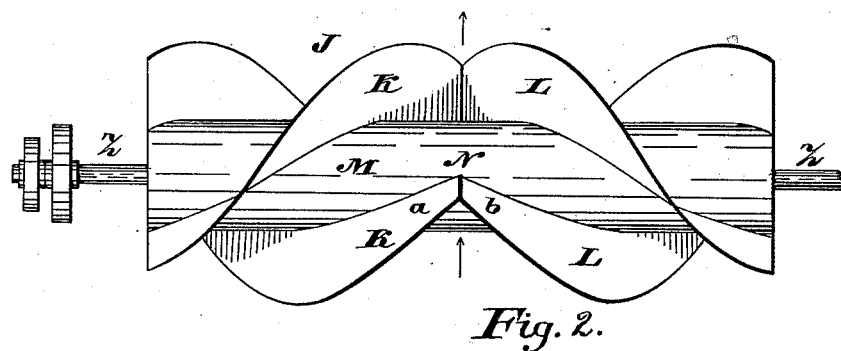
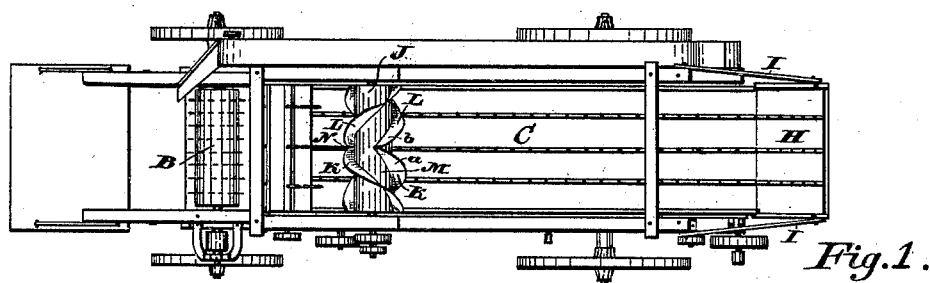


(No Model.)

T. H. RUSSELL.
THRASHING MACHINE.

No. 421,975.

Patented Feb. 25, 1890.



WITNESSES:

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THOMAS H. RUSSELL, OF MASSILLON, OHIO.

THRASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 421,975, dated February 25, 1890.

Application filed June 6, 1888. Serial No. 276,274. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. RUSSELL, a citizen of the United States, and a resident of Massillon, county of Stark, State of Ohio, have invented a new and useful Improvement in Thrashing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to improvements in thrashing-machines; and it consists in providing means for distributing the thrashed straw upon the separator and for an increase of separating capacity.

With these ends in view my invention consists of the construction of detail and combination of parts, as hereinafter described, and set forth in the claims.

Figure 1 is a plan view of a thrashing-machine embodying my invention, and Fig. 2 is a plan view of the rotary distributing-beater.

Similar letters of reference indicate corresponding parts in both the figures of the drawings.

As my invention is applicable to many of the well-known thrashing-machines now in use, I will proceed to describe it, referring to other parts of the machine only as conjunctive thereto.

A represents the supporting-frame of a thrashing-machine, B the thrashing-cylinder, and C a separating-table. The latter is suspended by links and actuated by a crank-shaft, as is usual. The particular form of separating-table is not, however, material to my present invention.

In the rear of the thrashing-cylinder and over the separating-table at such location as may best accomplish the purpose there is provided a rotary distributing-beater J, supported by journals Z, that rest in journal-boxes secured to the frame A. Said beater is rotated by a belt-connection with the cylinder in the usual and well-known way, said beater having spiral wings, as K and L, of different pitch in the manner of a right-and-left-hand screw, L representing a right and K a left hand thread, forming diverging deflecting spiral

surfaces, as *a* and *b*. The wings K and L are placed about and secured to a central body M and spaced apart, substantially as shown in Fig. 3, the inner ends joined, forming a separating or wedging point, as N, and deflecting surfaces, as *a* and *b*, by which the straw is thrown from the center of the shaking-table to the sides.

The object and operation may be briefly stated: A large portion—say two-thirds of all the grain thrashed—passes under the thrashing-cylinder at or near its middle portion, and the result is to throw a great amount of straw upon the center of the shaking-table and so compact it that the thrashed grain in and upon the straw does not fall through the straw to the shaking-table and thence to the grain-board, but is carried out with the straw and lost. The object of this device is to prevent this loss and to facilitate the operation of separating.

The distributing-beater is rapidly rotated in the direction indicated by the arrows. The thrashed straw is thrown upon the vibrator, as stated, and is caught by the points N of the deflecting-wings, by which it is thrown transversely and rearwardly, thinning it out and evenly distributing it over the vibrator, by which the separating of the grain from the straw is greatly facilitated.

Having thus fully described the nature and object of my invention, what I claim is—

1. In a thrashing-machine, the combination, with the thrashing-cylinder, means for conveying the thrashed grain away from the cylinder, and a separating-table, of a rotary distributing-beater having diverging spiral wings, whereby the thrashed grain is distributed laterally over the separating-table, substantially as set forth.

2. The combination, with a thrashing-cylinder and a shaking-table, of a rotary distributing-beater having diverging spiral wings and located over the shaking-table at the rear of the thrashing-cylinder, whereby the thrashed grain is simultaneously beaten and distributed laterally over the shaking-table, substantially as set forth.

3. The combination, with a thrashing-cyl-
inder and means for conveying the grain
rearwardly from the cylinder, of a rotary dis-
tributing-beater provided with sets of diver-
5 ging spiral wings, the sets or pairs of diverging
wings meeting centrally in wedge form, sub-
stantially as set forth.

In testimony whereof I have hereunto set
my hand this 24th day of April, A. D. 1888.

THOMAS H. RUSSELL.

Witnesses:

S. J. PATTERSON,
A. SEIDEL.