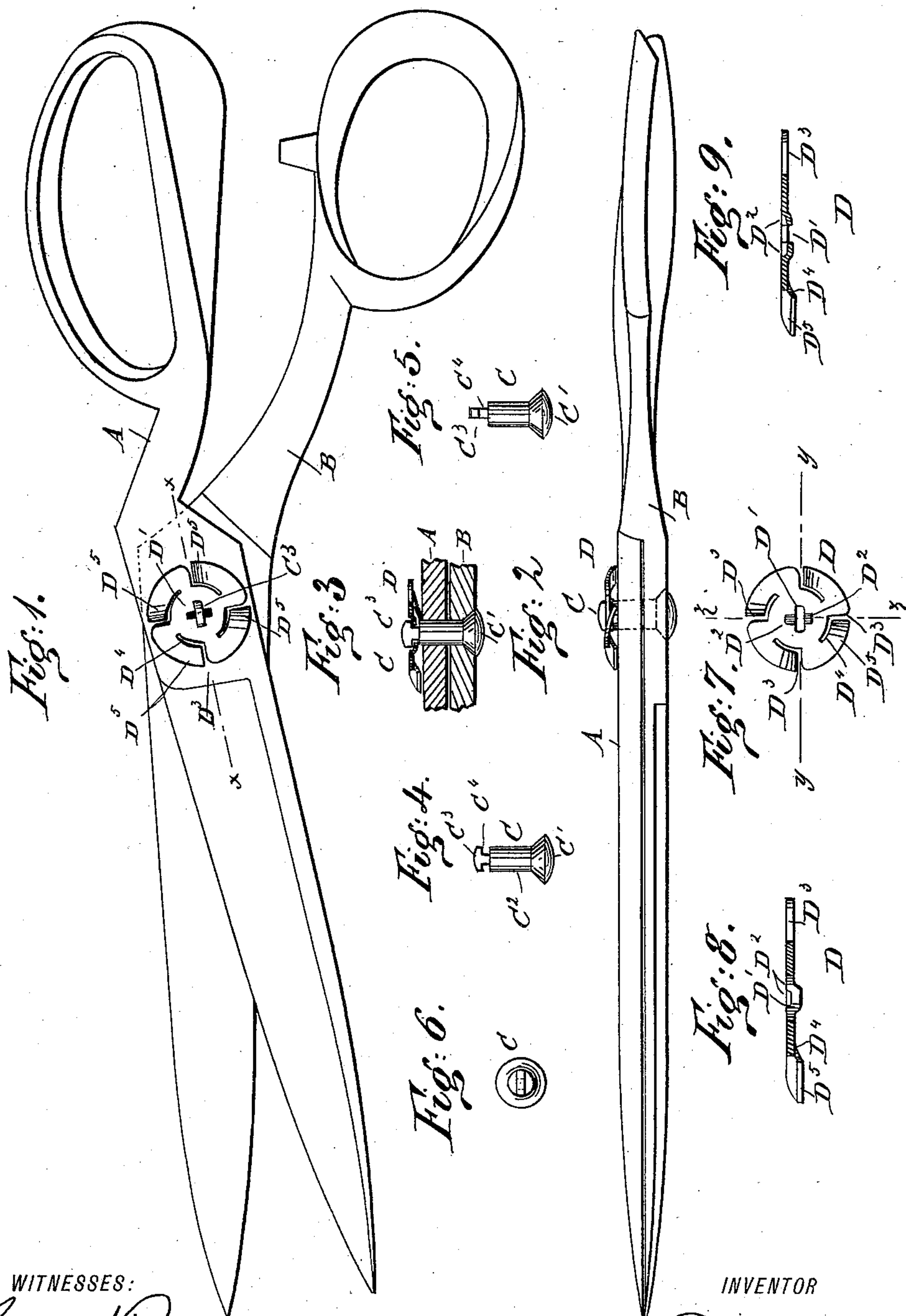


(No Model.)

F. CLAUSS.
SHEARS.

No. 362,572.

Patented May 10, 1887.



WITNESSES:

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SHEARS.

SPECIFICATION forming part of Letters Patent No. 362,572, dated May 10, 1887.

Application filed January 23, 1887. Serial No. 225,782. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK CLAUSS, of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and
5 useful Improvements in Shears, of which the following is a full, clear, and exact description.

My invention relates to that class of shears or scissors in which the cutting-blades are held against each other by means of a spring acting
10 upon a loose bolt at the pivot-joint of the blades.

The object of my invention is to produce a uniform pressure between the blades at their cutting-edges.

15 The invention consists in the combination of the cutting-blades with a pivot-pin passing loosely through the cutting-blades and a spring-plate held on one end of the said pivot-pin and pressing against one cutting-blade.

20 Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a pair of shears provided with my improvement. Fig. 2 is a plan view of the same. Fig. 3 is a sectional plan view of part of the same on the lines *xx* of Fig. 1. Fig. 4 is a plan view of the pivot-pin. Fig. 5 is an end elevation of the same. Fig. 6 is a side elevation of the same. Fig. 7
30 is a face view of the spring-plate. Fig. 8 is an enlarged sectional view of the same on the lines *yy* of Fig. 7. Fig. 9 is an enlarged cross-sectional view of the same on the lines *zz* of Fig. 7.

35 Through the shear-blades A and B passes at their pivot-joint the pivot-pin C, which is not rigidly connected to either blade, and is provided with the head C', the shank C², and the flat head C³, which is cut under to form a shoulder, C⁴.

The spring D is formed of one piece of steel and is provided in its center with a slot, D', corresponding in size to the flat head C³ of the
45 pivot-pin C. At right angles to the slot D', and at each side of the same, is formed a depression or indentation, D², in which is held and rests the flat head C³ when the several parts are adjusted and in their proper places.

50 The spring D, which is preferably in the shape of a disk, is also provided with a number of radial slots, D³, which commence at the periph-

ery and extend inwardly a suitable distance, and then join a circular slot, D⁴, which terminates about half-way between the two succeeding radial slots D³. The two corresponding
55 slots D³ and D⁴ form a prong or flap, D⁵, which is bent inwardly, as shown in Figs. 3, 8, and 9.

The several parts are put together by first passing the pivot-pin C through the blades A
60 and B at their pivot and by then placing the spring D, with its prong D⁵ held inwardly, on the head C³, so that the latter passes through the slot D'. The spring D is then given one quarter-turn, so that the flat head C³ rests in
65 the indentations D² on the outside of the spring D and the prongs or flaps D⁵ rest with their free ends on the blade A. The spring D is now locked on the pivot-pin C, and bears upon the blade A at several points which are equi-
70 distant from the center of the pivot-pin C. The spring D presses against the flat head C³ of the pivot-pin C and against the blade A, thus driving the two blades A and B toward each other.

75 It will be seen that the spring D draws the two blades A and B together with equal pressure at all times, thus insuring, when the shears are used, a uniform cutting from the heel to the points of the blades.

80 The several parts can be easily taken apart by giving the spring D one quarter-turn.

I am aware that prior to my invention shears have been constructed with a spring bearing upon a pivot-pin passed loosely through the
85 cutting-blades.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with a pair of shear-blades, 90 of a pivot-pin provided on one end with a head resting against one shear-blade and on its other end with a flat head forming a shoulder, and a spring having a central slot for the passage of the said flat head, and indentations for the re-
95 tention of the said flat head, the said spring also provided with inwardly-extending prongs resting on one of the said shear-blades, substantially as herein shown and described.

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Witnesses:

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