

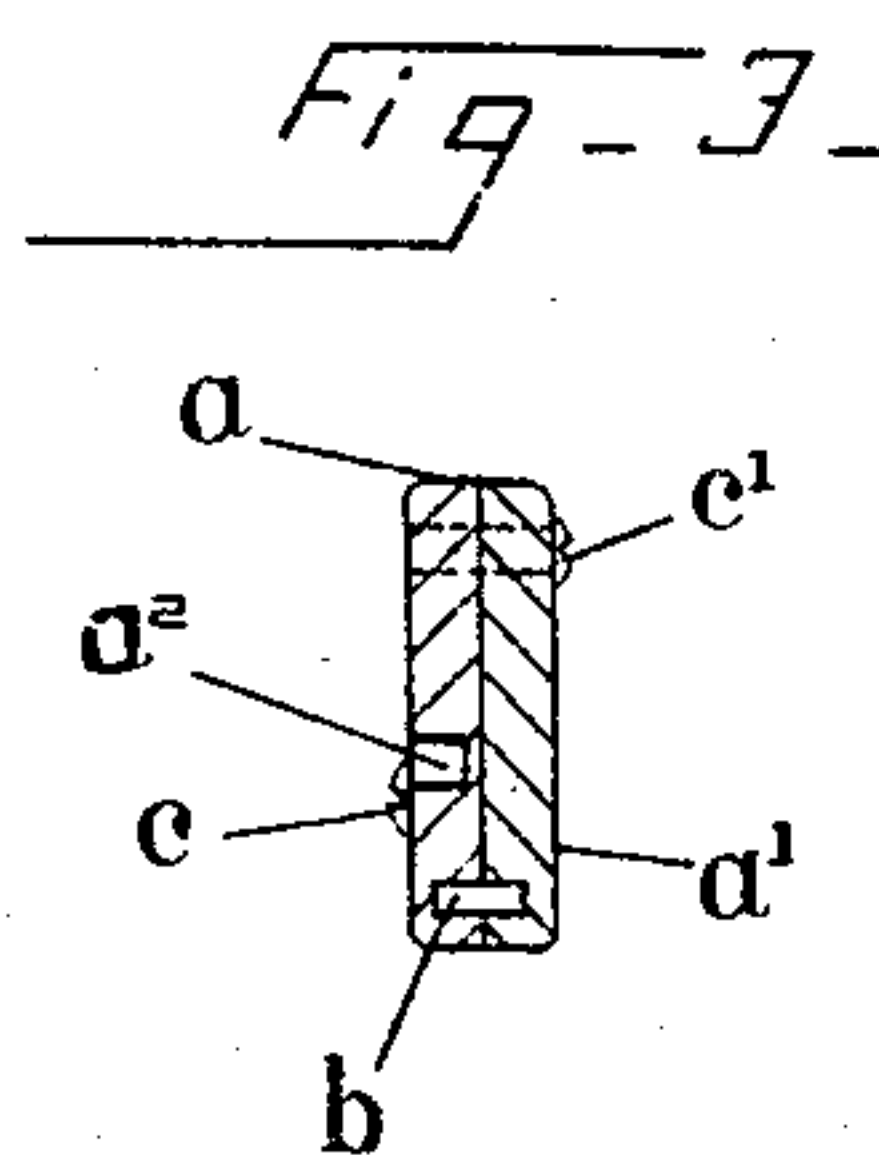
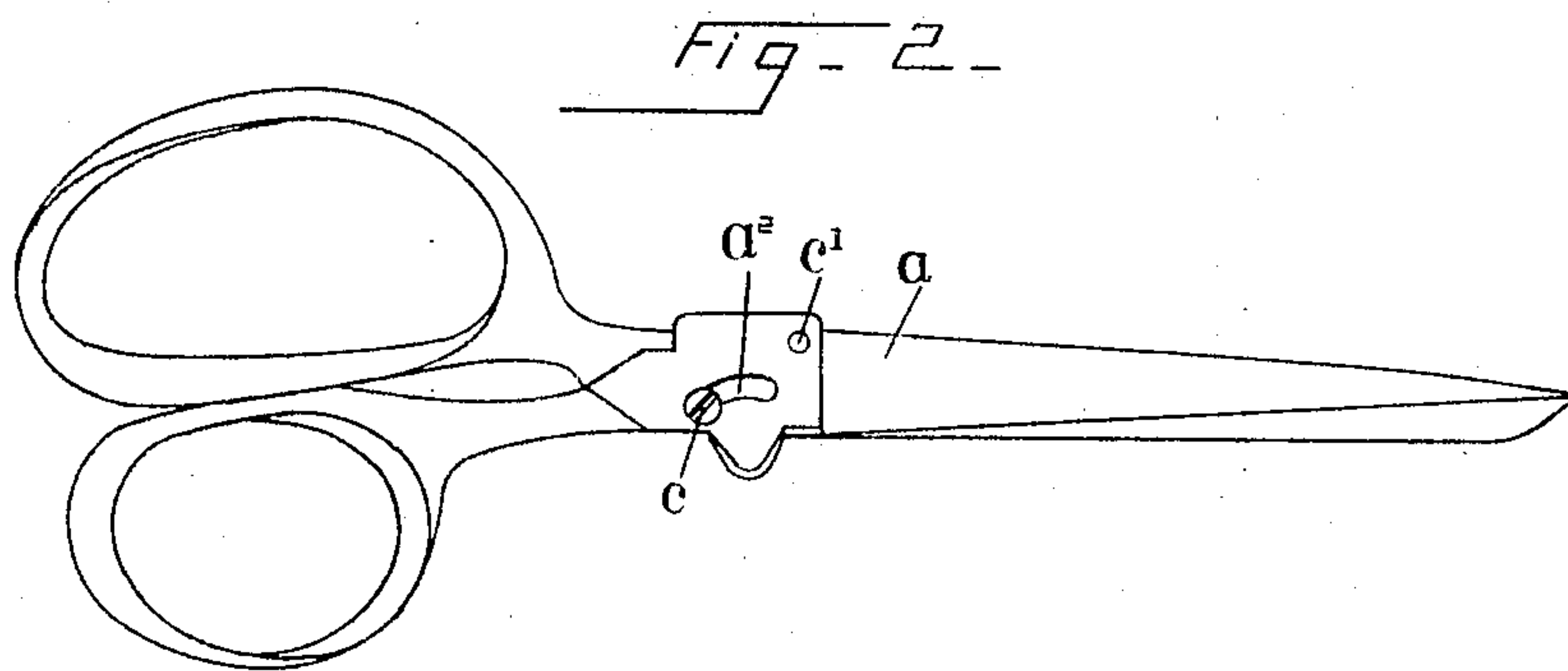
