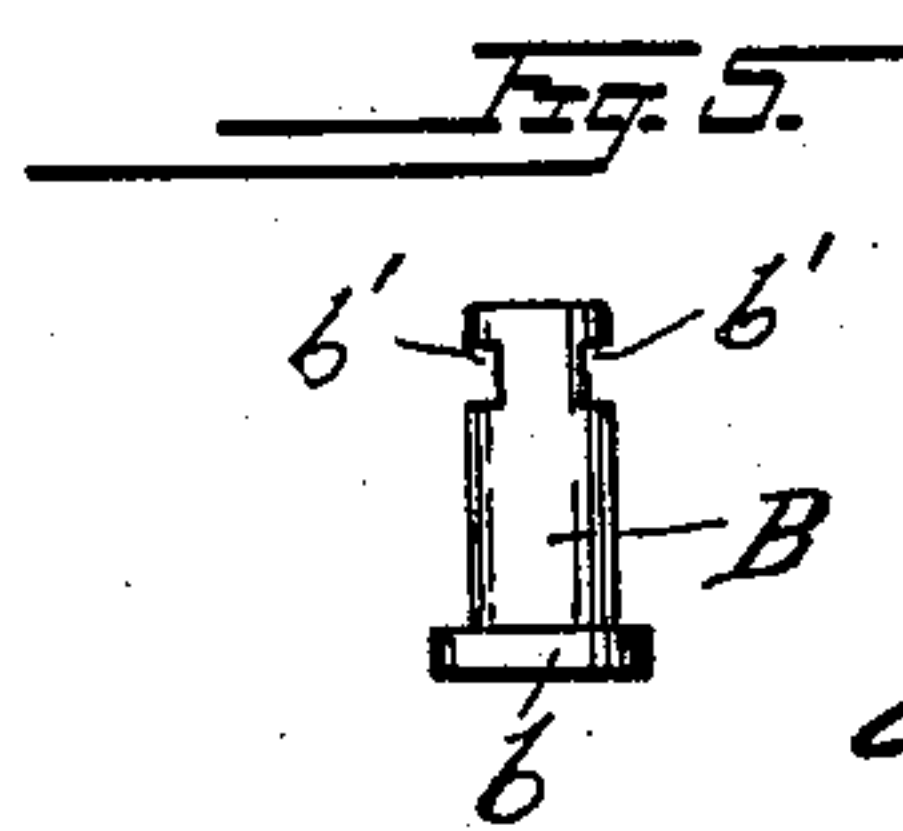
