

JOHN SMITH.

Improvement in Thrashing-Machines and Grain-Separators.

No. 114,984.

Patented May 16, 1871.

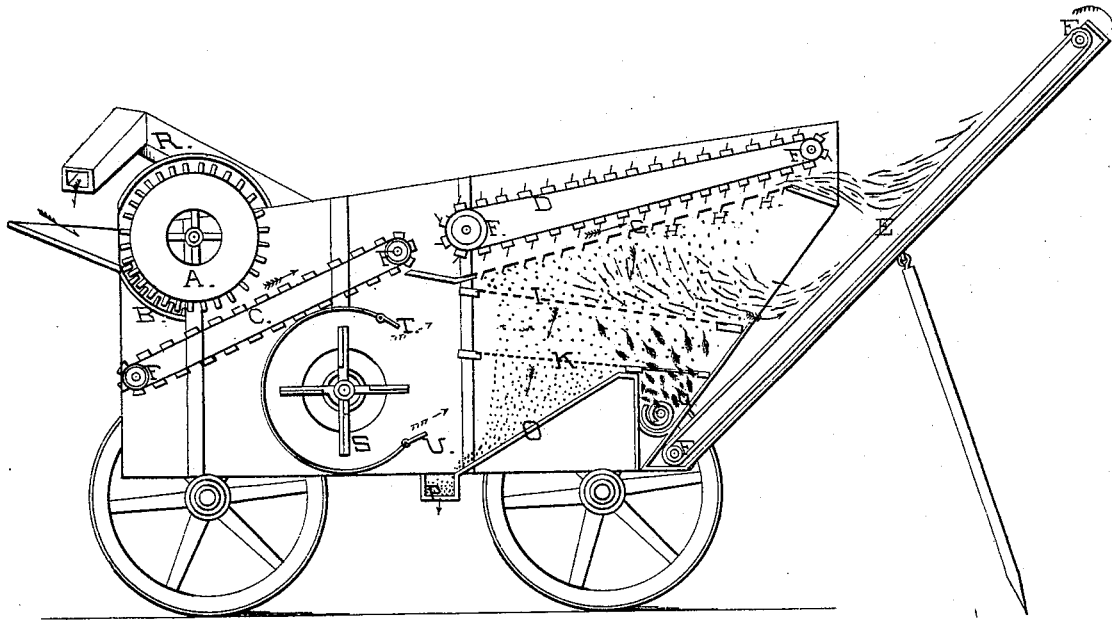


FIG. 1.

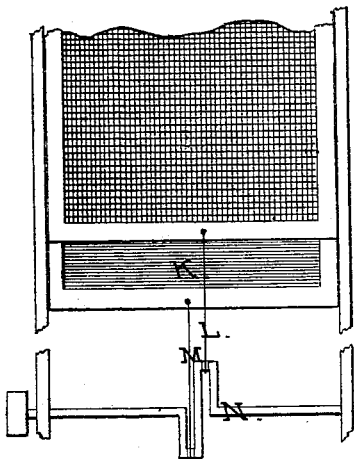


FIG. 2.

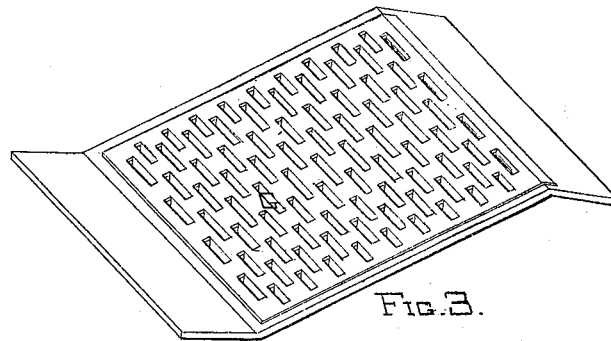


FIG. 3.

Witnesses.

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Inventor.

*John Smith*  
*By J. B. Smith*  
*his atty in fact*

# United States Patent Office.

JOHN SMITH, OF BURLINGTON, WISCONSIN.

Letters Patent No. 114,984, dated May 16, 1871.

## IMPROVEMENT IN THRASHING-MACHINES AND GRAIN-SEPARATORS.

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

I, JOHN SMITH, of Burlington, in the county of Racine, in the State of Wisconsin, have invented certain Improvements in Thrashing-Machines and Grain-Separators, of which the following is a specification.

### *Nature and Object of the Invention.*

My invention is for a thrashing-machine with the upper straw-carrier arranged for the straw to pass under it and over a wide-meshed screen, so that the grain may fall on screens below, which move in opposite directions lengthwise of the machine.

### *Description of the Drawing forming Part of this Specification.*

Figure 1 is a side view of the machine;

Figure 2, a plan view of the screens on which the grain falls; and

Figure 3, perspective view of the screen under the straw-carrier.

### *General Description.*

A is the thrashing-cylinder.

B, the concave.

C, straw-carrier under the cylinder.

D, the straw-carrier under under which the straw passes.

E, straw-carrier which carries the straw onto the stack.

F, pulleys which carry the various straw-carriers.

G, the screw under straw-carrier D, with oblong openings crosswise, and made to break joints and the forward side of the openings, the piece forced out to make the openings hanging down on the under side of the opening.

H, the hanging pieces on screen G.

I, sieve or screen below the upper screen G.

K, screen under screen I.

L, pitman to screen I.

M, pitman to screen K.

N, shaft and cranks to which pitmen L and M are attached.

O, board onto which the grain falls, and runs out at hole P.

Q, box in which fall the grain-heads which may not be thrashed, and is conveyed along to the other end, and thence carried to the thrashing-cylinder G.

R, the conveyer or elevator.

S, fan.

T, a small door to the fan-case.

U, another door to the fan-case. These doors are for the purpose of giving direction to the wind.

V, standards raised above the top of screen G, leaning in the direction which the straw passes, for the purpose of separating the straw as the same passes over or through them to sift out the wheat.

The operation of this machine is:

As the grain passes through the thrashing-cylinder it falls onto carrier C, and is carried along till it is taken by carrier D and carried down under carrier D and across screen G, where the grain falls through the openings, and the straw is carried on and falls off over onto carrier E, and carried up over it out onto the stack; and as the grain and heads not thrashed fall onto screen I, and as that is shook by the crank and shaft, the grain falls through onto screen K, the straw passing along over it and off over the end onto the straw-carrier E; and as the grain and heads not thrashed fall onto screen K, the grain falls through onto board O and out through the opening; the heads pass over or through the screen and into box Q, and are carried back to the cylinder by the conveyer or elevator. In this way the grain is well cleaned.

### *Claim.*

I claim as my invention—

The combination, in the thrashing-machine and grain-separator herein described, of the cylinder A, endless straw-carrier C, endless rake D, the screen G, constructed as described and shown, the sieves I K, fan S, and shaft N, provided with cranks L M, all arranged to operate in the manner and for the purpose set forth.

JOHN SMITH.

Witnesses:

JACOB GILL,

CHRISTIAN ERDMANN.