E. A. Ovalli. Jr.,

Straw Cutter.

No. 108,974. Patented Nov. 8. 1870.

Fig. 1

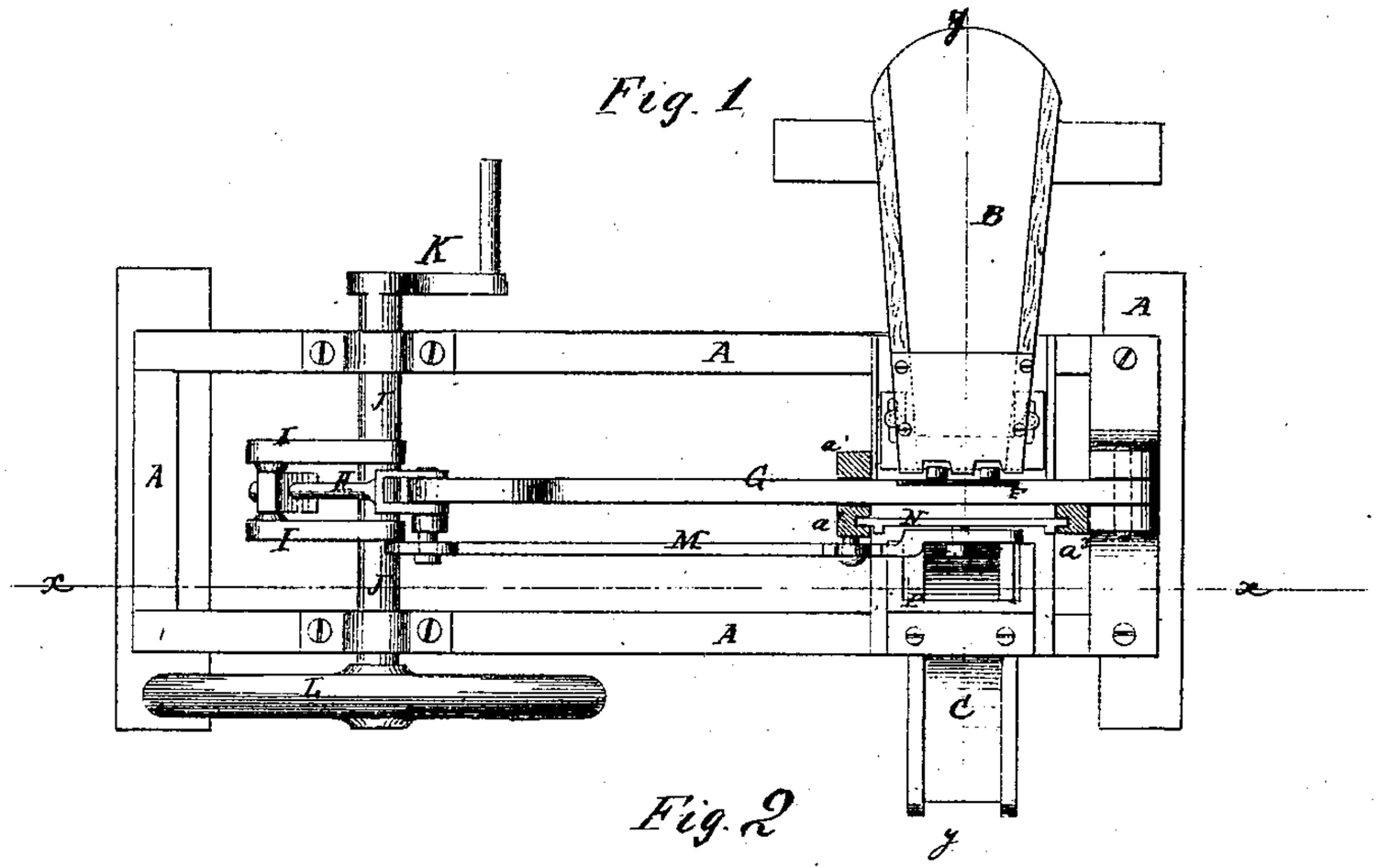


