

No. 667,411.

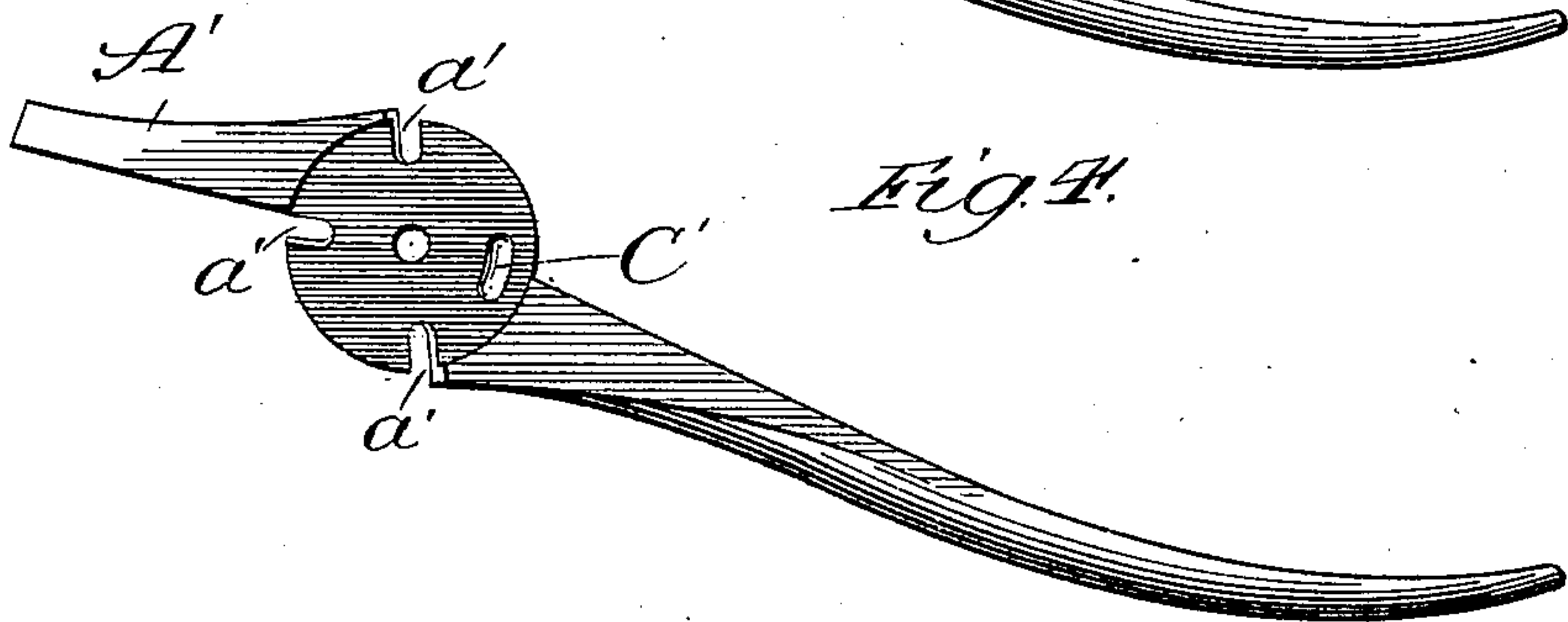