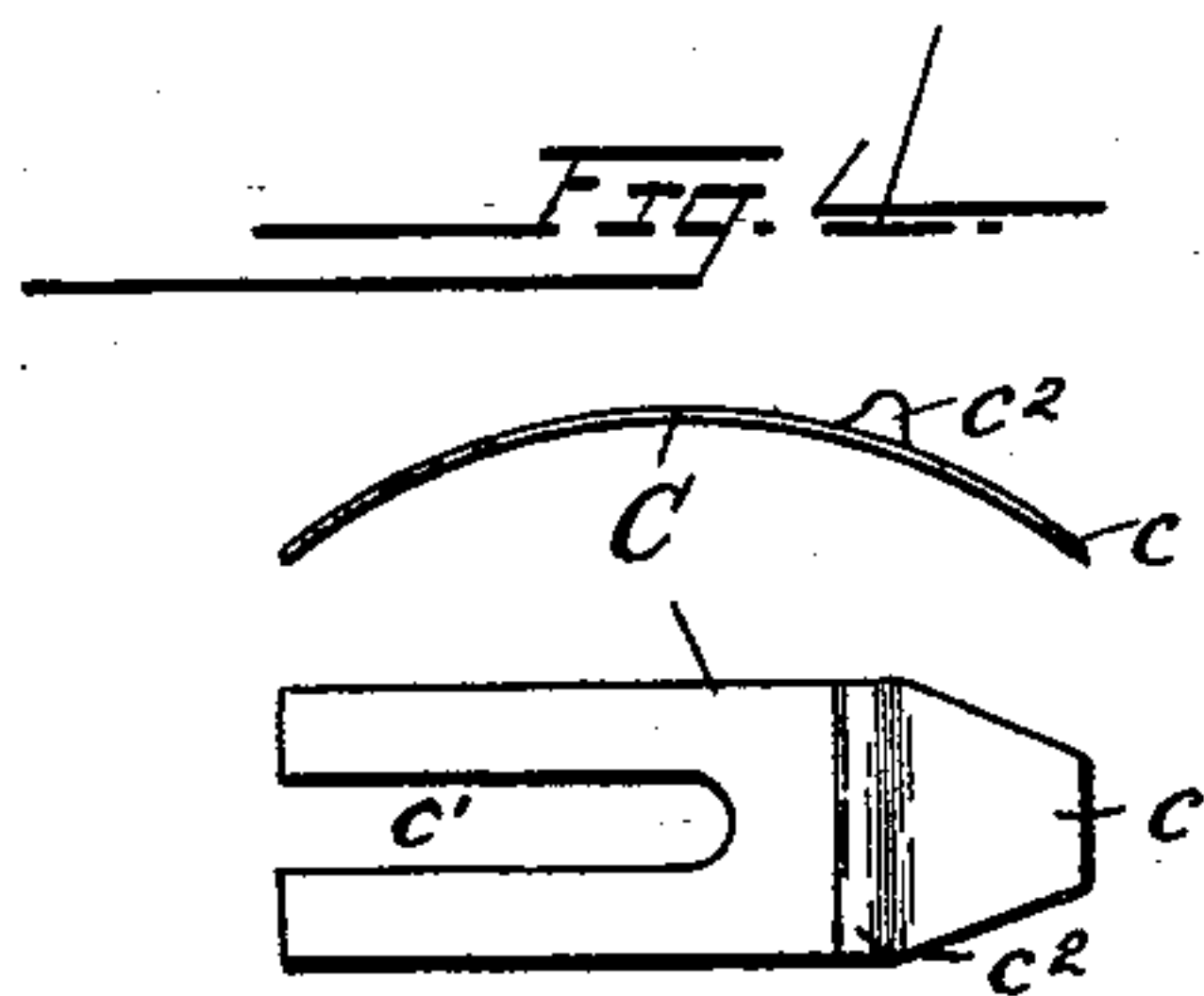
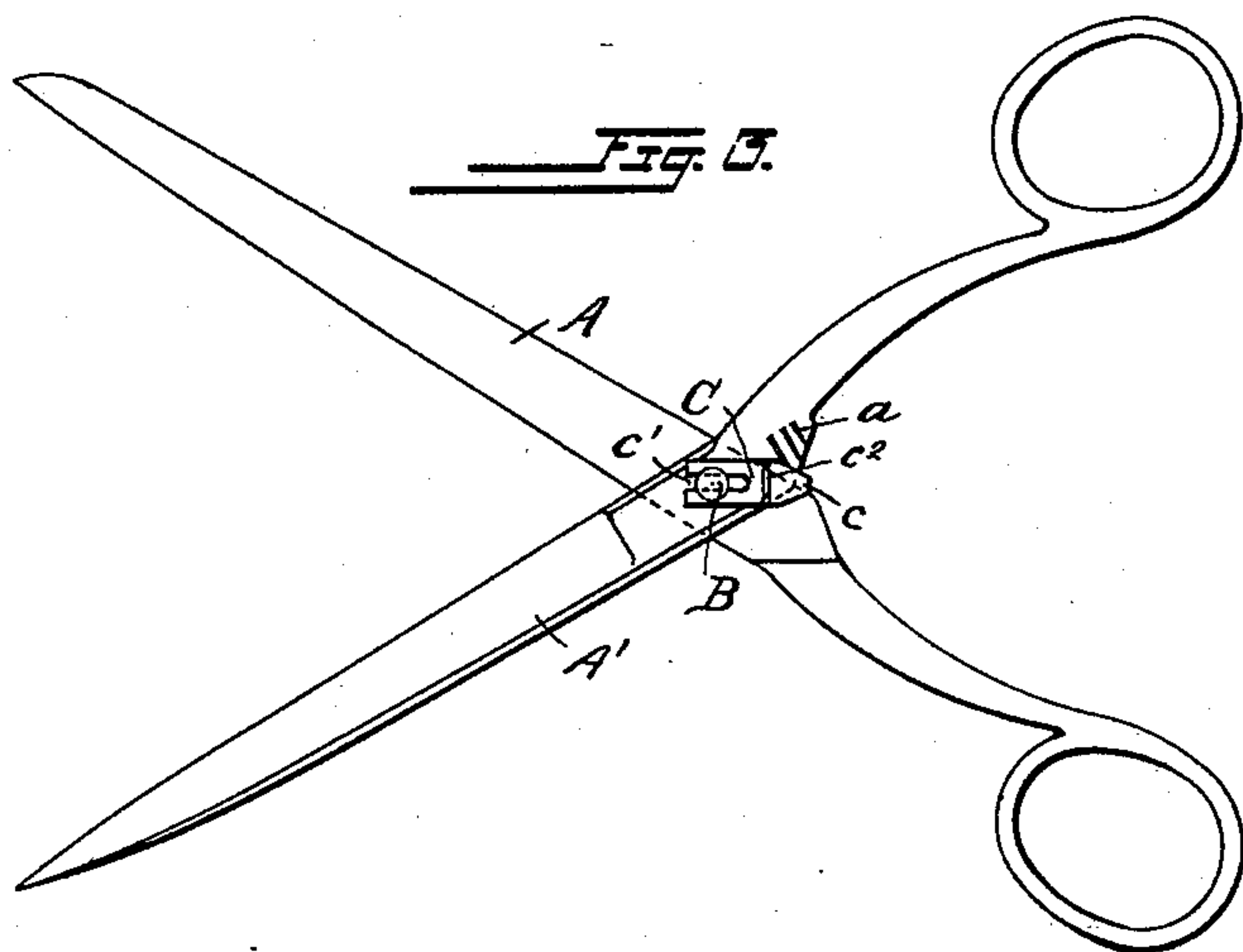
