

No. 814,029.

PATENTED MAR. 6, 1906.

A. N. EASTMAN.
SHEARS.

APPLICATION FILED AUG. 13, 1904.

Fig. 1.

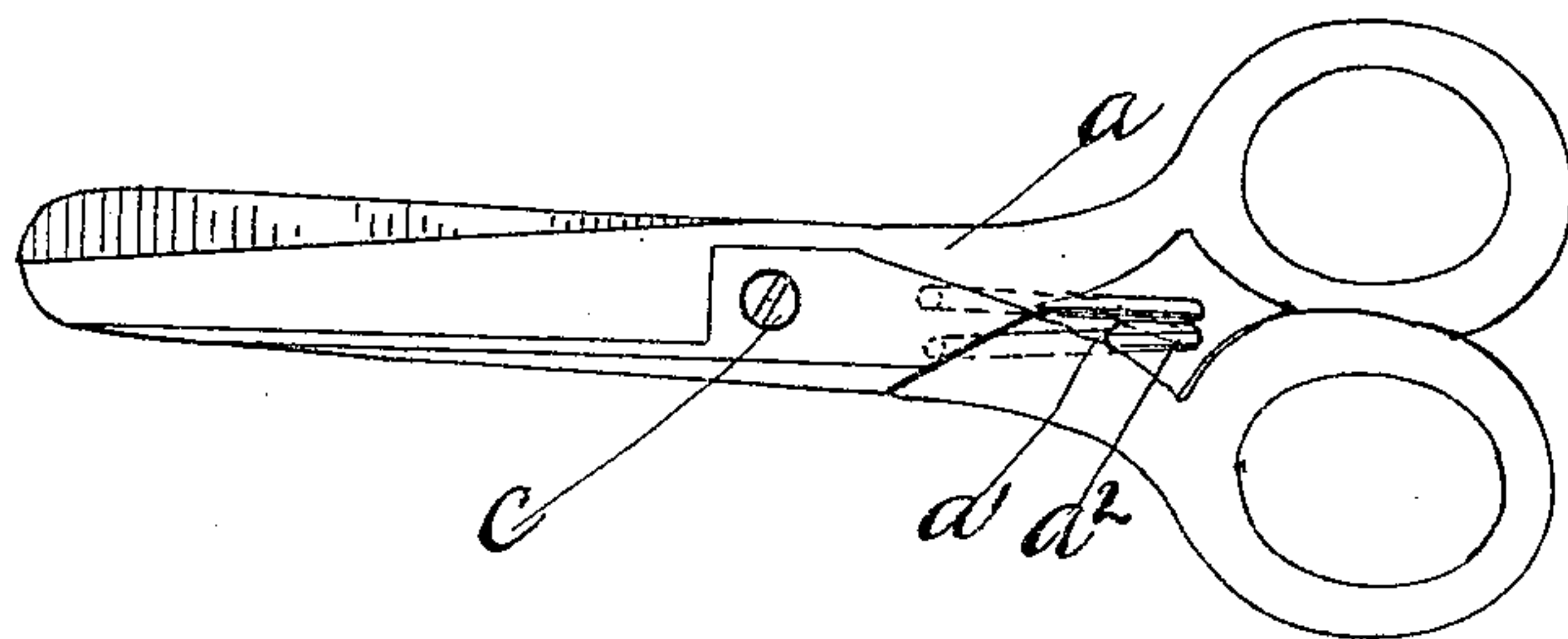


Fig. 2.