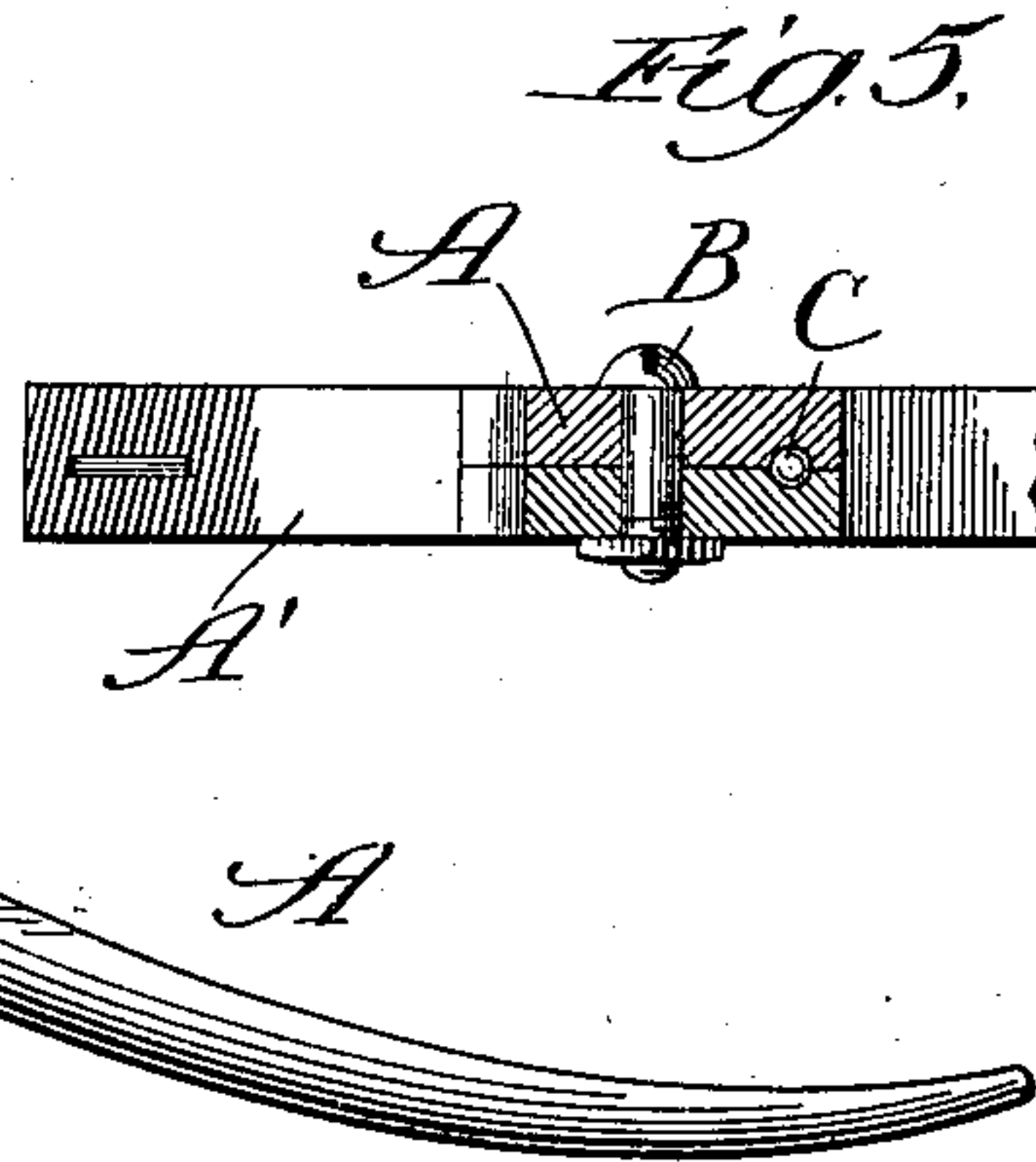
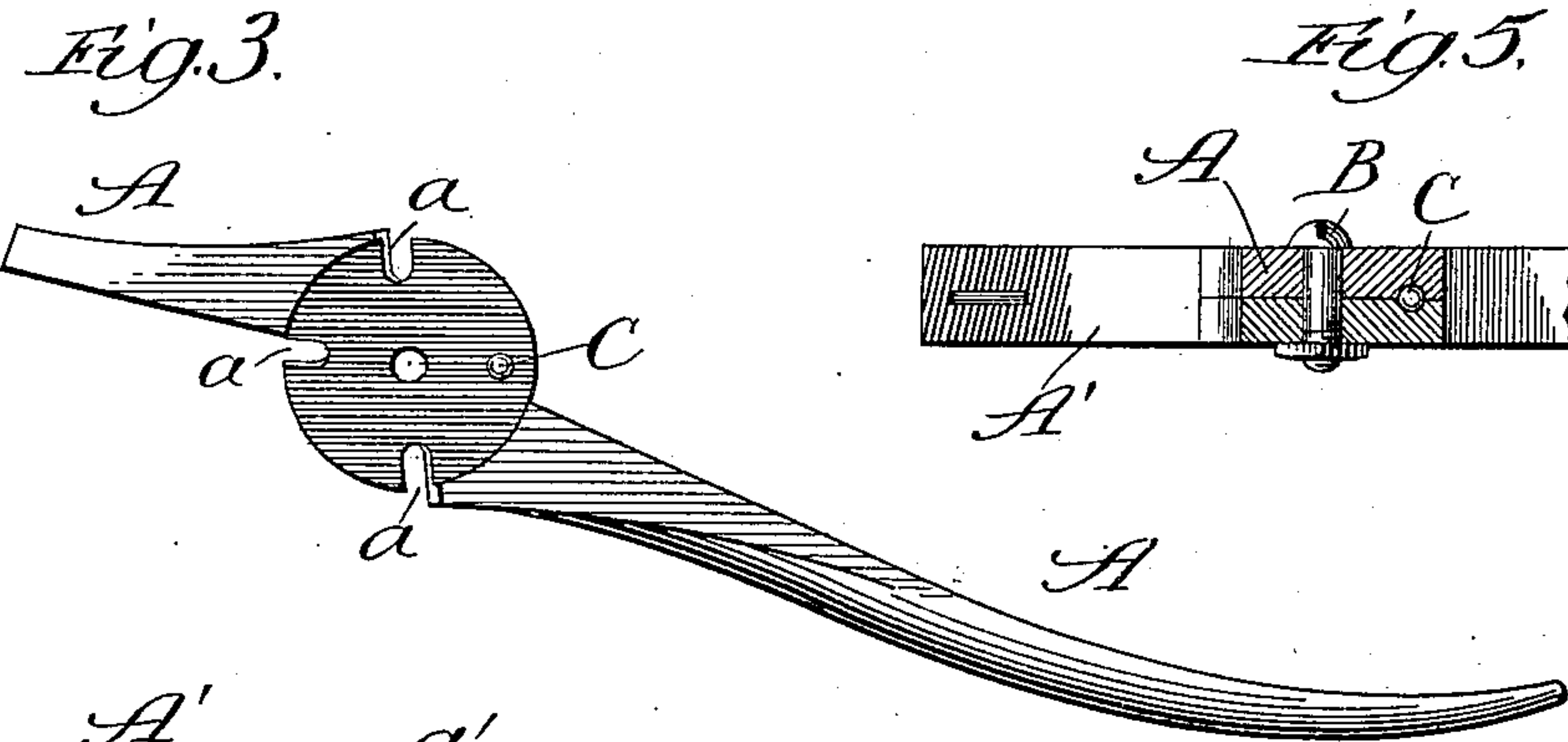
