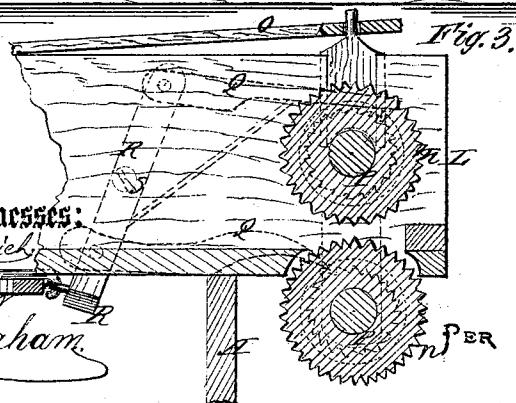
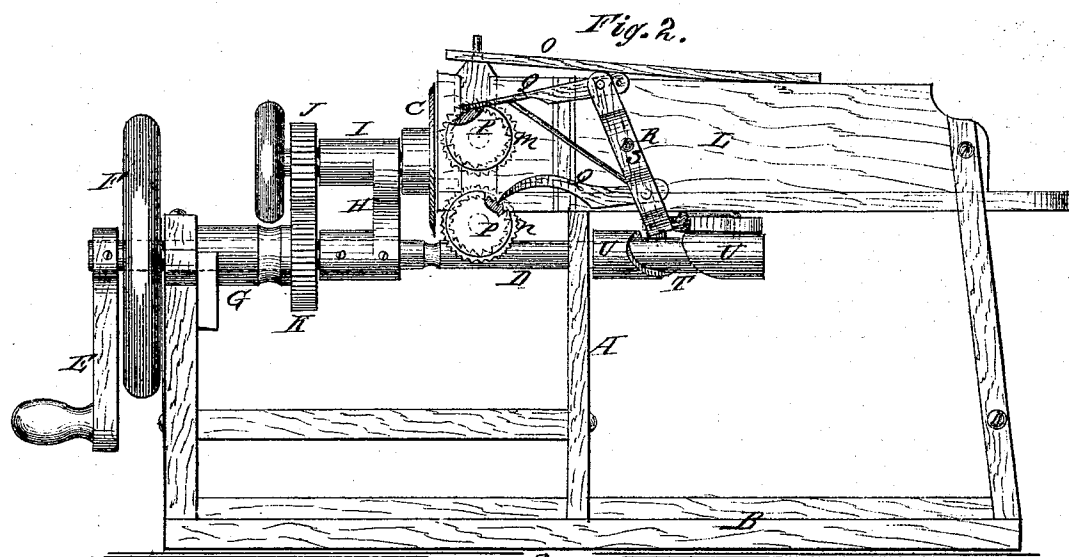
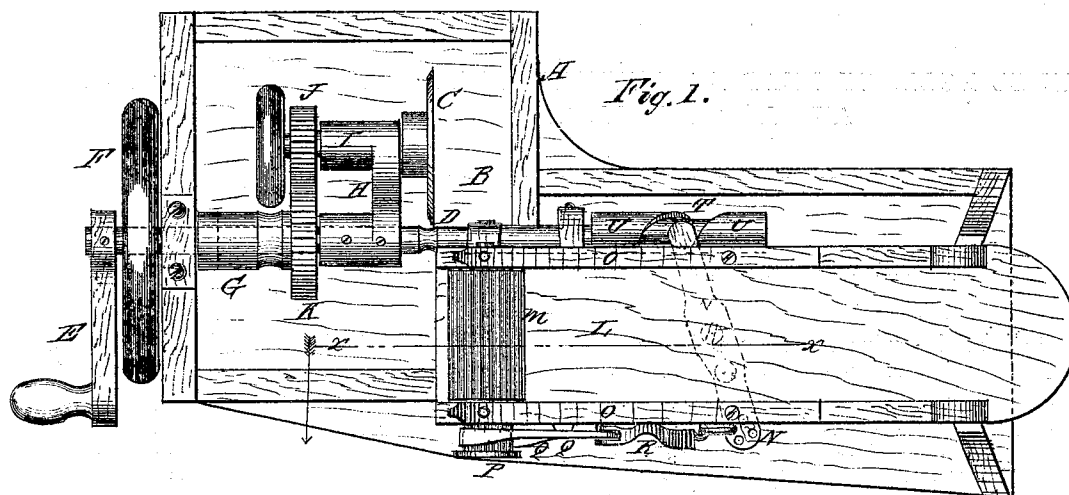


S. HOLL.

Improvement in Feed-Cutters.

No. 129,562.

Patented July 16, 1872.



Witnesses:

R. Dieterich

N. A. Graham

Inventor:

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UNITED STATES PATENT OFFICE.

SAMUEL HOLL, OF READING, PENNSYLVANIA, ASSIGNOR TO HIMSELF
AND JACOB HOLL, OF SAME PLACE.

IMPROVEMENT IN FEED-CUTTERS.

Specification forming part of Letters Patent No. 129,562, dated July 16, 1872.

Specification describing a new and useful improvement in Fodder-Cutter, invented by SAMUEL HOLL, of Reading, in the county of Berks and State of Pennsylvania.

My invention relates to an improvement in the class of feed-cutters wherein the cutter has a compound or planetary motion; and it consists in the arrangement of parts constituting the machine, as hereinafter described.

In the annexed drawing, Figure 1 is a top or plan view of the machine. Fig. 2 is a side view. Fig. 3 is a sectional detail of the feeding apparatus, the section being on the line *x x*.

Similar letters of reference indicate corresponding parts.

This machine is supported on a frame-work, A, by the bed-plate B, and the cutting is effected by a circular or disk knife, to which is imparted a compound motion. C is the knife. D is the main shaft, which is revolved by means of the crank E, or in any other manner. F is a fly-wheel on the main shaft. G is a sleeve-box attached to the frame, through which the main shaft passes. H is an arm attached to the main shaft, upon the end of which is a sleeve-box, I, through which the shaft of the knife C passes. J is a gear-wheel on the knife-shaft, which meshes into the stationary gear-wheel K, which is attached to the sleeve G. By means of this gearing the knife is rotated on its own shaft, and is also carried round the main shaft by the arm H. The knife is so adjusted that it passes before the feed-rollers and does its work as it de-

scends. In Fig. 1 the knife is seen in the position it occupies just before it begins to cut. L is the cutter-box, near the front end of which the feed-rollers *m n* are arranged. The lower roller is revolved in stationary boxes, while the upper one is adjustable vertically and pressed down by springs O. They are revolved by means of ratchets P P on their ends and pawls Q Q on the oscillating bar R. This bar is oscillated on its central pivot S by a cam-groove, T, on the main shaft D, formed by the two obliquely-cut sleeves U U placed at a proper distance from each other.

The motion is imparted from the cam T to the oscillating bar R by an oscillating bar, V, seen in dotted lines in the drawing.

I do not claim, broadly, the arrangement of a circular cutter so as to revolve in a vertical plane and about an independent axis; but

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

In a feed-cutter the combination, with the fluted rollers P P, actuated by the pawl mechanism Q R and the vibrating bar N for feeding and holding the material to be cut in the horizontal box L, of the vertical cutter C, bearing H I, pinion J, fixed gear K, fixed sleeve-box G, and the driving cam-shaft D T U, all constructed and arranged as shown and described.

SAMUEL HOLL.

Witnesses:

JOHN OBOLD,
J. G. GEMANT.