2 Sheets—Sheet 1.

S. E. OVIATT.

Thrashing Machine.

No. 47,326. Patented April 18, 1865.

FIG. 1

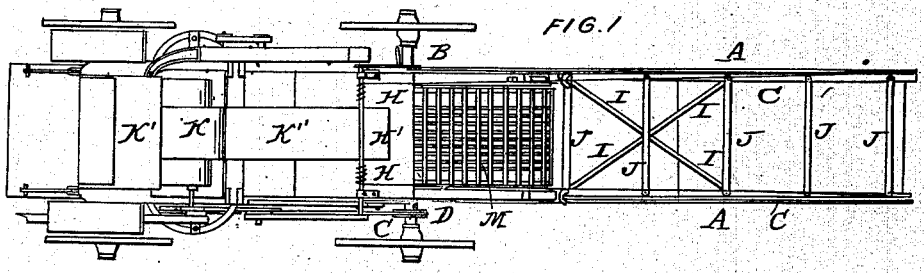


FIG. 2

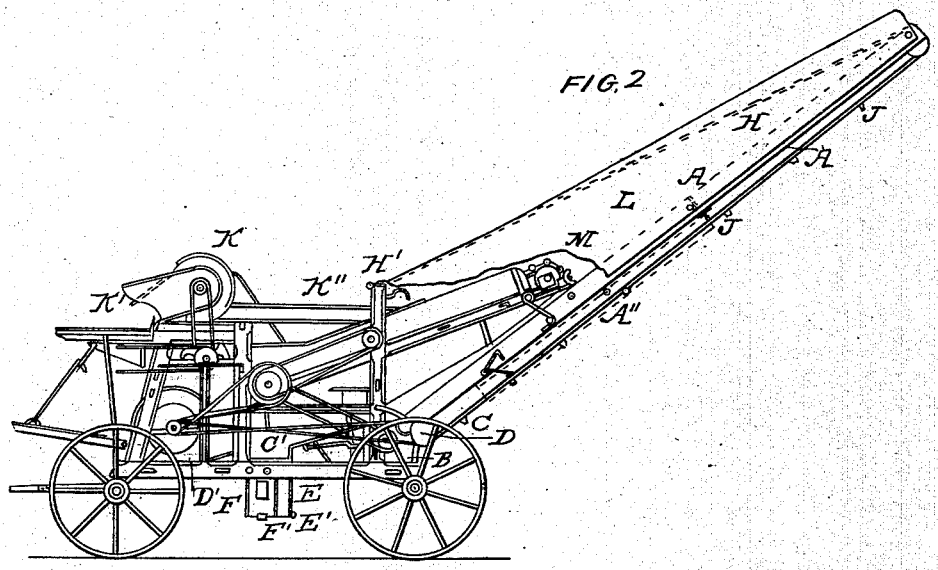


FIG. 6

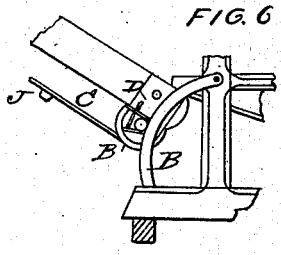
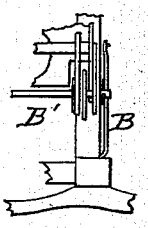


FIG. 7



WITNESSES

W. H. Burnings

Henry Voth

INVENTOR

S. E. Oviatt

2 Sheets—Sheet 2.

S. E. OVIATT.

Thrashing Machine.

No. 47,326. Patented April 18, 1865.

