N. MENDENHALL.

Improvement in Corn-Planters.

No. 133,109. Patented Nov. 19, 1872.

Fig. 1.

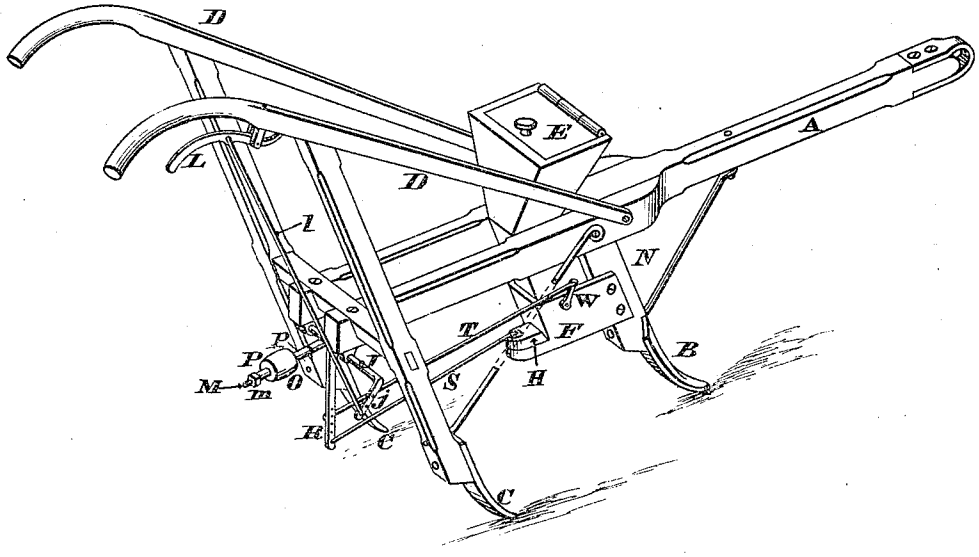


Fig. 2.

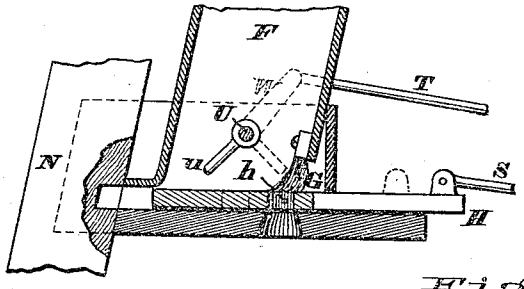


Fig. 3.

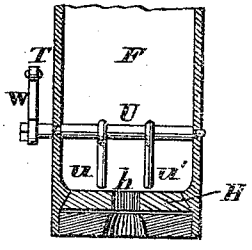
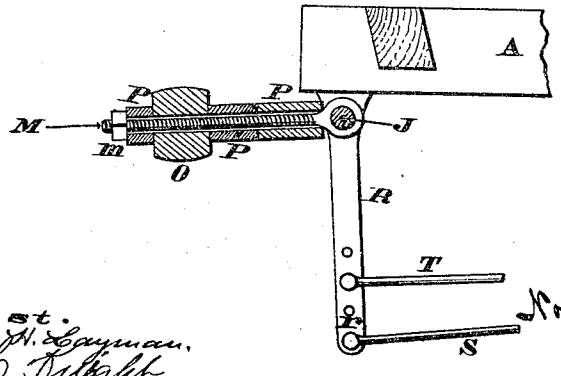


Fig. 4.



Attest.
Jas. N. Layman.
O. Knight

Noah Mendenhall
By Knight Bros.
Att'ys.

UNITED STATES PATENT OFFICE.

NOAH MENDENHALL, OF GREENSBURG, INDIANA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **133,109**, dated November 19, 1872.

To all whom it may concern:

Be it known that I, NOAH MENDENHALL, of Greensburg, Decatur county, Indiana, have invented certain Improvements in Corn-Planters, of which the following is a specification:

This invention is an improvement on the corn-planters patented to me December 6, 1870; and the first part of my present improvements consists in dispensing with the spring for retracting the seed-slide and substituting therefor a weighted lever, which weight is capable of being adjusted in such a manner as to operate upon said slide with a greater or less degree of force, as occasion may require. The second part of the present improvement relates to a pair of vibrating agitators, wherewith the grain is more thoroughly loosened than with the arrangement previously devised by me, the details of these devices being hereinafter fully described.

Figure 1 is a perspective view of an implement embodying my improvement; Fig. 2 is a longitudinal section; and Fig. 3 is a transverse section of the seed-discharging devices. Fig. 4 is a section view of the weighted lever.

Of the above views, Figs. 2, and 3, and 4 are drawn on an enlarged scale.

The beam A, furrowing-share B, covering-shares C, handles D, hopper E, grain-box F, cut-off G, slide H, rock-shaft J, trigger L, and standard N, being precisely similar to those in my aforesaid patent, need no further description. Projecting rearwardly from the rock-shaft J is a screw-threaded rod, M, having a nut, *m*, which serves to retain in position upon said rod the weight O and a number of short tubes or sleeves, P. This weight can be placed at the extreme rear end of the rod; or it can have one or more or all of the sleeves interposed between it and the nut, as may be necessary.

In case the grain in the hopper should be damp, or should for any other reason cause an unusual amount of friction upon the slide, the weight is to be shifted toward the nut, so as to exert a greater pressure upon the rod, and consequently upon the slide, through the medium of devices to be hereafter explained.

When the slide moves with any degree of freedom the weight can be adjusted toward the rock-shaft J so as to diminish the pressure upon the rod M, and in some cases it may be found that the sleeves will be sufficient without any other additional weight.

Projecting downwardly from the rock-shaft J is an arm, R, having perforations *r* for the attachment of rods S and T, the former of which actuates the seed-slide H, while the latter communicates motion to the agitators. These agitators consist of two pins, *u u'*, which project from a horizontal shaft, U, that is journaled transversely of the seed-box F, as more clearly shown in Figs. 2 and 3. This shaft U projects through one side of the box F, and has attached to its outer end an arm, W, with which the rod T connects. The agitators *u u'* are placed one on each side of the aperture *h* of the slides, and said agitators vibrate simultaneously with but oppositely to said slide, and with an upward stirring, as well as longitudinal, that very effectually prevents the binding or clogging of the seed.

The seed-slide and agitators are operated from the trigger L through the medium of rod *l* and arm *j*, the latter being secured to or forming part of rock-shaft J.

In the old form of agitator the operative-rod would sometimes become bent, and on that account bind in the seed-box, and thus prevent the stirrer acting; but in the present arrangement the vibrating agitators can never become useless from any cause whatever.

Claims.

1. In combination with the seed-slides H *h*, the rock J *j*, screw-threaded rod M, nut *m*, adjustable weight O, and one or more shiftable sleeves, P, for the object designated, when used in combination with the operating devices L *l* or their equivalents.

2. In combination with the seed-box F and reciprocating slide H *h*, I also claim the vibrating shaft U, stirrers *u u'*, arm W, and operating devices T R J L *l*, or their equivalents, as herein explained.

In testimony of which invention I hereunto set my hand.

NOAH MENDENHALL.

Witnesses:
GEO. H. KNIGHT,
JAMES H. LAYMAN.