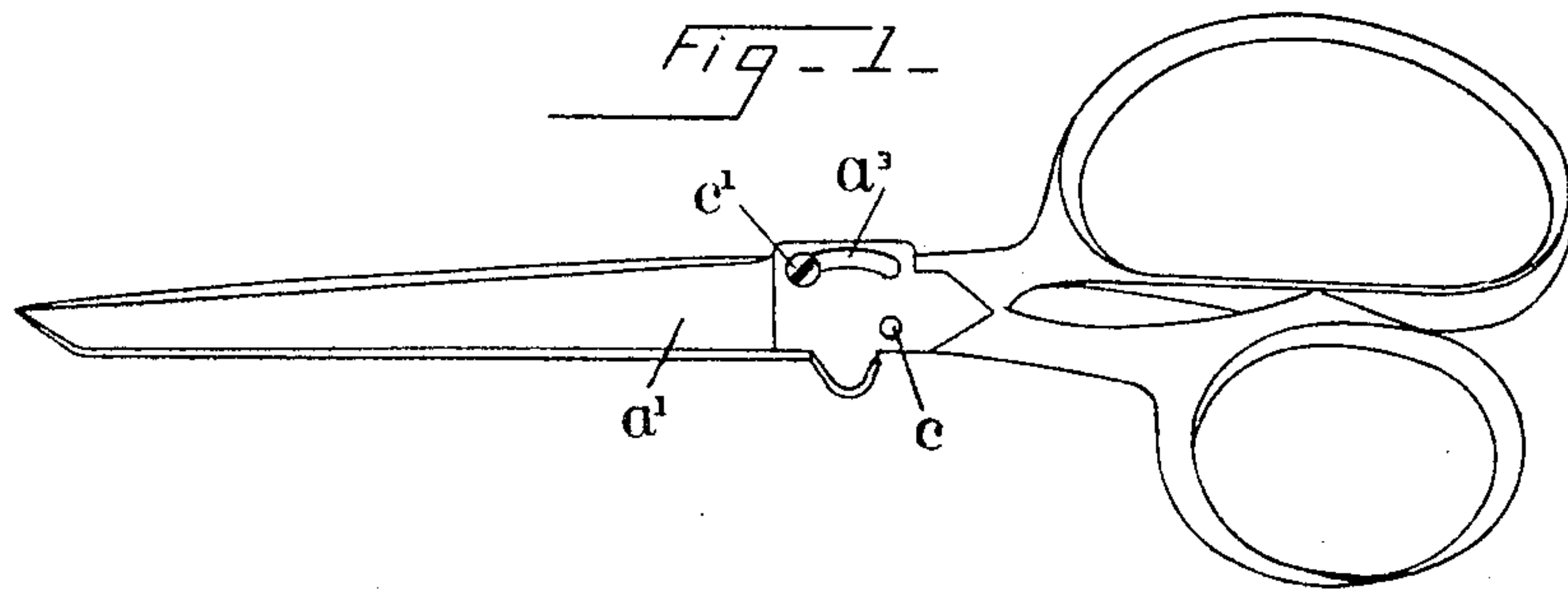
No. 764,878.

