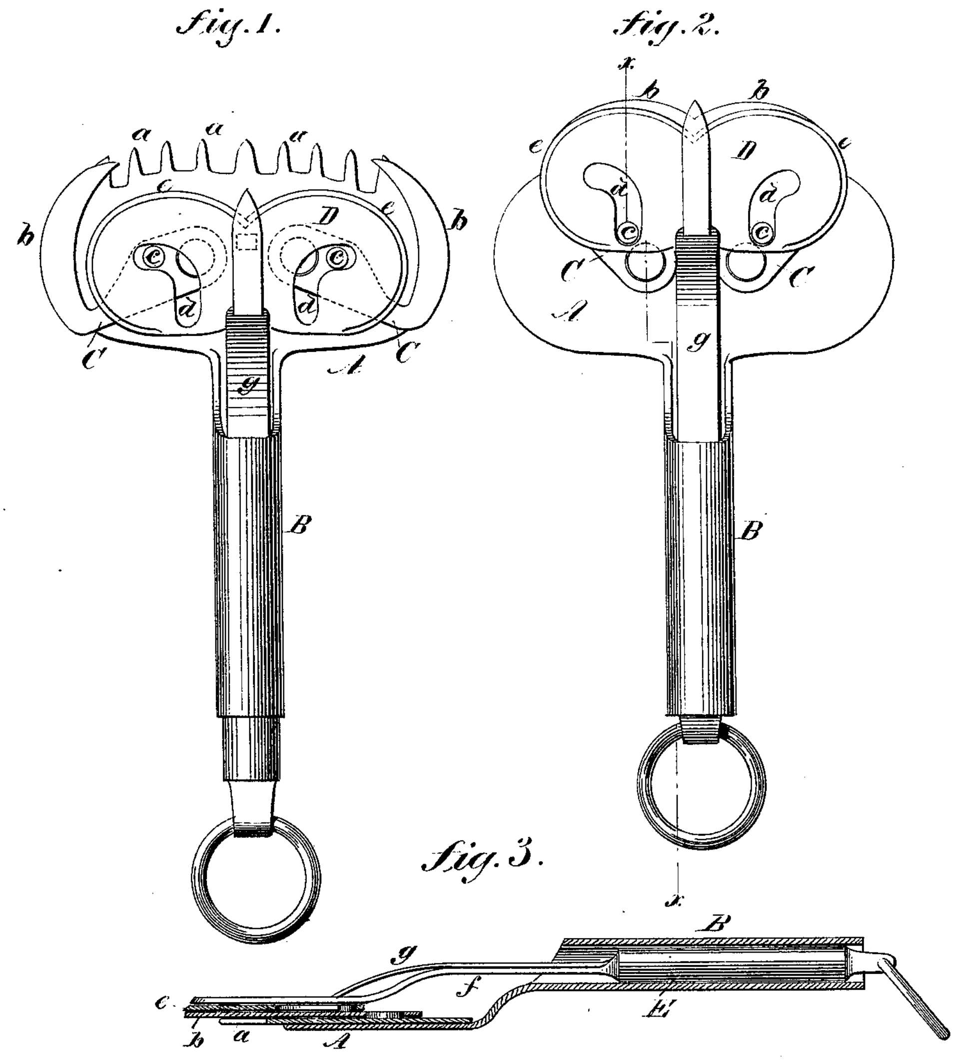
N. L. KING.
Shearing Machine.

No. 198,303. **Patented Dec. 18, 1877.**



WITNESSES:

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UNITED STATES PATENT OFFICE.

NATHAN L. KING, OF CATSKILL, NEW YORK.

IMPROVEMENT IN SHEARING-MACHINES.

Specification forming part of Letters Patent No. **198,303**, dated December 18, 1877; application filed June 11, 1877.

To all whom it may concern:

Be it known that I, NATHAN L. KING, of Catskill, in the county of Greene and State of New York, have invented a new and Improved Shearing and Clipping Machine, of which the following is a specification:

Figure 1 is a plan view, showing the shear-blades open. Fig. 2 is a plan view, showing the shear-blades closed. Fig. 3 is a longitudinal section on line *x x* in Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide an instrument that may be used for shearing sheep, clipping horses, &c., that will operate without cutting or injuring the animal.

In the drawing, A is a head attached to a tubular handle, B, and having a series of fingers or teeth, *a*. To this head two arms, C, are pivoted, one on each side of the central line of the handle extended through the head. Upon the outer ends of these arms curved shear-blades *b* are formed, the inner and upper edge being the cutting-edge. Friction rollers or studs *c* project from the face of the arms C, and are received by cam-slots *d*, formed in the movable head or plate D. The plate D has two curved cutting-edges, *e*, the curvature of which is of a little less radius than the curve of the blades *b*.

The tubular handle B contains a follower, E, to which a bar, *f*, is attached, that is also attached to the plate D. A spring, *g*, projects from the follower E and bears upon the back of the plate D.

The outward motion of the follower E carries the plate D forward toward the teeth *a*, and the engagement of the rollers or studs *c* by the cam-slots *d* causes the curved blades *b* to swing on their pivots, so that their cutting-edges follow the cutting-edges of the plate D, making a shearing cut. The teeth *a* meanwhile prevent the wool or hair being clipped from sliding between the cutting-edges of the instrument.

To give the instrument the rapid motion required it will be connected with suitable gearing, and operated by any convenient motor.

It will be observed that the teeth *a* have rounded points, and that the blades *b*, as they move on their pivots, do not project beyond the teeth, so that the animal being sheared or clipped cannot be injured.

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

The head A, having the fingers *a*, the blades *b*, and their arms C, having studs *c*, and the movable head D, having cam-slots *d* and cutting-edges *e*, in combination, substantially as herein shown and described.

NATHAN L. KING.

Witnesses:
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