

JESSE JOHNSON.

Improvement in Bolt Cutters.

No. 119,231.

Patented Sep. 26, 1871.

Fig. 1.

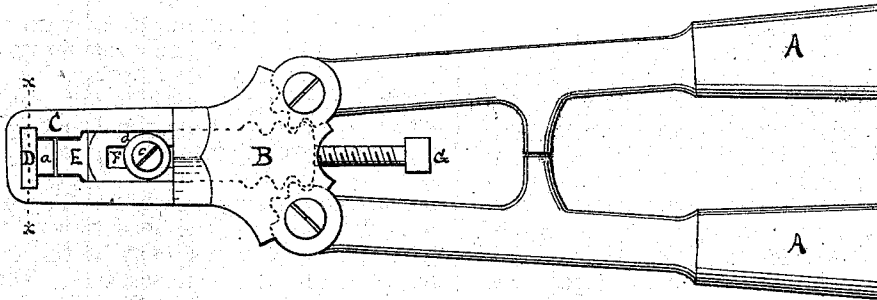


Fig. 2.

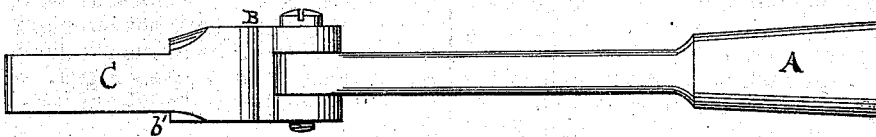


Fig. 3.

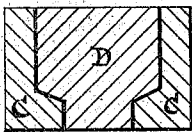


Fig. 5.

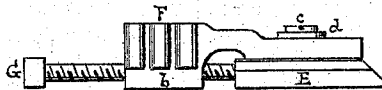


Fig. 6.

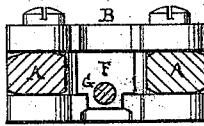
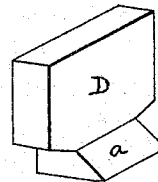


Fig. 4.



Witnesses.

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JESSE JOHNSON, OF COCHRANVILLE, PENNSYLVANIA.

IMPROVEMENT IN BOLT-CUTTERS.

Specification forming part of Letters Patent No. 119,231, dated September 26, 1871.

To all whom it may concern:

Be it known that I, JESSE JOHNSON, of Cochranville, in the county of Chester and State of Pennsylvania, have invented an Improved Bolt-Cutter; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a top view of my improved bolt-cutter. Fig. 2 is a side view of the same. Fig. 3 is a transverse section, on an enlarged scale, on line *xx* of Fig. 1, showing the mode of attachment of the stationary knife. Fig. 4 is a perspective view, on an enlarged scale, of the stationary knife detached. Fig. 5 is a side elevation of the rack-bar with the movable knife attached; and Fig. 6 is an end view of the rack-bar and frame, showing the rib on the bar and the groove in the frame in which it moves.

The same letter indicates the same part wherever it occurs.

The nature of my improvement in bolt-cutters consists in the peculiar mode of constructing and inserting the stationary knife, and in the construction of the rack-bar and the plate of the frame in which it runs, so as to enable the knife to be applied more nearly on a level than can be done with cutters of the ordinary construction. This invention is an improvement on the bolt-cutters hitherto patented by me, and improved by William Mendham April 19, 1870. The shape and location of the rack-bar in that form of cutter are such as to render it impossible in some positions to cut with it as near to a flat surface as is often desirable. The stationary knife, moreover, is not readily removable for sharpening or renewal. The present improvement obviates these objections.

The general form, construction, and mode of operating my improved bolt-cutter are the same as those of my previously-patented instruments, as will be apparent on inspection of the accompanying drawing, in which A marks the handles of the cutter; B, the body of the frame; and C, the thinner end portion of the same. The lower or cutting side of the tool is nearly flat, there being but a slight shoulder or offset at *b'*. In the end of the frame C is a mortise for the reception of the stationary knife D, the form of which is clearly shown in Figs. 1 and 3. The form of the stationary knife and its stock is clearly shown, on an enlarged scale, in Fig. 4.

The knife D is fixed in place by driving it into the mortise formed in the frame for its reception. The force to which it is subjected when in use has no tendency to drive it out, but it can be readily withdrawn from the frame whenever it is desired to sharpen, repair, or replace it. The movable knife E is attached, by means of a bolt, *c*, and nut *d*, to the rack-bar F, which has a long slot in it for the reception of the bolt *c*, in order to the adjustment of the knife E by means of the adjusting-screw G. The shape of the rack-bar is shown in Figs. 5 and 6. Its upper portion is furnished with teeth, which receive the teeth of the segments in the ends of handles A A, as shown in Fig. 1. The lower portion *b* has no teeth, but forms a slide which runs in a groove in the lower plate of the frame, as shown in Fig. 6.

In the Mendham cutter the adjusting-screw G passes through the middle of the end of the rack-bar, and there is no groove in the frame by which the adjusting-screw may be brought near the lower surface of the bottom plate. The knife is consequently thrown much higher in the frame, and the offset at *b'*, (see Fig. 2,) which in my present invention is so slight, has to be quite large.

In my improved cutter the screw G passes through the lower part *b* of the rack-bar, and the knife is thus brought down much lower, and the offset at *b'* is reduced to a minimum, enabling the tool to be applied much nearer to a flat surface and much closer to its work than is possible in the other construction.

Having thus fully described my invention, I claim as my improvement—

In bolt-cutting-tools of the character of those described in the patents hereinbefore referred to, the particular construction of the rack-bar with the rib extending longitudinally along its lower surface, the location of the hole for the adjusting-screw partly or wholly within said rib, and the groove in the bottom plate of the frame B for the reception and guidance of the rib and the movable cutter, as and for the purpose set forth.

The above specification of my said invention signed and witnessed at Cochranville this 1st day of June, A. D. 1871.

JESSE JOHNSON.

Witnesses:

JOHN GILFILLAN,
JOEL S. GILFILLAN.

(66.)