A. CLARKE.

Scissors and Shears.

No. 212,790. Patented Mar. 4, 1879.

FIG. 1

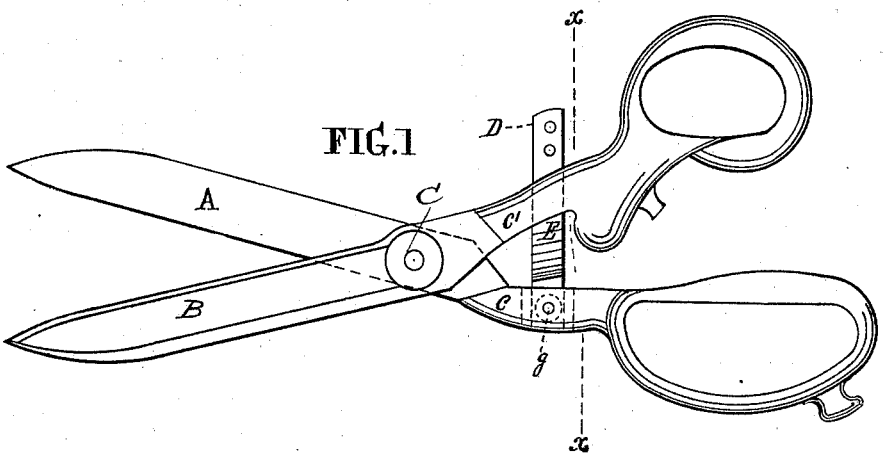


FIG. 2

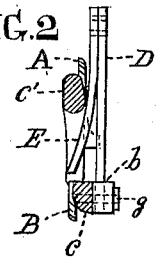


FIG. 3

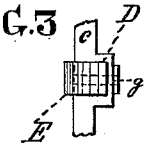
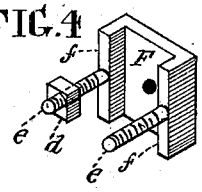


FIG. 4



Witnesses.

Thomas J. Bewley.

Curtis G. Stoddard

Inventor.

Alfred Clarke.

per Stephen Ustick, attorney.

UNITED STATES PATENT OFFICE.

ALFRED CLARKE, OF ATLANTIC CITY, NEW JERSEY.

IMPROVEMENT IN SCISSORS AND SHEARS.

Specification forming part of Letters Patent No. **212,790**, dated March 4, 1879; application filed January 2, 1879.

To all whom it may concern:

Be it known that I, ALFRED CLARKE, of Atlantic City, in the county of Atlantic and State of New Jersey, have invented a new and useful Improvement in Shears and Scissors, of which the following is a specification:

The object of my invention is to prevent the blades of a pair of shears or scissors being pressed apart in the shearing or cutting operation as they approach each other from their heels to their points. It is a well-known fact that in their ordinary construction this tendency of spreading apart laterally is a source of much trouble to the operator, as the tendency increases very much by the time the points of the blades come together.

In order to make the blades cut clear to their points, in the ordinary construction of the implement, it is necessary to exert a side pressure upon the bows or handles, as well as a direct pressure; and this is very hard upon the hand, especially in shears having long blades, when used in cutting thick textile fabrics or sheets of metal These difficulties are overcome by the use of my improvement.

The nature of my invention consists in the connection of the heel of a spring rigidly to a standard, which is connected to the shank of one of the blades of shears or scissors, in such a manner that the resilient part of the spring shall bear against the shank of the other blade, so as to give an increased inclination of the two blades toward each other laterally as their points come together, and thus produce a clean cut throughout the whole length of the blades without requiring any side pressure, as hereinafter fully described.

In the drawings which make a part of this specification, Figure 1 is a side view of a pair of shears having my improvement. Fig. 2 is a cross-section, at the line *x x*, of Fig. 1. Fig. 3 is a top view of a part of the shank *c*, with the standard D and spring E connected therewith. Fig. 4 is a perspective view of the staple F.

Like letters of reference in all the figures indicate the same parts.

A represents one of the blades, and B the other blade, connected therewith by an ordinary pivot, C. D is a standard, which is connected at its lower end with the shank *c* of the blade A by means of the slot *b* and confining-screw *d*, which passes through the cheeks of the slot and the standard, whereby the latter is held firmly in position. E is a curved spring, the heel of which is riveted to the upper end of the standard. The resilient end of the spring projects outward from the standard far enough to exert sufficient force upon the shank *c'* of the blade B to give the requisite lateral inclination of the point of the blade toward the point of the blade A to overcome its tendency in the cutting operation of receding therefrom laterally.

The spring is designed to be of such curvature as to cause the inclination of the blades to each other in such a manner as to counteract their increased tendency to recede as the points of the blades approach each other.

It will readily be seen that by the use of my improvement, above described, the labor of operating the shears is much diminished; and that as they wear evenly in consequence of the compensating force of the spring E, they will keep in order much longer than ordinary shears, and will last much longer than the latter.

The staple F (represented in Fig. 4) is intended to be attached to ordinary shears already made. The screw-stems *e e* are to be passed through corresponding holes in the shank *c*, and fastened by means of nuts *d*, so as to draw the shoulders *f f* against the shank, to form a vertical slot for the connection of the lower end of the standard, to be secured by means of a screw or rivet in the same manner as shown in Figs. 1 and 3. If desired, the stems *e e* may be fastened by riveting instead of by means of the nuts *d*.

I claim as my invention—

The combination, with the shanks *c c'* of a pair of shears or scissors, of the spring E and the standard D, for giving a lateral inclination of the points of the blades toward each other in the cutting operation, substantially in the manner and for the purpose set forth.

ALFRED CLARKE.

Witnesses:

THOMAS J. BEWLEY,

STEPHEN USTICK.