(No Model.)

S. D. & D. E. PAXTON & A. MAHURIN.

SHEEP SHEARS.

No. 302,354. Patented July 22, 1884.

FIG. 3.

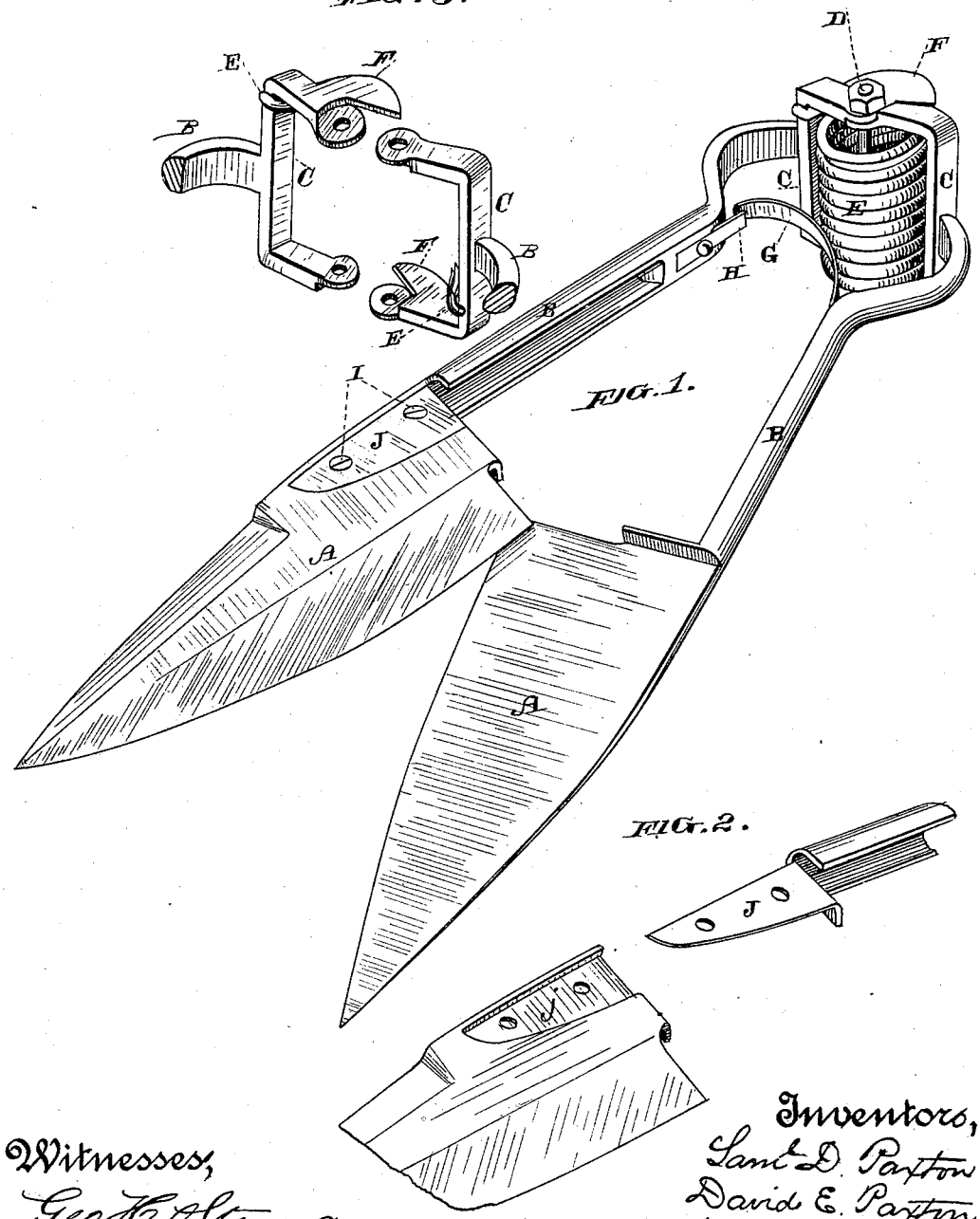

FIG. 1.

FIG. 2.

Witnesses,
Geo. H. Strong.
J. L. Simmes

Inventors,
Sam'l D. Paxton
David E. Paxton
Amos Mahurin
By Dewey & Co.
Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL D. PAXTON, DAVID E. PAXTON, AND AMOS MAHURIN, OF UKIAH, CALIFORNIA.

