

(Model.)

J. K. ALWOOD.
Machine for Clipping Sheep.
No. 241,584. Patented May 17, 1881.

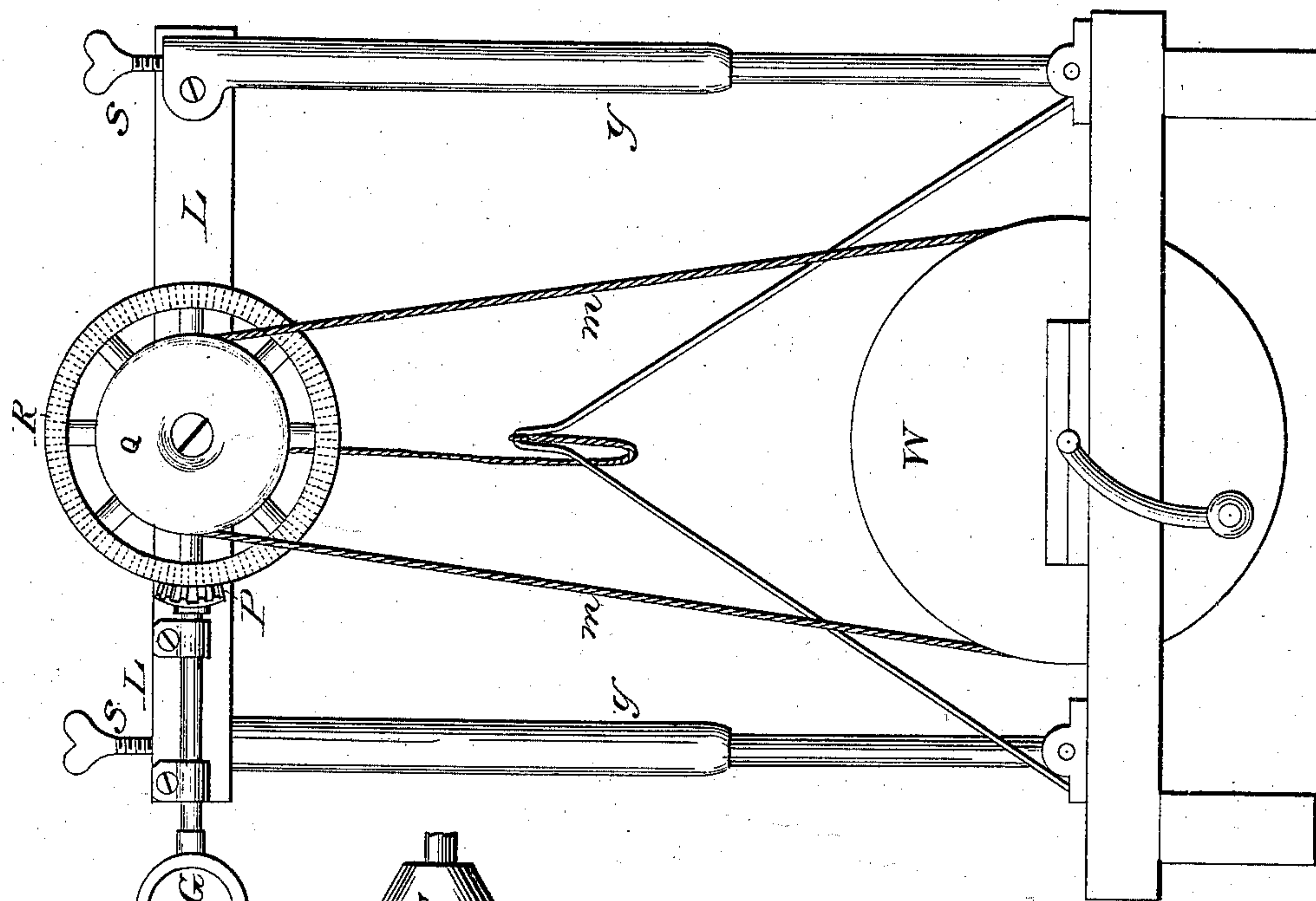


Fig. 1.

