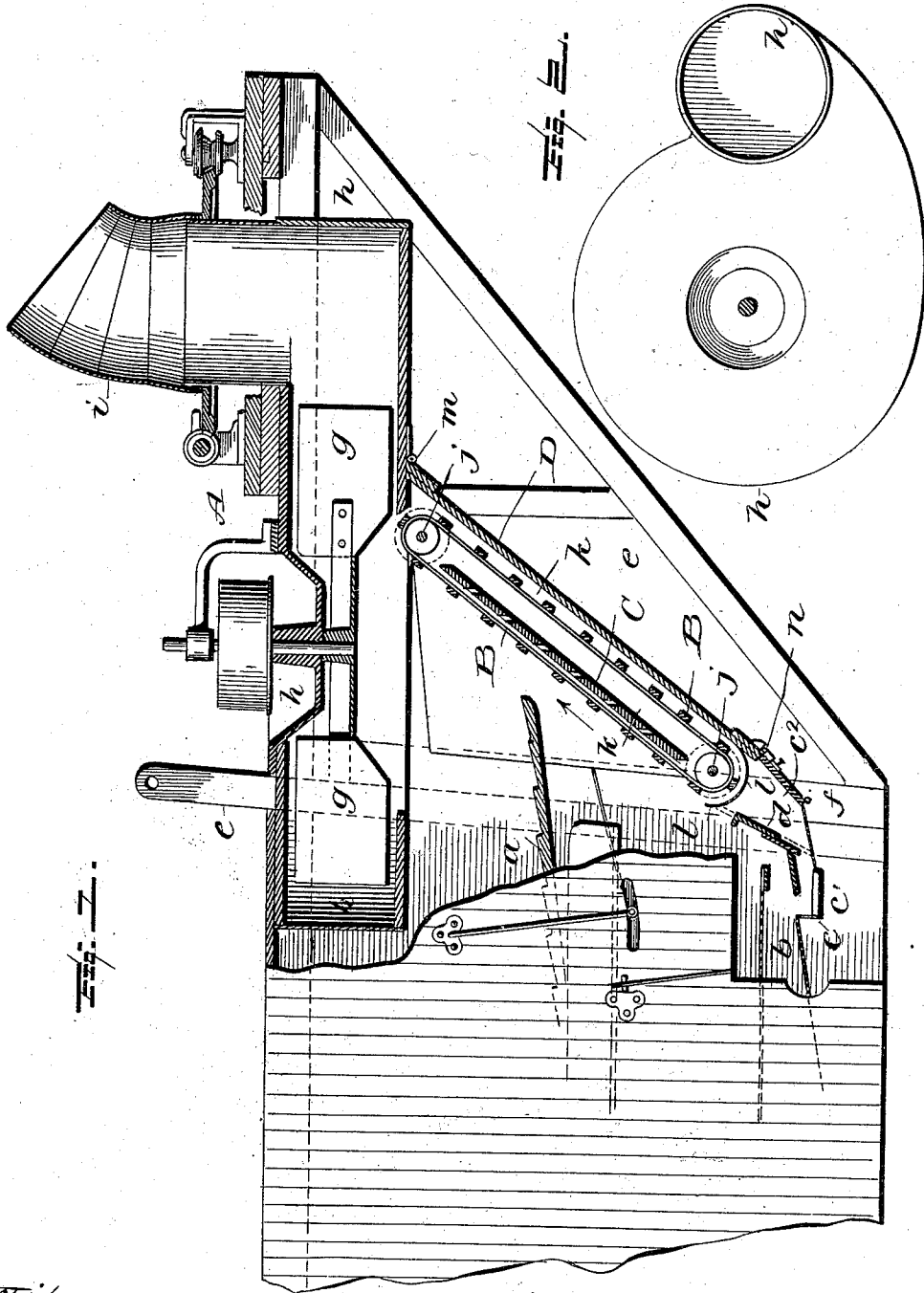


(No Model.)

F. W. ROBINSON.
STRAW STACKING ATTACHMENT.

No. 558,843.

Patented Apr. 21, 1896.



Witnesses:
L. C. Hills.
J. B. Keefe

Inventor:
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by Marshall D. Baly
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UNITED STATES PATENT OFFICE.

FRANCIS W. ROBINSON, OF RICHMOND, INDIANA, ASSIGNOR TO THE
ROBINSON & COMPANY, OF SAME PLACE.

STRAW-STACKING ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 558,843, dated April 21, 1896.

Application filed December 5, 1894. Serial No. 530,898. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS W. ROBINSON, of Richmond, Wayne county, Indiana, have invented certain new and useful Improvements in Straw-Stacking Attachments for Use in Connection with Thrashing-Machines, of which the following is a specification.

My invention has relation to means for recovering from the straw after it has left the separator end of the thrashing-machine, and before it reaches the chute or trunk of the stacker, grain which may be carried along with it, and for returning such grain to the thrashing-machine.

