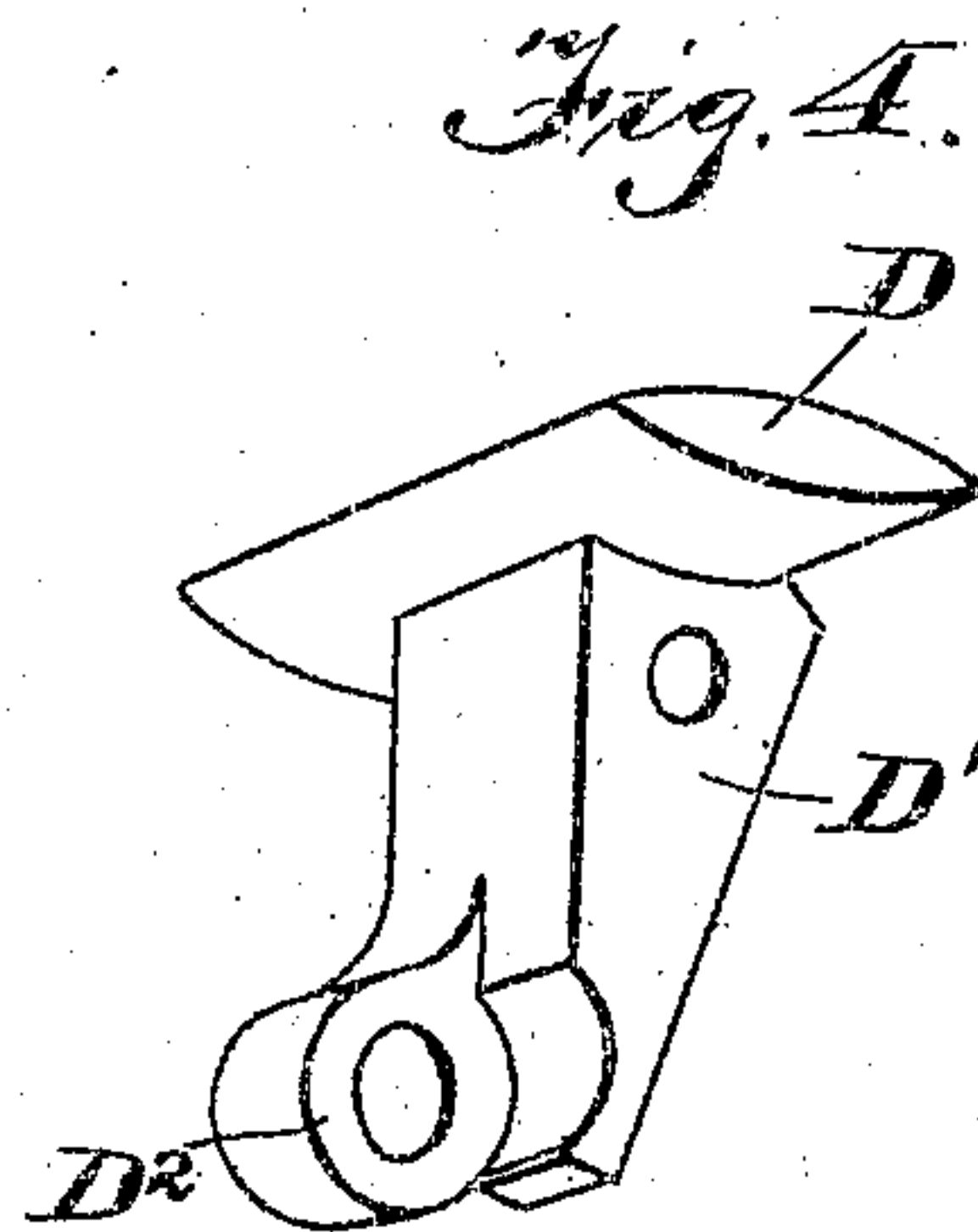