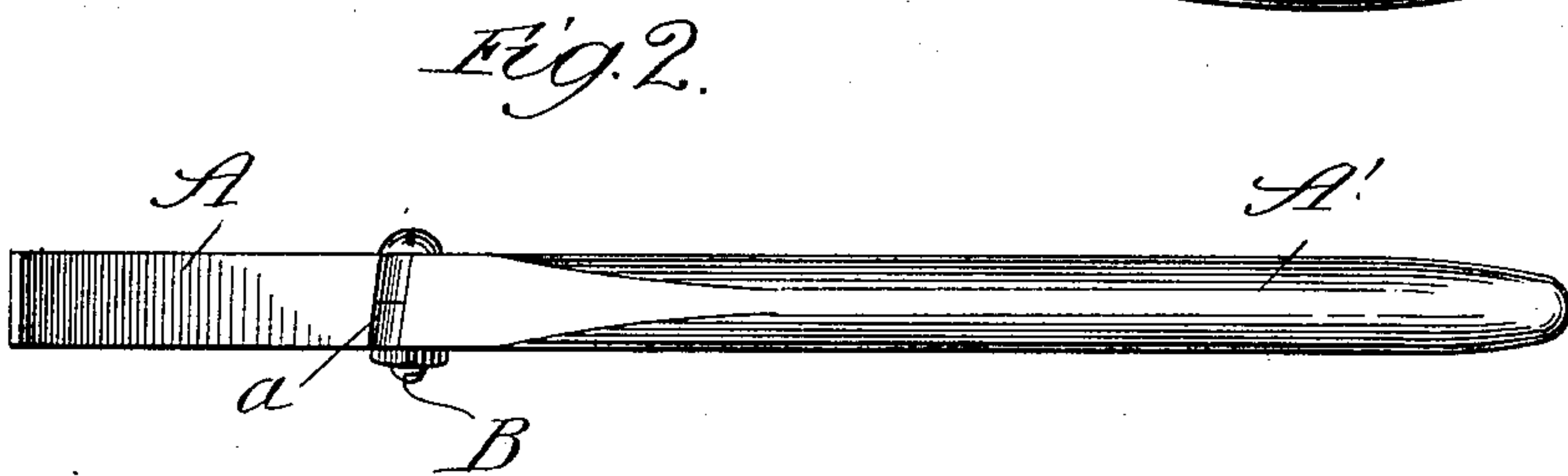