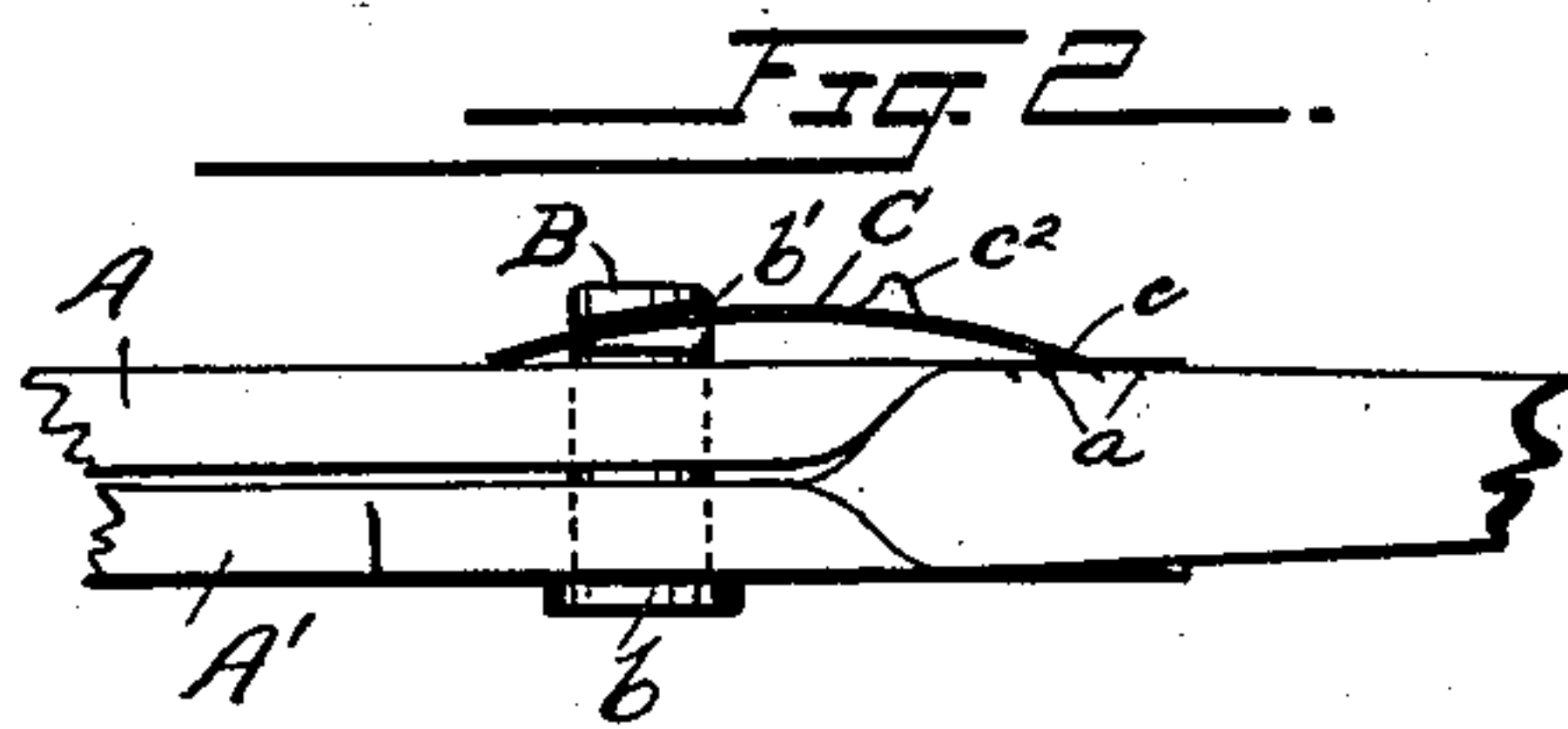
