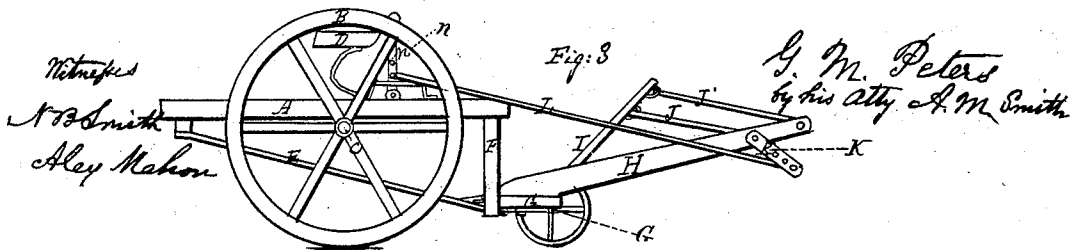
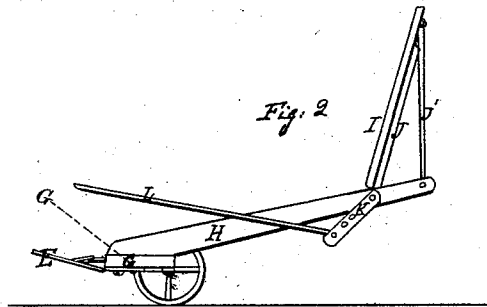
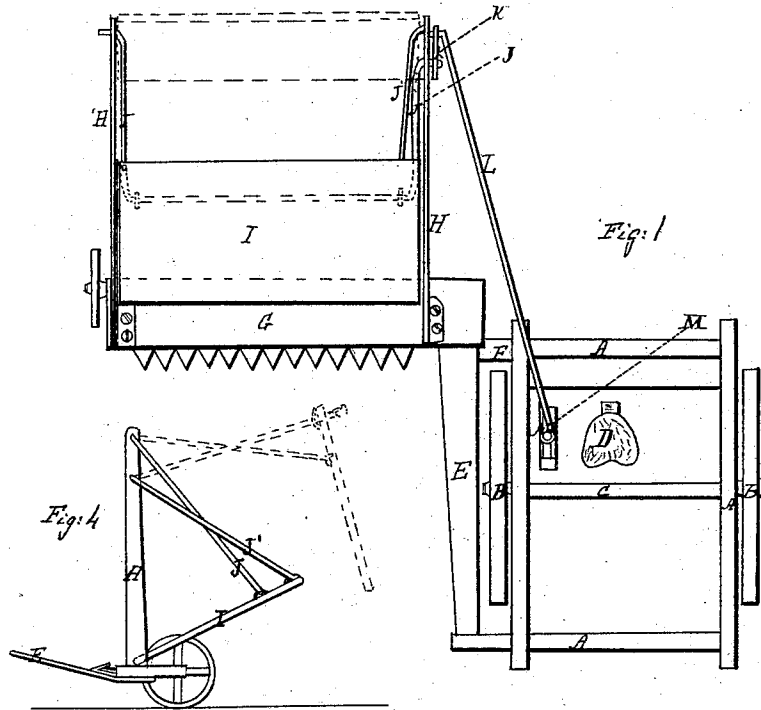


G. M. PETERS.
DROPPER FOR HARVESTERS.

No. 81,941.

Patented Sept. 8, 1868.



UNITED STATES PATENT OFFICE.

G. M. PETERS, OF LANCASTER, OHIO.

IMPROVEMENT IN DROPPERS FOR HARVESTERS.

Specification forming part of Letters Patent No. **81,941**, dated September 8, 1868.

To all whom it may concern:

Be it known that I, G. M. PETERS, of Lancaster, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Droppers or Discharging-Platform for Harvesters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view of a machine embracing my improvements. Fig. 2 is a side elevation, showing the platform raised or tilted to discharge the grain. Fig. 3 is a side elevation, showing the platform in position to receive the falling grain as it is cut; and Fig. 4 represents modifications in the arrangement of parts hereinafter described.

Similar letters of reference denote corresponding parts in all the figures.

My invention relates to that class of harvesting-machines in which the grain is discharged from the platform, on which it falls as it is cut, by the movement of the platform itself; and consists in giving to the platform a reciprocating and tilting movement combined, by means substantially such as are hereinafter described, whereby the platform is quickly withdrawn from underneath the completed gavel, allowing it to drop in front of the platform and behind the cutting apparatus, as hereinafter set forth.

