

BOLT-CUTTERS.

Patented Sept. 26, 1876.

Mr. F. Boyle
Mr. W. Madigan

Inventor:
William A. Lawrence
by Louis Baggett,
his Atty.

UNITED STATES PATENT OFFICE.

WILLIAM A. LAURENCE, OF MCZENA, OHIO.

IMPROVEMENT IN BOLT-CUTTERS.

Specification forming part of Letters Patent No. **182,524**, dated September 26, 1876; application filed March 25, 1876.

To all whom it may concern:

Be it known that I, WILLIAM A. LAURENCE, of McZena, in the county of Ashland and State of Ohio, have invented certain new and useful Improvements in Bolt-Cutters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view, and Fig. 2 is a top plan, the top plate being removed.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to that class of tools which are used for cutting off the heads or ends of bolts and rods; and it consists in the construction and arrangement of parts hereinafter shown and described.

In the drawing, A is the bottom plate. From this extend two arms, B B, terminating in a cross-piece, K. Between arms B, and resting against end piece K, is a small solid plate, C, through which passes a set-screw, s. P is the stationary cutter. This is secured removably in dovetailed grooves in the under side of arms B, and is held securely in place by set-screw s. Between arms B B slides the cutter-stock D, having the movable cutter E. The ends of arms B B are cut off slantingly, as shown at *c c*, to correspond with the shape of the head (at *e e*) of the cutter-stock D. The cutter E is of such a length that at the moment it comes in contact with cutter P the shoulders *e e* of cutter-stock D shall reach the shoulders *c c* of arms B B, thus preventing the cutter from going too far, and the steel edges from being destroyed. On

the top of arms B B is affixed the top plate F. G G are levers, having cams H H. These levers are pivoted between plates A and F, and the cams H work in corresponding recesses *h* in the cutter-stock D. The levers G are the handles for operating the machine, the operation of which will be fully understood from the foregoing description. When the levers G are moved apart cams H work in recesses *h*, thus withdrawing the movable cutter E, and when they are pressed together the movable cutter E is forced forward against the stationary cutter C, thus heading off the bolt which has been inserted between them.

I aware that it is not new to operate a bolt-cutter by means of toothed or cam levers; but I am not aware that a bolt-cutting device constructed like the one herein described—that is, having cutter-stock D sliding between the covering and protecting plates A F, the lower of which has arm or brackets B B for the purpose set forth—has been ever before known or used.

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

The combination of the sliding cutter-stock D, having recesses *h h*, shoulders *e e*, and cutter E, plate A, having guide-arms B B, forming shoulders *c c*, and holding the solid removable cutter P, covering-plate F, and hand-levers G, all arranged to operate substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM A. LAURENCE.

Witnesses:

PHILIPP KIEFFER,
HENRY COBLE.