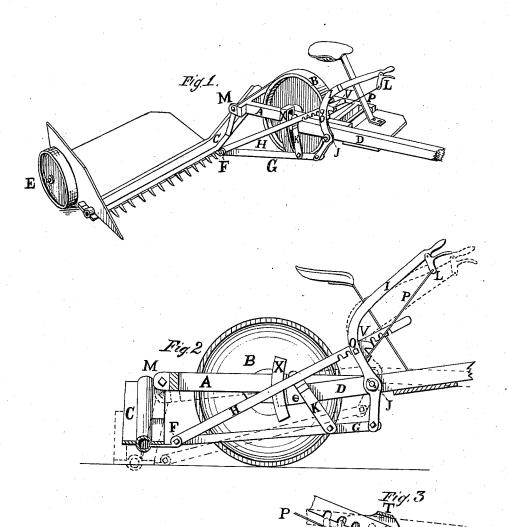
No. 182,029.

Patented Sept. 12, 1876.



Witnesses: Muny F. Milley Milton H. Cooley

Aaron Miller Inventor

## UNITED STATES PATENT OFFICE

## AARON MILLER, OF BROCKPORT, NEW YORK.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 182,029, dated September 12, 1876; application filed April 13, 1876.

To all whom it may concern:

Be it known that I, AARON MILLER, of Brockport, in the county of Monroe and State of New York, have invented a new and useful Improvement in Harvesting-Machines, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to give the driver complete control of the elevation of the cutting apparatus during actual use; and consists in the following arrangement of parts:

To the rear end of frame A (containing driving-wheel B and gearing) is hinged the finger-bar C at M, and to the forward end of A the tongue D is pivoted at J, so that the frame A may oscillate on the axis of driving-wheel B. The rear end of tongue D can have a vertical motion in tongue-socket X. To the inner shoe F of the cutting apparatus is pivoted the draft-bar G and ratchet-bar H. The other end of draft-bar G is pivoted to the lower end of lever I, which has its fulcrum at J, where the tongue D is pivoted to the forward end of frame A. Link K connects the rear end of tongue D to draft-bar G, near its forward end. Near the upper end of lever I is pivoted hand-lever L, to which is attached rod P. The other end of rod P is pivoted to eccentric V, which is placed on bolt O in lever I.

Eccentric V has two projections or flanges, S, Fig. 3, on the lower side of ratchet-bar H, and T on the upper side. By clasping the upper end of lever I and hand-lever L together eccentric V is partly revolved, flange S lifts ratchet-bar H clear from contact with bolt O, and allows lever I to be moved backward or forward, and flange T allows eccentric V to rotate only far enough to raise ratchet-bar H clear of bolt O.

When the upper end of lever I is pulled backward the other end carries the forward end of draft-bar G forward and downward, and by means of link K the rear end of tongue D is carried downward. The forward end of

frame A is thus caused to drop and the rear end to rise, carrying up the end of finger-bar C. When the upper end of lever I is carried forward finger-bar C is dropped, and by releasing hand-lever L the weight of ratchet-bar H causes eccentric V to rotate sufficiently to allow notches on ratchet-bar to catch on bolt O and hold the finger-bar C at any desired elevation.

The axis of grain-wheel E, Fig. 1, being placed as far back of the line of the hinges M as the axis of driving-wheel B is forward of said line, causes the end of finger-bar C, that is carried by wheel E, to rise or fall an equal distance at the same time with the other end.

I am aware that many harvesting-machines have the grain-wheel placed back of the cutting apparatus, but as near to it as possible. With this arrangement the grain-wheel is placed further back than usual, the distance being determined by the distance of driving-wheel B from line of hinges M, and if varied much from the position described the finger-bar will not have an equal rise or fall at each end at the same time.

The usefulness of this invention consists in giving the driver such control of the machine that he can lift the cutting apparatus over an obstruction ten or twelve inches high, or drop it down to the ground to gather up lodged spots of grain and adapt it to the proper height for grain in different parts of a field without stopping the team or dismounting from the seat.

I claim as my invention—

1. The draft-bar G, lever I, link K, in combination with the tongue and finger-bar, pivoted to the main frame, substantially as described.

2. The combination of the draft-bar G, ratchet-bar H, lever I, and flanged eccentric V, substantially as described.

AARON MILLER.

Witnesses:

MINER F. MILLER, MILTON H. COOLEY.