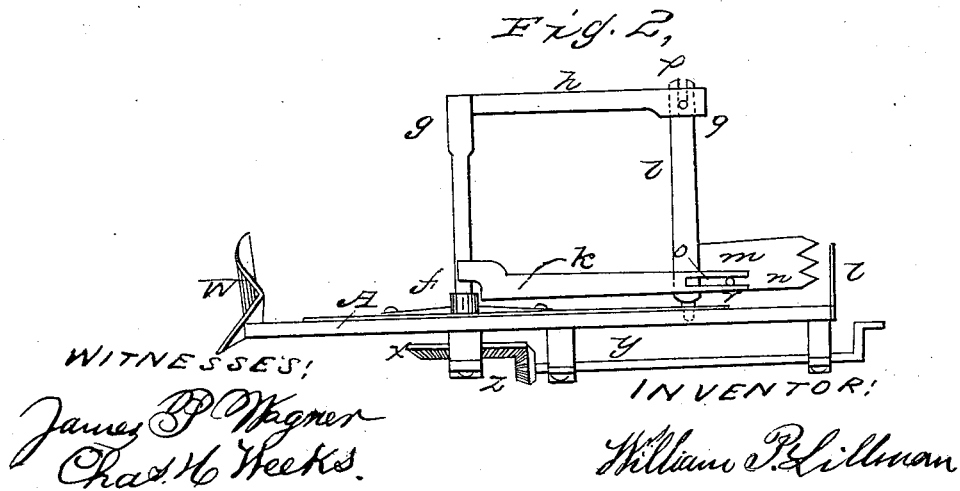
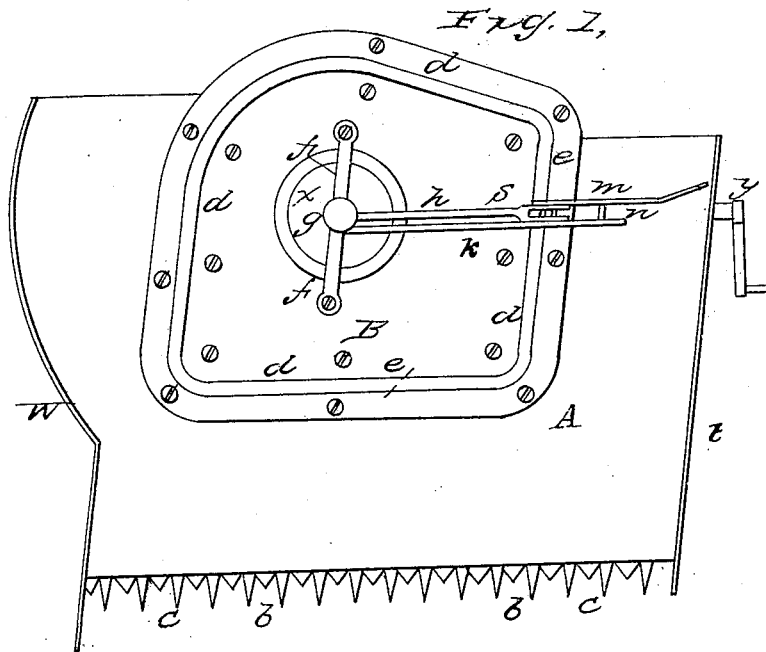


W. P. DILLMAN.

Harvester Rake.

No. 53,958.

Patented April 17, 1866.



WITNESSES:

James P. Wagner
Chas. H. Weeks.

INVENTOR:

William P. Dillman

UNITED STATES PATENT OFFICE.

WILLIAM P. DILLMAN, OF JOLIET, ILLINOIS.

IMPROVEMENT IN HARVESTER-RAKES.

Specification forming part of Letters Patent No. 53,958, dated April 17, 1866.

To all whom it may concern:

Be it known that I, WILLIAM P. DILLMAN, of Joliet, county of Will, in the State of Illinois, have invented a new and Improved Self-Raker for Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a top view, showing the table or platform of the harvester, where is located the raker; and Fig. 2 is a rear view of the raker on the platform; together with the gearing necessary to drive the raker.

The object and nature of my invention is to construct a self-raker for harvesters in a light, cheap, and simple form, and one that will be complete in its operation, delivering the grain in even and complete gavels, and at the same time it is under the entire control of the operator.

