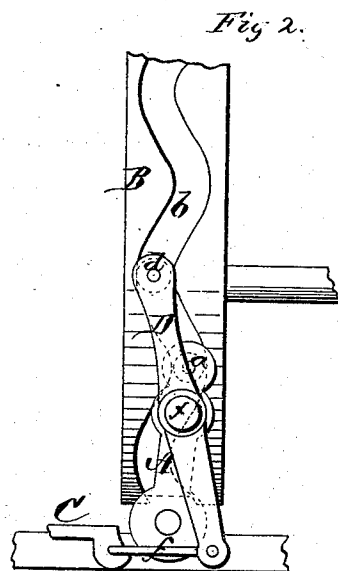
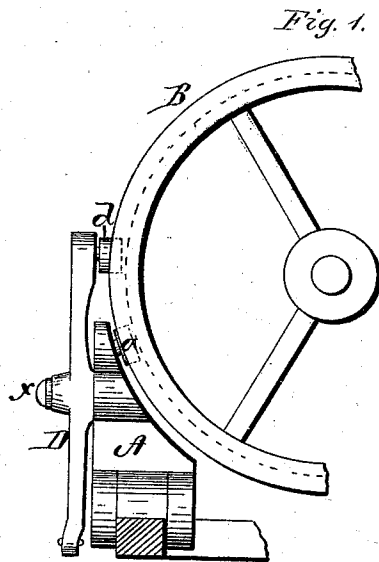


J. VANNETTE.
Mechanical-Movements.

No. 148,008.

Patented Feb. 24, 1874.



WITNESSES

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By

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UNITED STATES PATENT OFFICE.

JASPER VANNETTE, OF FOSTORIA, OHIO.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **148,008**, dated February 24, 1874; application filed August 13, 1873.

To all whom it may concern:

Be it known that I, JASPER VANNETTE, of Fostoria, in the county of Seneca and in the State of Ohio, have invented certain new and useful Improvements in Harvesters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

My invention relates to that class of mechanical movements in which the cutter-bar of a harvester is operated by means of a revolving wheel having a cam or zigzag groove around its periphery; and the nature of my invention consists in two levers, the one fulcrumed on the other, and so arranged that one end of each works in the cam-groove on the wheel at the same time, and always in the opposite direction, and the lower end of the lever, which has a movable fulcrum, being connected with the cutter-bar, all as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and Fig. 2 a front view, of my invention.

A represents a lever, which is hinged at its lower end to the frame-work of the machine. At the upper end of this lever is a spindle, on which is placed a metal roller, *a*, and this roller works in the cam-groove *b* upon the wheel B. D represents another lever, which is pivoted or fulcrumed at *x* to the outer or front side of the inner lever A, and hence the fulcrum of said outer lever D is carried back and forth, according to the motion of the lever A as it is being driven by the cam-groove *b* in the wheel B. At the upper end of the lever D is a spin-

dle, upon which is placed a roller, *d*, also working in the cam-groove *b* of the wheel B. The lengths of the upper parts of the levers A and B, from the fulcrum *x*, are so adjusted that the rollers *a* and *d* will be exactly one-half of a cam apart, the groove *b* being formed by means of two series of alternating cams, as shown in Fig. 2, and hence the levers A and D are at all times driven in opposite directions. The lower end of the lever D is, by a rod, *f*, or its equivalent, connected with the heel of the cutter-bar C of the machine.

By this arrangement of the levers A and D and cam-wheel B, the necessary motion to cut grass or grain is obtained without using an abrupt cam, or the disadvantage of a single lever. The strain and wear of the parts working in the cam-groove are divided, thus increasing the durability. There is no lateral strain on the axle by the cam-wheel, as the levers, striking on the opposite sides of the cams, tend only to burst the cam, and not to move the wheel on the axle.

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

The combination, with the cam-wheel B, of the lever A, hinged or pivoted at its lower end to the frame of the machine, and the lever D, connected to the cutter-bar and pivoted to the lever A, the upper ends of both levers provided with friction points or rollers, and working in opposite directions in the cam-wheel, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of August, 1873.

JASPER VANNETTE.

Witnesses:

JOHN A. BRADNER,
JAMES M. HILL.