(Model.)

P. ANDERSON.

ANIMAL SHEARS.

No. 259,073. Patented June 6, 1882.

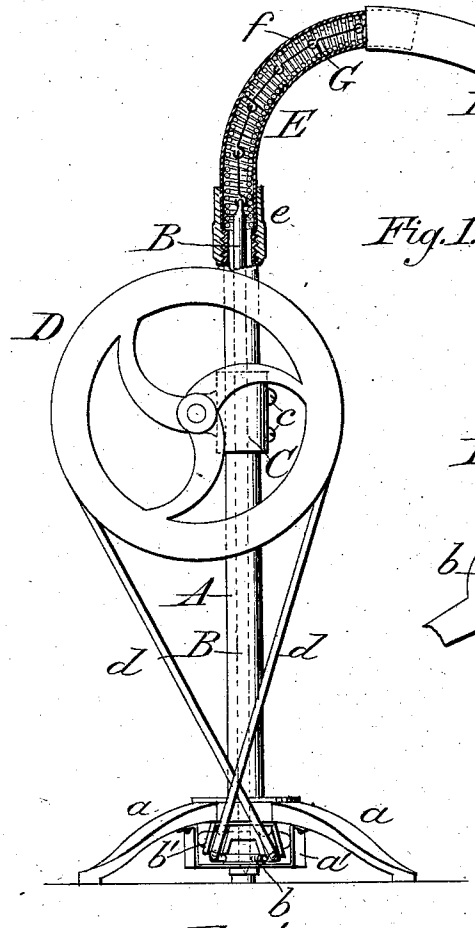


Fig. 1.

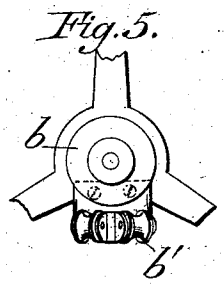


Fig. 5.

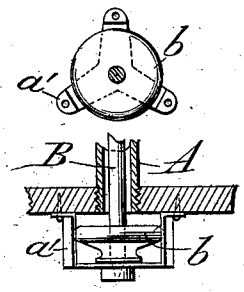


Fig. 4.

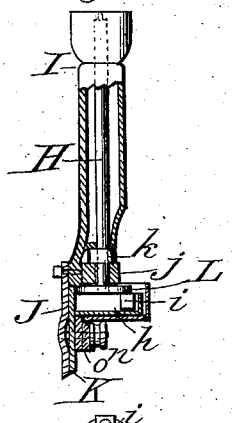


Fig. 2.

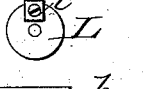
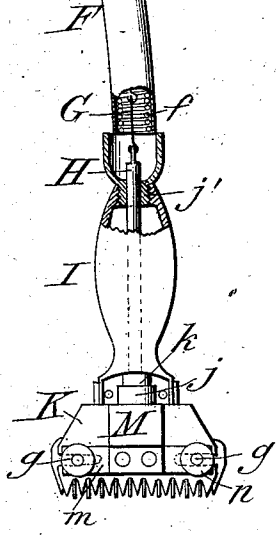


Fig. 3.





Attest:

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UNITED STATES PATENT OFFICE.

PHILANDER ANDERSON, OF NEW YORK, N. Y.

ANIMAL-SHEARS.

SPECIFICATION forming part of Letters Patent No. 259,073, dated June 6, 1882.

Application filed June 23, 1881. (Model.)

To all whom it may concern:

Be it known that I, PHILANDER ANDERSON, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Shearing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to shearing and clipping machines; and it consists in the construction and arrangement of parts, as hereinafter more fully described.

In the annexed drawings, which fully illustrate my device, Figure 1 is a view of my improved shearing-machine, partly in section. Fig. 2 is a longitudinal section through the hand-piece or cutting-instrument, and Figs. 3, 4, and 5 are details.

Similar letters indicate corresponding parts in the several views.

The standard A consists of a tube supported on feet *a a* and inclosing a vertical shaft, B. This shaft carries at its lower end a combined fly-wheel and pulley, *b*, and is stepped in a bracket, *a'*, as shown in Figs. 1 and 4. Beneath the standard are also secured the pulleys *b' b'*.

To the upper part of the standard A is attached an adjustable sleeve, C, by means of set-screws *c c*. This sleeve is provided with a suitable bearing for the shaft of the driving-wheel D, which connects by the belt *d* with the pulleys *b b'*.

At the upper part of the tubular standard A, and connected therewith by a coupling, *e*, is a curved tube, E, to the opposite end of which is attached a flexible tube, F. The tubes E F inclose a metallic coil, *f*, which gives form and stiffness to the tube F without impairing its flexibility. Within these tubes, and attached to a loop or eye at the upper end of the vertical shaft B, is a flexible driving-chain, G, which is connected at its opposite end to a shaft, H, in the hand-piece or shearing-instrument I.

The hand-piece I consists of a suitable tubular case, to which is attached the stationary toothed cutting-plate J, having screw-threaded pins *g g*. Resting upon the plate J is a reciprocating cutting-plate, K, which is slotted to engage with the pins *g g*. The plate K is provided with a box or casing, *h*, which receives the square eccentric block or pin *i* on a disk, L, attached to the end of the shaft H. The shaft H is journaled at *j j*, and is held in place by a collar, *k*. Above the plate K and inclosing the box *h*, is a casing, M, which is provided with a slotted flange, *m*, that fits over the pins *g g*, and is secured by nuts *n n* and washers *o o*.

It will be seen that when power is applied to the wheel D it will be transmitted through the belt *d* and pulley *b* to the vertical shaft B, causing the latter to rotate and carry with it the flexible chain G, through which a rotating movement is imparted to the shaft H and disk L, the latter, by the engagement of its eccentric *i* with the box *h*, causing the cutting-plate K to reciprocate.

The device may be employed to advantage for shearing sheep, clipping horses, and for barbers' use. It will be observed that the parts are connected in such a way as to be readily detached or readjusted when required, and may be thus kept in order without difficulty.

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

1. The combination of the tubular standard A, tube E, and flexible tube F, containing coil *f*, with the vertical rotating shaft B, flexible chain G, and hand-piece I, having shaft H, substantially as and for the purpose set forth.

2. In a shearing-machine, the combination of the tubular standard A, provided with vertical rotating shaft B, pulleys *b b'*, and adjustable driving-wheel D, tubes E F, flexible driving-chain G, and hand-piece I, having rotating shaft H, adapted to actuate the reciprocating plate K, substantially as and for the purpose shown and described.

3. The combination, with the tubular standard A, having feet *a a*, of the bracket *a'* and vertical shaft B, stepped in said bracket and carrying a combined pulley and fly-wheel, *b*, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

PHILANDER ANDERSON.

Witnesses:

SAMUEL KILPATRICK,

JAMES W. HALLENBECK.