

(No Model.)

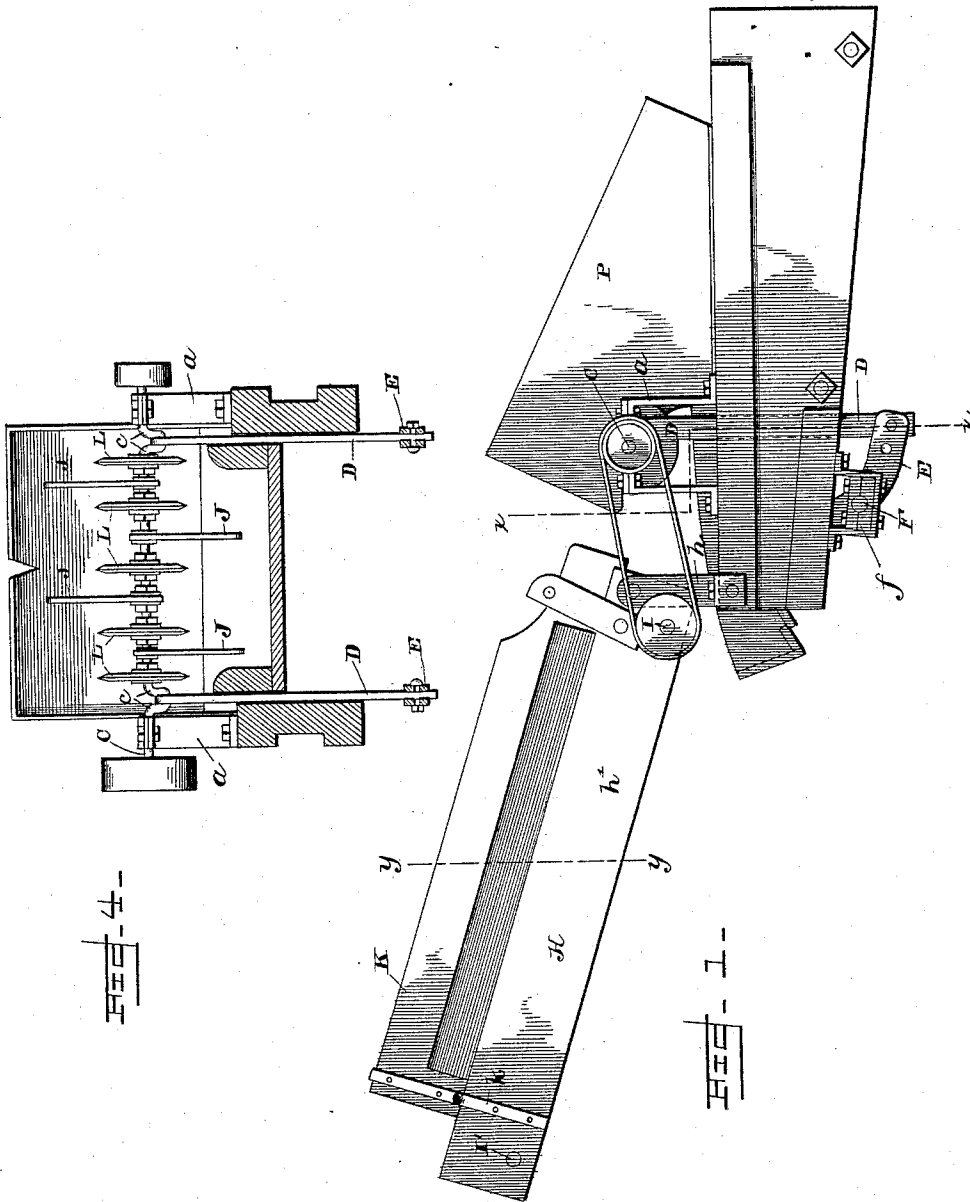
2 Sheets—Sheet 1.

J. JUEL.

SELF FEEDER FOR THRASHING MACHINES.

No. 474,254.

Patented May 3, 1892.



WITNESSES:

E. S. Duvall Jr.
Philip H. Mason

INVENTOR

John Juel.

BY *E. W. Anderson*

ATTORNEY.

