

G. A. RIES.
BOLT CUTTER.

No. 50,497.

Patented Oct. 17, 1865.

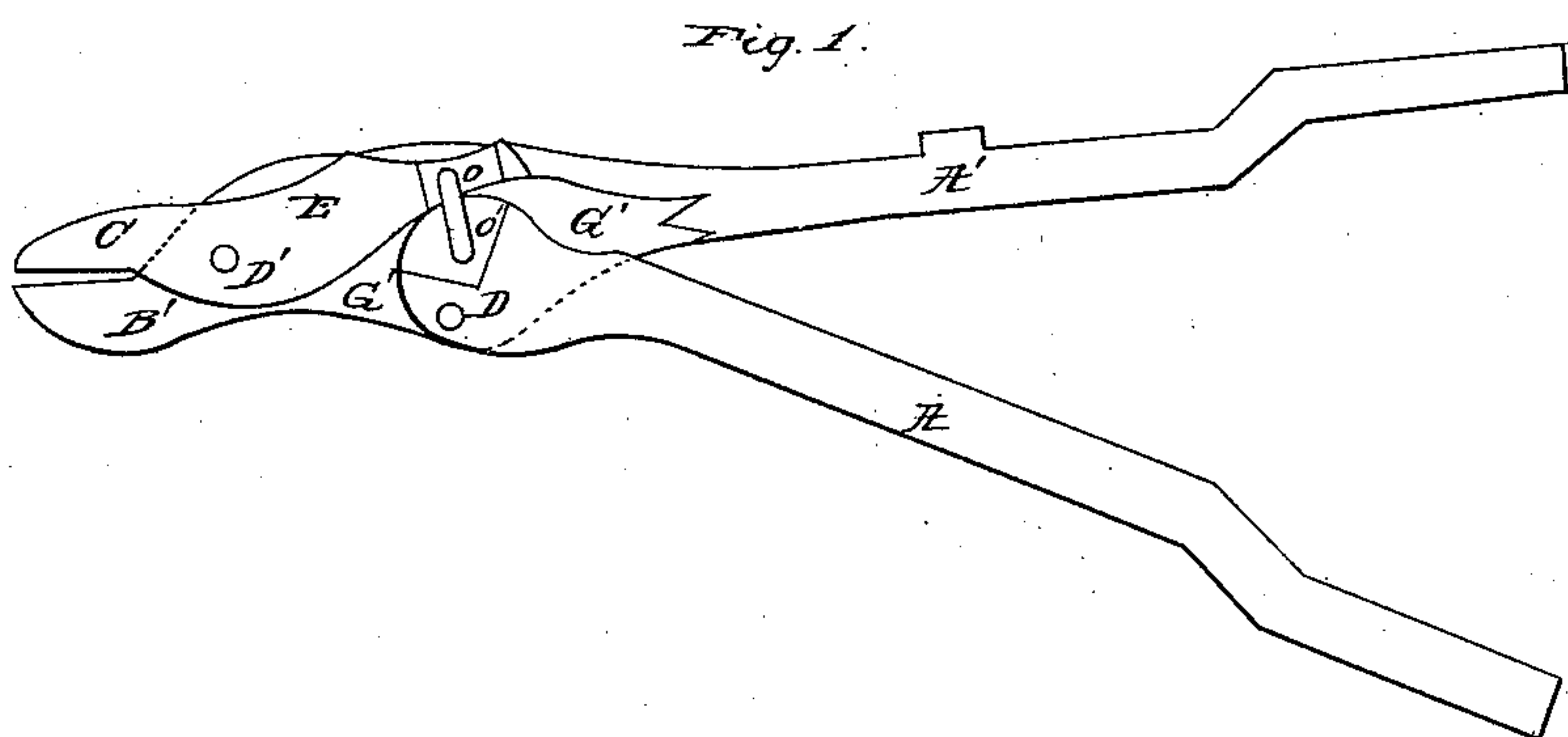


Fig. 4.

