

(No Model.)

G. L. DONOVAN.

CUTTING NIPPERS.

No. 332,597.

Patented Dec. 15, 1885.

FIG. 1.

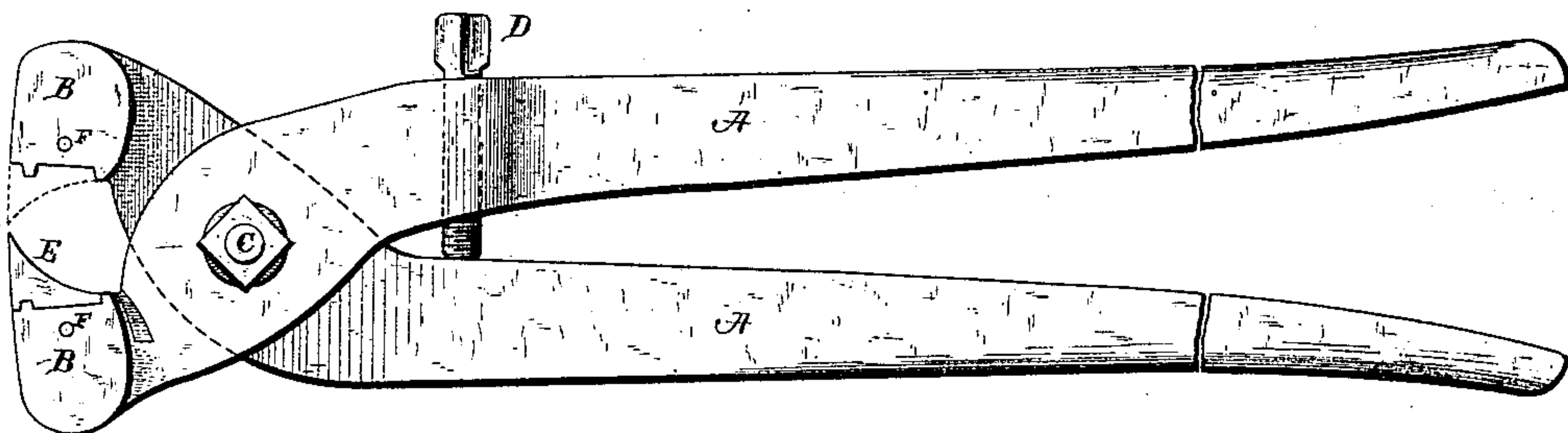


FIG. 2.

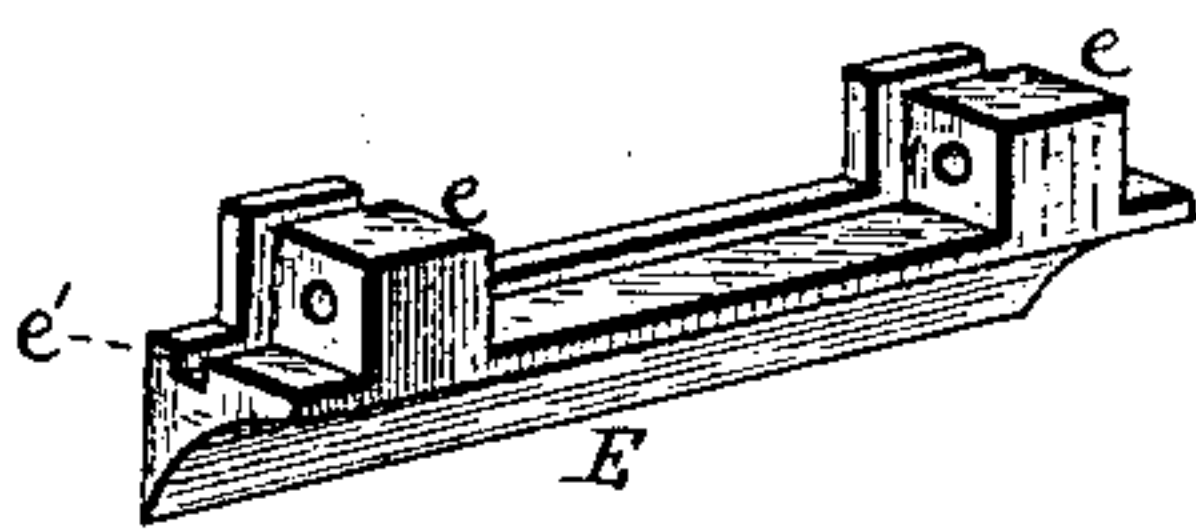


FIG. 3.

