

(No Model.)

W. C. ADAMS.
THRASHING MACHINE.

No. 463,883.

Patented Nov. 24, 1891.

Fig. 1.

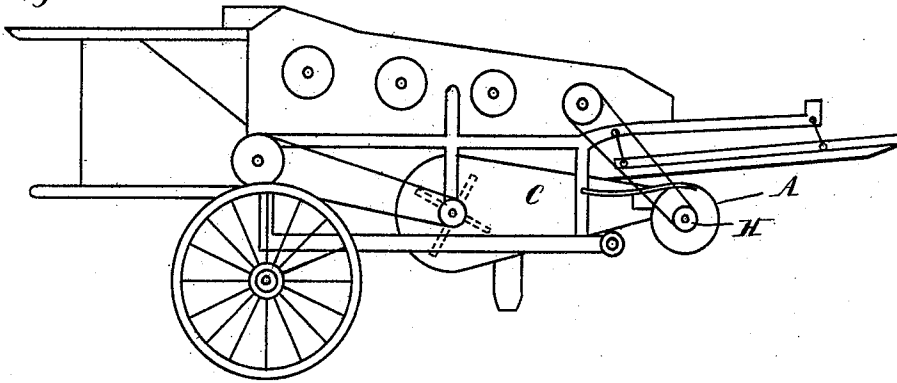


Fig. 1.

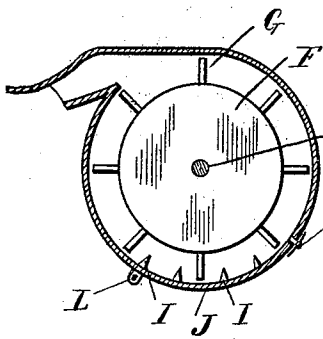


Fig. 3.

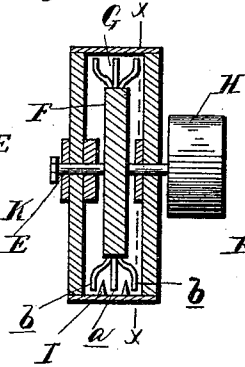


Fig. 2.

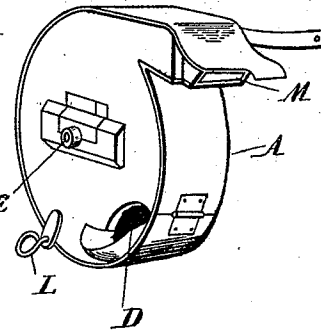
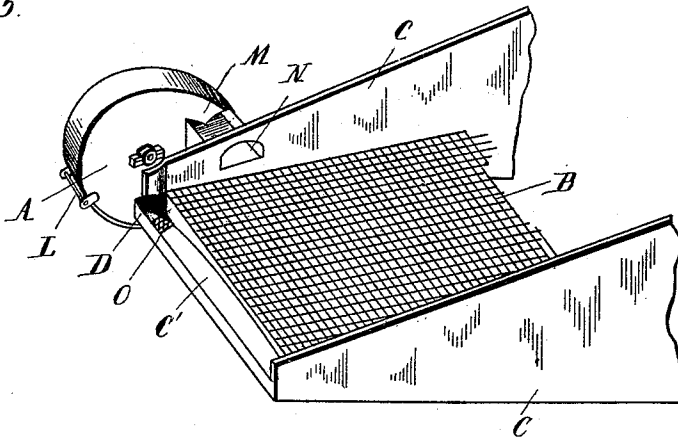


Fig. 5.



Witnesses
A. L. Kabbel
P. M. Hulbert

Inventor

William C. Adams

By *Thos. J. Maguire* for
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM C. ADAMS, OF ROCHESTER, MICHIGAN.

THRASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 463,883, dated November 24, 1891.

Application filed April 1, 1891. Serial No. 387,312. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. ADAMS, a citizen of the United States, residing at Rochester, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Thrashing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in auxiliary thrashing attachments especially designed for bean or grain thrashers; and it consists in the peculiar construction of a thrashing-cylinder, with a rotating thrashing-head therein, adapted to receive the tailings and to thrash and elevate the same again to the screens.

The invention further consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a diagram elevation of a thrashing-machine to which my attachment is applied. Fig. 2 is a detached perspective view of the attachment. Fig. 3 is a central vertical cross-section. Fig. 4 is a section on line *xx* in Fig. 3. Fig. 5 is a perspective view of the attachment, showing its arrangement in connection with the screen.

A is the casing of my attachment, which is secured at the lower end of the screen B, which has sides C, and through which the draft from the combined cylinder and fan ascends, the beans or grain coming from the thrashing-cylinder above falling upon the screen, while the lighter particles are blown away by the draft. The tailings will pass down the screen to the chute C', inclined toward the casing of the attachment.

D is a feed-aperture in the lower side of the casing through which the tailings enter the attachment.

Within the casing A is a shaft E, upon which is secured a head F, having the radially-extending forks G, preferably provided with a central tooth *a* and two side teeth *b*, as plainly shown in Fig. 3. Motion is imparted to the shaft in the head from the pulley H, connected with any suitable drive-pulley on the machine.

I are a series of thrashing-teeth formed in the lower side of the casing, within and pre-

erably upon the door J, which is hinged at K, forming a part of the casing.

L is a locking-pin for holding the door in its closed position.

It is evident that the tailings will be drawn in by the revolution of the head F and will be thrashed by means of the teeth G and I in the rapid revolution of the head and carried to the top of the casing, where it will be discharged through the discharge-chute M, beneath which is the lateral return-chute N, which brings the material back onto the screen B, where the beans will pass through the screen and the finer particles are blown away by the blast, as before described.

It will be seen that by attaching this auxiliary thrasher at the foot of the screen I can dispense with the elevator ordinarily employed to return the material to the thrashing-cylinder to be carried again through the machine, and this auxiliary thrasher can be operated with much less power than such an elevator, is less expensive to build, and will take up the tailings by themselves separated from the rest of the material to be thrashed, and it will perform its work much more thoroughly than will be the case if mingled with the new material being fed in through the main thrasher. In case any material collects in the casing I can remove it by opening the door J.

O is a sand-screen, preferably placed in the chute C, near the aperture D of the casing A.

What I claim as my invention is—

1. In a thrashing-machine, the combination, with a screen for the tailings, of an auxiliary thrashing and elevating attachment into which the tailings are fed, and a chute leading out from the thrashing attachment to a point above the screen, substantially as described.

2. In a thrashing-machine, the combination, with the screen for the tailings, of an auxiliary thrashing attachment adapted to receive the tailings therefrom at the lower end, and an exit-chute from said thrasher connected with the screen between its ends, substantially as described.

3. The combination, in a thrashing-machine, of the screen B, the tailings-chute C', the auxiliary thrashing attachment having an inlet-aperture at its lower edge connected with said

chute, a thrashing-cylinder, a suitable toothed concave, and a discharge-chute at the upper end connected with the screen between its ends, substantially as described.

- 5 4. In a thrashing-machine, the combination, with the tailings-screen having an inclined chute across the discharge end thereof, of an auxiliary tailings-thrasher consisting of a casing having an inlet-aperture in the lower part
10 thereof at a point adjacent to the end of the chute, a thrashing-cylinder in the casing, a

door in the lower part of the casing below the cylinder, teeth on the inner face of the door, and a discharge-chute at the upper end of the casing connecting the same with the screen, 15 substantially as described.

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

WILLIAM C. ADAMS.

Witnesses:

E. M. BARNES,

A. F. CAMPBELL.