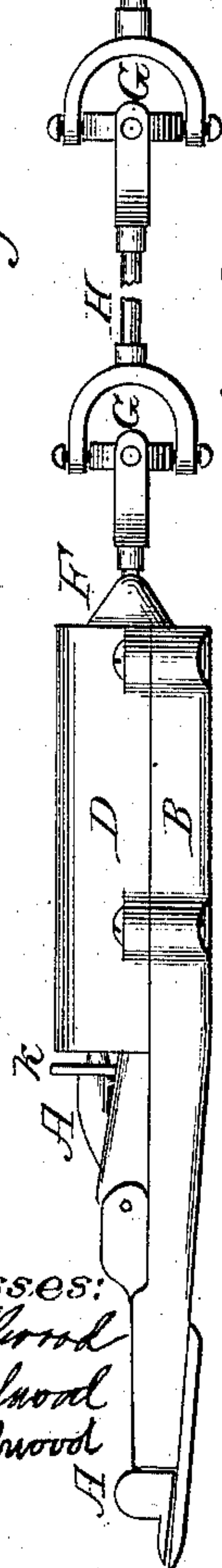


Fig. 2.

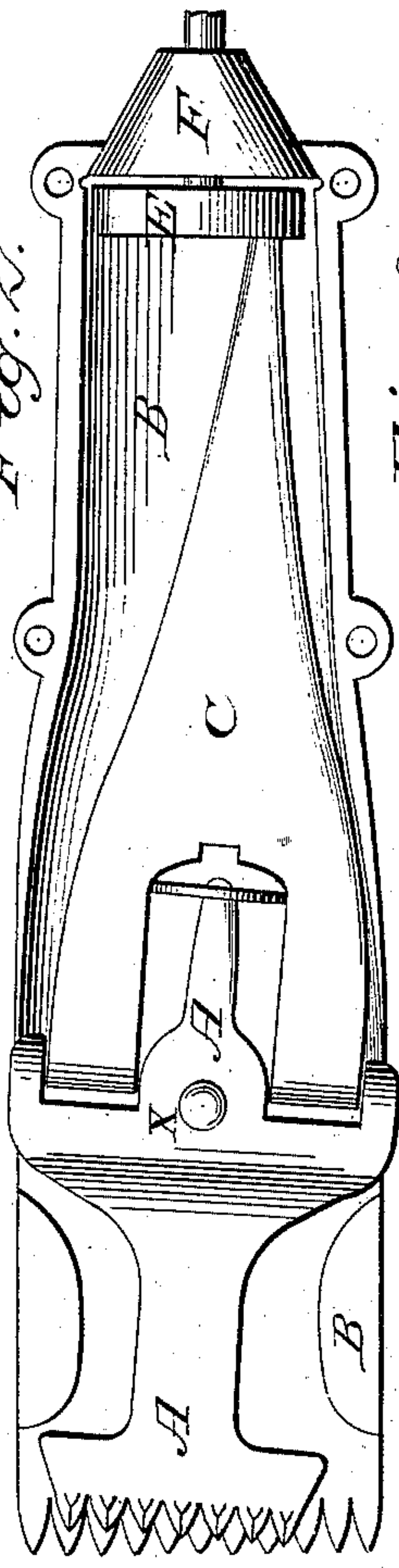


Fig. 3.

