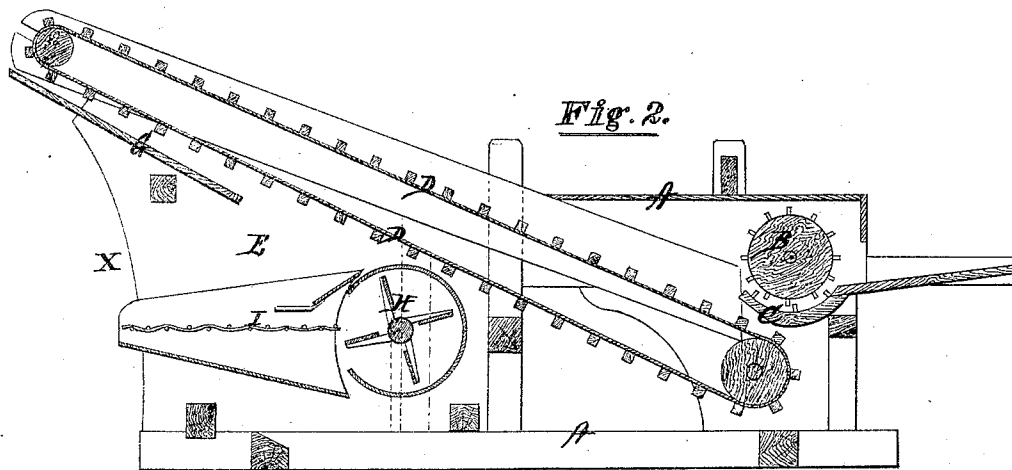
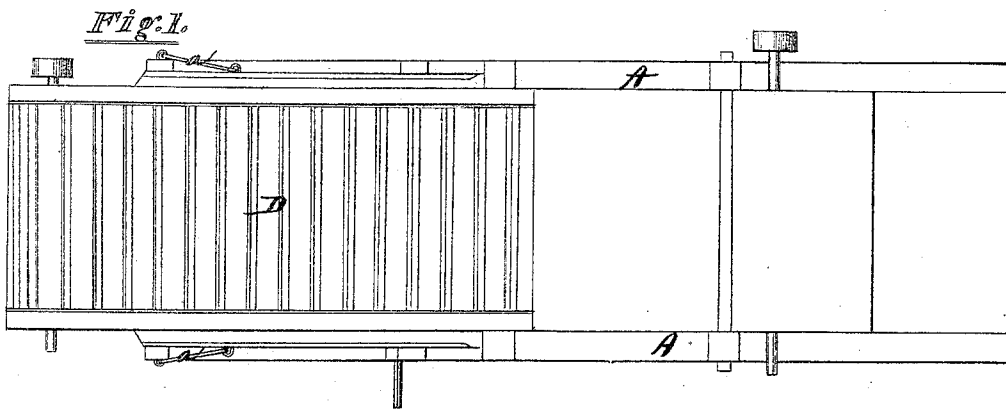


M. H. MANSFIELD.

Improvement in Thrashing-Machines.

No. 114,313.

Patented May 2, 1871.



Witnesses.

Chas. Kenyon.

D. D. Kane.

Inventor.

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Fig. 3.

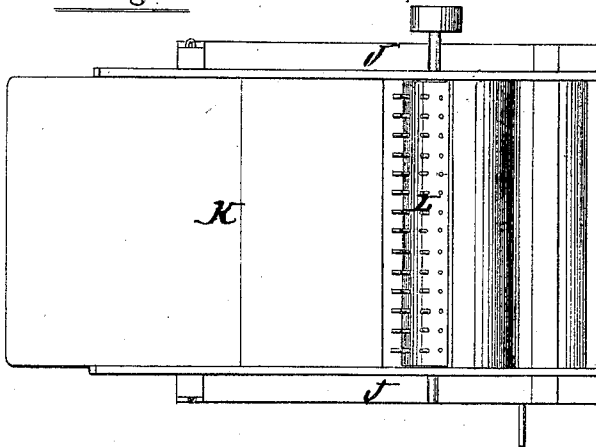
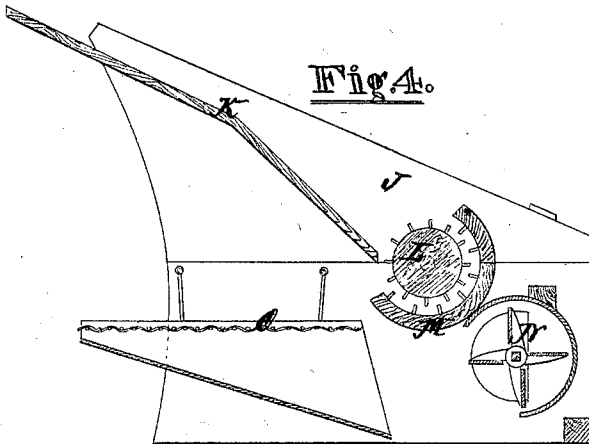


Fig. 4.



