

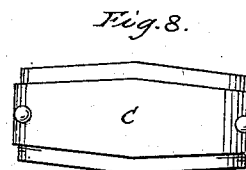
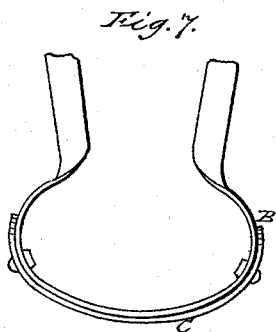
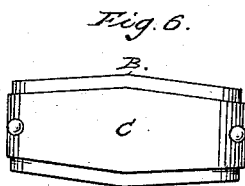
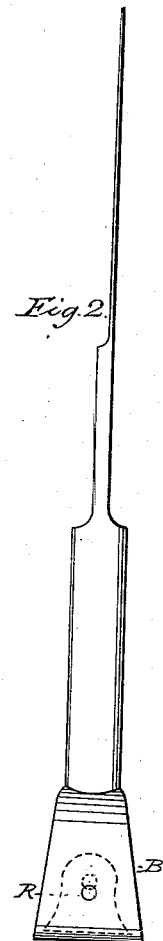
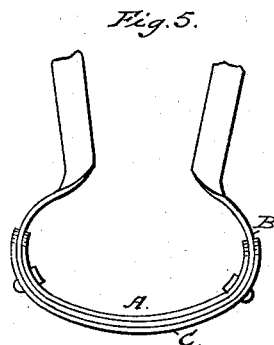
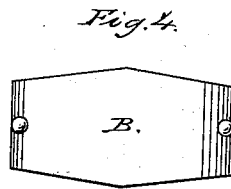
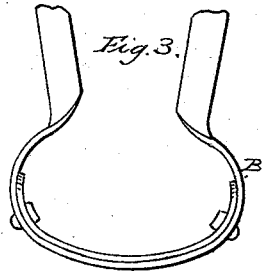
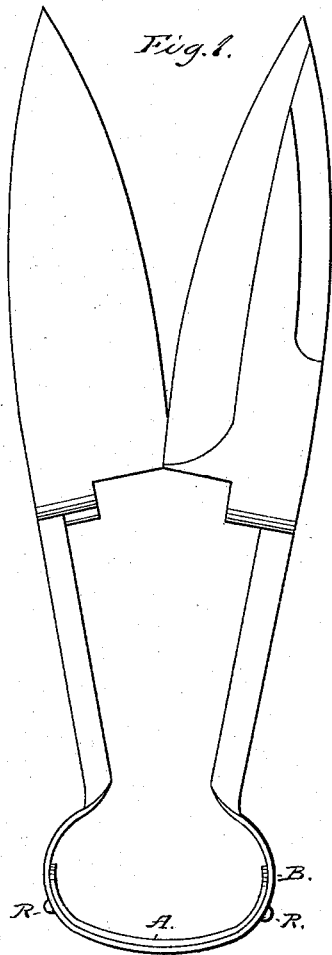
(No Model.)

T. A. & R. H. SORBY.

SHEEP SHEARS.

No. 261,777.

Patented July 25, 1882.



Attest,
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UNITED STATES PATENT OFFICE.

THOMAS AUSTIN SORBY AND ROBERT HENRY SORBY, OF SHEFFIELD,
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SHEEP-SHEARS.

SPECIFICATION forming part of Letters Patent No. 261,777, dated July 25, 1882.

Application filed July 18, 1881. (No model.) Patented in England March 11, 1881, No. 1,042.

To all whom it may concern:

Be it known that we, THOMAS AUSTIN SORBY and ROBERT HENRY SORBY, citizens of Great Britain, residing at Sheffield, in the county of York, England, have invented certain new and useful Improvements in Sheep-Shears; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

15 This invention relates to shears.

The nature of said invention consists in the combination of a pair of shears having the bow thereof made in one piece, with a spring plate or plates attached to said bow to give elasticity thereto.

Hitherto shears have generally been made of thin sheet or plate iron or steel, the elasticity of the bow itself being relied upon to separate the blades. Frequent use, however, lessens the elasticity of the bow, so that after a while it will no longer act as a spring, and the shears become of little value. In some instances shears have been made with the bow divided at the middle, and provided with a plate that spans the joint and fastens the parts together. The entire strength of the shears, when thus constructed, resides in the fastening-plate, since, if this plate be broken, the two parts of the shears will necessarily separate. To avoid the difficulties of these constructions we make our shears in such a manner that their elasticity is not dependent on the bow, nor their strength on that of the spring-plate.

In the accompanying drawings, Figure 1 represents a front elevation of our improved shears; Fig. 2, an edge view of the same; Fig. 3, a front detail elevation of the bow; Fig. 4, an end view of the same; Fig. 5, a front detail elevation of a modification; Fig. 6, an end view of the same; Fig. 7, a front detail view of another modification, and Fig. 8 an end view of the same.

In said drawings, B designates the bow of a pair of shears, said bow being formed of one piece of metal, having the blades welded thereto.

To the inside of said bow a plate, A, of spring metal, is attached by rivets R. This plate may be of equal width with the bow, or narrower, and may be fastened in the middle instead of near the ends. It fits against the inside of said bow and operates to throw the blades open. The fracture of said spring will, however, leave said bow intact, and a new spring-plate may be easily substituted whenever the old one becomes inefficient without separating the blades from one another.

As the operation of opening the shears is performed by this spring-plate A, it is obvious that the bow itself will be relieved of strain, and will be in good condition long after it would be bent out of shape and elasticity if said spring-plate were wanting.

Instead of attaching a spring-plate, A, to the inside of the bow, we sometimes attach a similar plate, C, to the outside thereof, as shown in Figs. 7 and 8. In other instances we prefer to use both the inner plate, A, and the outer plate, C, as shown in Figs. 5 and 6. The same rivets may be used in this latter modification to fasten both.

In all the forms of our invention the bow of the shears is integral and retains its shape, the work of opening the blades being performed by the spring plate or plates attached to said bow.

Having thus fully described our invention and acknowledged the prior state of the art, what we claim as new, and desire to secure by Letters Patent, is—

A pair of shears having the bow in one piece of metal and a spring plate or plates attached to said bow for the purpose of opening the said shears, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

THOMAS AUSTIN SORBY.
ROBERT HENRY SORBY.

Witnesses:

CHARLES RECKETTS,
Clerk.

JOSEPH FROST,
Manager.