Similar letters of reference refer to similar parts in the two figures.

A is the platform, upon which is located the raker and upon which falls the cut grain. *b b* is the sickle, which is made in the ordinary form and operated in the usual way. *c c* are the fingers, constructed in the ordinary way and used for the ordinary purpose. *g* is a standard arising from any point desired on the platform, passing through the cross-bar *f f* and through the platform A, and to the lower end of which is attached the bevel-wheel *x*. *h* is the upper arm, fastened at the upper end of the standard *g*. *k* is the lower arm, and in like manner fastened to the lower end of the standard *g*. *l* is a cross-beam extending from the upper arm, *h*, to the lower arm, *k*.

The upper arm, at the end opposite which is attached to the standard *g*, is made with a vertical slot, as shown at *v*, Fig. 1. The lower arm, *k*, is likewise made with a horizontal slot at the end opposite to that which is attached to the standard *g*, as shown at *o*, Fig. 2. The cross-beam *l* is also slotted at *p*, Fig. 2.

q, Fig. 2, is a pin passing through the two arms of the slot *p* of cross-beam *l*. *m* is the rake-head attached to the cross-beam *l*. *n* is a pin fastened to the rake-head *m* and extending back through the slot *o* in lower arm, *k*.

d d d, Fig. 1, is a track or guide located upon the platform A. It is made by taking a strip of steel or other suitable metal and working it to the right shape and fastening it to the platform in the desired locality. Then take another piece of the same metal and work it to conform to the last one, only a little smaller in size, and place it within the first, leaving its outer edge at equal distances all around from the inner edge of the first, thus leaving a space between the two. All that part of the platform coming under the space between these two edges should be removed, and the inner plate, B, should be fastened by means of arms on the under side extending from the inner plate, B, to the platform A.

y is a rod through which motion is communicated from the main driving parts of the machine to the raker. *z* is a small bevel-wheel on one end of this rod.

The wheels *x* and *z* and rod *y* are made in the drawings (for better illustrating them) to extend lower down than they will be used in practice.

The cross-beam *l* is placed with its upper end in the slot *v* of the upper arm, *h*, and its lower part by means of the rake-head *m* and pin *n* rests in the slot *o* of the lower arm, while the extreme lower end passes down into the track or guide *d d d*, as shown at *r*, Fig. 2, and is not fastened tightly to either the upper or lower arms, *h* and *k*.

The operation of my invention is as follows: Motion is communicated through the rod *y* and wheels *x* and *z* to the standard *g*. This standard *g* revolves and carries with it the upper and lower arms, *h* and *k*, which in turn carry around the cross-beam *l* and rake-head *m*. As the head *m* passes along to the rear of the sickle it gathers up the cut grain and carries it along, pressing it against the side-board *t*, and discharges it in a gavel at the rear of the platform.

In consequence of the irregularity of the guide or track *d d d*, the rake-head *m* is constantly made to deviate with the irregularity of the guide or track *d d d*, and, being suspended on the two arms *h* and *k* by means of the slots *p* and *o* and pins *q* and *n*, the lower end, *r*, is allowed to move at a greater or less distance from the lower end of the standard *g*, thus constantly varying the cross-beam *l*

from a perpendicular and enabling the rake-head *m* to travel in such a line as will enable it at each revolution to carry and discharge the cut grain in gavels at the rear of the platform.

I do not confine myself to any particular form or line that the guide or track *d d d d* can be made, but reserve the right to make it in any form or shape circumstances may require.

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

1. An automatic rake for harvesters, composed of the upright standard *g*, the upper and lower arms, *h* and *k*, the rake-head *m*, the cross-beam *l*, or their equivalents, all arranged and constructed substantially as described.

2. The standard *g*, passing up through the platform and at or near the center of the guide-track *d d*, in combination with the upper and lower arms, *h* and *k*, substantially as described.

3. Suspending the cross-beam *l* between the upper arm, *h*, and lower arm, *k*, in the manner described.

4. The combination of the guide or track *d d d d* with upper and lower arms, *h* and *k*, and standard *g*, with the cross-beam *l* and rake-head *m*, in the manner and for the purpose described.

WILLIAM P. DILLMAN.

Witnesses:

JAMES P. WAGNER,

CHAS. H. WEEKS.