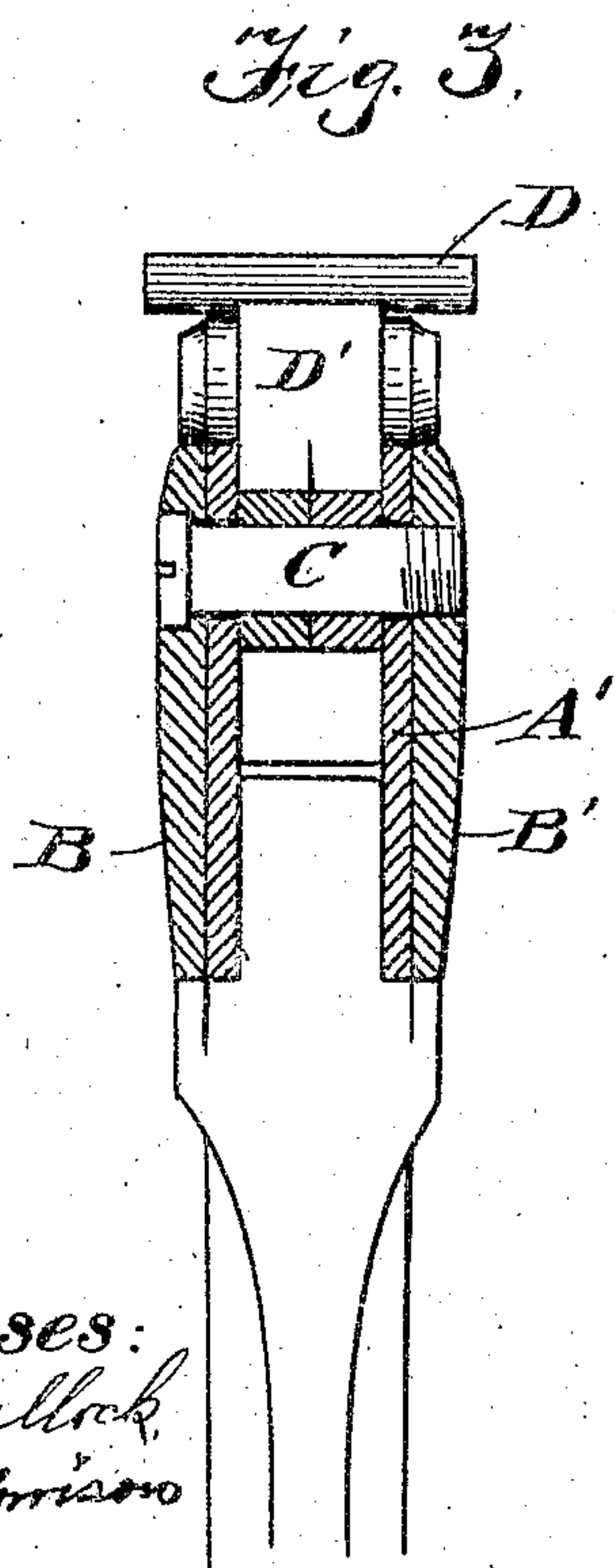
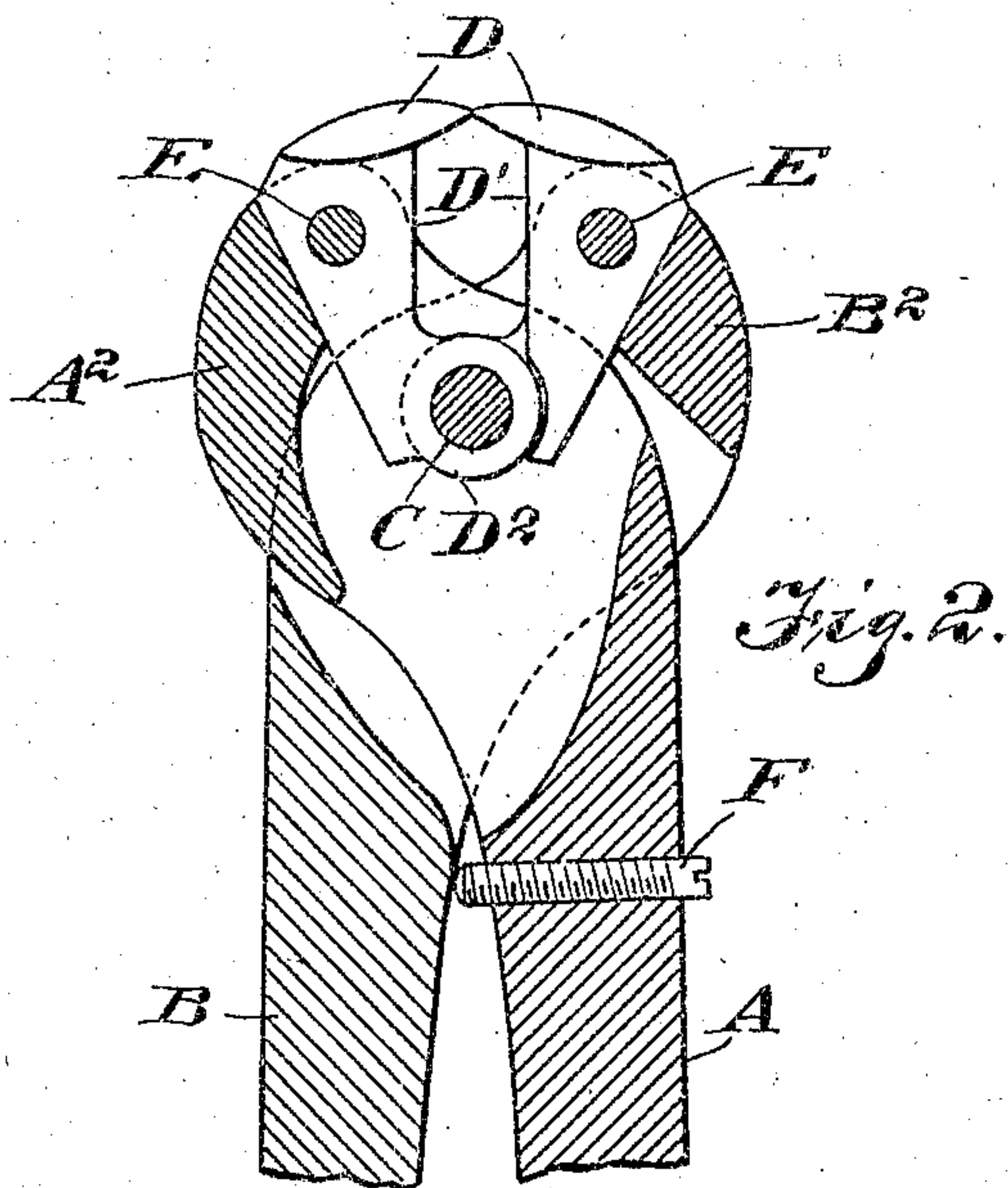