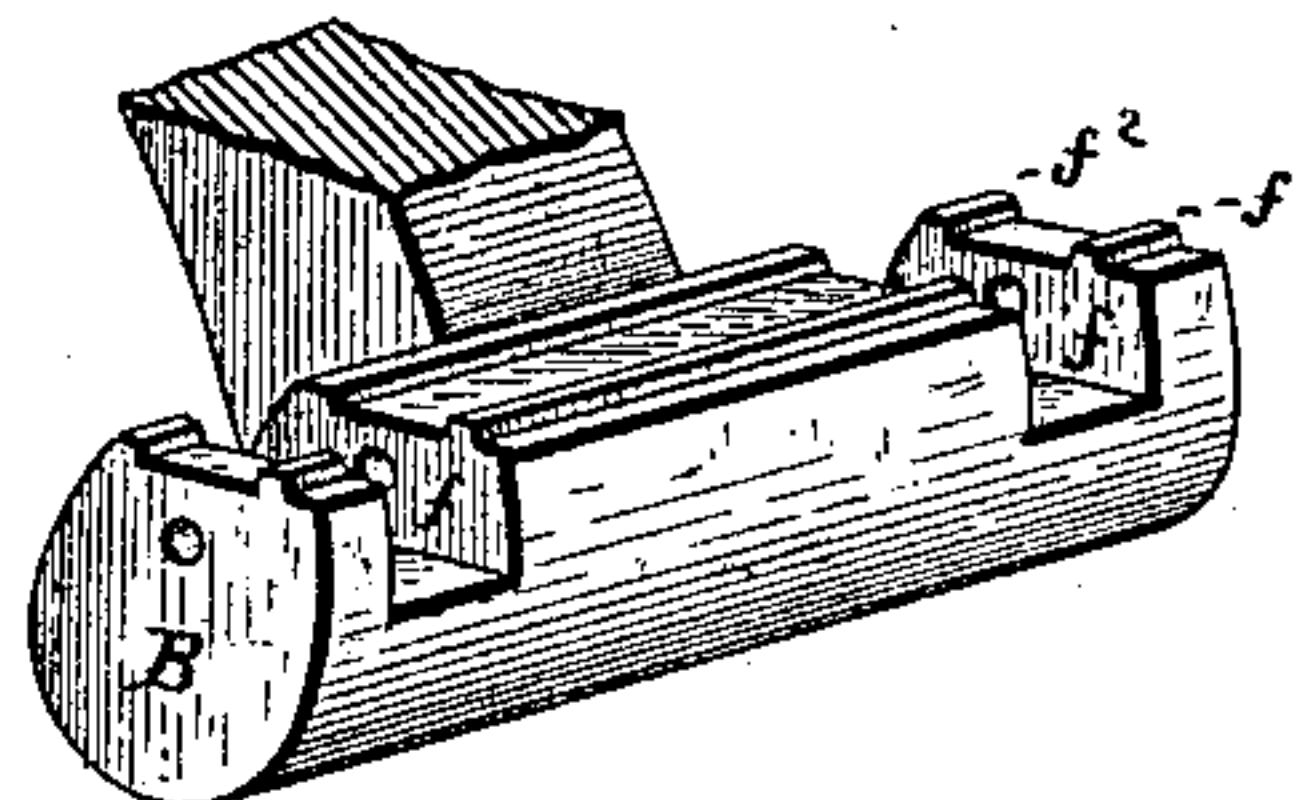
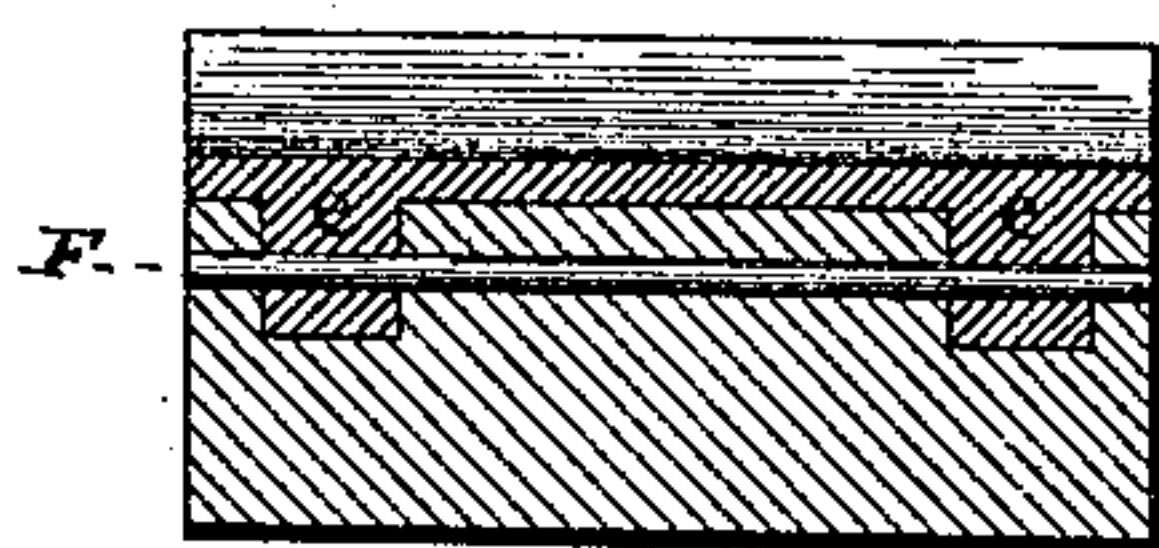


