

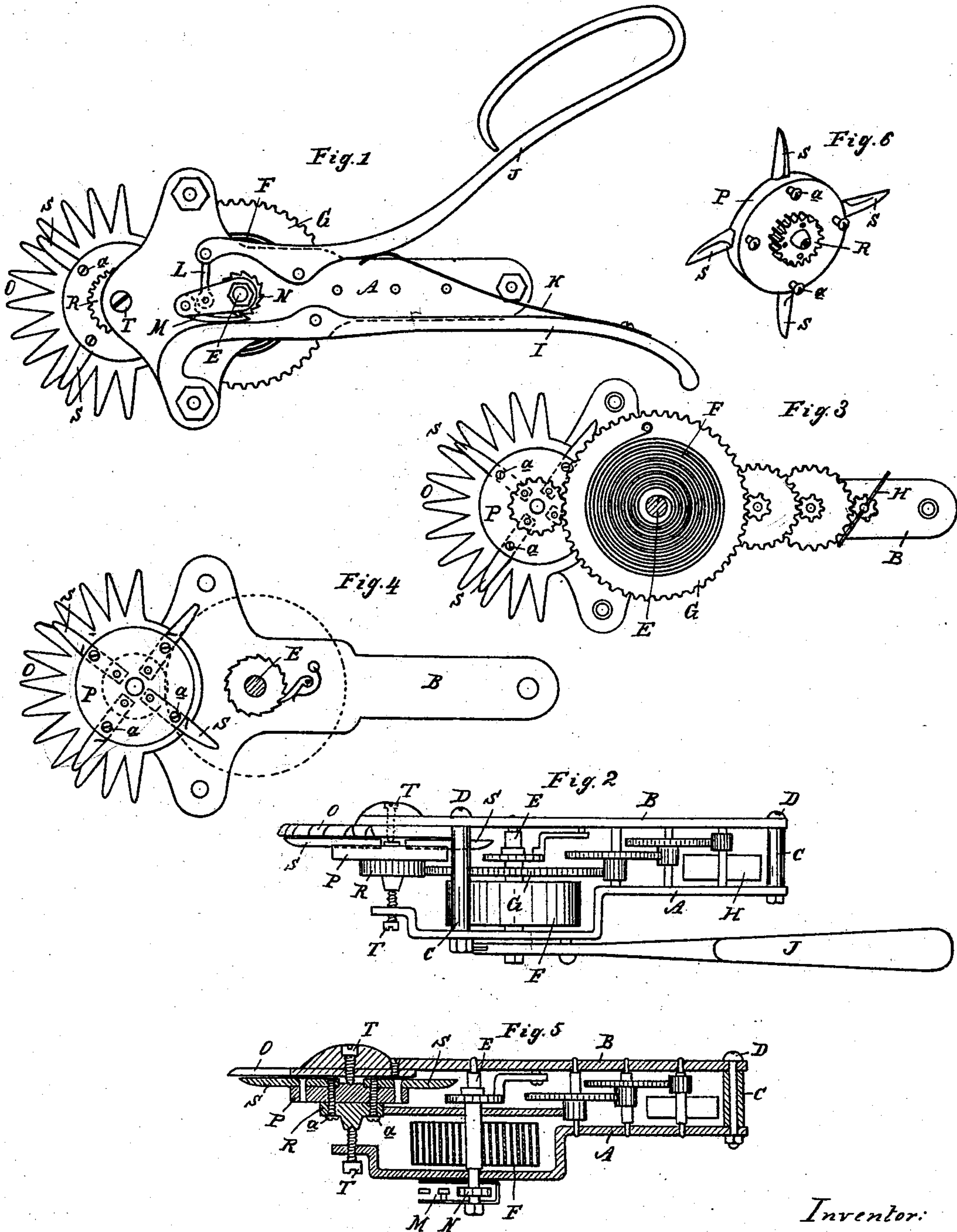
(No Model.)

D. CAMERON.

SHEEP SHEARS.

No. 376,233.

Patented Jan. 10, 1888.



Attest:  
John Schuman.  
Charles J. Hunt.