Fig. 2

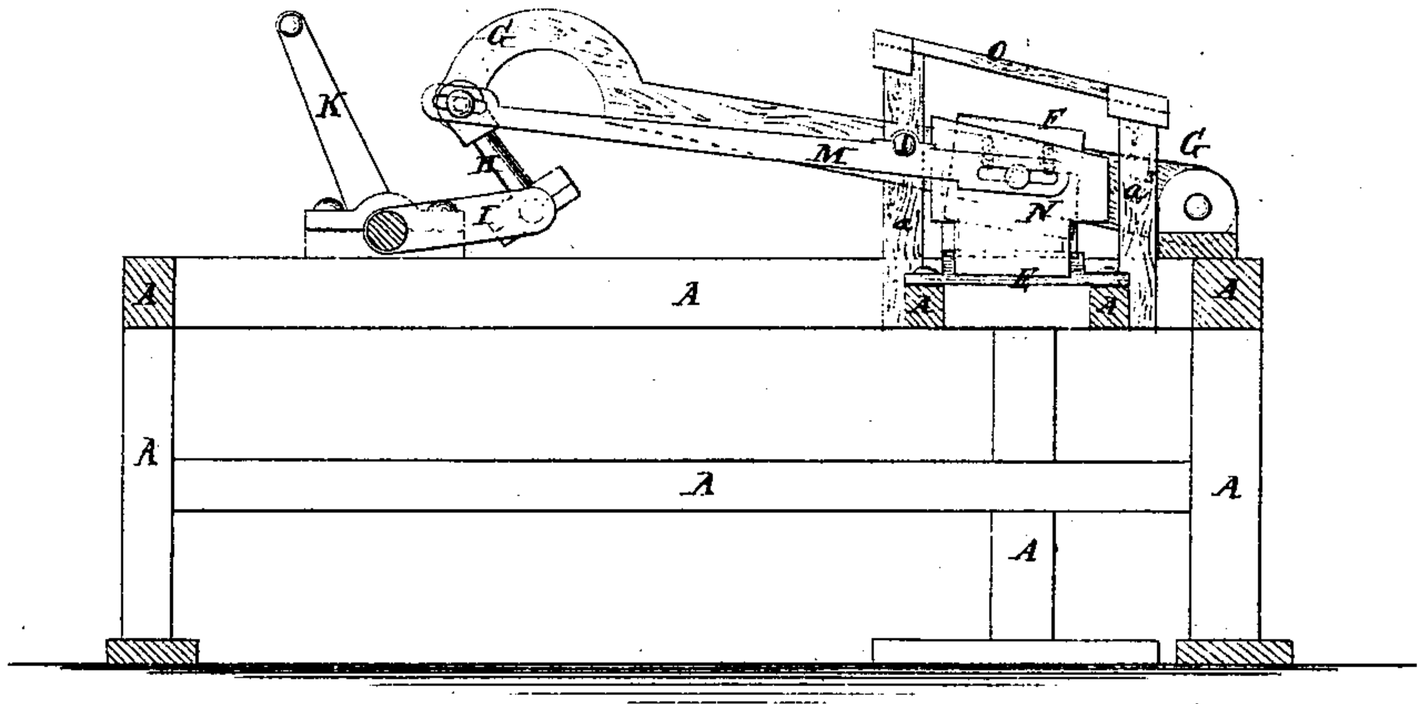
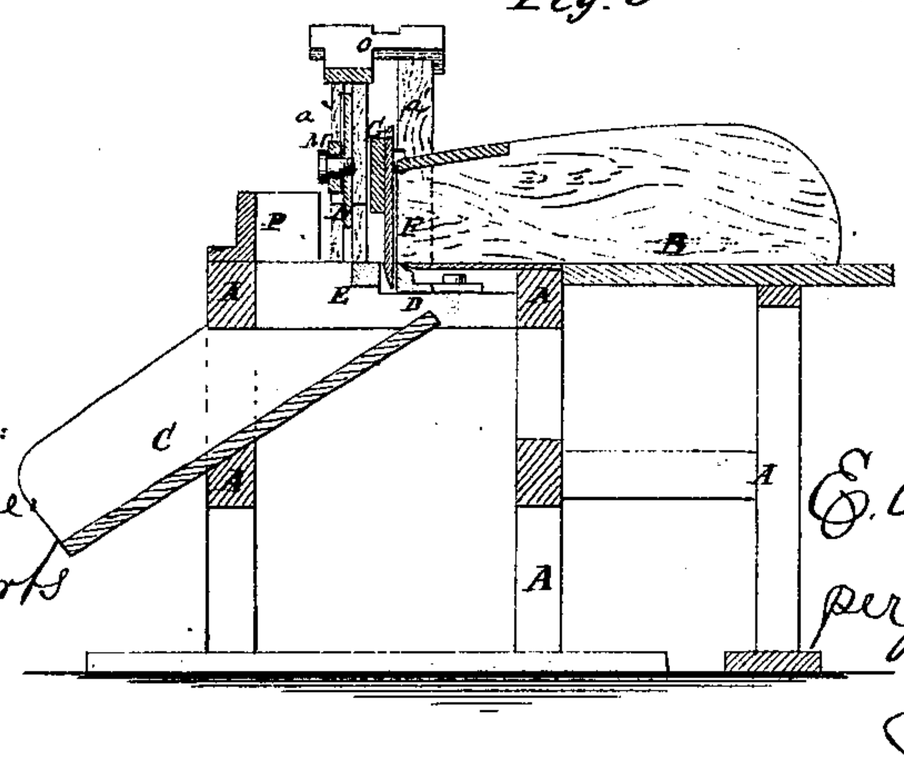