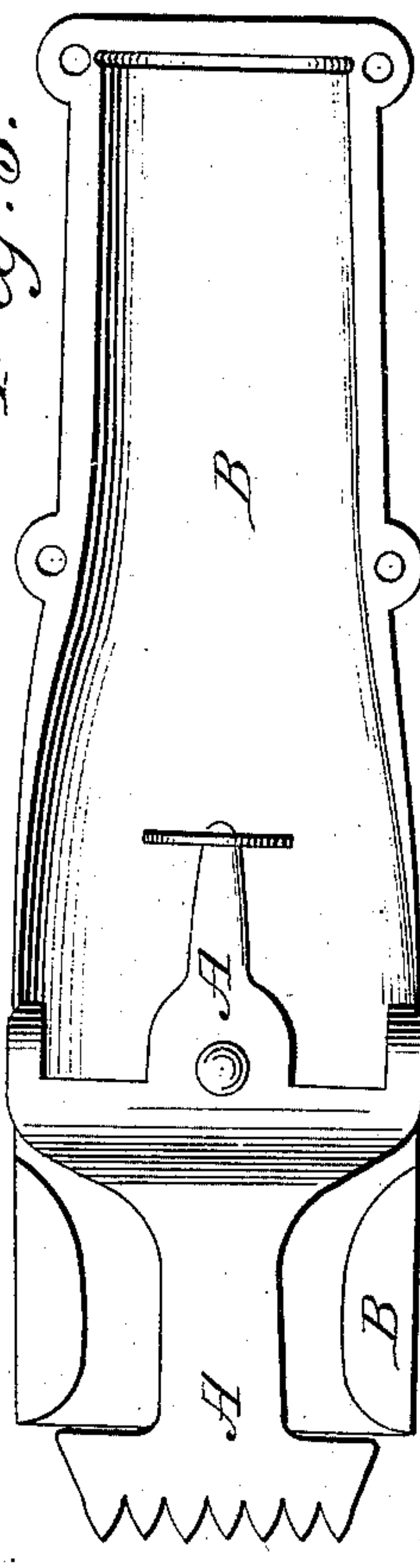


Fig. 4.

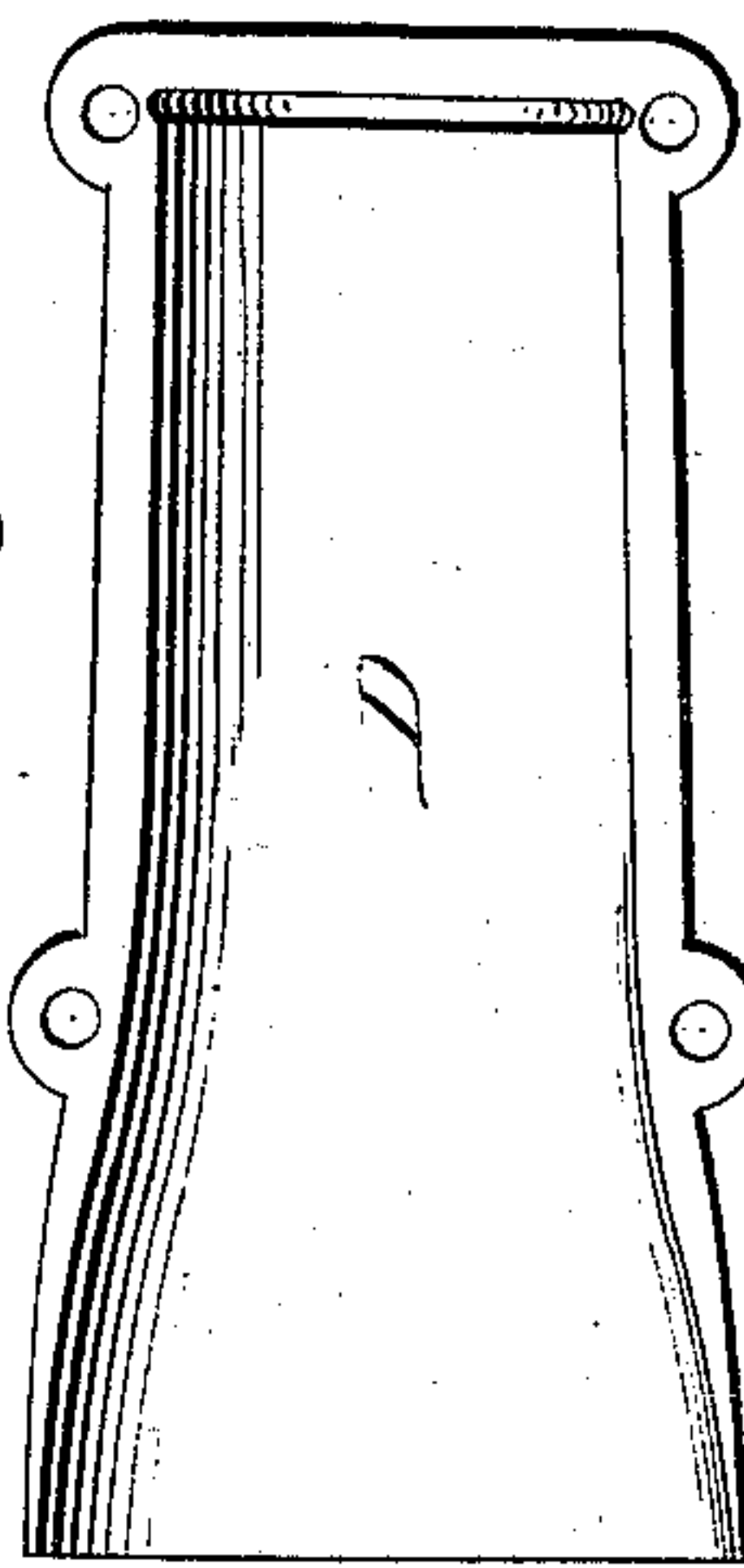
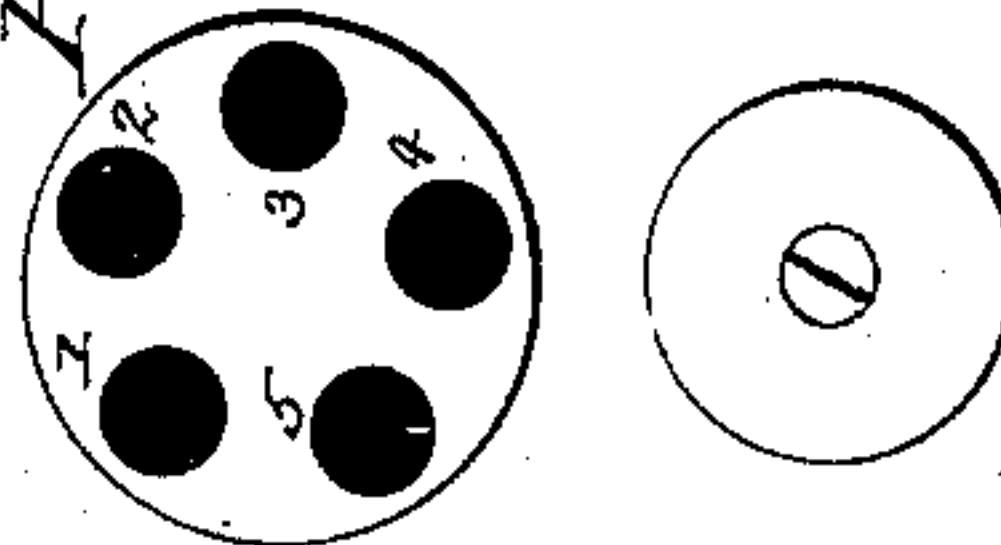