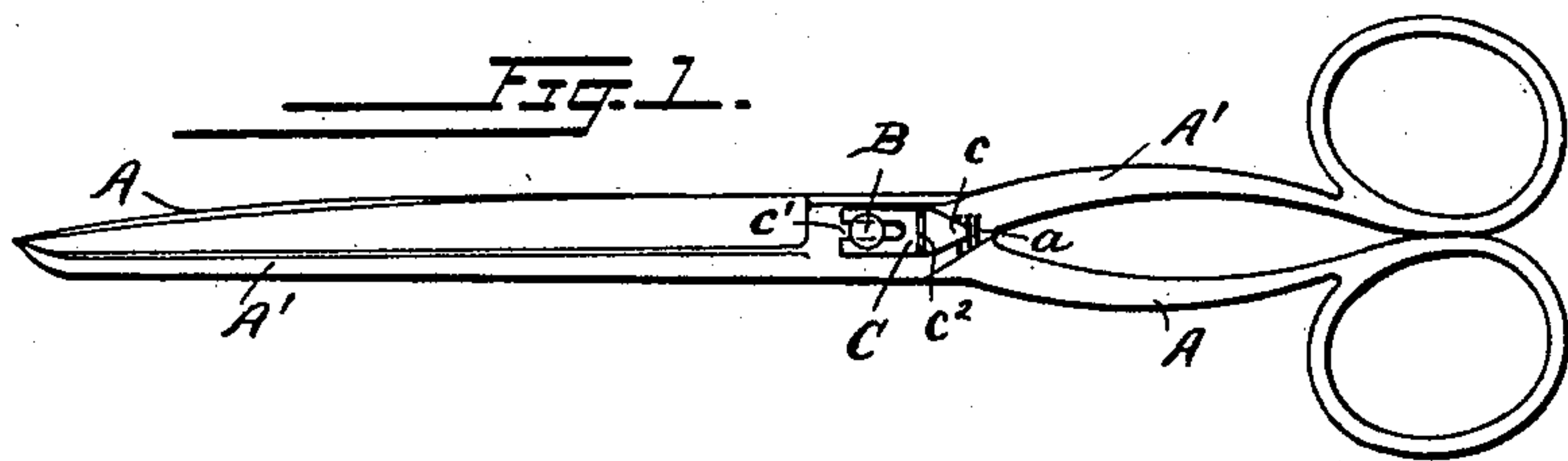