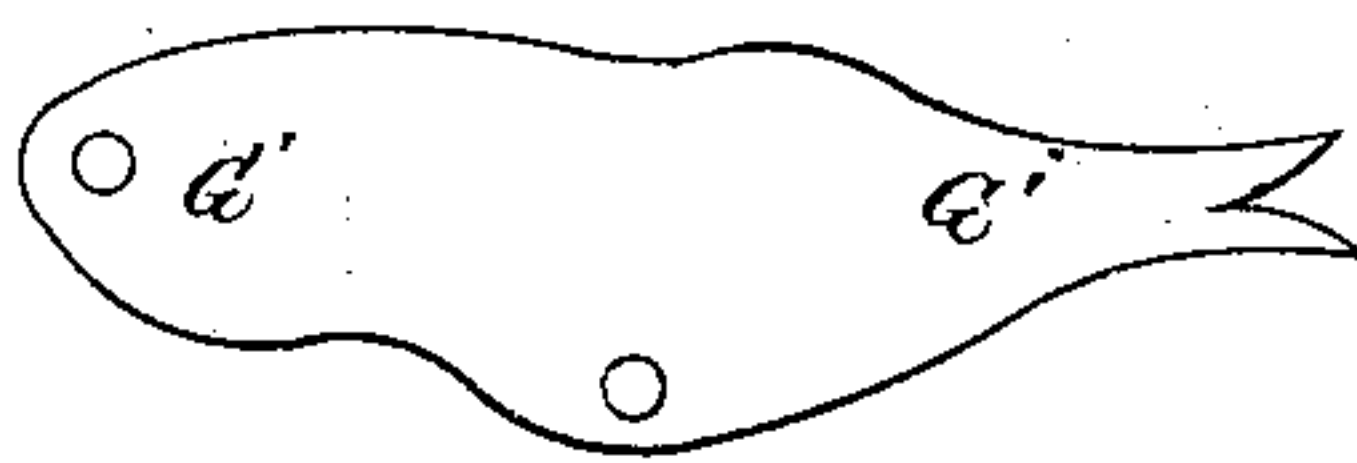
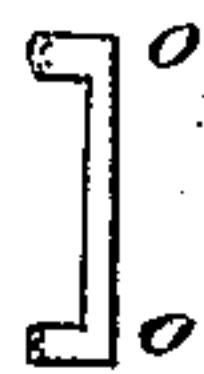


Fig. 3.

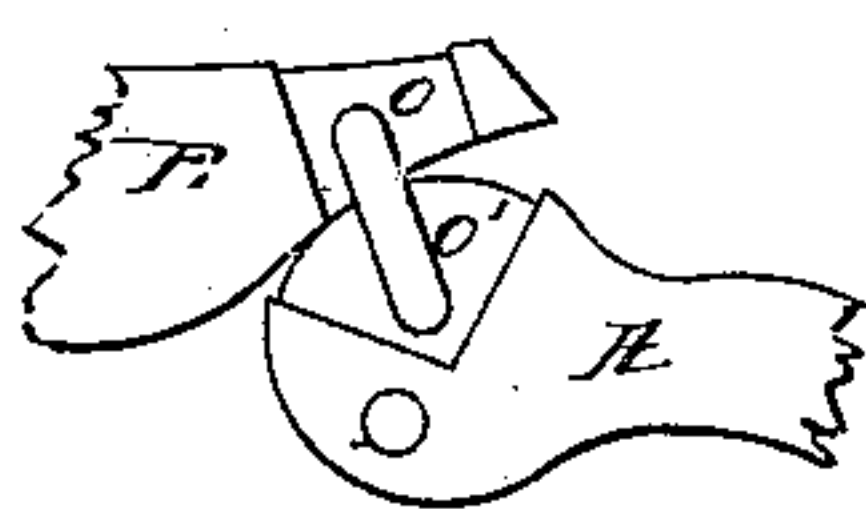
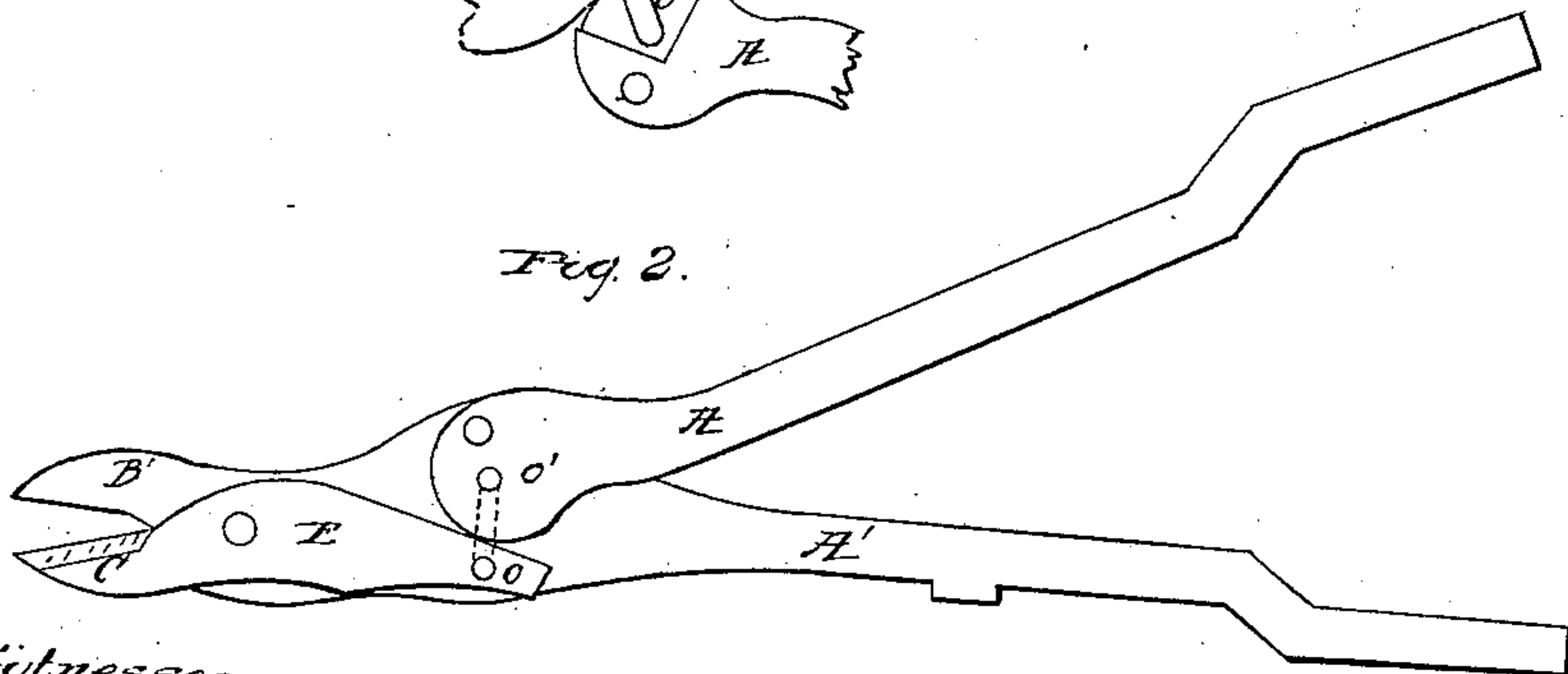