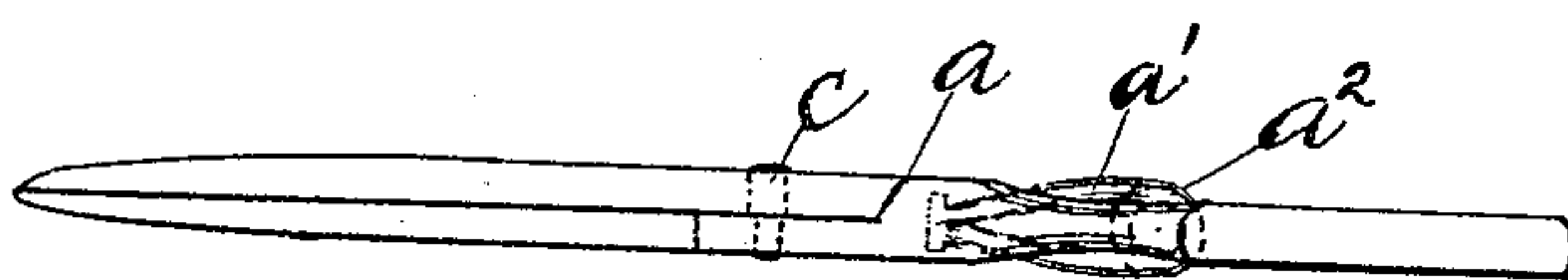
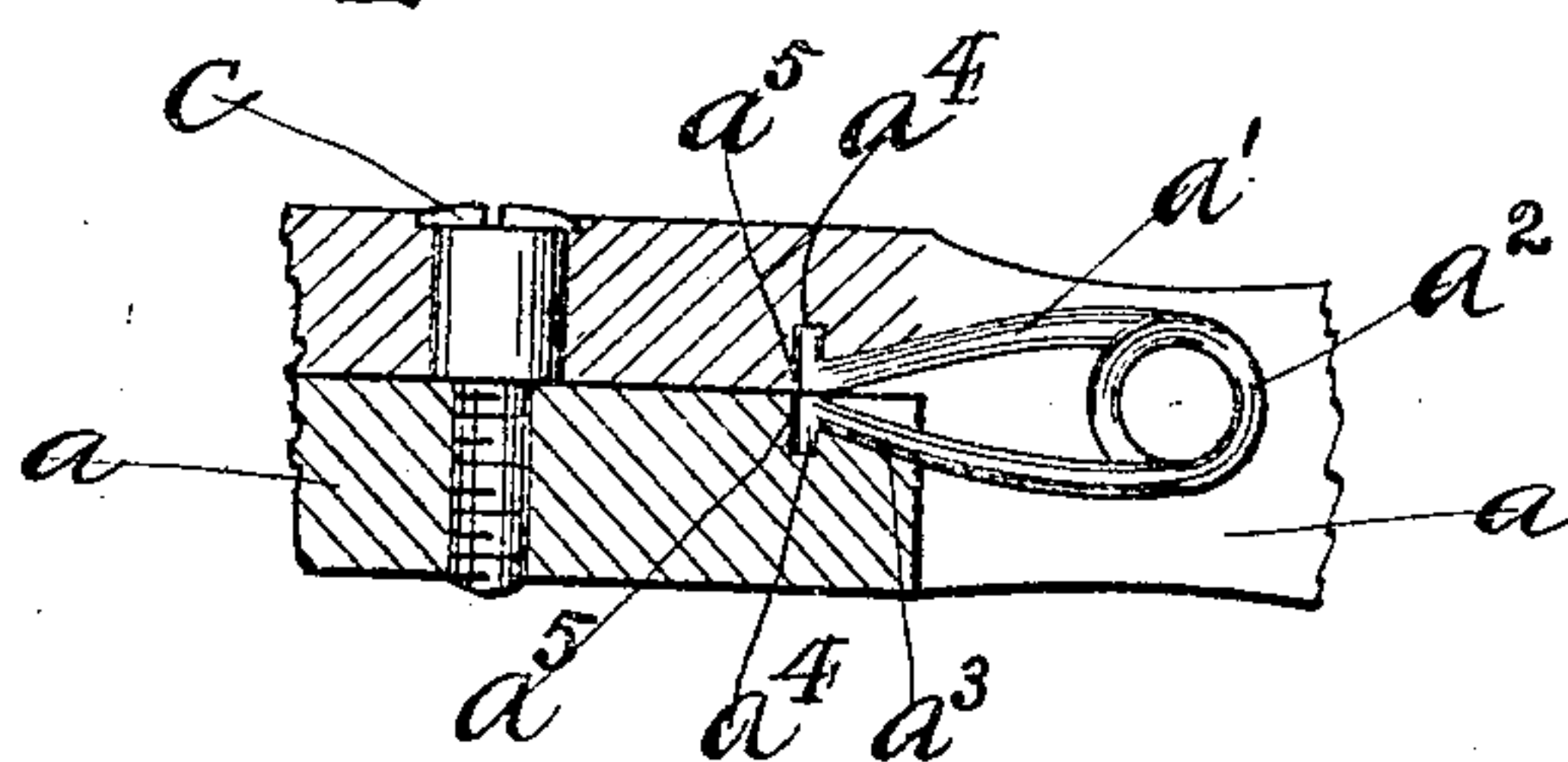


