

# Q. F. Messinger, Corn-Harvesters.

N<sup>o</sup> 74.928.

Patented Feb. 25. 1868.

Fig: 1

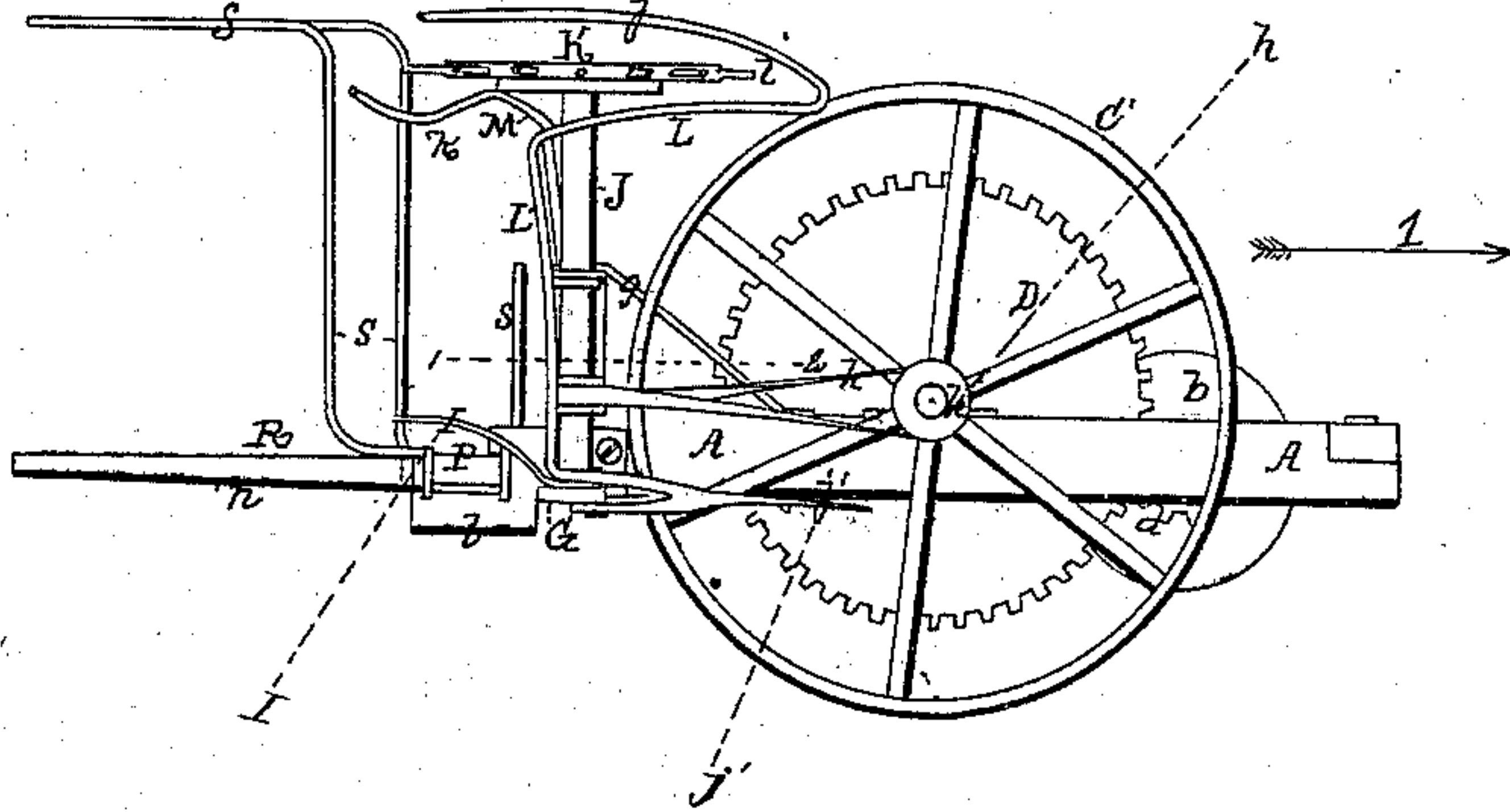


Fig: 2

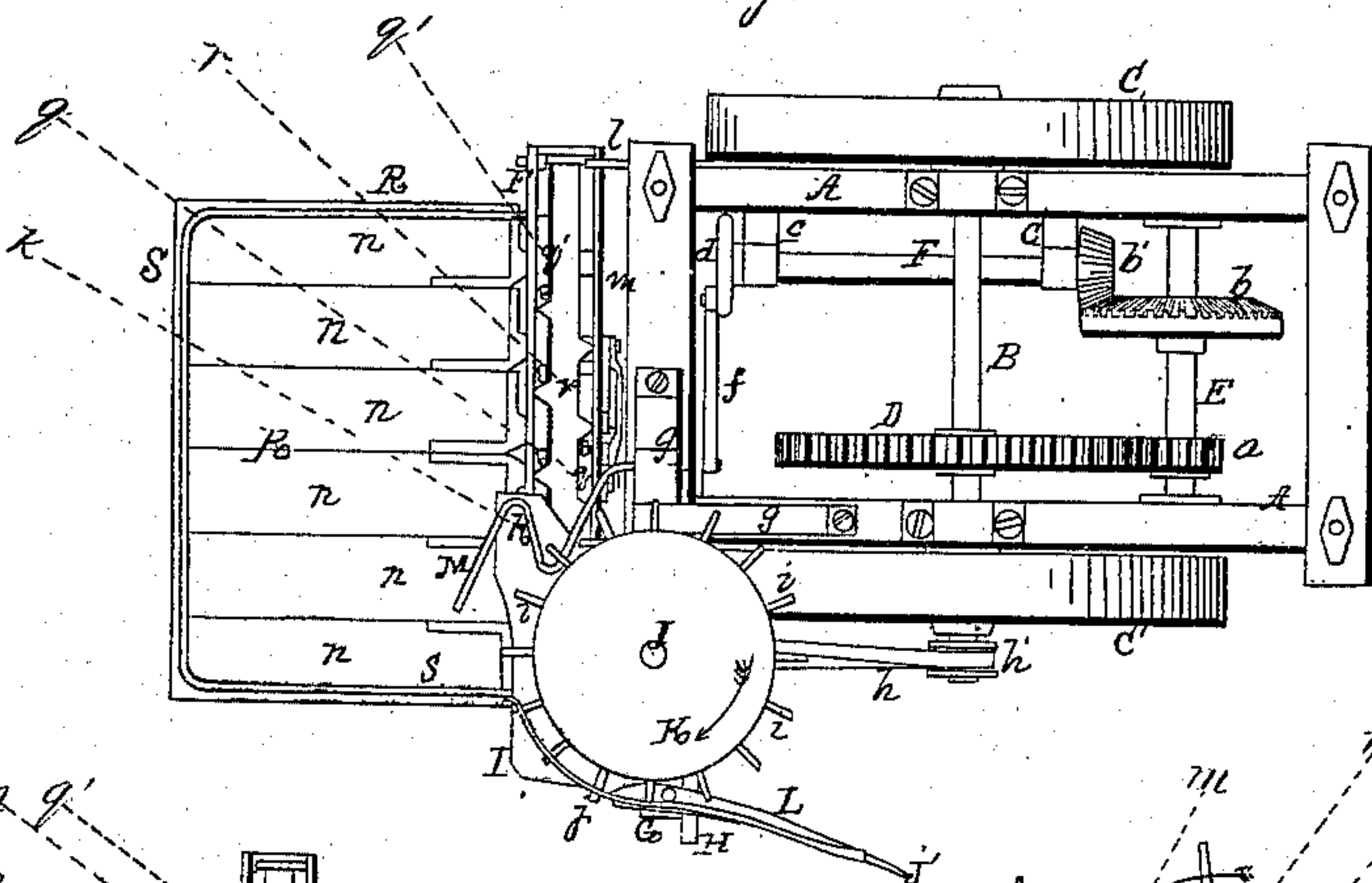


Fig: 3

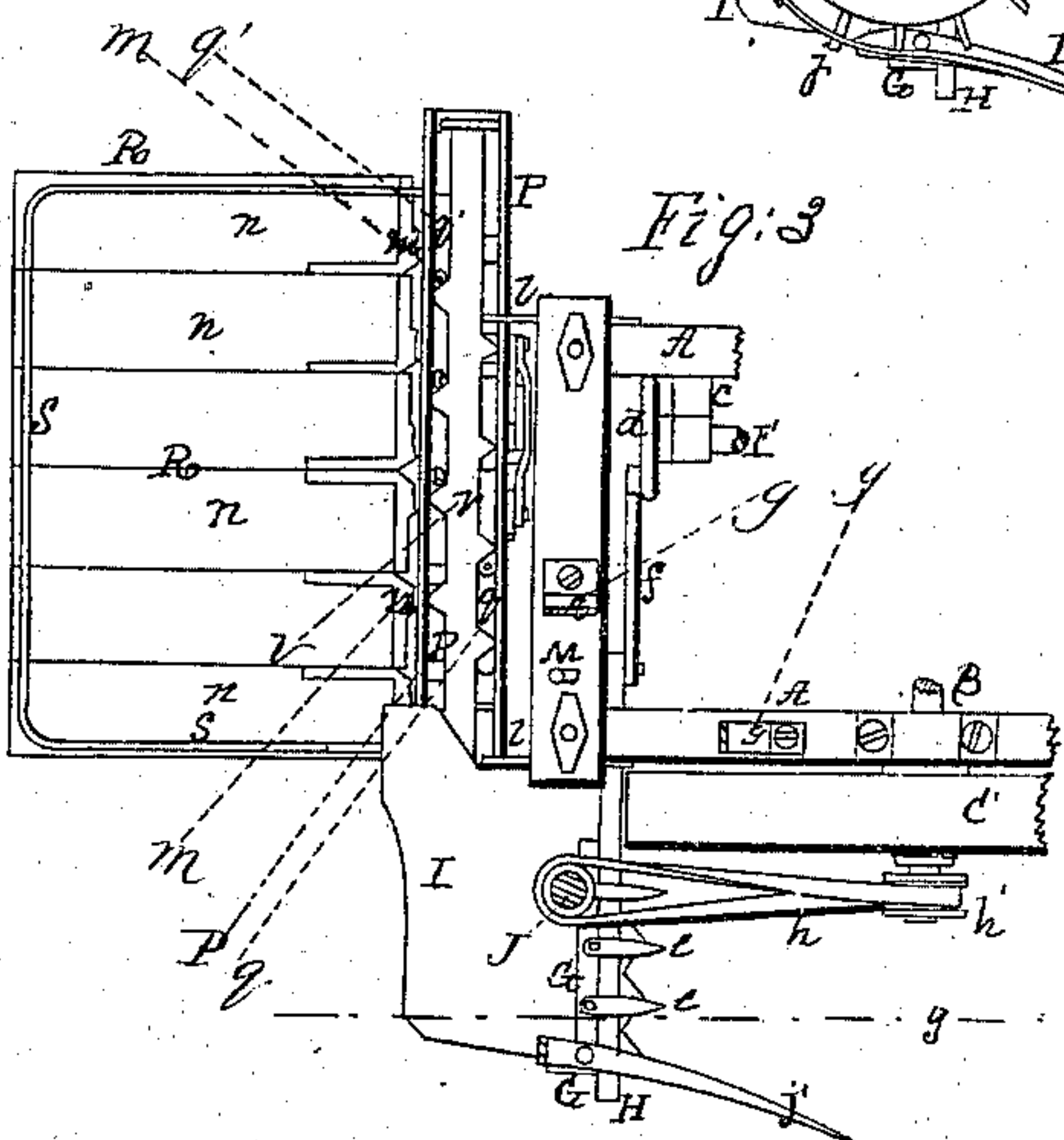


Fig: 4

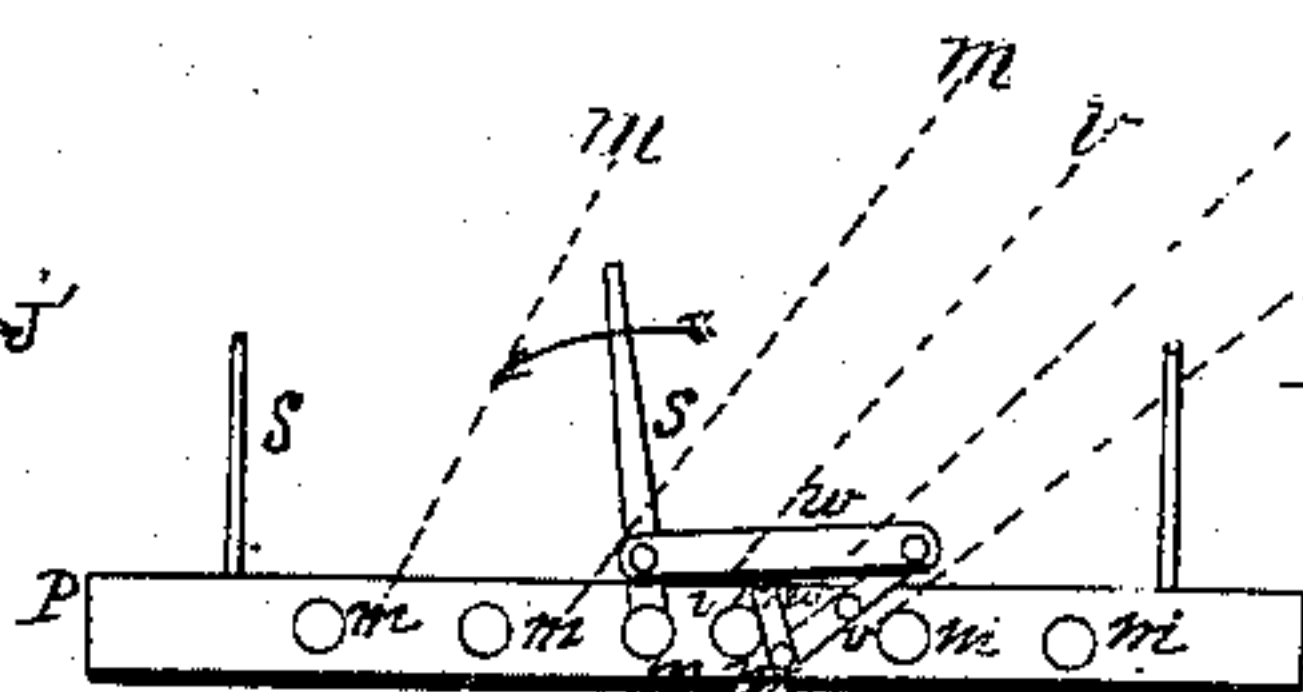


Fig: 5

