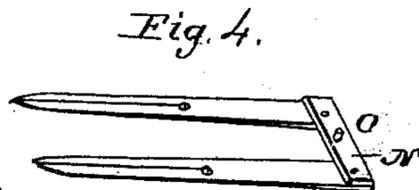
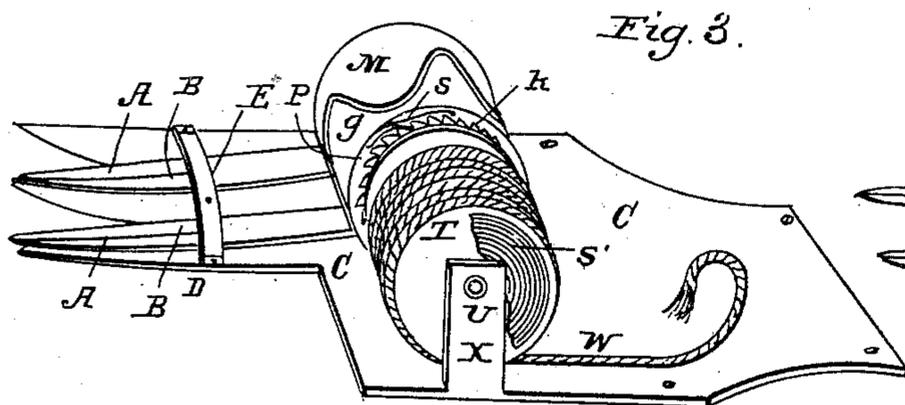
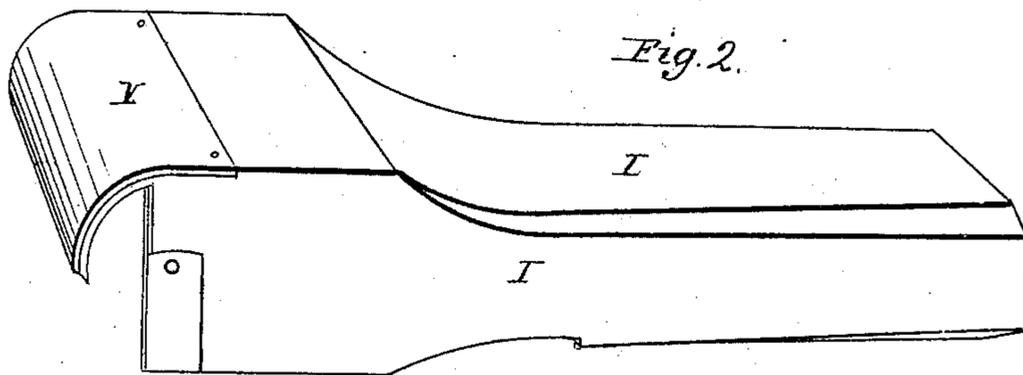
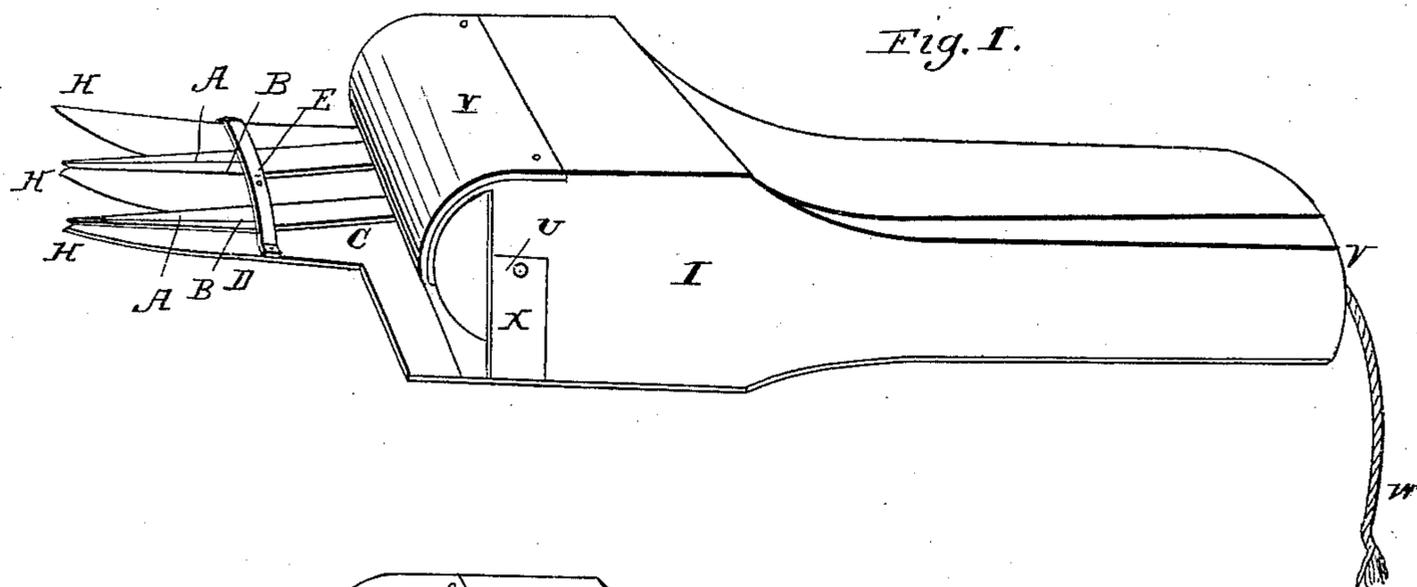


W. M. ECCLES.  
 Sheep Shearing Machine.

No. 44,618.