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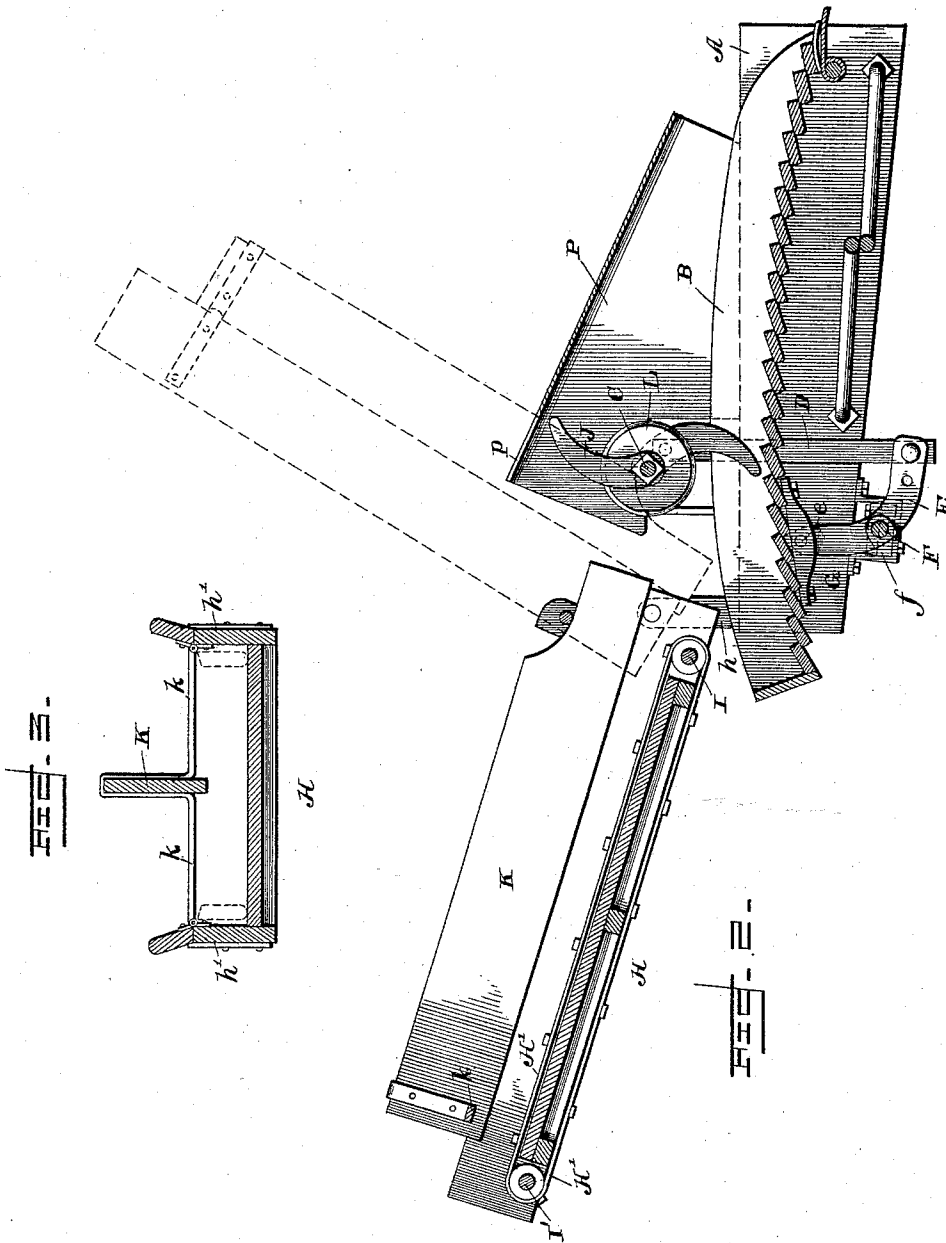
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UNITED STATES PATENT OFFICE.

JOHN JUEL, OF LARCHWOOD, IOWA.

SELF-FEEDER FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 474,254, dated May 3, 1892.

Application filed October 30, 1891. Serial No. 410,342. (No model.)

To all whom it may concern:

Be it known that I, JOHN JUEL, a citizen of the United States, and a resident of Larchwood, in the county of Lyon and State of Iowa, have invented certain new and useful Improvements in Self-Feeders for Thrashing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side elevation of the invention. Fig. 2 is a vertical longitudinal section. Fig. 3 is a transverse section of the bundle-carrier and partition-board on line *y y*, and Fig. 4 is a vertical transverse section on line *x x*.

This invention has relation to certain new and useful improvements in self-feeders for thrashing-machines; and it consists in the novel construction and combination of parts, as hereinafter specified.

