient for either purpose.

My invention will be readily understood by reference to the accompanying drawings which form a part of this specification.

Figure 1 is a perspective view of my improved pipe-cutter with the wrench attachment thereto applied. Fig. 2 is a longitudinal section thereof. Fig. 3 is a view of the handle and cutter holder, with the cutter attached as when withdrawn for sharpening or adjusting. Fig. 4 is a cross-section of the body of the implement, showing the opening through which the cutter, holder, and screw portion of the handle passes, and also showing grooves or guideways made longitudinally on the inner walls of the body of the implement.

A is the body of the implement. B is a toothed dog, which is pivoted to the body of the implement at C, and which I term the wrench attachment. To use it as a wrench, the dog is thrown forward against the pipe, as shown by dotted lines D. A spring, E, holds it back against the body of the implement when not in use, and may be removed at will. On the outside of the body, and opposite the face of the dogs B, are raised pieces or cheeks N, to enable the operator to grasp short pieces of pipe or nipples between said

cheek and one of the dogs. F is a piece of pipe grasped in the tool, as when about to be cut. G is the cutter, which has two or more cutting-edges, one at each end, and at the sides, if desired. This cutter G is held in a slot in the holder I by means of one or more screws or pins, H. The holder I is attached to the handle P by a swivel-joint, J. K is a screw-thread cut on the handle P, which corresponds with a thread cut on the inner walls of the body of the implement. Q and Q are grooves or guideways, which cross the screw-threads on the inner walls of the implement. Into these grooves the edges of the knife or cutter G fit and slide, as also does a pin or spline, R, which is a part of the holder I. This is to guide the cutter, and to keep the cutter-holder and cutter from turning. To make the holder I square would answer the same purpose—that of keeping it from turning when forced forward or withdrawn by means of the screw K on the handle P. S S are cutters provided to facilitate the operation of cutting, especially in close and confined places, but not at all times needed.

These cutters are attached by means of holes in the grasping end of the implement, and are held in place by screws or pins M. The cutters are shown in the drawing.

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

1. The body A of the implement, provided with a longitudinal hole, and with the grooves Q running longitudinally through the same, substantially as and for purpose set forth.

2. The dogs B hung to be thrown forward against the pipe F, and backward against the body of the implement, and to be held by the spring-catch E to adapt the tool for a wrench or cutter, substantially as set forth.

3. The holder I, carrying the double-ended or reversible cutter G, and connected with the handle P by the swivel-joint J, and also provided with the spline or pin R, all arranged so as to be withdrawn together from the body of the tool, substantially as and for the purpose set forth.

JOHN BREWER.

Witnesses:

A. WHITE,
G. S. VAN PELT.