(Model.)

L. SCOFIELD.

CORN PLANTER.

No. 252,265. Patented Jan. 10, 1882.

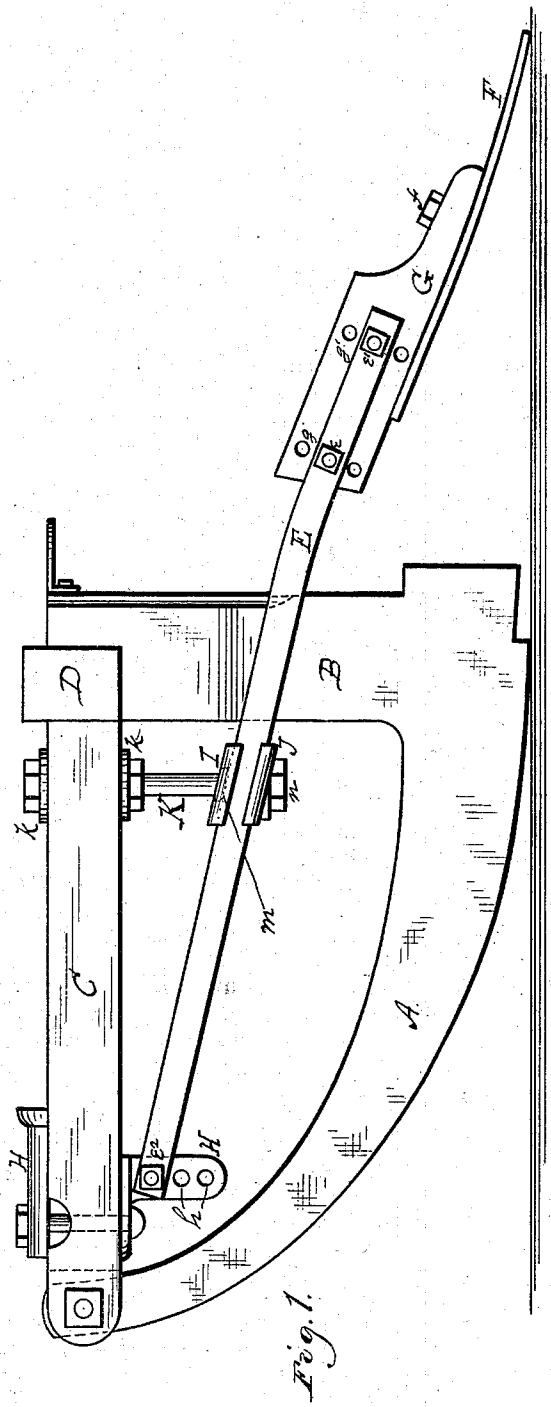


Fig. 1.

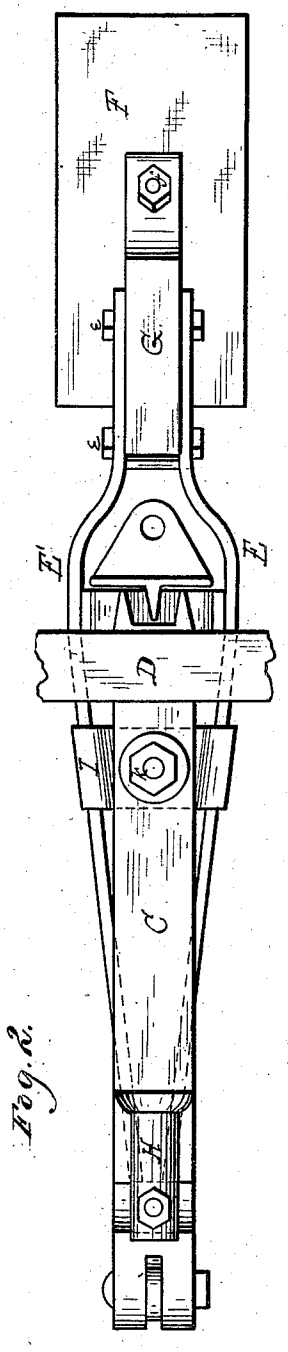


Fig. 2.

Witnesses.
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UNITED STATES PATENT OFFICE.

LEVI SCOFIELD, OF CEDAR RAPIDS, IOWA.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 252,265, dated January 10, 1882.

Application filed August 30, 1881. (Model.)

To all whom it may concern:

Be it known that I, LEVI SCOFIELD, of Cedar Rapids, in the county of Linn and State of Iowa, have invented a certain new and useful Improvement in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description and specification thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, showing one of the runners, the standard, and two top bars of a corn-planter with my improvement attached, and Fig. 2 is a top plan view of the same.

Similar letters of reference indicate the same parts of the machine.