FIG. 3

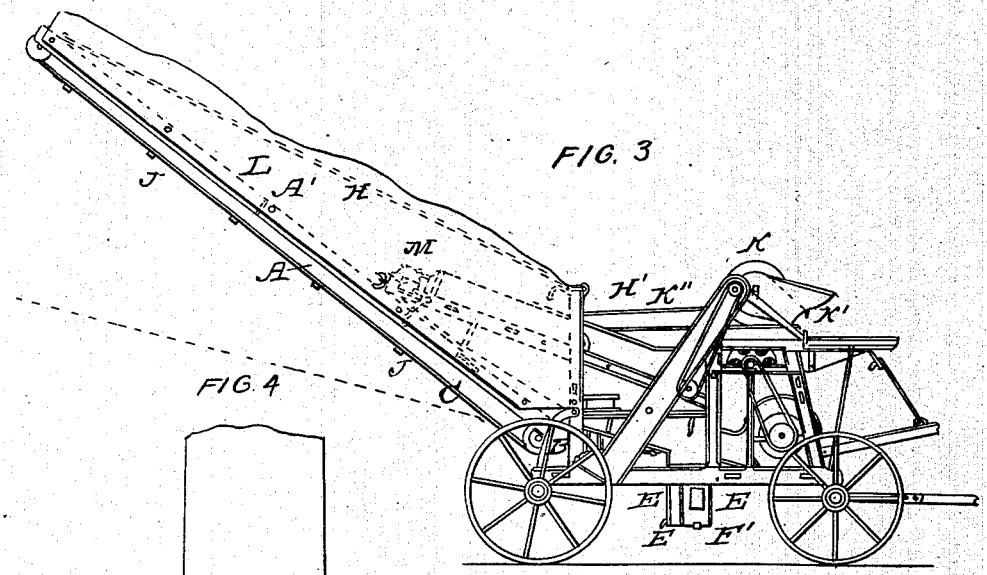


FIG. 4

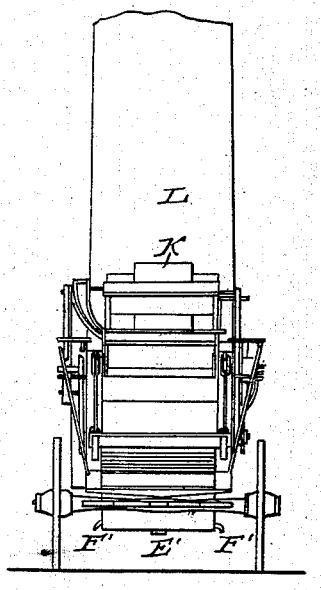


FIG. 5

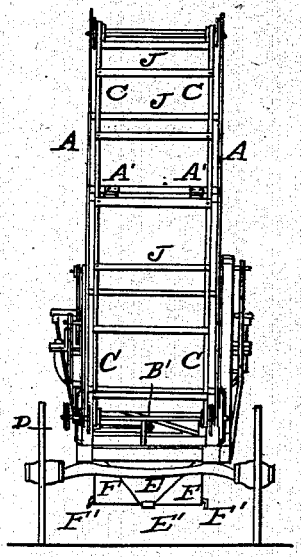
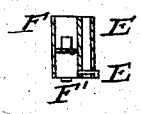


FIG. 8

FIG. 9



WITNESSES

W. H. Burnings

Henry Voth

INVENTOR

S. E. Oviatt

UNITED STATES PATENT OFFICE.

S. E. OVIATT, OF RICHFIELD, OHIO.

IMPROVEMENT IN THRASHING-MACHINES.

Specification forming part of Letters Patent No. **47,326**, dated April 18, 1865.

To all whom it may concern:

Be it known that I, S. E. OVIATT, of Richfield, in the county of Summit and State of Ohio, have invented new and useful Improvements in Thrashing-Machines; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a top view. Figs. 2 and 3 are side views. Fig. 4 is a front view. Fig. 5 is a back view; and Figs. 6, 7, 8, and 9 are detached parts.

My application relates to certain improvements upon two patents and a reissue granted to me under date of July 10, 1860, May 14, 1861, and August 13, 1861, and in this specification I shall describe only those parts that are involved in my present improvement.

A represents the stacker. This is attached to the hind part of the frame of the machine by means of the curved traces B, to which boxes are attached to receive and support the shaft B′, which carries the endless elevator-belts C C. Upon one one end of the shaft B′ is a pulley, D, around which the chain or band C′ passes, and which gives motion to the elevator-belts C C. The shaft B′ thus forms an articulating attachment to the frame of the machine, by which I am enabled to elevate or depress the free end of the stacker without changing the relation of the pulley D to the driving-pulley D′. In this manner the stacker can be made to deliver the straw at any desired height without a change in the length of the band C′ or the elevator-belts C C.