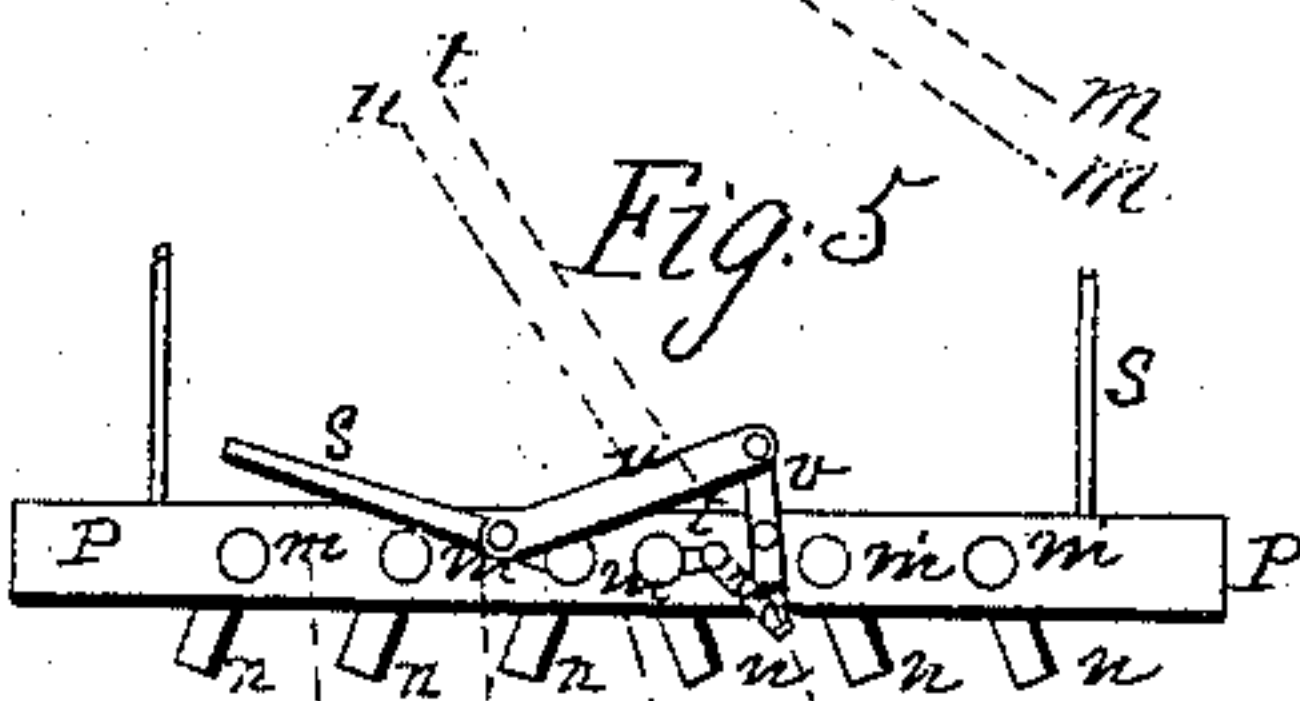
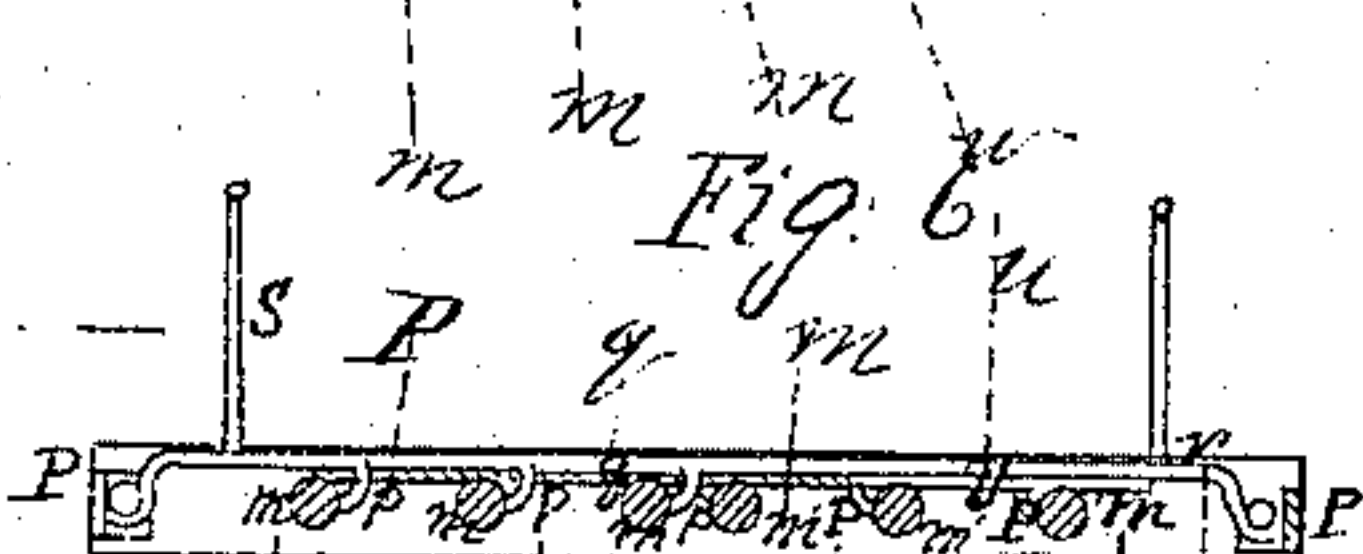


Fig: 6



WITNESSES  
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# United States Patent Office.

QUINTUS F. MESSINGER, OF EASTON, PENNSYLVANIA.

*Letters Patent No. 74,928, dated February 25, 1868.*

## IMPROVEMENT IN CORN-HARVESTERS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, QUINTUS F. MESSINGER, of Easton, Northampton county, Pennsylvania, have invented an Improved Corn-Cutting Machine; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention consists of certain mechanism, fully described hereafter, by which stalks of corn are cut, and the upper parts collected together on a platform, so as to form a shock, which is dropped to the ground at such a point as not to interfere with the future operations of the machine.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 is a side view of my improved corn-cutting machine.

Figure 2, a plan view of the same.

Figure 3 is a sectional plan view on the line 1-2, fig. 1, and

Figures 4, 5, 6, detached views, illustrating parts of my invention.

Similar letters refer to similar parts throughout the several views.

