

(Model.)

J. D. TODD.
SHEEP SHEARS.

No. 484,379.

Patented Oct. 11, 1892.

Fig. 1.

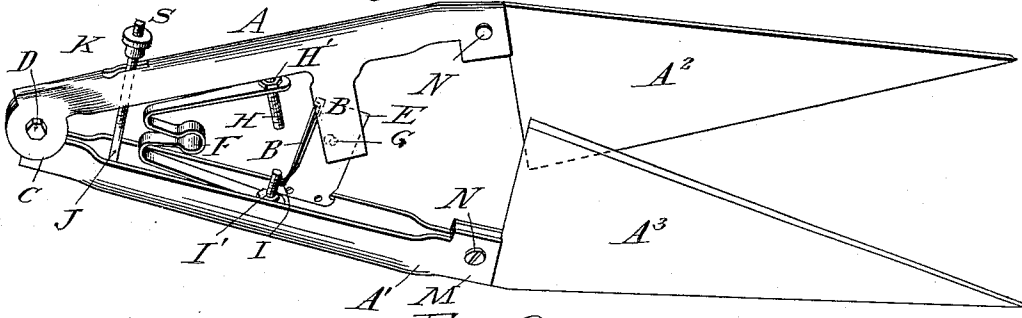


Fig. 2.

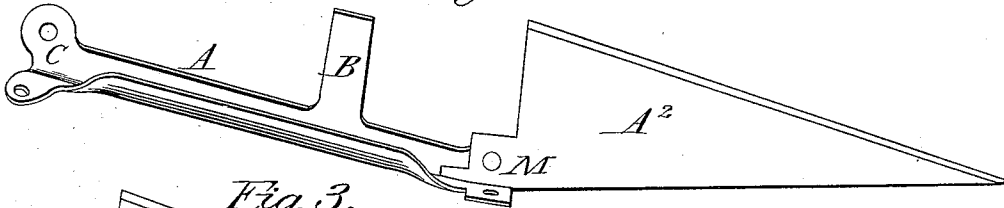


Fig. 3.

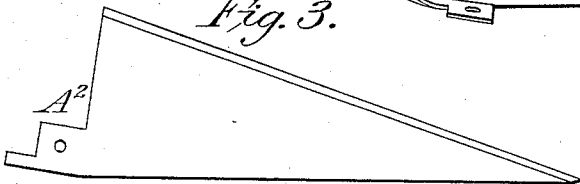


Fig. 4.

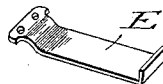


Fig. 5.

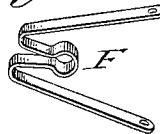


Fig. 6.

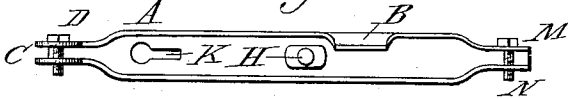
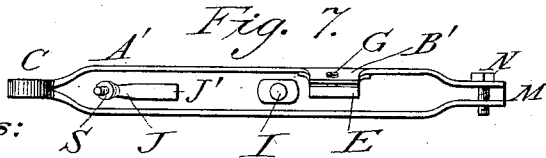


Fig. 7.



Witnesses:
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UNITED STATES PATENT OFFICE.

JEFFERSON DAVIS TODD, OF CHICO, CALIFORNIA, ASSIGNOR OF ONE-HALF
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SHEEP-SHEARS.

SPECIFICATION forming part of Letters Patent No. 484,379, dated October 11, 1892.

Application filed June 9, 1891. Serial No. 395,726. (Model.)

To all whom it may concern:

Be it known that I, JEFFERSON DAVIS TODD, a citizen of the United States, residing at Chico, in the county of Butte and State of California, have invented a new and useful Improvement in Animal-Shears, of which the following is a specification.

My invention relates to that class of cutting-instruments which are provided with two or more blades working over and past one another in opposite directions and in adjacent planes, and are used for depriving sheep of their fleece or clipping the hair of various other animals.