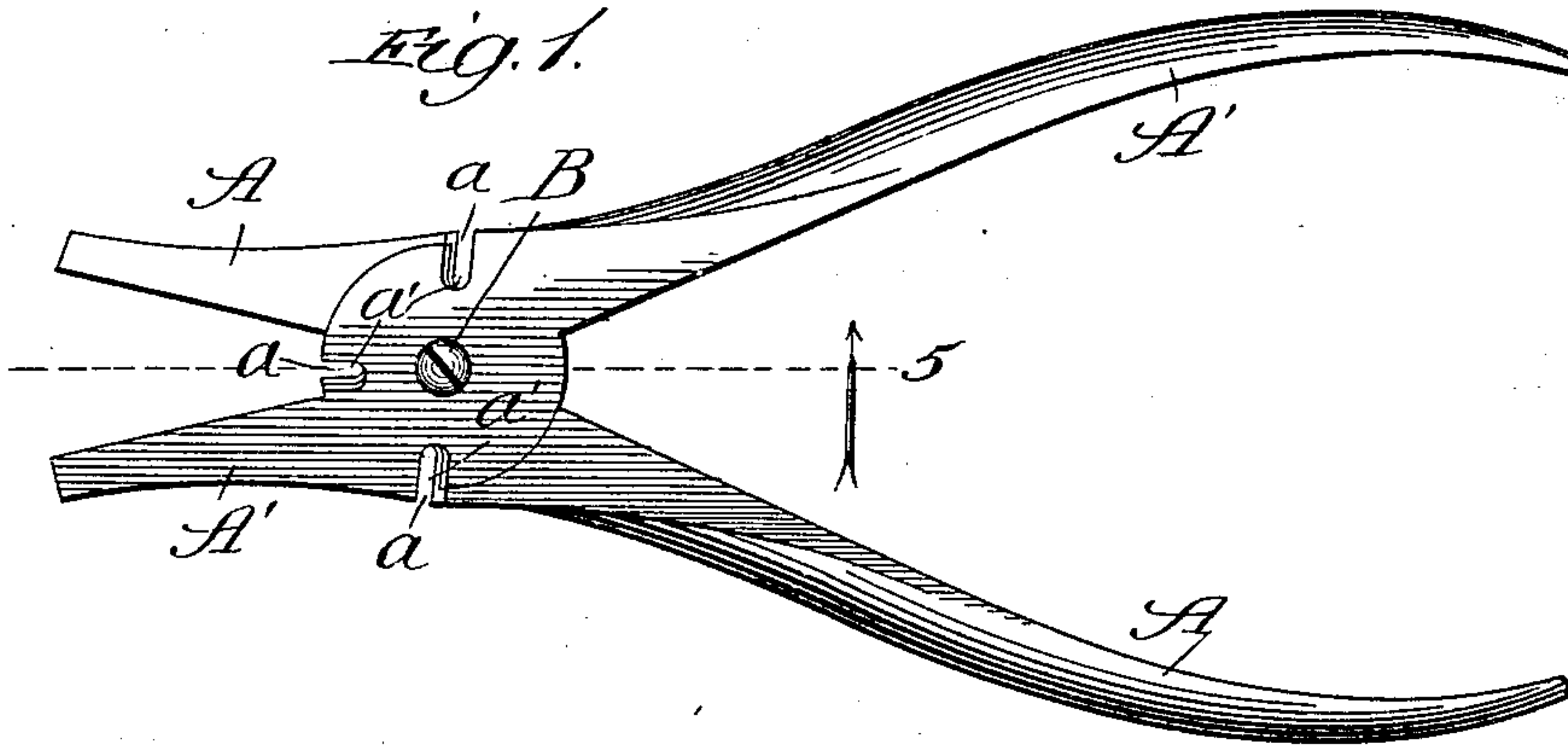
Patented Feb. 5, 1901.

