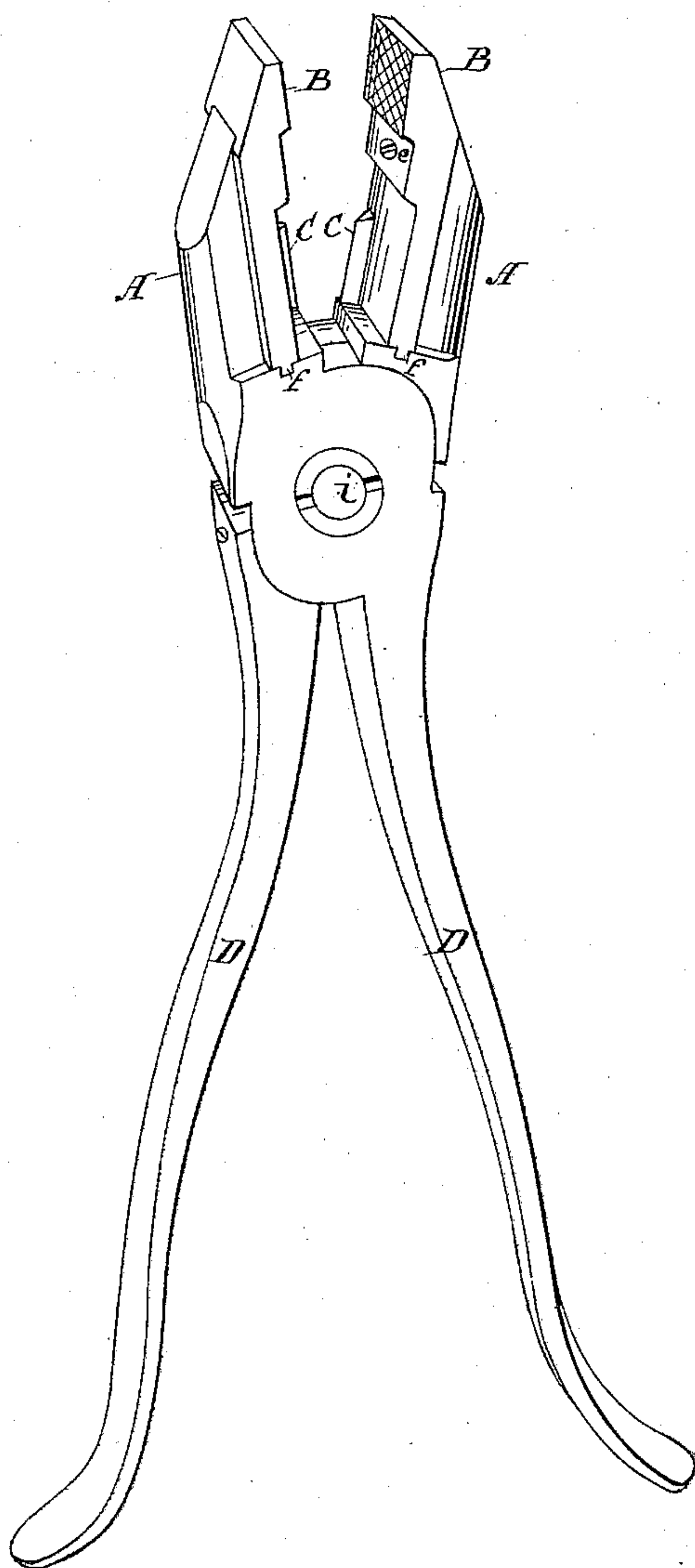


(No Model.)

T. G. HALL.
PLIERS.

No. 335,694.

Patented Feb. 9, 1886.



WITNESSES:

Samuel Leopold
W. H. Hill

INVENTOR

Thomas G. Hall

UNITED STATES PATENT OFFICE.

THOMAS G. HALL, OF BROOKLYN, NEW YORK.

PLIERS.

SPECIFICATION forming part of Letters Patent No. 335,694, dated February 9, 1886.

Application filed April 27, 1885. Serial No. 163,590. (No model.)

To all whom it may concern:

Be it known that I, THOMAS G. HALL, a citizen of the United States, residing in Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Pliers, of which the following is a description in such full, clear, exact, and concise terms as to enable any one skilled in the art to which it appertains, or with which it is most nearly connected, to make and use the same, reference being had to the annexed drawing, making part of this specification, and to the figures and letters of reference marked thereon.

The figure of said drawing illustrates said pliers in perspective.

My improvement consists, principally, of a combination of removable and reversible nipping-surfaces and cutting-edges with the jaws of the pliers.

Reference being had to the drawing, A A are the principal jaws of the pliers, D D are the handles or levers, and *i* the pivot that unites and holds together the two parts of the joint. The jaws A are faced with removable and reversible nipping-surfaces and cutting-edges B and C, the cutting-edge C being made part of the face-piece B, at the upper end of which the nipping-jaw is formed. The cutting-edges C are placed opposite each other at

the side of the respective face-pieces B, the latter being made interchangeable, by which the cutting-edges can be placed either at the right or left hand side of the pliers. The face-pieces B are tongued and grooved in the jaws A, and are held in place by a single screw, *e*, the tonguing and grooving supporting the piece upon the jaw, the screw being used merely to keep it from working out of its seat. By this construction of the pliers the nipping-jaws and cutting-edges are quickly and cheaply replaced by new ones when they are worn out or broken. All of the several parts of the respective sizes being made exactly alike in shape and size, to renew the tool it is only necessary to take out the screw *e* and substitute new jaw-facings for the old ones.

Having now described my improved plier, I claim as new and desire to secure by Letters Patent—

Pliers having jaws A faced with interchangeable pieces B, tongued and grooved in the jaws, said pieces being held in place by a screw and provided with cutting-edges and gripping-surfaces, substantially as described.

THOMAS G. HALL.

Witnesses:

SAMUEL LEOPOLD,
J. EDGAR BULL.