In the accompanying drawings, A represents a main frame; B B, the driving and carrying-wheels; C, the main axle; D, the driver's seat; E, a drag-bar; F, a lateral brace-rod, connecting the lower or free end of the drag-bar with the main frame and sustaining it in proper relation thereto. G is the finger-bar, attached at its inner end to the drag-bar, and provided at its outer end with a carrying-wheel.

The parts above referred to may be of any usual or desired construction and arrangement. The drag-bar and brace may be hinged to the frame, to adapt the cutting apparatus and platform to conform their movements to the surface of the ground over which they pass, independently of the main frame; or any other construction of machine may be substituted for that illustrated in the drawing, as my improvements are applicable to any of the

various constructions of rigid or hinged-bar machine in use.

H H' are arms, of any suitable form or material, attached by their forward or lower ends to the finger-bar, and forming supports for the platform I, arranged between them, and attached at or near its rear edge to a bent rod or crank, J, which has its bearings in the arms H. The platform is connected to the rod J by loops or hinges, which allow it to turn freely upon said rod, and, when in position to receive the falling grain, is supported at its forward edge by resting upon the rear edge of the finger-bar.

K is a crank-arm, attached to the inner end of the bent rod or crank J, the outer or swinging-end of which is connected by a pitman or rod, L, to a lever, M, mounted on the main frame, within convenient reach of the driver on seat D. A rod or link, J', is pivoted at one end to the inner arm H, and, at its opposite end, to the platform, in the manner represented in the drawing, said link serving, by its relation to the crank-arm, to give the necessary tilting movement to said platform when the latter is operated or moved backward by the vibration of said bent rod or crank J.

The platform may be made of any suitable construction, either slatted or solid, as may be preferred. A slatted platform, composed of light slats or teeth, either wood or metal, attached to a rear transverse supporting-bar, will be found advantageous in use, as combining lightness and an easy and quick delivery, but it will be apparent that other construction of platform may be used.

In operation, when the machine is drawn forward, the platform is supported in a horizontal or slightly-inclined position, with its forward edge resting upon or slightly in rear of the rear edge of the finger-bar, until a sufficient amount of grain has accumulated thereon to form a sheaf, when the driver, on his seat D, by operating the bent rod J through its connection with the lever M, moves the platform back from the finger-bar in such manner as to withdraw it from underneath the grain, the butts of which rest upon the finger-bar. As the platform is thus moved backward, the rear edge thereof is thrown upward by means of the link or rod J', causing the platform to

turn or tilt upon the rod I as a fulcrum, until it assumes a vertical or nearly vertical position, as represented in the drawings, Figs. 2 and 4, causing the grain to slide off or drop upon the ground.

The movement of the platform, in other words, is such in discharging the grain as to give to its forward edge a direct or nearly direct backward reciprocation, the vibration or tilting of the platform upon its crank-shaft or arm being such as to compensate for the tendency of movement of the platform with the crank-rod to lift the forward edge. The rear portion of the platform, being thus held and thrown upward while the forward portion is withdrawn from under the grain, serves to hold the grain until the platform has assumed its vertical or nearly vertical position, when the gavel drops upon the ground, and the platform is immediately returned to its former position to receive another gavel, passing over that deposited upon the ground.

The compound movement thus imparted to the platform is such as to cause the gavel to be deposited almost instantly and in compact form upon the ground, and the rapidity with which the gavel can be removed and the platform returned to its former position is such as to obviate the necessity for the employment of a cut-off to hold the falling grain while the completed gavel is being discharged, though such device may be readily applied in such manner as to be operated by the movement of the platform, if required.

In Fig. 4, a modification in the arrangement of the supporting-arms and bent rod and link

is shown; and it will be obvious that various other modifications in the arrangement of said parts may be made for the same purpose, still preserving substantially the same movements of the platform or the mode of operation above described.

By adjusting the relation of the link J' to the bent rod J, the throw of the platform on said rod may be varied, and by adjusting the point of attachment of connecting-rod L, either on the lever or crank, the throw of the operating-rod or bent arm, and consequently the movement of the platform, can be regulated as desired.

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

1. Hinging or pivoting the platform to a bent arm or support, by means of which it is operated in such manner as to admit of a reciprocating and tilting movement, substantially as described.

2. The bent arm or rod to which the platform is hinged, and by means of which said platform is vibrated, in combination with the rod or link for tilting the platform upon its operating-arm.

3. The bent rod or arm J, link J', crank K, connecting-rod L, and lever M, or their equivalents, in combination with the platform I, arranged and operating substantially as described.

G. M. PETERS.

Witnesses:

O. E. PETERS,
C. L. ECKERT.