FIG. 4.



ATTEST-  
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# UNITED STATES PATENT OFFICE.

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## CUTTING-NIPPERS.

SPECIFICATION forming part of Letters Patent No. 332,597, dated December 15, 1885.

Application filed September 3, 1885. Serial No. 176,953. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE L. DONOVAN, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Cutting-Nippers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to nippers having soft-metal bodies and hard cutting-edges.

It consists in the peculiar construction of the cutting-jaws and the contiguous parts of softer metal, and in the combination thereof with transverse fastening-pins, substantially as hereinafter set forth and claimed.

15 In the accompanying drawings, Figure 1 represents a side elevation of a pair of nippers with one of the hard cutting-pieces removed. Fig. 2 represents a detail perspective view from behind of one of these cutting-pieces. Fig. 3 represents a similar view of the corresponding part of the jaw into which it fits, and Fig. 4 represents a transverse section through the interlocking parts of the jaw and cutting-piece on the line of the connecting rod or pintle.

20 A designates the handles of the nipper; B, the jaws cast therewith, (or formed of one piece of wrought metal with said handles;) C, the pivot, and D the gage-screw.

25 E designates the removable cutting-pieces, the inner faces of which are curve-ground from below, to form in each instance a cutting-edge with the flat top. Each of these pieces has on its rear a lug, *e*; near each end, and a deep groove, *e'*, extends from end of said piece, cutting through said lugs. The contiguous face of the

softer metal of jaw B, into which it is set, has a recess, *f*, for each of these lugs *e*, a bead, *f'*, that fits into groove *e'*, and another bead, *f''*, that fits under said piece E. A locking-pin, F, extends transversely through said jaw and said lugs *e*, holding the cutting-piece E securely in place. The lugs *e* and the corresponding parts of the softer metal on each side of them brace the piece E against lateral strain, and the beads *f'* *f''* brace it in like manner against strains toward or from the pivot C.

The construction of each cutting-piece E and jaw B is the same as that of the corresponding part on the other side. By withdrawing the locking-pins F the cutting-pieces E are left free to be removed for grinding.

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

1. A nipper-jaw, in combination with a detachable cutting-edge and a fastening device for securing them together, said jaw and cutting-edge being constructed with interlocking recesses, lugs, and beads, which prevent motion either laterally or toward and from the pivot, and act as braces against strain in either direction, substantially as set forth.

2. A cutting-piece, E, having a groove, *e'*, from end to end, in combination with the softer body of the jaw, having beads *f'* *f''*, and the removable locking-pin, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE L. DONOVAN.

Witnesses:

GEORGE TERRY,

GEORGE D. SEYMOUR.