S. S. VAUGHAN & W. L. PETERSON.

WIRE CUTTER.

(Application filed July 16, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

SANFORD S. VAUGHAN AND WILLIAM L. PETERSON, OF CHICAGO, ILLINOIS,
ASSIGNORS TO THE VAUGHAN & BUSHNELL MANUFACTURING COMPANY,
OF SAME PLACE.

WIRE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 667,411, dated February 5, 1901.

Application filed July 16, 1900. Serial No. 23,737. (No model.)

To all whom it may concern:

Be it known that we, SANFORD S. VAUGHAN and WILLIAM L. PETERSON, citizens of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Wire-Cutters, of which the following is a specification.

The object of our invention is to make a wire-cutter which shall always open so that the wire-cutting notches in the two members of the cutter shall be in register or alinement or proper position to receive the wire to be cut; and our invention consists in the features, details of construction, and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of our improved wire-cutter in an open position. Fig. 2 is an edge elevation of the same. Fig. 3 is an inside elevation of one of the members of the cutter detached. Fig. 4 is an inside elevation of the other member of the cutter detached, and Fig. 5 is a plan sectional view taken on the line 5 of Fig. 1 looking in the direction of the arrow.

For convenience we have illustrated our wire-cutter in connection with a pair of pliers, so that they together form a combination of pliers and wire-cutter. It is so obvious, however, that the plier-jaws can be omitted without impairing the function and operation of the wire-cutting features that we shall describe and claim our device as a wire-cutter irrespective of the plier features.

In making our improved wire-cutter we make the members A and A' of the cutter of any suitable size and material. The members of the cutter are crossed and fastened together by a screw or pivot B, as is usual in such cases, so as to give them a pivotal connection with each other. The members of the cutter are provided with wire-cutting notches of the usual form *a* and *a'*, preferably three notches in each member, as shown in the drawings. These notches are intended to receive the wire to be cut, and in order to receive the wire it is necessary that they shall be brought into register or alinement, as shown in Figs. 1 and 2. Not only is it necessary that the notches should be in alinement, but in the cutting of wire it is often neces-

sary to hold the cutter in one hand and the wire in the other. The necessity, therefore, of manipulating the cutter with one hand increases the difficulty of bringing the cutting-notches into alinement. Hence it is important that some means should be employed which shall operate as a gage or stop, so that when the members of the cutter are moved on their pivot the cutting-notches will necessarily and of themselves be brought into register or alinement to receive the wire. In order to do this, we provide the member A with a pin, stud, or other projection C and the member A' with a recess, depression, or slot C', into which the pin, stud, or other projection may be received and in which it may travel a predetermined distance. These contiguous parts C and C' are arranged on the inner faces of the members of the cutter, so that when they are assembled together the projection on the one and the recess or slot on the other will be concealed from view and protected from liability to injury or displacement. As shown in the drawings and as we prefer to make it, the projection on the member A of the cutter is formed by making a suitable hole in its face and putting a hardened shot or ball into such hole with half of it projecting above the surface to be received in the recess or slot in the other member. Of course any kind of a pin, stud, or projection if properly hardened will serve the purpose instead of the shot or ball; but we prefer to use a ball or shot owing to its cheapness and to the facility with which it may be hardened to prevent wear in use as well as the ease with which it may be inserted in place. The pin, stud, or projection of whatever kind it may be on the one member received into the recess or slot on the other member permits the members of the cutter to move on their pivot only to the extent or point that the projection can travel in the recess or slot. As it reaches the end of the recess or slot the further movement of the members of the cutter is arrested and prevented. The parts are so made and the projection and recess so located that the end of the travel of the one in the other is always reached just at the time the notches *a* and *a'* have been brought into

register or alinement, so that they are open to receive the wire to be cut.

Although we have shown the members of the cutter assembled by a screw B, yet it will be
5 understood, of course, that they can be fastened with a rivet, if preferred.

What we regard as new, and desire to secure by Letters Patent, is—

In a wire-cutter, the combination of two
10 movable members crossing each other and each having a plate at the crossed point pivotally connected together at the center for the plates to move on each other, each plate provided on its periphery or outer edge with
15 a cutting-notch adapted to be brought into

registration as the members are moved and the plates turned on each other, one of the plates carrying a ball partially entered into its inner face and the other plate having a curved recess in its inner face into which the
20 projecting portion of the ball enters and forms a stop for the movement of the plates on their pivots arresting the movement as the cutting-notches are brought into register, substantially as described.

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