Fig. 3



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EDWARD A. CRALLÉ, JR., OF BRICKLAND, VIRGINIA.

Letters Patent No. 108,974, dated November 8, 1870.

IMPROVEMENT IN STRAW-CUTTERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, EDWARD A. CRALLÉ, JR., of Brickland, in the county of Lunenburg and State of Virginia, have invented a new and useful Improvement in Straw-Cutter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a top view of my improved machine.

Figure 2 is a vertical longitudinal section of the same, taken through the line *x x*, fig. 1.

Figure 3 is a vertical cross section of the same, taken through the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved straw-cutter, simple in construction, strong, durable, and effective in operation, doing its work with great ease to the operator; and

It consists in the construction and combination of the various parts of the machine as hereinafter more fully described.

A represents the frame-work of the machine, to one side of which, near one end, is attached the feed-box B, the forward end of which is covered in the usual manner, and the bottom of the forward end or mouth of which is plated with metal to prevent wear.

To the other side of the frame A, opposite to and below the mouth of the feed-box B, is secured a spout C to receive the cut material from the knife and guide it to the desired place, or into a receptacle prepared to receive it.

D and E are two ribs placed parallel with each other at the forward end or mouth of the feed-box B, and between which the knife-edge enters after making the cut.

The bars or ribs D E rest upon and are secured to the frame-work A of the machine by screws or bolts passing through transverse slots in the end parts of said bars or ribs, so that they may be conveniently adjusted closer to or farther from the knife, or set up to said knife, to compensate for wear.

F is the knife or cutter-plate, which is adjustably secured to the lever G by bolts or screws passing through vertical slots in said knife, and into or through the said levers.

The forward end of the lever G is pivoted to a support attached to the end of the frame A. The lever G passes back through or between vertical guides a^1 a^2, attached to or forming a part of the frame-work A, and to its rear end is pivoted the end of the pitman or connecting rod H, the other end of which is pivoted to the crank I, formed upon or attached to the shaft J.

The shaft J revolves in bearings attached to the frame A, and to one of its ends is attached the crank K, by means of which the machine is operated.

To the other end of the shaft J is attached a balance-wheel L, as shown in fig. 1.

M is a lever, one end of which is pivoted to the projecting end of the pin or bolt that pivots the end of the lever G to the end of the connecting-rod H, said pin or bolt passing through a slot in the end of the said lever M.

The lever M is pivoted to the guide a^2, and to its forward end is secured a plate, N, by a pin or bolt passing through a slot in the end of the said lever M, and into or through the said plate.

The plate N moves up and down in vertical grooves in the guides a^2 a^3, attached to or forming a part of the frame-work A, and its upper edge is made inclined to correspond with the inclination of the cap-bars O, attached to and connecting the upper ends of the guides a^1 a^2 a^3.

By this construction and arrangement, as the knife F is raised after making a cut, the plate N descends to serve as a gauge-stop to the material as it is fed forward in the feed-box B.

As the knife N descends to make a cut, the plate N is raised to allow the material, as it is cut, to drop into the spout C.

P is a box or vertical spout placed in front of the mouth of the feed-box B, and upon the outer-side of the stop-plate N, to prevent the cut material from flying about, guide it into the spout C, and at the same time leave an unobstructed space at the front of the knife F while making the cut, so that it may be impossible for the cut-material to clog the discharge-spout.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. An improved straw or feed-cutter, formed by the combination of the frame A, feed-box B, discharge-spout C, adjustable bars or ribs D E, adjustable knife F, lever G, pitman H, crank I, shaft J, crank K, balance-wheel L, lever M, stop-plate N, and box or spout P, with each other, said parts being constructed and arranged substantially as herein shown and described, and for the purpose set forth.

2. The combination of the movable stop-plate N and stop-plate lever M with the knife and knife-lever of a feed-cutter, substantially as herein shown and described, and for the purpose set forth.

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Witnesses:

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