This invention has reference to the devices employed to cover the corn after it has been dropped into the furrow; and it consists, first, in the divided adjustable drag-bar by which the covering-plate is operated, and, secondly, in the means for effecting the various adjustments of said plate, both separately and combined.

In the drawings, A represents the runner; B, the standard; C, the longitudinal top bar, and D the transverse top bar. These devices are represented because they are the usual devices employed in the construction of corn-planters; but the invention may be used with any other construction to which it is applicable.

The invention consists in the covering-plate F, the drag-bar E E′ G, by which said covering-plate is drawn along after the machine and held down to its work, and the means for adjusting the inclination of the drag-bar and covering-plate to enable the latter to be adjusted in height without disturbing its inclination, or in inclination without disturbing its height, or both in height and inclination simultaneously.

The form of the covering-plate is not new, and may be varied without affecting the invention. As here represented, it consists of a curved metal plate about fifteen inches long, seven inches wide, and one-eighth of an inch thick, with smooth under surface. Its rear end rests nearly horizontal upon the ground. This plate F is attached by a bolt and nut, *f*, or any other suitable means, to a stock, G, preferably of wood, and of any suitable size and shape. The stock G is held between the rear ends of two curved metal bars, E E′, by means of bolts and nuts *e e′*, and is provided with one or more series of holes, *g g′*, whereby the inclination of the plate to the ground can be varied without affecting the adjustment of the bars E E′. The bars E E′ are pivoted at their forward end by means of a horizontal bolt and nut, e^2, to a clevis, H, attached to the frame of the machine, by which means the drag-bar and covering-plate can be together swung up and down upon said pivot, thereby adjusting both the height and inclination of the plate simultaneously. A series of holes, *h*, may be provided in the clevis for adjusting the pivot e^2 up and down, or the clevis itself may be made vertically adjustable. No particular form of clevis is necessary. Near the middle of the bars E E′ they pass between two metal plates, I J, which clasp their upper and lower edges, as shown, or hold them securely in any equivalent manner; or a single plate or block having a recess in each side to hold the bars may be used instead. A screw-bolt, K, extends from the top bar, C, down through the plates I J, between the bars E E′, and is provided with a screw-nut, *m*, above the plate I, and another screw-nut, *n*, under the plate J. The bolt is vertically adjustable through the top bar by means of screw-nuts *k k*, or their equivalents. The bearings of the screw-nuts *m n* against the plates I J should be slightly convex, and the bolt should have a little play in the holes through which it passes in the plate to enable the plates to rock on their support and the bolt to maintain its vertical position with the drag-bar at different inclinations. A block or plate of metal may be inserted between the plates I J to prevent them from bending, it being of course provided with a suitable hole to permit the bolt K to pass through it. The bars E E′ diverge from the pivot, in order to pass around the standard, and then converge to the front end of the stock G, from which point they are parallel. The sides of the standard thus form guides to hold them laterally in position and render their adjustment vertical.

The drag-bar and covering-plate can readily be adjusted at different heights and inclinations, either by raising or lowering the bolt K or the screw-nuts *m n*, or by adjusting the pivot e^2, as above described. By this means both the depth of the furrow and the covering of

the seed can be regulated at will, as the weight of the machine can be thrown either upon the runners or the covering-plate to any extent desired. The covering-plate is held by the standard from lateral displacement and caused to follow the furrow accurately.

Having thus described my invention, I claim as new—

1. The combination of a single covering-plate with the runner and with a divided drag-bar pivoted to the frame near the upper front end of the runner, and supported between said pivot and the standard, whereby the inclination of said drag-bar can be adjusted and fixed in adjusted positions, and whereby the drag-bar is laterally supported by the standard from deflection in either direction, substantially as described.

2. The combination of a single covering-plate with the runner, with a long divided drag-bar pivoted to the frame near the upper front end of the runner, with a support between the pivot and the standard, and with an intermediate adjustable connection, G, arranged between the divided portion of the drag-bar and the covering-plate, substantially as described.

3. The combination of the drag-bar, arranged above and independently of the runner, with the covering-plate and with the intermediate block, G, adjustable on the drag-bar by means of a series of holes and a bolt, substantially as described.

4. The combination of the covering-plate with a divided drag-bar pivoted in front of the standard, and with the adjusting-bolt K, operating between the pivot and the standard, substantially as described.

5. The combination of the covering-plate with the divided adjustable drag-bar suspended about midway of its length immediately in front of the standard, and with an adjustable pivot at the front end of the drag-bar, substantially as described.

6. The combination of the covering-plate, the pivoted divided drag-bar, the plates I J, or their equivalent, the screw-nuts *m n*, and the bolt K, substantially as described.

7. The combination of the covering-plate, the pivoted divided drag-bar, the adjustable connection between the plate and the drag-bar, and the adjustable suspending device immediately in front of the standard, substantially as described.

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