Fig. 2.



Witnesses

Dunham Collier
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UNITED STATES PATENT OFFICE.

GEORGE A. RIES, OF BELVIDERE, NEW JERSEY.

BOLT-CUTTER.

Specification forming part of Letters Patent No. 50,497, dated October 17, 1865.

To all whom it may concern:

Be it known that I, GEORGE A. RIES, of Belvidere, in the county of Warren and State of New Jersey, have invented a new and useful Improvement on the Bolt-Cutter; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective of the bolt-cutter with the parts in full working, the simple covering-plate being represented twice in this Fig. 1—namely, once at G G detached and once attached and lying in place under the represented instrument at G' G'. A A' represent the handles. A' B' is of one piece of metal, and in its form that of the colored portion of the Fig. 1. The handle A swings at its larger end on the pivot and pin at D, and impinges as a lever of the first class on the blade-piece E, near O, this blade-piece being also a lever of the first class, having its fulcrum pivot or pin at D' and blade at C. When the solid handle A' B' is put upon the burr of the bolt or iron pin to be cut off, the handle A is moved, and acting as above described upon the piece E, cuts off the bolt or iron pin; but after this it does not, upon opening, draw the piece E back to its position, which frequently occasions trouble. Now, your petitioner has improved this instrument by

making two grooves—the one in the end of A, the other in the piece E—such that link M, of metal sufficiently heavy, may be introduced between the ends of E and A, and of a form fully represented at Fig. 4. In this link the pin O fits into a hole in the groove of the piece E, and the pin O' fits into the corresponding and opposite groove above the pin D in the end of the handle A, the two holes—the one in the piece E and the other in the end of the handle A—being always drilled so that their positions in relation to the fulcrum D shall be substantially as represented in the drawings, and not so as to cause tension upon the link.

Fig. 2 represents the bolt-cutter turned over, so that, the face-piece G G, Fig. 1, having been removed, the instrument presents the appearance in the Fig. 2 which Fig. 1 would if the instrument represented in Fig. 1 had been turned over and the under side made uppermost.

What I claim is—

The connecting the link M to the bolt-cutter, as afore described, with the grooves in the ends of E and the handle A respectively and substantially as figured in Figs. 3 and 4.

GEORGE A. RIES.

Witnesses:

J. R. HUTCHINSON,
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