(No Model.)

E. F. WEBER.
SHEARS.

No. 477,343.

Patented June 21, 1892.



Witnesses

Ed. A. Kelly
David Levan

Inventor

By his Attorney

Edward F. Weber

UNITED STATES PATENT OFFICE.

EDWARD F. WEBER, OF READING, PENNSYLVANIA.

SHEARS.

SPECIFICATION forming part of Letters Patent No. 477,343, dated June 21, 1892.

Application filed December 29, 1891. Serial No. 416,451. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. WEBER, a subject of the Emperor of Germany, residing at Reading, in the county of Berks, State of Pennsylvania, have invented certain Improvements in Scissors or Shears, of which the following is a specification.

My invention relates to that class of scissors or shears in which the blades are held together by a spring so as to maintain proper contact of the cutting-edges.

My main objects are, first, to enable the blades to be taken apart with the greatest possible ease and without the use of a screw-driver or any tool whatever, and, second, to enable the tension of the spring to be readily varied without employing an adjusting-screw. These objects I attain by means of a very simple and inexpensive construction, the essential features of which will be fully explained in connection with the accompanying drawings.

Figure 1 is a plan view of a pair of scissors having my invention adapted thereto, the blades being represented as closed. Fig. 2 is a partial edge view of the same on an enlarged scale. Fig. 3 is a view similar to Fig. 1, but shows the blades opened and indicates the manner of removing or placing in position the spring-plate. Figs. 4 and 5 show the spring-plate and pivot-pin in detail.

The blades A and A', of any ordinary construction, are provided with holes for the passage of the pivot-pin B, by which they are connected. The pin is represented as formed with a head b and a body of uniform diameter which fits loosely in the pivot-holes, but the projecting portion of which beyond the pivot-blades is grooved on opposite sides, as shown at b' b'. The means by which this pin is held in place and the blades are maintained in proper contact, whether opened or closed, consists merely of a spring-plate C, of sheet metal, preferably formed, as represented in Fig. 4, with a forked end c', a narrower opposite end c, and an intermediate lug or projection c² from the convex surface. The pivot B being in position, the forked end of this spring-plate is entered in the grooves or recesses b' b' in the manner indicated in Fig. 3 and the end c is pushed sidewise, with a slight strain upon the spring, into engagement with one of a series of notches or kerfs a, formed in the outer face of one (or both) of the blades at different distances from the

pivot. The connection of the blades is then complete, the outer face of the spring serving to hold the head b of the pivot-pin firmly against the blade A by pressing against the portion of the projecting pin which overhangs the grooves b' b', while its ends c and c' bear upon the blade A', thus holding the two blades in contact.

If it is desired that the spring-pressure be increased or diminished, it is only necessary to push or pull upon the lug c², so as to move the end c of the spring-plate forward or backward into a different notch or recess a. The blades, though thus securely held together, may be taken apart in a moment for cleaning, oiling, or sharpening without the use of a screw-driver or other tool. These advantages over prior devices involving the use of springs to maintain the blades in contact, as well as the superior economy and simplicity of my construction, will be readily understood.

I do not desire to limit myself to the exact construction herein described and shown; but What I claim is—

1. The combination, with the scissor-blades, of a headed pivot-pin passing through said blades, and the forked spring-plate C, engaging, intermediately, the projecting portion of the pin and having its opposite ends bearing upon one of the blades, said spring-plate being independently removable, substantially in the manner and for the purpose set forth.

2. The combination, with the scissor-blades, of a headed pivot-pin passing through said blades, and a spring-plate having a forked end engaging the projecting portion of said pin and its opposite end adapted to engage a series of notches a in the plate upon which it bears, substantially as and for the purpose set forth.

3. The combination, with the scissor-blades provided with a series of notches a and a pivot-pin connecting the same, of the forked spring-plate having one end adapted to engage said notches and a projection c² thereon whereby to adjust the same, substantially as set forth.

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

EDWARD F. WEBER.

Witnesses:

ADAM L. OTTERBEIN,
W. G. STEWART.