To this end my invention consists in the construction, arrangement, and combination of devices which will first be described by reference to the drawings accompanying and forming part of this specification, and will then be more particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical central longitudinal section of so much of a thrashing-machine and straw-stacking attachment therefor as needed for purposes of explanation. Fig. 2 is a plan or top view of the fan-case.

A is the rear or discharge end of a thrashing-machine of ordinary or suitable construction. The straw passes out over the vibratory fingers *a*. The grain riddle or screen is shown at *b*, the tailings-spout at *c*, and the shoe (in which the tailings spout or trough is located) at *c'*. The tail-board is shown at *d*, this board being vertically adjustable for purposes well known. The rear timbers of the thrashing-machine are shown at *e*. Fitted up against and secured to them are the vertical front timbers *f* of the straw-stacker attachment. A straw-stacking attachment thus applied is not here claimed, being the subject of my prior application, Serial No. 475,362, filed May 24, 1893. The stacker which I have shown in illustration of my invention is a "wind-stacker," so called. The fan proper is shown at *g*, the fan-case at *h*, and the "stump" of the discharge trunk or chute at *i*. The straw from the thrashing-machine passes up through the eye of the fan and thence out to and through the trunk or chute.

Between the stacker-fan and the discharge

end of the thrashing-machine are located the devices in which my invention is principally comprised. These devices consist in the main of the endless moving slatted carrier B and the stationary floor-like riddle or screen C, over which the acting-face of the carrier moves.

The carrier consists of tranverse slats (extending the width of the machine) secured at the ends to belts which are mounted upon pulleys or wheels *j*, one set of which is power driven, the power being taken by belting or other suitable motion-transmitting instrumentalities from any convenient part of the thrashing-machine. The carrier revolves in the direction of the arrow in Fig. 1. It is located in an inclined position, its lower end being near to the tail-board *d*. It thence slants upwardly toward the eye or mouth of the fan, as shown.

Back of the carrier is an inclined solid floor D, which forms the bottom of the passage *k*, that is closed at top by the stationary riddle or screen C. This passage at its lower end opens into and communicates with an extension *c''* of the shoe *c'*, which in turn leads to the passage beneath the tail-board that communicates with the tailings-spout. Thus any grain or the like which may drop through the screen C will, through the inclined passage *k* *c''*, be led back into the tailings-spout where it will be returned along with the tailings to the cylinder end of the thrashing-machine in the usual way. In this manner I am enabled to save any grain which, carried along with the mass of straw, will fall therefrom as the latter in loosened condition is passing above the screen C to the stacker-fan. Any straw that may fall with the grain is caught by the slatted carrier, and by it is carried up to the inlet of the jaw, where it will be caught up and drawn into the fan-case along with the main body of the straw. Any straw that by chance may still adhere to the carrier will, as the latter travels around, be caught by the curved deflecting wire fingers *l* at the lower end of the carrier, and thus will be prevented from passing back into the shoe of the thrasher.

In the arrangement shown in the drawings the fan is horizontal and located in the top of the stacker, so that its mouth or inlet will

overhang the carrier. Although I am not confined to the particular arrangement, still I prefer it for the reason that the screen C is better positioned with relation to the fan to catch the grain which may drop from the straw passing into the latter. In this arrangement the carrier and its appurtenances close the rear end of the thrashing-machine. It oftentimes, however, is desirable to change the riddle or riddles *b* of the thrashing-machine according to the kind of grain to be operated on. To permit access to the interior of the thrasher for this purpose, I form the carrier-support as a hinged door, the same being hinged at the top at *m* to the body of the stacker, and being held in closed position at the bottom by one or more turn-buttons *n* or any other suitable or preferred fastening. By unlatching the carrier-frame at the bottom and then swinging the same back and upon its hinge, access can conveniently be had to the interior of the thrasher.

Having described my invention and the best way now known to me of carrying the same into practical effect, what I claim herein, and desire to secure by Letters Patent, is—

1. The combination, with the discharge end of a thrasher and a pneumatic straw-stacker, of an endless traveling carrier interposed between the thrasher and the stacker-fan, and extending from the shoe of the thrasher to the mouth or inlet of the fan, a screen or riddle

below the acting face of the carrier, and a trough below the screen leading back to and communicating with the tailings-spout of the thrasher.

2. In combination with the discharge end of the thrasher, a pneumatic straw-stacker, having at its top a horizontal fan, a traveling endless rearwardly and upwardly inclined carrier extending between the thrasher and the eye of the fan, and arranged beneath the latter, a riddle or screen below the carrier, and a trough below the screen extending back to and communicating with the shoe of the thrasher, substantially as set forth.

3. In combination with the thrasher and the stacker, the endless traveling carrier, and the riddle or screen below the same, arranged in inclined position between the discharge end of the thrasher and the stacker trunk or chute, and a supporting-frame for said parts hinged at one end to the body of the stacker, and adapted to be opened as a door, to expose and permit access to the discharge end of the thrasher, substantially as hereinbefore set forth.

In testimony whereof I have hereunto set my hand this 1st day of December, 1894.

FRANCIS W. ROBINSON.

Witnesses:

F. B. KEEFER,
R. E. MANNING.