Fig. 5.



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JOSIAH K. ALWOOD, OF MORENCI, MICHIGAN.

MACHINE FOR CLIPPING SHEEP.

SPECIFICATION forming part of Letters Patent No. 241,584, dated May 17, 1881.

Application filed December 23, 1880. (Model.)

To all whom it may concern:

Be it known that I, JOSIAH K. ALWOOD, of Morenci, Lenawee county, State of Michigan, have invented a new and useful Improvement in Devices or Machines for Clipping Sheep, of which the following is a specification.

My invention relates to machines for clipping sheep and other animals; and the object of my improvements is to provide such devices and combinations thereof as will enable me to produce a machine which will clip the fleece or hair from animals smoothly and without injury to them. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the entire machine, showing the supporting-frame, the mechanism for giving the required movements, and the clipping mechanism. Fig. 2 is a plan view of the clipping device and the means of converting a rotary motion into a reciprocating one, the cap for covering the same being removed. Fig. 3 is a plan view with the cap removed, showing the cutting-blades and an arm for use in moving them. Fig. 4 is a plan view of the cap which constitutes a portion of the handle for guiding the clipping-shears, it being shown as removed from the lower portion; and Fig. 5 is a view showing the ends of the disk which gives motion to the shears.

Similar letters refer to similar parts in all the figures.