The object of my improvement is to produce a pair of shears whose blades will always work true and not cut across each other, and the edges of which may be readily set at such distance apart as the quality of the coat of wool or hair to be taken off may call for.

A further object is to afford means for regulating the play of the handles, both as to range and quickness of action, to suit the hand of the operator.

Referring to the accompanying drawings, which form part of this specification, Figure 1 is a side view of my improved shears complete. Fig. 2 is an elevation of one of the handles and blades, parts being bent away to show how these are put together. Fig. 3 is a similar view of one of the blades removed from its handle. Fig. 4 is a detail view in perspective of an intermediate piece used between adjacent guides projecting inwardly from each of the handles. Fig. 5 is a perspective view of the spring which normally forces the handles and blades apart; and Figs. 6 and 7 are detailed views of the handles, looking at the inner side thereof.

Similar letters refer to similar parts throughout all the views.

A A' represent the handles, which by preference are made of sheet-steel and provided with guides B B', projecting from their inner edges and adapted to slide by each other in adjacent parallel planes. These handles are hinged together at C, the butt-end of one being formed into an eye, which is set between similar eyes on the butt-end of the other and jointed therewith by a hinge-pin or screw D.

A² A³ are two removable blades, which are of the usual shape, and are united with the

handles at M by screws N. As in other shears, these blades follow the vibrating movements of their handles in sliding past and next each other, with this difference, however, that, owing to the guides above described, they are maintained always in a true position and are not liable to cross-edges. They may also be adjusted as to the distance between their edges to conform with the grade of wool or hair to be cut, so there will be no danger of its slipping between the edges and some of it remain uncut. This also is effected through the medium of the guides, which are adapted to be set at any convenient distance apart by a small piece of steel or plate E, inserted between them, and by a set-screw G. The piece E is riveted at the base and laid over the inner side of the guide B', through the opposite side of which the set-screw is inserted. The screw G may then be brought to bear upon the free end of the intermediate piece, which in turn will press against the guide B and keep it away from the guide B', the intervening space varying in proportion to the pressure exerted. By a judicious working of the set-screw the guides, and consequently the members of the shears to which they belong, are more or less strongly acted upon, and the edges of the blades may be brought closer together or pushed farther apart to meet different needs. The piece E might be dispensed with, as it is conceived that the set-screw would be sufficient to accomplish the purpose in view; but it is preferable to use it.

The shears are normally kept open by a flat spring F, bent somewhat in the shape of a W, and the outer branches of which are attached to the inner sides of the handles by threaded pins H I, passing through holes in their upper ends. Nuts H' I' are used in connection with these pins, both to maintain the spring in proper position and provide for a greater or less tension thereof by suitable adjustment along the threaded ends of the pins, accordingly quickening or retarding the return of the blades or opening of the shears to suit the convenience of the operator and conform with the speed at which the shears are worked.

The outward play of the shears is regulated to accommodate the hand of the operator by means of a small threaded rod J and a thumb-nut S, revoluble about the threaded end thereof.

The rod J is secured at J' to the inside of one of the handles A' and passed through the opposite handle A, which is slotted at K for this purpose. By turning the nut S up or down
5 the rod J the movement of the handles will be confined within the desired limits, and the blades will operate accordingly.

Having now described my invention, what I claim as new, and desire to secure by Letters
10 Patent of the United States, is—

1. The combination, in animal-shears, of handles, blades secured thereto, guides projecting from the said handles and sliding past each other in adjacent planes, and a set-screw
15 adapted to regulate the distance between said guides, whereby the edges of said blades may be brought closer together or forced farther apart, substantially as set forth.

2. The combination, in animal-shears, of handles, blades secured thereto, adjacent
20 guides projecting from said handles, a plate intermediate said guides, and a set-screw acting upon said plate and regulating the space between the guides, substantially as set forth.

3. The combination, in animal-shears, of
25 handles, blades connected therewith, a spring normally opening the same, threaded pins passing through branches of said spring, and nuts movable along said pins to bring and hold
30 said branches in predetermined positions, substantially as and for the purpose set forth.

JEFFERSON DAVIS TODD.

Witnesses:

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