Fig. 3.



WITNESSES:

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SHEARS.

No. 814,029.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT N. EASTMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Shears, of which the following is a specification.

In cutting with a pair of shears or scissors it is necessary to pull upon one of the handles 10 connected to the blade with the fingers and to push on the other with the thumb in order that the blades may be in sheer during the cutting operation. Numerous springs have been invented to hold the blades in sheer during the cutting operation. The ones with 15 which I am familiar exert a pressure upon the blade from the outside and between the pivot-screw and the cutting edge of the shears or scissors.

20 The object of my invention is to produce a spring which will as nearly as possible duplicate the action of the human hand in the use of shears and to furnish a spring of one-third the strength whose tension will produce 25 a sheer cut by separating the blades back of the pivot-screw between the screw and the handle. As the screw acts as the fulcrum for the different styles of springs for shears or scissors and since said screw is nearly always 30 located very near to the cutting edge, it is necessary to have a spring of considerable strength. By the use of my improved spring, located, as it is, three times as far from the fulcrum, it is apparent that a spring of one-third 35 the strength will produce the same result.

My method of obtaining the foregoing object may be more readily understood by having reference to the accompanying drawings, which are a part of this specification and 40 which are hereunto annexed, in which—

Figure 1 is a plan view of a pair of shears with my improved spring attached thereto. Fig. 2 is a side elevation of the same. Fig. 3 is an enlarged detail, partly in section, of my 45 improved device.

Similar letters refer to similar parts throughout the entire description.

In the drawings, *a* is a pair of shears having handles of the usual construction. The handles are connected to the blades by the 50 usual shanks, and the blades are connected together by a pivot-screw *c*. Between the handles and the shanks is a wire spring *a'*. This spring is formed somewhat in the shape of a pear, having a coil *a²* at its bend, the ends 55 *a⁵* of the wire being bent at right angles to itself. Grooves *a³* are cut into the inner portion of the blades, and a hole *a⁴* is drilled at the ends of said grooves. The ends *a⁵* of the spring are then inserted into the holes *a⁴*, the 60 spring lying in the recess or grooves *a³*, permitting the shears to pass over each other in closing. The action of the spring is outward, pushing against the blades similar to the action of the human hand, and as the spring is 65 located a great deal farther from the fulcrum formed by the pivot-screw *c* it necessarily follows that a spring of much less strength will produce the desired result.

Having described my invention, what I regard as new, and desire to secure by Letters Patent, is— 70

A pair of scissors or shears in combination with a pear-shaped spring, said spring having an outward tension, said spring having 75 its arms fitted to and coinciding with grooves formed on the inside face of the shears and connected thereto back of the pivot-screw and so located as to increase its leverage for the purpose set forth substantially as described. 80

In testimony whereof I have set my hand before two subscribing witnesses.

ALBERT N. EASTMAN.

Witnesses:

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