In constructing machines of this character I provide a suitable frame-work, upon which the moving parts rest. The shears consist of an upper and lower jaw. Upon the outer end of the former, which is designated by the letter A, there is fixed a plate having upon its outer edge a series of pointed cutting-edges, as shown in Figs. 2 and 3. This jaw is pivoted to the lower one, as shown at X in Fig. 2, and has upon its inner portion a projecting arm, which is provided with a disk which fits into the space formed in the pivoted lever C, said lever being bifurcated at its outer end and pivoted to jaw A in such a manner that as its inner pointed end is moved by a rotating disk (soon to be described) it will be capable of having imparted to its inner end both a vertical and a longitudinal movement, and thus enable it to give to the jaw A and the cutting-edges

attached thereto the required reciprocating movements. The lower jaw, B, has upon its outer end a series of points, as shown in Fig. 2, such points being for the purpose of collecting the wool or hair of the animal and holding it in position to be cut by the edges formed upon or attached to the upper jaw, A. The jaw B has no movement except such as is imparted to it by the operator. It, however, extends rearward sufficiently far to form a chamber or a part of a chamber for the lever C to work in, it being covered for a portion of its length with a recessed cap, D, which is secured to it by screws, and which, together with the part B, constitute a handle, which the operator grasps, and by which he directs the cutting-edges of the shears to the proper point.

In the inner end of the jaw B and in the cap D there is provided a conical bearing, in which revolves a conical journal, F, said bearing forming the support for the end of a shaft, which carries upon its inner end a disk, E, located within the chamber formed by the jaw B and the cap D. This disk is provided with a series of holes, 1 2 3 4 5, as shown in Fig. 5, into which the pointed end of lever C enters, and by which said lever receives the required movement to give the proper movements to the shears or cutting-edges.

To the outer end of the shaft, which enters the conical journal F, there is affixed a yoke, G, which forms a part of what is usually termed a "universal joint," it being connected with a similar yoke on the end of a shaft, H, at the opposite end of which there is a similar joint, the two constituting bearings for said shaft, and constituting a tumbling-shaft capable of being changed to any desired angle to the driving-shaft, and thus enabling the operator to change the position of the shears to various parts of the body of the animal without affecting the movements of the shears.

For giving motion to the tumbling-shaft H there is provided a shaft, which is secured to a beam, L, and carries upon one of its ends a beveled pinion, P, which meshes into and is driven by a beveled wheel, R, which is placed upon a stud projecting from the beam L at about the center thereof.

Upon the outer surface of the wheel R, or upon the stud which supports the same, and

outside thereof, there is placed a band-wheel, Q, over which passes a band or belt, *m*. Said band also passes over a wheel or drum, W, which is carried upon a shaft having its bearings in the frame of the machine, it being supplied with a crank, by which the wheel W is rotated, said wheel giving motion to the wheels R and P, and through them to the other moving parts of the device.

10 To the sides of the frame of the machine there are pivoted two posts or supports, Y Y, the upper ends of which are provided with sliding or telescopic tubes, the upper ends of which have in them set-screws S S, for determining the distance between the wheels W and Q, and thus regulating the tension of the band *m*. The posts or supports Y Y are pivoted to the opposite sides and ends of the frame and of the beam L, their positions being such with reference to driving-wheel W that when in a vertical position the center of the wheel R will be exactly in line vertically with that of W, and hence it follows that the beam and the wheel R may be oscillated to any extent permitted

25 by the parts without affecting the belt or band which drives the shears, which can thus be brought into use upon the body of the animal

throughout a greater range than would otherwise be possible.

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

1. The combination of the oscillating jaw A, carrying upon its outer end a series of cutting-edges, the oscillating lever C, for giving motion to the jaw and its cutters, the lower jaw, B, having upon it a series of gathering-points, the disk E, for giving motion to said lever, the conical journal F, and tumbling-shaft H, and suitable mechanism for driving the same, substantially as shown and described.

2. The combination, in a machine for clipping animals, of a longitudinal oscillating support, L, for the driving mechanism, it having extensible supports for uniting it with the frame of the machine, a stationary driving-pulley, a belt for communicating the movement of the driving-pulley to a tumbling-shaft, and the clipping-shears, substantially as set forth.

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Witnesses:

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