PATENTED JULY 12, 1904.

C. BEEBE.  
SHEARS.

APPLICATION FILED NOV. 2, 1903.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## SHEARS.

SPECIFICATION forming part of Letters Patent No. 764,878, dated July 12, 1904.

Application filed November 2, 1903. Serial No. 179,551. (No model.)

*To all whom it may concern:*

Be it known that I, COURTLAND BEEBE, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Shears, of which the following is a specification.

This invention relates to shears of that class which are provided with means for readily readjusting the blades as they become worn or sprung apart.

The novelty in the present instance resides in the peculiar construction and the combination of parts, all as more fully hereinafter described and then particularly pointed out in the appended claim.

The accompanying drawings illustrate my improvements, Figure 1 being a side view of a pair of shears embodying said improvements. Fig. 2 is a similar view showing the reverse side of said shears, and Fig. 3 is a cross-sectional view taken on the line 3 3 of Fig. 1.

In the drawings the letters  $a$   $a'$  indicate the two companion members of an implement of this class, the said members being drilled, or otherwise recessed, on their confronting faces to receive a pivotal stub  $b$ , that is concealed when the two members  $a$   $a'$  are clamped together and ready for service. The pivotal stub  $b$  is located at one side of the longitudinal center of the said members, so that when the latter are opened or closed, as in the act of cutting, they operate with an emphasized shearing or drawing movement upon each other.

Importance is attached to the fact that the pivot of the blades is concealed instead of being of rivet or screw form, whereby the construction is simplified and the shears made more satisfactory in operation. The pivotal support of the blades is entirely free, so that the blades are not bound together at that point, and the pivot being to one side of the longitudinal center through the blades when the blades are in use they are inclined

to rock upon each other slightly as their positions with respect to each other are changed—that is to say, as the contact-point changes from the heel to the point of the blades—and if the pivot were in the form of a screw that was set up tight it would be almost impossible to adjust the blades with respect to each other so that they would work smoothly from heel to point during the cutting operation; but by leaving the pivot so that the blades are not bound together at that point the shears will work smoothly, no matter whether they are used for cutting near the heel of the blades or at the points. Further, as a matter of economy in manufacture as well as for outward appearance and, further, for protection of the pivot the concealed pivot is an important factor in my shears.

The member  $a$  is provided with a slot  $a^2$ , that is an arc whose center is the center of pivot  $b$ , and the member  $a'$  is provided with a slot  $a^3$ , which is also an arc whose center is the center of pivot  $b$ , but is located farther away from said pivot than the slot  $a^2$ . In these described slots are screws  $c$   $c'$ , that are tapped into the opposing member and are screwed home sufficiently to hold the two members in cutting engagement with each other. The screw  $c$ , which is nearest the pivotal connection of the shears, serves as a binder to hold the two members in close contact at their pivotal point, and the screw  $c'$ , which is farthest from the said pivot, serves to prevent the separation or crowding apart of the blades during the act of cutting. By properly adjusting the screws  $c'$  any desired tension may be attained, and I find in practice that the blades may be quickly regulated so as to cut freely from heel to point with an easy shearing movement.

Having thus described my invention, I claim—

Shears comprising a pair of blades, a pivot therefor loosely held in recesses in the adjacent faces of the blades and concealed be-

tween said blades, the pivot being at one side  
of the longitudinal center of the blades, said  
blades being formed with curved slots formed  
on arcs having said pivot as a center, and  
5 screws in the blades engaged in said slots, as  
shown and described.

In testimony whereof I have signed my name

to this specification in the presence of two sub-  
scribing witnesses.

COURTLAND BEEBE.

Witnesses:

FRANK H. ALLEN,  
FRANK S. DEWIRE.