M. ACKERMANN.

Corn Planter.

No. 106,981. Patented Sept. 6, 1870.

Fig. 1.

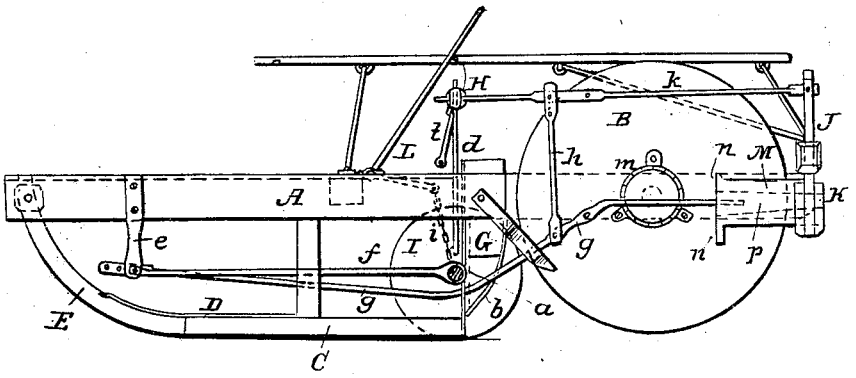
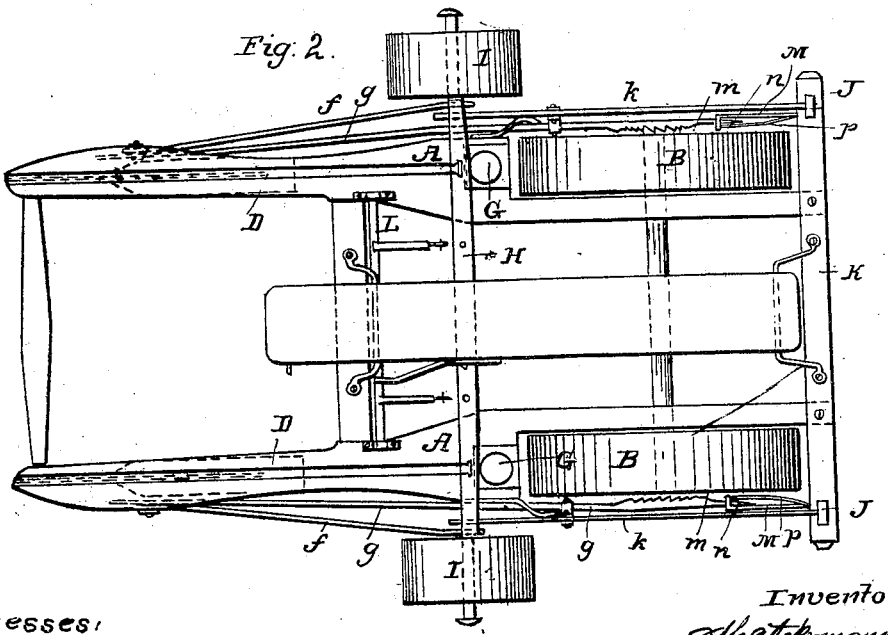


Fig. 2.



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UNITED STATES PATENT OFFICE.

MICHAEL ACKERMAN, OF STEAMBOAT ROCK, IOWA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **106,981**, dated September 6, 1870.

To all whom it may concern:

Be it known that I, MICHAEL ACKERMAN, of Steamboat Rock, in the county of Hardin and State of Iowa, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a corn-planter, as will be hereinafter 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, referring to the annexed drawings, in which—

Figure 1 is a side elevation, and Fig. 2 is a plan view, of my machine.

A represents the frame; B B, the covering-wheels, and C C the runners, which are the same, or nearly the same, as on machines now in use. On the upper part of each runner is fastened a thin iron slab, D, of suitable width, which acts as a gage to let the runners plow in the ground a uniform depth. On the point of the runners C C are steel knives E, and on the heels are the boxes G G, fastened by set-screws.

The box G with the plunger *a* is like the one on J. H. Jones's improved hand-planter, patented August 26, 1856, and April 9, 1867, with the exception that in mine the plunger is of uniform width from top to bottom.

The casting G that holds the plunger to its place is made box-like, as shown, with a spring, *b*, to hold the corn until the plunger drives it through.

To the plunger *a* is fastened a rod, *d*, which has an eye on its upper end, and is inserted in a small mortise on a cross-bar, H, in such a way that either side may work independent of the other. Forward and outside of the frame A, on each side, is fastened an iron bar, *e*, having a double fork at its lower end.

A rod, *f*, is pivoted in one of these forks, and runs back, having the axle of the dropping-wheels I passing through its rear end. Another rod, *g*, pivoted in the other fork of said bar *e*, runs under the axle of the dropping-wheels, and then takes a short bend upward, having a forked bar, *h*, pivoted to it. The upper end of this bar *h* is also forked and pivoted to a bar, *k*, which runs from a standard, J, on a cross-beam, K, back of the covering-wheels B B, forward to and in a mortise on the cross-bar H.

The front ends of the rods *k k* are loose in the mortises on the cross-bar H, so that they can move back and forth. There is also a lever, L, running crosswise in the middle of the machine, with two chains, *i i*, connecting with the axle of the dropping-wheels I I, to hold said wheels up in going to or from the field and when turning the machine. The lever L is also to drop the corn by hand, as will be hereinafter described.

The rods *g g*, when they reach the center of the covering-wheels B, are flattened and brought to an edge next the wheel, so as to catch in a ratchet-wheel, *m*, fastened to the covering-wheel, as shown.

On the standard J, running downward from the cross-beam K, is an iron, M, running forward near the center of the covering-wheel, said iron having at its front end a pair of jaws, *n n*, bent downward, and a spring, *p*, between said jaws. In this the end of the rod *g* will so play as to throw itself out and in of the ratchet-wheel.

The object of this is that in a field that is cloddy and uneven the rods *g g*, with all their attachments, will be carried upward while the machine goes over two and a half or three feet of ground, then thrown inside the spring. The lower edge of said spring is so bent as to hold the rod *g* until the dropper-wheels fall in the furrow, and gives these rods a tap and plunges the corn. It will also throw the rod in the ratchet-wheel, so that it cannot drop corn until the machine goes two and a half or three feet farther, and so near the other furrow that there will be no danger of dropping between furrows. The dropper-wheels I, not being attached to the rods *g g*, can fly up as they roll over clods, and do no harm.

The field must be well harrowed, so it is even, and furrowed out with a good marker, so it leaves a furrow one and a half or two inches deep and from five to six inches wide on top.

In working the machine the driver will sit so as to balance the machine to suit, and as soon as the machine crosses a cross-furrow the dropping-wheels fall in the furrow and bear down on rods *g g*. These rods will pull down the plungers by the rods *h h* and *k k*, and plunge the corn out, feeding itself.

In a field where the ground is so bad that this self-planter cannot be used, take off all rods and dropping-wheels belonging to the self-dropper, except the cross-bar H, the rods *d d*, and plungers *a a;* then attach the small rods *t t*, fastened on the cross-bar H, to the lever L, and the machine is a complete hand-planter.

Having thus fully described my invention, what I claim as new, and desired to secure by Letters Patent, is—

1. The arrangement of the rod *g*, ratchet-wheel *m*, bars *h k*, and cross-bar H for raising the plunger, substantially as herein set forth.

2. Bar *e*, rods *f f*, dropper-wheels I I, and shaft H, arranged with rods *g d* and plungers *a a*, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

MICHAEL ACKERMAN.

Witnesses:

C. H. ROCKWELL,

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