In the accompanying drawings, the letter A designates a suitable frame, in which is hung an oscillating table B. Journaled in arms *a*, secured to the side portions of said frame near its rear end, is a transverse crank-shaft C, on the cranks *c* of which are loosely hung the vertical parallel oscillating arms D D, pivotally and adjustably connected at their lower ends to the curved arms or bell-cranks E E. Said arms or bell-cranks are carried by a transverse rock-shaft F underneath the table and hung in bearings *f* on the side portions of the frame. The upper ends of said arms or bell-cranks are each provided with a pivot stud or journal *e*, projecting inwardly therefrom and loosely engaging apertures in lugs or bearing-blocks G, secured to the underside of the table, and thereby forms its oscillating support. This connection gives an oscillating and longitudinally-reciprocating movement when the crank-shaft C is actuated. Said table is preferably of the form shown, having the downwardly-curved rear portion, and transversely ribbed or corrugated to enable it to more effectually feed the grain to the cylinder of the thrasher. The downward curve of the rear portion of the table has a tendency to check

the too-rapid feed of the bundles under the cutters and spreaders, where the grain might become too much jammed, and allows the bundles to become more thoroughly spread over the table before being carried under the cutters and spreaders to the cylinder.

H designates the bundle-carrier, which is pivotally secured at its forward end to arms *h* of the frame A at the rear end thereof. Said carrier is provided with the endless carrier H', carried by the shafts I I' at the front and rear ends thereof. A longitudinal central partition-board K, supported by arms *k*, secured to the side portions *h'*, divides the bundle-carrier into two longitudinal compartments. The upper portions of the sides *h'* may be hinged to the lower portions, as shown, so that when not in use they may be folded into the carrier. The bundles are discharged onto the rear portion of the oscillating table, where they are engaged by the rotary band-cutters L L. The cutters comprise a series of sharp-edged circular disks arranged at intervals on the crank-shaft C. Said shaft also carries a series of curved spreaders and feeders J, arranged between the disks L L. These spreaders or feeders carry the bundles to the cutters, which sever the bands, and the cutters and spreaders together serve to keep the grain disposed straightly and evenly upon the table as it is passed thereunder.

It will be observed that the heavier parts of the machine are attached directly to the separator instead of being secured to the bundle-carrier, which gives them a solid and firm support, and but one oscillating table is employed in carrying the grain to the cylinder instead of two.

In the forward upper end of the guard or hood P of the feeder is a recess *p*, which is designed to form a seat for the central longitudinal partition K of the bundle-carrier when the latter is not in use, said carrier by reason of its pivotal connection with the frame A being adapted to be turned upwardly thereagainst, and obviating the necessity of disconnecting it therefrom when it is desired to move the machine.

The feeder is extremely simple in construction, as will be observed, and is much lighter and more easily driven than those ordinarily in use.

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

1. In a self-feeder for thrashing-machines, the combination, with the frame having the bundle-carrier connected thereto, of the crank-shaft journaled in said frame near the rear end thereof, the oscillating vertical arms carried by the cranks on said shaft, the bell-cranks to which the lower portions of said arms are connected, said bell-cranks having journals thereon, and a corrugated table having bearings loosely engaged by said journals, said crank-shaft also carrying a series of band cutters and feeders, substantially as specified.

2. In a self-feeder for thrashing-machines, the driving-shaft having the cranks thereon, and the table-oscillating mechanism connected to said cranks, a series of rotary cutters also carried on said shaft, and a series of curved spreader and feeder arms carried by said shaft between said cutters, substantially as specified.

3. The combination, with the frame having the feed-table thereon and the hood or guard arranged over said table and formed with a recess at its rear portion, of the bundle-car-

rier hinged to said frame and having a central longitudinal vertical partition adapted when the carrier is folded up against the frame to rest in the recess in said hood or guard, substantially as specified.

4. In a self-feeder for thrashing-machines, the combination, with the frame, of the oscillating feed-table supported thereon, said feed-table being transversely corrugated throughout its length and curved downward at its rear portion, substantially as specified.

5. The combination, with the feed-table, formed with a series of continuous transverse corrugations and bent downwardly at its rear portion, of the crank-shaft journaled over said rear portion having mechanism connected thereto for oscillating said table, said shaft carrying a series of rotary cutter-disks and a series of spreader and feeder arms between said disks, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN JUEL.

Witnesses:

ERIK PAULSEN,
WM. OLSEN.