Patented Oct. 11, 1864.



Witnesses:  
 J. M. Lampton  
 B. H. Lane.

Inventor:  
 W. M. Eccles

# UNITED STATES PATENT OFFICE.

WILLIAM M. ECCLES, OF OBERLIN, OHIO.

## MACHINE FOR SHEARING SHEEP.

Specification forming part of Letters Patent No. 44,518, dated October 11, 1864.

*To all whom it may concern:*

Be it known that I, WILLIAM M. ECCLES, of Oberlin, in the county of Lorain and State of Ohio, have invented a new and useful Machine for Shearing Sheep or Pelts, titled "Eccles' Sheep-Shearer;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of Eccles' sheep-shearer. Fig. 2 is a detached drawing of the wooden handle I, (which may or may not be finished with a metallic shield, Y.) Fig. 3 is a perspective view of the machinery that works the steel cutters A A.

In Fig. 1 the cutters A A vibrate on their centers B B, and are held down to the plate C by the steel spring D, which is attached underneath to the steel or brass binding-plate E, and presses down on the cutters A A, so as to hold them on the lower blades, (three,) H H H. The binding plate E is furnished with a hinge at one end, fastened to the plate C, and at the other end with a catch, so as to facilitate the removal of the cutters A A for sharpening, itself serving to hold down the spring D. The steel or brass plate C supports the whole machinery, and at the end has three or more steel blades, beveled underneath and corresponding to the cutters A A. These are designated by H H H. This plate is fastened for use to the wooden handle I, Fig. 1.

Fig. 3 is a perspective view of the machinery by which the cutters are moved.

M is a cam-wheel, made of steel or brass, and permanently attached to its axle U. It has a groove, *g*, cut in its circumference, and passing from side to side, in a wave-line, so that when the cam-wheel M revolves it may move the cutters A A, which is its object. The cutters A A, Fig. 4, are connected at the ends by a cross-piece, N, designed to hold the cutters together. N is provided with a pin, O, fitted to move in the groove *g*.

Attached to the cam-wheel is a pawl, P, catching in the ratchet-wheel R, and held in its place by the spring S. The ratchet-wheel

is permanently attached to the pulley T, and with its pawl permits the pulley to revolve from left to right without turning the cam-wheel M. The pulley T is made of brass, steel, or any other metal, and is movable on the axle of the cam-wheel M, the end of which appears at U. It has a spiral spring, *s'* in the end, (seen where the end of the pulley is broken away.) This spring is so connected with the pulley and the end of the support X that when wound up it will turn the pulley T from left to right without turning the cam-wheel. The object of this spring is to keep the cord W always wound up.

Attached to the pulley is the cord W, and wound around it from right to left, passing out at the end of the handle, I, Fig. 1, at V, which cord is to be attached to the girdle around the waist of the person operating the machine. Its object is to turn the pulley T.

The operation of the machine will then be as follows: As the machine is pushed down, the cord W turning the pulley from right to left, the ratchet-wheel, engaging the pawl, carries the cam-wheel with it, which in revolving causes the cutters A A to vibrate, thus clipping the wool.

The dimensions of my machine are as follows: The wooden handle, Fig. 2, is four inches long, two inches thick, two and one-half inches wide, more or less. A A are each three inches long, one-quarter inch wide, one-eighth inch thick, tapering at the bladed ends. H H H, as a whole, is one inch and a half wide at the base, one inch and a half long, and one-sixteenth of an inch thick, more or less. C is two inches wide, three inches long, and one-eighth of an inch thick, more or less. M is one inch and a half in diameter and one inch thick, more or less. R is three-fourths of an inch in diameter and one-eighth of an inch thick, more or less. T is one inch in diameter and one inch and a half long. W is one-eighth of an inch in diameter and one foot and a half long, more or less. S is a common watch-spring, one foot and a half long, more or less. D is a spring one-half inch long, one eighth of an inch wide, (more or less,) and as thick as the case may demand. E is two inches long, one-half inch wide, one eighth

inch thick, more or less. N, Fig. 4, is one-half inch long, one-quarter of an inch wide, one-eighth inch thick, more or less. O is one-eighth inch long, and as large as the case may demand.

What I claim as my invention, and for which I ask Letters Patent, is—

The combination of the cam-wheel, the ratchet, the pulley, the cutters, and spring, as above described, and for the purpose set forth.  
WM. M. ECCLES.

Witnesses:

R. H. LANE,  
JOHN M. LANGSTON.