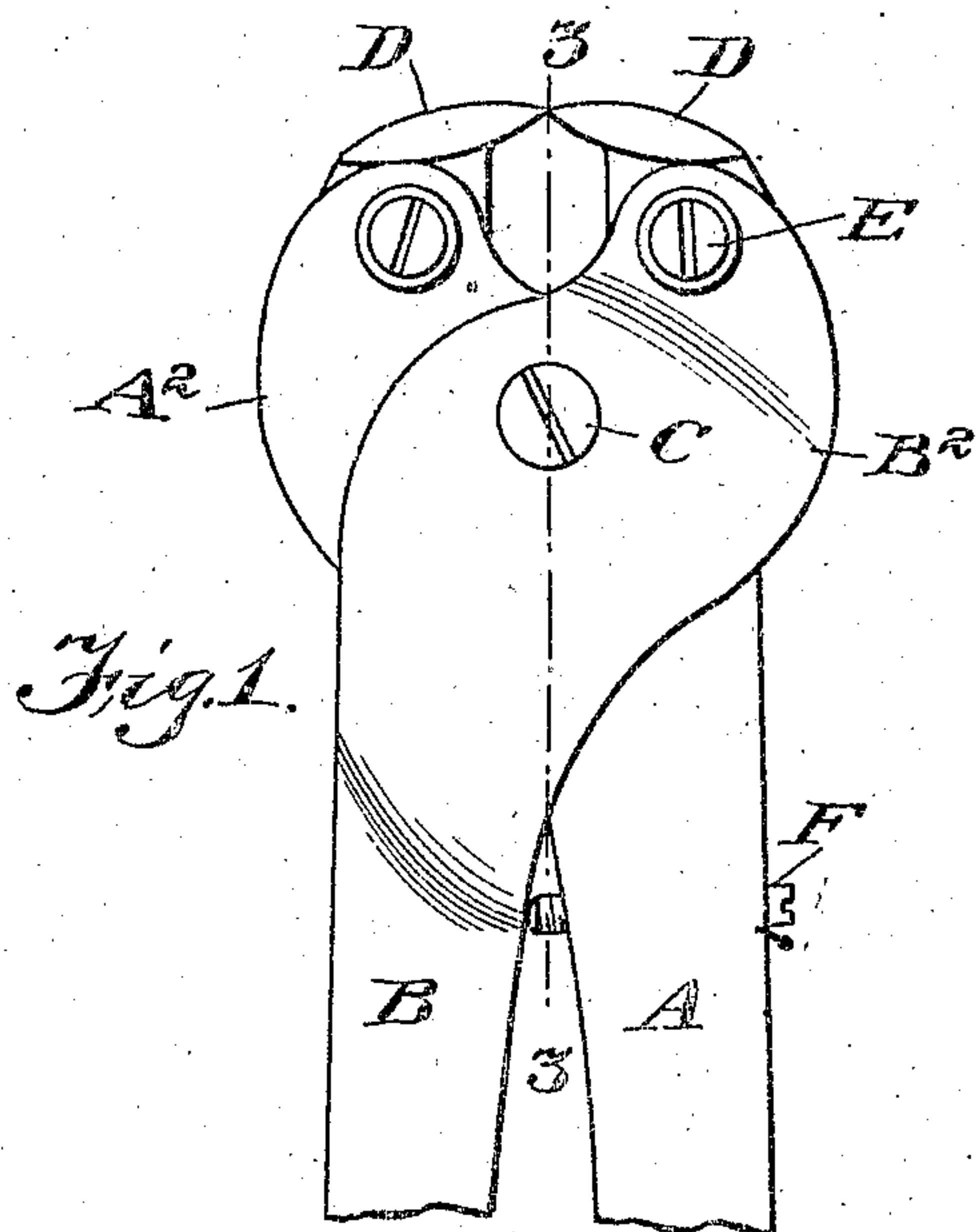