In suitable bearings on the frame A of the machine, turns the main driving-shaft B, to which are secured driving-wheels C and C', and a large cog-wheel, D, the latter gearing into a pinion, *a*, upon a shaft, E, which turns in bearings at the opposite sides of the frame. To the shaft E is secured a bevel-wheel, *b*, which gears with a pinion, *b'*, on a shaft, F, the latter turning in brackets, *c*, secured to the frame of the machine, and having at one end a crank-wheel, *d*. A finger-bar, G, is secured at one end to the frame A, at the rear of the driving-wheel C', and projects laterally from the machine, the fingers *e* of the said bar supporting a cutter-bar, H, which is connected to the crank-wheel *d* by a rod, *f*. A curved plate, I, is secured to the finger-bar G, and in the latter, and in a bracket, *g*, turns a vertical shaft, J, to which a rotary motion is imparted by a belt, *h*, from a pulley, *h'*, on the end of the driving-shaft. To the upper end of the shaft J is secured a wheel, K, from the edge of which project a number of pins, *i*, the object of which will be explained hereafter. A guide-bar, L, is secured to the finger-bar, G, and is bent in the peculiar manner shown in the drawing, so that its upper end, *j*, shall be adjacent to and correspond in curvature with a portion of the periphery of the wheel *k*, its lower end, *j'*, projecting outwards, as shown in fig. 3, for a purpose described hereafter. A rod, M, secured to the frame A, projects upwards, and is bent at *k*, as shown in fig. 2. A frame, P, is supported by and is arranged to slide in guides, *l l*, secured to the rear end of the frame A of the machine, and in this frame P turn a number of short spindles, *m* and *m'*, to the outer end of each of which is secured one end of a plate, *n*. When the spindles are in the positions shown in figs. 3 and 4, the plates *n*, ranged side by side, form a platform, R, and above the latter is a light metal frame, S, which is secured to the frame P. From each of the spindles *m*, fig. 6, projects a short curved arm, *p*, which passes through holes in a plate, *q*, resting upon the spindles, and from the spindles *m'* project curved arms *p'*, which pass through holes in a similar plate, *q'*, the two plates *q q'* being prevented from rising by a stationary plate, *r*, which is secured to the frame P. To the outer end of one of the centre spindles *m* is secured an arm, *s*, and to the adjacent spindle, *m'*, is secured an arm, *t*, and these two arms are so connected by rods *u* and *u'* to a lever, *v*, hung to the frame, that when the arm *s* is operated the spindles *m* and *m'* will be turned equally in opposite directions for a purpose described hereafter.

### Operation.

The machine is drawn over the ground in a direction parallel to the row of corn to be cut, (the position of which is indicated by the red line *y*, fig. 3.) Motion is transmitted from the driving-shaft B by the cog-wheel D, and the gearing described, to the crank-wheel *d*, and thence by the rod *f* to the cutter-bar H, to which a rapid reciprocating motion is thus imparted, the wheel K being turned in the direction of its arrow. The stalks of corn are successively severed by the cutters, those which have been beaten down being guided to the cutters by the projecting portion *j'* of the bar L. The upper ends of the severed stalks fall between the pins *i* of the wheel K, and are carried round by the latter between the periphery of the same and the rod L, and are finally

thrown against the bent portion of the rod M, their lower ends resting upon the platform I. The stalks are removed from time to time by an attendant, and are placed upright upon the platform R, their upper end resting against the frame S, and when a sufficient number of stalks to form a shock are collected upon the platform, they are bound together near their upper ends. The frame P and platform R are now moved laterally to the position shown in fig. 3, when the arm s, fig. 4, is depressed until the plates n, forming the platform R, assume the position shown in fig. 5, when the stalks forming the "shock" will fall between the plates until their lower ends rest upon the ground, the angle to which the plates are turned separating the stalks near the lower ends, thus insuring a broad base to the shock. By moving the platform R to one side before dropping the shock, the latter will be clear of the course of the machine when the next parallel row of corn is cut. As the machine moves on, the frame S passes over the top of the shock, the attendant moves the plates n to their original position, shown in fig. 2, and another shock is formed upon the platform R, and dropped as before.

I claim as my invention, and desire to secure by Letters Patent—

1. The rotating wheel K, with its pins i, in combination with the cutters, the bar L, or its equivalent, and with a platform, so connected to the rear of the machine as to be adjustable laterally for the purpose described.
2. The platform R, consisting of a series of plates, n, in combination with the devices herein described, or the equivalent of the same for operating the said plates, all substantially as and for the purpose specified.
3. The arrangement of the bent bar M and the wheel K, as and for the purpose set forth.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

QUINTUS F. MESSINGER.

Witnesses:

H. D. MAXWELL,  
G. W. STOUT.