Inventor:  
Donald Cameron.

by his Atty  
Thos. S. Sprague



# UNITED STATES PATENT OFFICE.

DONALD CAMERON, OF DETROIT, ASSIGNOR OF ONE-HALF TO WILLIAM C. MOONEY, OF INDIAN LAKE, MICHIGAN.

## SHEEP-SHEARS.

SPECIFICATION forming part of Letters Patent No. 376,233, dated January 10, 1888.

Application filed April 21, 1887. Serial No. 235,587. (No model.)

*To all whom it may concern:*

Be it known that I, DONALD CAMERON, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Sheep-Shears; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in sheep-shears of that class which are provided with a rotating cutter.

The object of the invention is to construct a device for the purpose named wherein the rotating cutter is operated by a spring, and to provide means for winding such spring during the operation of cutting or shearing.

To this end the invention consists in the peculiar construction and arrangement of the winding mechanism and the application thereof to a rotating cutter, and in the various combinations of the parts, all as more fully hereinafter set forth.

Figure 1 is a plan view of my improved device. Fig. 2 is a side elevation of the same. Fig. 3 is an elevation with front plate removed. Fig. 4 is an elevation of the cutter and comb. Fig. 5 is a horizontal section. Fig. 6 is a perspective of the rotating cutter-head removed.

In the accompanying drawings, which form a part of this specification, A represents the front table, and B the back table, of a suitable frame, the two plates being secured together by proper spreaders and girts, C D, respectively. Properly journaled to these plates A B is a shaft or drum, E, carrying a clock-spring, F, and a drive-pinion, G, said pinion and shaft being provided with the usual ratchet and pawl and connected by a suitable chain of gear to the fan H, as in the ordinary construction of a clock-movement.

I is a handle rigidly secured to the plate A near one edge thereof, while opposite thereto the operating-lever J is fulcrumed to the same plate, said lever J being "spread" under the action of the spring K. The short arm of this lever is connected, by a proper link, L, to a spring-ratchet, M, which engages with a

ratchet, N, secured upon the projecting end of the spring shaft or drum E. By operating the lever I, as in using a pair of shears, it will readily be seen that the spring may be easily wound upon the drum.

At the front end of the plate B is rigidly secured a comb or finger-plate, O, the fingers of which radiate from a common center, as shown.

P is a cutter-head, carrying upon its outer face a gear-wheel, R, which meshes with and is driven by the pinion G, the said gear and cutter-head being properly journaled between the plates A B. The under face of the cutter-head is slotted radially from the center to receive any desired number of cutter-blades S, held in place by screws *a*, which may also be employed to secure the wheel R upon the cutter-head.

T are set-screws tapped through the cutter-head, the inner ends of such set-screws resting upon the face of the cutter, and are employed for regulating the depression of such cutters and their relation to the comb or finger-bar.

In practice, the parts being constructed and arranged substantially in the manner described, the operator, by pressing the lever J toward the handle I, causes the spring to be wound upon the drum, which latter, through the connections named, imparts a rotary motion to the cutter-head, the cutters of which, being slightly depressed at their outer ends in passing over the comb, make a "shear cut."

By intermittently operating the lever J the spring may be kept wound up.

By using a finer comb or finger-bar the device can be advantageously employed in clipping horses.

What I claim as my invention is—

1. In combination with a comb or finger-plate, O, a rotating cutter-head, P, carrying independent cutters S, said cutter-head being adapted to be rotated by a spring motor-wheel, R, and the screws *a* passed through said wheel and cutter-head into the cutters, substantially as described.

2. The combination, with the frame and the spring-motor, of the comb O, rotating cutter-head, cutters carried thereby, and set-screws

T, tapped through said cutter-head for regulating the depression of said cutters, substantially as described.

3. The combination, with the frame, the  
5 spring-motor, and the pinion G on the shaft of said spring, of the spring-ratchet M, ratchet N on said spring-shaft, lever J, link L, connecting one end of said lever directly with the

spring-ratchet, cutter P, gear-wheel R, carried thereby, comb O, cutters S, and the set-screws 10 T, all constructed, arranged, and operating substantially as and for the purpose specified.

DONALD CAMERON.

Witnesses:

H. S. SPRAGUE,

CHARLES J. HUNT.