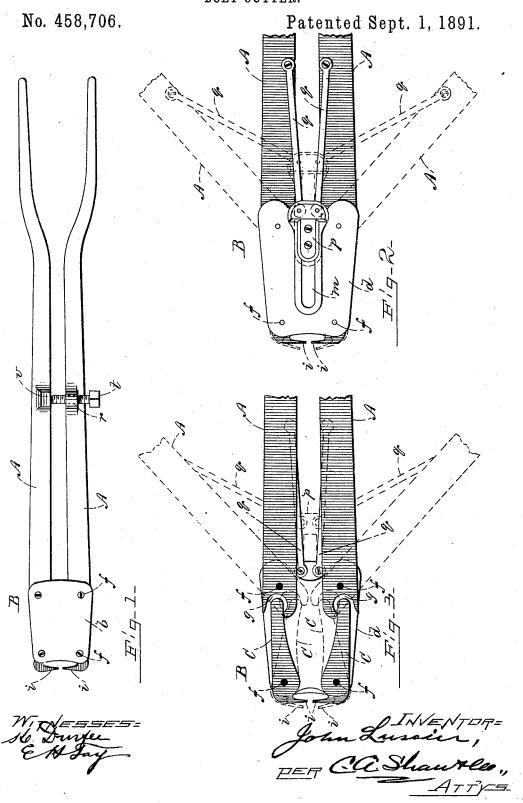
J. LUSSIER. BOLT CUTTER.



## UNITED STATES PATENT OFFICE.

JOHN LUSSIER, OF CAMBRIDGE, ASSIGNOR OF ONE-HALF TO NAPOLEON J. HARDY, OF ARLINGTON, MASSACHUSETTS.

## BOLT-CUTTER.

SPECIFICATION forming part of Letters Patent No. 458,706, dated September 1, 1891.

Application filed April 28, 1891. Serial No. 390,811. (No model.)

To all whom it may concern:

Be it known that I, John Lussier, of Cambridge, in the county of Middlesex, State of Massachusetts, have invented certain new 5 and useful Improvements in Bolt-Cutters, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use to the same, reference being had to the accompanying drawings, forming part of this specification, in which-

Figure 1 is an elevation of my improved bolt-cutter; Fig. 2, an elevation of the side 15 opposite that shown in Fig. 1, illustrating the guide mechanism, and Fig. 3 an elevation with one of the face-plates removed.

Like letters of reference indicate corresponding parts in the different figures of the 20 drawings.

My invention relates especially to bolt or rod cutters; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, 25 cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following 30 explanation.

In the drawings, A A represent the handles of the cutter. The body or head B of the cutter consists of two face-plates b d, secured together by screws f. The handles A A are pivoted on screws f between said plates, the inner ends of said handles being recessed at g, as shown in Fig. 3.

The cutting levers or jaws C are pivoted between the plates on the outer screws f, the 40 inner ends of said levers working in the recesses g of the handles A. The heads or cutting-edges i of the levers C are turned laterally inward and register. The plate d is slotted longitudinally at m, and a block p is fitted to 45 slide in said slot. Two rods q are pivoted by an end in the outer end of said block, the outer ends of said rods being pivoted, respectively, to the handles A at points correspond-

ingly distant from the head B. One handle A is provided with a lug r, through which a screw t passes in position to

be engaged by a  $\log v$  on the companion handle A, serving as an adjustable stop to limit the movement of said handle.

The jaws C and handle A, as arranged in 55 the head B, (see Fig. 3,) leave a space between said handles in line with the space between the cutting-edges of said jaws, whereby a rod may be passed between the jaws any desired distance.

In the use of my improvement, the handles being separated, as indicated by dotted lines in Fig. 3, the heads i of the jaws C are spread to admit the bolt or rod to be cut. The pivoted rods q, as said handles are spread, move 65 the block p in the slot m, said block serving as a guide to cause said handles to travel at equal speed. The article to be cut being inserted between the cutting-heads i of the jaws C and said handles closed in the ordinary 70 manner, said jaws are forced thereby together, severing the bolt or rod. The block p and levers q causing said handles to approach at equal rates of speed, all danger of one cuttingjaw moving more readily than the companion 75 jaw is avoided.

By constructing the cutting-jaws so that their edges operate in line at right angles to said jaws, instead of the scissors movement ordinarily employed in bolt-cutters of this 80 class, my improved cutter is applicable for use in corners or numerous positions where such scissors-cutters cannot be employed. Moreover, the peculiar arrangement of the parts permitting the article to be projected 85 through the head B and between the handles renders the device useful for cutting rods of lengths greatly exceeding that for which the scissors can be employed.

Having thus explained my invention, what 90 I claim is-

1. In a bolt cutter, a head, jaws pivoted therein and having inwardly-turned cuttingedges, and handles pivoted in said head and recessed to receive the inner end of said jaws, 95 substantially as described.

2. In a bolt-cutter, the head B, in combination with the recessed handles A, pivoted therein, and the pivoted jaws C, having inwardly-turned cutting-heads i, all being ar- 100 ranged to operate substantially as described.

3. In a bolt-cutter, the head B, comprising

the face-plates b d, provided with the slot m, in combination with the jaws C, the handles A, pivoted between said plates, the block p, fitted to slide in said slot, and the pivoted rods q, connecting said block and handle, substantially as and for the purpose set forth.

4. In a bolt-cutter, the pivoted jaws C, hav-

4. In a bolt-cutter, the pivoted jaws C, having cutting-heads *i*, arranged at right angles to said jaws, in combination with means for actuating said jaws, substantially as described.

5. In a bolt-cutter, the handles A, provided with the lugs r v, stop t, and recesses g, in combination with the slotted head B, the pivoted jaws C, the block p, fitted to slide in said slot, and the pivoted rods q, connecting said block and handles, substantially as described.

JOHN LUSSIER.

Witnesses: NAPOLEON J. HARDY, WILLIAM H. H. TUTTLE.