At A′ the side pieces of the stacker are hinged, so that the free end, embracing nearly one-half, can be folded backward, as indicated by the dotted lines at A″, in Fig. 2. This folding back is for the purpose of convenient and safe transportation without the trouble of removing the stacker from the machine.

H H represent cords, one end of which are secured to the outer end of the stacker, the other ends being secured to and pass around a shaft, H′, situated upon the top of the back posts of the frame of the machine. The shaft H′ has a crank, by which it can be turned, and the cords H H can thus be wound up upon the shaft H′. The distance from the shaft H′ to the shaft B′ forms the base of a triangle, the perpendicular being the side pieces, A, and the hypotenuse the lines H, consequently by letting out or taking up the lines H by turning the shaft H′, upon which they are wound the free end of the stacker can be depressed or elevated at pleasure.

To prevent the carrier-straps C from running off their pulleys, I apply to them the braces I I, by means of which they are retained in their proper positions upon their pulleys. This defect has been remedied heretofore by the application of a third strap, running over a third pulley; but this makes the machine more complicated and expensive, and I avoid this by the application of the braces I.

Bars J are fastened to the belts C C, as shown in the drawings, and which, in connection with the belts C C, form the carriers that convey the straw from the revolving screen M to the top of the stack.

K represents a fan-case, which is placed above the cylinder of the machine. The middle portion of this fan case is occupied by a fan. (Not shown in the drawings.) The mouth of the case K′ extends over the feed-table, so as to receive the dust from the cylinder, the fan being supplied with air through this mouth. A flap (shown at K′ in Figs. 2 and 3) is secured inside the mouth in such a position as to be easily drawn downward by the ingoing current of air, and which partially closes the mouth if the current is too strong. The flap may be of thin metal, as tin, or it may be supported by a weak spring.

K″ represents a hollow trunk, which leads from the fan-case K to the back part of the machine, and enters the chamber of the revolving screen M just below the shaft H′, thus adding the draft of the fan in the case K to that of the separating-fan beneath the cylinder, and in this manner conveying the dust arising from the cylinder into the common separating current; or this trunk may be so arranged as to convey the dust from the cylinder to any desired place of discharge. By this arrangement the wheat or grain drawn in and thrashed by the fan within the case K is separated just as that thrashed by the cylinder, and the blast of air, pressing the straw down upon the carrier-aids in cleaning and prevents clogging. Another great advantage which is gained by this ar-

rangement is that it keeps the atmosphere around the machine, and especially around the feed-table, free from dust.

L represents a hood of oiled cloth, which covers the sides and top of the stacker and a large portion of the chamber of the revolving screen M, and thus forming an inclosed channel, through which the straw, chaff, and dust are conveyed away from the operators of the machine.

E represents a receptacle for the tares that are separated from the grain. It is placed immediately beneath the shaking screen, from which it receives the tares. These are discharged from the receptacle by means of the sliding gate E′.

F represents the grain receptacle. This is also placed beneath the shaking screen, and receives the grain therefrom.

G G represent inclined planes, placed in the middle of the grain-box F, at the bottom of which, upon each side, is placed the sliding gates F′, through which I am enabled to draw the grain from either or both sides of machine, as may be found most convenient.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. Discharging the blast from the case K above the thrashing-cylinder through a pipe or flue upon the separating-carrier between the thrashing-cylinder and the tail-board, for the purpose of bearing down the straw upon the separating-carrier and of forcing the same along without clogging, as well as for clearing the front of the machine from dust, substantially as and for the purposes described.

2. Hinging the stacker to the rear end of the thrashing-machine in such a manner that it is perfectly free to be elevated or depressed on said hinge without changing the relative positions of the pulleys D and D′, which operate the elevator-belts of the stacker, substantially as and for the purposes descried.

3. The braces I I, in combination with the carrier C C and J, as described.

4. The grain-box F, with the inclined planes G G and gates F′, so arranged as to draw the grain from either side of the machine, as herein specified.

S. E. OVIATT.

Witnesses:
W. H. BURRIDGE,
B. F. FLAGG.