Witnesses.

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United States Patent Office.

MARTIN H. MANSFIELD, OF ASHLAND, OHIO:

Letters Patent No. 114,313, dated May 2, 1871.

IMPROVEMENT IN THRASHING-MACHINES.

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

To all whom it may concern:

Be it known that I, MARTIN H. MANSFIELD, of Ashland, in the county of Ashland and State of Ohio, have invented a new and valuable Improvement in Thrashing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is my machine in plan view, when arranged as a thrashing-machine and fanning-mill;

Figure 2 is a longitudinal vertical section of the same;

Figure 3 is a plan view of the clover-seed hulling and cleaning apparatus; and

Figure 4 is a longitudinal vertical section of the same.

The nature of my invention consists in the construction and arrangement of a "combined grain-separator and clover-seed thrasher and huller," as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation.

The machine complete is constructed of three parts:

First, a main part with thrashing-cylinder and concave, and with the endless grain and straw-belt;

Second, a fanning-mill or winnowing machine, for cleaning and separating the grain from the chaff; and

Third, a clover-seed hulling and cleaning-machine with cylinder and concave, fan and screens.

The grain-thrasher and separator is formed by the combination of parts 1 and 2, in which combination the machine is constructed similarly to the well-known "Pitt thrashing-machine."

These parts need, therefore, no further description than merely to mention the various parts by letter.

A is the frame of the thrasher;

B is the thrashing-cylinder;

C, the concavity under the cylinder; and

D is the endless slatted belt.

E is the frame of the separator;

G, the inclined board near the top;

H, the fan; and

I, the screens.

The separator-frame E is placed in rear of and directly under the endless belt D, and fastened to the thrasher-frame A by means of hooks *a a*, as shown in fig. 1. Thus combined the machine is used for thrashing and cleaning all kinds of large grain, as wheat, rye, oats, barley, &c.

The clover-seed thrashing, hulling, and cleaning-machine is formed by combining parts 1 and 3, and thus combined is used in thrashing, hulling, and cleaning clover and timothy-seed.

J is the frame of part No. 3, at the upper rear end

of which is an inclined board, K, which leads downward to the hulling-cylinder L and concavity M.

Under and in front of this concavity is situated the fan N, and in rear thereof are the screens O.

By unhooking the hooks *a a* the separator can readily be removed and the seed-huller be substituted.

The operation of my machine is as follows:

First, for thrashing and separating grain the sheaf of grain is fed to the thrashing-cylinder B of the main frame A. The thrashed grain, straw, and chaff is discharged on the slotted-endless belt D; the grain and chaff fall and settle into the cells or spaces between the slats; the straw is carried on the top of the slats and discharged at the top and rear end of the machine; the grain and chaff fall on the inclined board G, and thence to the screens I, where the grain is separated from the chaff by the blast from the fan and the action of the screens.

Second, for thrashing, hulling, and cleaning clover-seed the clover is fed to the thrashing-cylinder and concavity; the clover-straw, and clover-heads or bolls which contain the seed, are discharged on the slatted endless belt; the heads or bolls fall and settle between the slats; the straw is carried on the top of the slats and is discharged at the top and rear end of the machine; the bolls or heads of clover fall on the inclined board K, and thence are drawn down by the endless belt to the hulling-cylinder L and concavity M; after being acted upon by the hulling-cylinder and concavity by passing between them, the clover-seed and chaff is discharged onto the screens; by the blast from the fan N and the action of the screens O the clover-seed is separated from the chaff and dust.

The main object and advantage of my invention is to produce a machine with its several parts for thrashing all kinds of grain and seeds at a much less cost than to build and use each machine separately.

This object is effected by so constructing the main frame A, which contains the thrashing-cylinder and the endless belt, that the supplemental frames E and J, respectively, containing the proper devices to finish the operation in the one case by separating grain from chaff, or in the other case by hulling and cleaning clover-seed, the thrashing in each case being performed by the devices in frame A.

Having thus fully described my invention,

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

The arrangement of the thrashing-frame A, provided with the thrashing-cylinder B, endless belt D, and recess X, in the manner and for the purposes specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MARTIN H. MANSFIELD.

Witnesses:

J. A. McCLUSKY,

JEFF SPRENGLE.