No. 786,723.

PATENTED APR. 4, 1905.

P. BROADBOOKS.
NIPPERS OR CUTTING PLIERS.

APPLICATION FILED JUNE 11, 1904.



Witnesses:
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UNITED STATES PATENT OFFICE.

PETER BROADBOOKS, OF BATAVIA, NEW YORK.

NIPPERS OR CUTTING-PLIERS.

SPECIFICATION forming part of Letters Patent No. 786,723, dated April 4, 1905.

Application filed June 11, 1904. Serial No. 212,063.

To all whom it may concern:

Be it known that I, PETER BROADBOOKS, a citizen of the United States, residing at Batavia, county of Genesee, and State of New York, have invented a certain new and useful Improvement in Nippers or Cutting-Pliers, of which the following is a specification.

My invention relates to a new and useful improvement in nippers or cutting-pliers; and my object is to so construct a tool of this description as to gain rigidity and overcome the side strain the jaws are subjected to in cutting large wire on the outer edge thereof.

Another object of my invention is to provide cutting-jaws which are solid and integral with their shanks and hinging said jaws together upon the same pivot as the levers.

Another object is to so construct the cutting-jaws that while they are adjustably and removably attached to the levers are at the same time rigidly held in a receptacle formed in the head of each lever and between the flanges of the inner lever.

Another object of my invention is to construct the receptacle in which the jaws are held so that the outer walls of said receptacles will bear directly against the shank of the cutting-jaws, and thus insure great rigidity, and by hinging said jaws to the same fulcrum-pivot as the levers said jaws are kept from twisting.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side view of a pair of nippers made in accordance with my improvement; Fig. 2, a longitudinal section through the same; Fig. 3, a section taken on the line 3 3 of Fig. 1; Fig. 4, a perspective view of one of the cutting-jaws and shank.

A and B represent two levers, each lever being cut away at one end, so as to form the

side flanges A' and B', respectively. These levers are cut away at this end, so that one may pass through the other and be hinged together by the pivot C.

D represents the cutting-jaws, each of which has a shank D' formed with it. One of these jaws is adapted to fit between the flanges of each lever, a screw or bolt passing through the flanges of the lever and through the shanks of the jaws. The inner ends of the shanks of the jaws are provided with bearing-rings D², adapted to surround the pivot C between the flanges A' of the inner lever A. The solid portions formed at A² and B² in the head of the flanges of the levers A and B, respectively, beyond the cut-away portions are adapted to contact the shanks D' of the jaws, so that the strain in cutting is not taken by the bolts or screws E; but the pressure is directly applied from the levers by the solid portions A² and B² coming in contact with the jaws. It will thus be seen that the cut-away portions at the head of the flanges of each of the levers provide a receptacle for the jaws, and these jaws may be removed at any time by removing the bolts or screws E and pivot C, and if the cutting edges of the jaws are worn away in sharpening or repairing they can be adjusted by enlarging the holes through which the bolts or screws pass and putting a liner between the solid portions A² and B² and the shanks of the jaws. This is an important point in pliers of this character, as the cutting edges of the jaws may be repaired and exactly or accurately fitted independent of the levers and used with greater economy.

F is a screw adapted to be threaded through one of the levers and bear against the other lever for limiting the movement of the jaws toward one another.

It will thus be seen that by this construction of cutting-pliers I have provided a tool which accomplishes all the objects before stated and at the same time consists of very few parts, thus making the tool cheap to manufacture, durable, and extremely efficient in action.

Of course I do not wish to be limited to the exact construction herein shown, as slight

modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

- 5 In a cutting-pliers, two levers, the flanges of one lever adapted to pass between the flanges of the other lever and be hinged together at this point, receptacles formed at the head of the flanges of each lever, cutting-jaws provided with shanks, said shanks adapted to fit
10 within the receptacles formed in the end of each of the levers, said shanks being led together, the pivot which pivots the levers together adapted to pass through both shanks,
15 bolts or screws passing through the levers and

through the shanks above the pivotal point, the outer walls of the receptacles adapted to bear against the shanks of the cutting-jaws so that the power from the levers is communicated to the jaws through these outer walls, thus removing all strain from the bolts or screws which pass through the levers and shanks.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

PETER BROADBOOKS.

Witnesses:

MARTIN BROWN,
C. H. BERGMAN.