SHEEP-SHEARS.

SPECIFICATION forming part of Letters Patent No. 302,354, dated July 22, 1884.

Application filed January 26, 1884. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL D. PAXTON, DAVID E. PAXTON, and AMOS MAHURIN, of Ukiah, county of Mendocino, and State of California, have invented an Improvement in Sheep-Shears; and we hereby declare the following to be a full, clear, and exact description thereof.

Our invention relates to the class of sheep-shears, in which the blades are held apart under the influence of a spring, against which the pressure of the hand is exerted to close them.

Our invention consists in a novel hinge-connection between the shanks of the blades, in a peculiar spring under the influence of which the blades are opened, in a stop or catch which limits their separation when operating, and in removable blades secured to the shanks, whereby they may readily be detached in case of an accident or fault in either requiring the substitution of another.

The object of our invention is to provide shears which, on account of their formation, will be superior to those now in use in durability and ease of operation, closing with less force and reacting quicker, firm in handling, and precise and strong in use, and easily repaired and kept in order.

Referring to the accompanying drawings, Figure 1 is a perspective view of our shears. Fig. 2 is a detail showing the connection between shank and blade. Fig. 3 is a detail showing frame C and stops F.

A are the blades, and B the shanks, the rear ends of which are curved and have secured to them three-sided bases C, one for each shank. These bases, when fitted together, receive a pin or bolt, D, through their ends, which forms a hinge between them, upon which the shears operate. The two bases thus united inclose a rectangular space which the helical or spiral spring E occupies, the hinge-pin D passing through its center. One end of the spring is bent upward, and rests upon a corner of one of the bases C, and the other end of the spring is similarly disposed of upon a corner of the other base, diagonally opposite the first corner. The tension of the spring through its ends is to bear down upon the bases upon which they rest, thus separating the shanks and keeping the blades normally open. By the use of the form of spring we obtain greater durability and an easier action than in the common form of spring for shears. At the same time that its flexibility is such as to permit its easy compression, its reaction is certain and rapid. The hinge-connection between the bases of the shank insures firmness and precision in the action of the blades, preventing "bucking" or giving to one side when coming in contact with a hard substance.

In order to permit the blades to open sufficiently for the purpose of sharpening them, and not too far, we have a lug or stop, F, projecting from an opposite end of one side of each base, and adapted, when the spring forces the bases open, to come in contact with the opposing side of the other base, thus limiting their movement at a point which allows the blades to become separated far enough for convenient grinding or other sharpening; but when the shears are in actual use we find it advantageous to allow the separation of the blades only to an extent to enable them to cut, thus saving exertion of the hand. To do this we have secured to the inner side of one shank, near its butt, a curved strip or spring, G, the end of which plays back and forth in the curved butt of the other shank when the shears are in use, and is adapted, upon the separation of the blades, to come in contact with a small stop, H, secured to the inner surface of the opposing shank, whereby the blades are limited in their separation, as described. When the greater limit of the stops F is required, the spring-strip G is easily released from the stop H. The blades A are formed separable or independent of the shanks, and are secured thereto by means of screws I, passing through an extension or lip, J, of the shanks into the blades. These lips lie upon the blades in proper seats or sockets, *j*, formed therein, whereby they are inclosed and lie flush, making a neat and secure joint.

The advantage of the removable blades is in the ready adaptability to the substitution of a fresh one when, through accident, one should become unserviceable or contain a serious fault.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In sheep-shears, the blade-shanks B, hav-

ing three-sided bases C, in combination with the pin or bolt D, passing through the meeting ends of the bases and forming a hinge, and a suitable spring to force the shanks apart, substantially as herein described.

2. In sheep-shears, the blade-shanks B, having bases C, and the hinge pin or bolt D, joining them, in combination with the spiral or helical spring E, arranged, as shown, between the bases, and the lugs or stops F on the bases, to limit their movement and the separation of the shanks, substantially as herein described.

3. In sheep-shears, the blade-shanks B, having curved butts and hinged together at their bases, and a spring for forcing them apart, in combination with the curved strip G on one shank and the stop or catch H on the other, with which the strip engages to limit the separation of the shanks, substantially as herein described.

In witness whereof we have hereunto set our hands.

SAMUEL D. PAXTON.
DAVID E. PAXTON.
AMOS MAHURIN.

Witnesses:
A. L. BRANSFORD,
J. J. MORROW.