T. J. BARNES.

Harvester.

No. 110,949. Patented Jan'y 17, 1871.

Fig. 1.

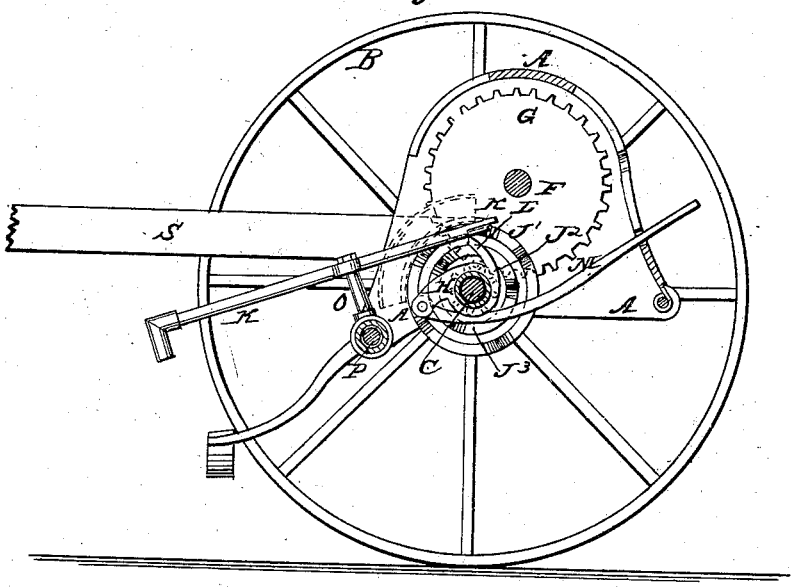
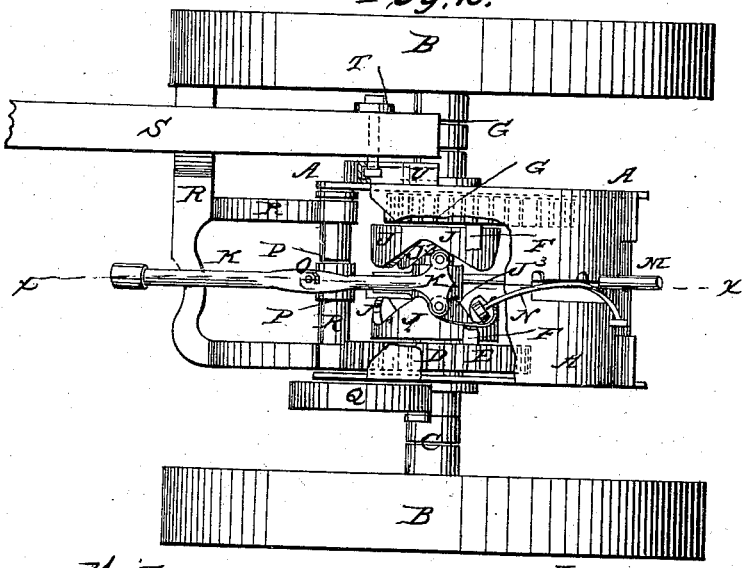


Fig. 2.



Witnesses:
E. Wolff
L. S. Mabee

Inventor:
Thos J. Barnes
per Munn & Co
attys

UNITED STATES PATENT OFFICE.

THOMAS J. BARNES, OF CORRY, PENNSYLVANIA.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **110,949**, dated January 17, 1871.

To all whom it may concern:

Be it known that I, THOMAS J. BARNES, of Corry, in the county of Erie and State of Pennsylvania, have invented a new and useful Improvement in Mowing and Reaping Machines; 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 vertical section, and Fig. 2 a plan view, of a machine exhibiting my improvements.

The main purpose of my invention is to construct a device which shall impart a varying throw to the lever that vibrates the cutter-bar.

I will first describe the invention, in connection with all that is necessary to a full understanding thereof, and then clearly point it out in the claims.

B are wheels, and C an axle, which rotate together. I is a sleeve, loose upon the axle, to which are attached two disks, J J, whose opposite faces have the cams J^1 J^3 and an annular intermediate recess, J^2. D E is a gear, which connects axle C and a parallel shaft, F, and G H is another gear, which connects shaft F and loose sleeve I. L is a cam-lever placed loosely on sleeve I and between the disks, to support the lever K, which is pivoted horizontally to a stud, O. M is a lever, jointed to the rear arm of cam-lever L, to graduate the position of its cam end. A is a frame, notched and slotted to receive the rear end of lever M and allow its adjustment, while spring N retains it in any position placed. R is a hinged frame, to which the finger-bar is attached. The pivoted lever is held upon its support L by a spring, Q.

The principle or mode of operation is as follows: The vehicle being put in motion, the wheel D on axle revolves pinion E on shaft P, which, in turn, through gear G H, revolves sleeve I at a speed much greater than that of the axle. This motion rotates the cam-disks and vibrates the lever K.

When it is desired to change the throw of K the lever M is moved from one extreme notch to the other; but if it is desired to throw the cutter-bar out of gear with the actuating-power, then M is placed in the middle notch.

Each of the three notches in the frame corresponds to the cams and the intermediate recess between them.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The laterally and vertically pivoted cutter-bar lever K, combined, as described, with two disks made fast to a loose sleeve upon the axle, and having intermediate cams J^1 J^3 and recess J^2, for the purpose specified.

2. The subject-matter of first claim, combined, as described, with cam L H and lever M, for the purpose specified.

THOMAS JAMES BARNES.

Witnesses:

MOSES H. BARLOW,

ALVIN MARTIN.