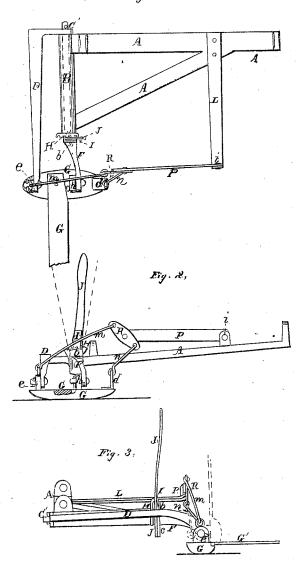
## Ray & Grant, Mower.

Nº50,956.

Patented Nov. 14.1865.

Fig . 1,



Inventor B. Ray Bli Grant Withings W. D. f. Someges T. W. Mcblelland

## UNITED STATES PATENT OFFICE.

SAML. RAY AND ELI GRANT, OF ALLIANCE, OHIO.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 50,956, dated November 14, 1865.

To all whom it may concern:

Be it known that we, SAML. RAY and E. GRANT, of Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Harvesters; and we do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan view. Fig. 2 is a side view, and Fig. 3 is a view of the rear end.

Like letters of reference refer to like parts in the views.

My improvement relates to the manner of connecting the shoe of the finger-bar to the harvester, whereby the shoe with the finger-bar can be tipped or inclined upward either way by a lever forming a vibrating finger-bar, and it can be turned up vertically or in a horizontal position, for the purpose of transportation.

In the several figures, A represents a frame designed to be connected to a harvester, that can be cast in one piece, at one end of which is a sleeve, B. Through this sleeve extends a shaft C, as indicated by the dotted lines in Fig. 1, on the end of which, at C', is placed or hung a brace, D, as represented. This brace is connected to the shoe G at the other end by curving down and being pivoted to a lug, e, extending up from the shoe.

F is an arm on one end of the shaft C, that curves down and is pivoted or hung to a lug, b, on the shoe.

Projecting upward from the sleeve B is a rack, H, formed as represented, in which a lever, J, works, there being a projection on one side of the lever, that fits into the teeth on the face of the rack. The lower end of the lever is secured to a lip, c, extending down below the arm F, and on the upper side of the arm there is a lip, b, against which a spring, I, rests that is attached to one side of the lever, whereby the lever can be adjusted and kept in place on the rack, retaining the cutting apparatus in any desired position.

L is an arm, secured to the frame A or forming a part of the frame, to one end of which is pivoted at i a link, P. On the end of this link is hung a lever, R, at each end of which is attached connecting-rods mn. The rod m is connected to the lug e at the rear of the shoe, and the rod n to a lug, d, at the front of the shoe. These rods, thus connected to the shoe, act as braces to keep the shoe in place, and at the same time allow it to be vibrated or moved to any inclination by the hand-lever J, for by means of the lever R, and link P pivoted to the arm L, the braces can be adjusted to any position of the shoe.

As the arm F is secured to the lever J, by moving the lever as noted by the dotted lines in Fig.2 the shoe and finger-bar can be readily adjusted to any inclination either way, for the purpose of passing over obstacles or to be adapted to the inclination of the ground.

The cutting apparatus can be turned up vertically for transportation, as indicated by the dotted lines in Fig. 3, by means of the jointed connection, as described, and it can be turned so as to fold round in a horizontal position.

The sleeve B on the shaft C may be open in the middle, if there is a bearing at each end for the shaft.

What we claim as our improvement, and desire to secure by Letters Patent, is—

1. The link P and lever R, in combination with the rods m n and shoe G, substantially as and for the purpose set forth.

2. The adjustable brace D, in combination with the shoe, constructed and arranged as and for the purpose set forth.

3. The sleeve B and brace D, in combination with the shaft C and arm F, constructed and arranged substantially as and for the purpose set forth.

SAMUEL RAY. ELI GRANT.

Witnesses:
W. H. BURRIDGE,
A. W. MCCLELLAN.