(No Model.)

J. H. STRATTON.

SHEARS.

No. 477,711. Patented June 28, 1892.

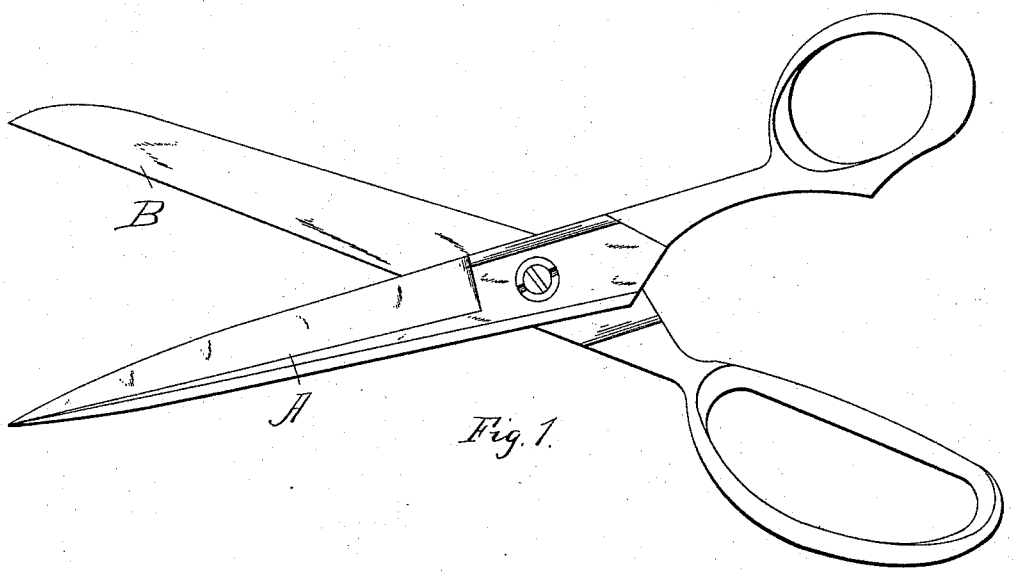


Fig. 1.

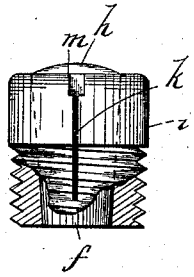


Fig. 2. C

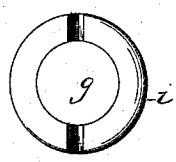
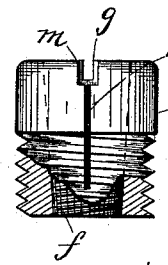
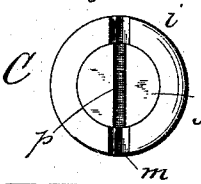


Fig. 3. C



C Fig. 4.



C Fig 5.

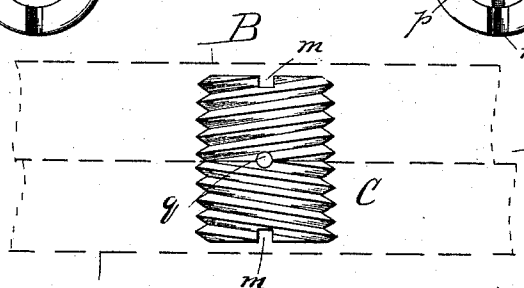


Fig. 6.

WITNESSES A

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SHEARS.

SPECIFICATION forming part of Letters Patent No. 477,711, dated June 28, 1892.

Application filed January 4, 1892. Serial No. 416,966. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. STRATTON, of Holyoke, in the county of Hampden, State of Massachusetts, have invented certain new and useful Improvements in Scissors, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation showing a pair of shears provided with my improved pivot; Fig. 2, an elevation, enlarged, of the pivot, a portion being broken away; Fig. 3, a top plan view of same; Fig. 4, an elevation similar to that shown in Fig. 2, illustrating a method of fastening the pivot; Fig. 5, a top plan view of the part shown in Fig. 4, and Fig. 6 a side view of a modified form of pivot.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to an improved construction of the pivot of scissors or shears, whereby the blades may be caused to spread slightly at the pivot while cutting, imparting a superior shearing cut.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A B represent the blades, which are of any form and construction. The pivot C comprises a bolt of suitable length, having one-half its body cut with a V-shaped screw-thread either of right or left hand pitch, as may be required. The pivot is hollow at *f*, its inner walls tapering, and may be interiorly screw-threaded, as in Fig. 4, to receive a spreading-screw *g* or smooth to receive a pin or key *h*, as in Fig. 2. A kerf *k* is formed in the bolt to permit the spreading. The outer end of the kerf is broadened at *m* to receive a tool or screw-driver, whereby the bolt may be turned into the blades. The spreading-screw *g* has a narower tool-groove *p*. (Shown in Fig. 5.)

The modification shown in Fig. 6 comprises a bolt threaded in opposite directions from the center and provided centrally with a lateral tool-opening *q* and in its ends with driver-grooves *m*.

In the use of my improvement the blades A B are mounted on the pivot-bolt, one blade, as A, being secured to the bolt on its head *i* by means of the pin or key *h* or the spreading-screw *g*. The opposite blade is turned onto the threaded portion of the screw. Either a right or a left hand screw may be employed. With a left-hand thread the blades approach each other when opened, and when closing they spread evenly. When a right-hand thread is employed, these movements are reversed. This spreading apart at the pivot-point while cutting effects a superior shearing cut to one produced by moving the blades at the same distance apart during the cutting. By means of my improved pivot the blades may be set closely enough to cut and not touch each other, said blades always following the same line at which they are set. The threads on the pivot also afford increased bearing-surface to the blades, preventing them from rocking laterally.

In the form shown in Fig. 4 one blade is fitted to turn tightly onto the end of the pivot, and may be secured by either a set-screw or other means.

The blades may be tapped and threaded on their inner faces to receive the pivot, such openings not extending through the blades. By this means no pivot is exposed, and the blades may be adjusted thereon by means of a tool inserted in the opening *q*.

Having thus explained my invention, what I claim is—

1. Shears or scissors comprising blades mounted on a pivot consisting of a screw-threaded bolt, one of said blades being fast to said bolt and the companion blade fitted to work on said thread.

2. A pivot for shears, comprising a hollow exteriorly-screw-threaded bolt having its head split and adapted to receive a wedge or spreading-screw, substantially as described.

3. A pivot for shears, comprising a screw threaded in opposite directions from its center, substantially as described.

4. A pivot for shears, comprising a hollow bolt having tapering inner walls, a screw-threaded shank, a smooth head, a slit or kerf

through said head, and a wedge or spreading-screw in said head, substantially as described.

5. Shears having their blades tapped and threaded in the inner faces of their pivot portions, and a right and left hand screw inserted in the openings thus formed, whereby the blades may be adjusted in relation to each other, substantially as described.

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Witnesses:
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H. W. SMITH.