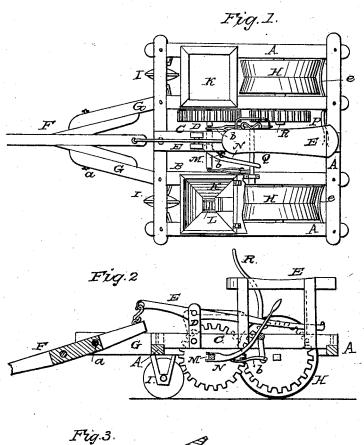
## CARTER & WILLIAMSON.

Corn Planter.

No. 110,341.

Patented Dec. 20, 1870.



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Witnesses Samuel Smith. Henryt Johnston

Inventors John T. Carten

Hoses B. Wittiam son. a. b. Kleweke Hoo Atterneys.

## United States Patent Office.

## JOHN T. CARTER, AND MOSES B. WILLIAMSON, OF XENIA, ILLINOIS.

Letters Patent No. 110,341, dated December 20, 1870.

## IMPROVEMENT IN CORN-PLANTERS.

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

To all whom it may concern:

Be it known that we, JOHN T. CARTER and Moses B. WILLIAMSON, both of Xenia, in the county of Clay and State of Illinois, have invented certain new and useful Improvements in Corn-Planters; and we do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, and in which—

Figure 1 is a top view of our improved corn-plan-

ter;

Figure 2, a longitudinal vertical section, taken at

the line x x, fig. 1; and

Figure 3, a similar section through one of the seed-hoppers.

To enable those skilled in the art to make and use our corn-planter, we will proceed to describe the same, referring by letters to the drawing.

Similar letters denoting like parts in the different

views.

A A and C represent the four sides of the frame.

BB are two additional rails, arranged at proper distance from the sides, for the purpose hereinafter explained.

O is a stout rail, secured at a point equally distant from the side rails, upon which is erected a standard,

D, and a seat, E.

The standard D has a slot cut in its top, and swings therein by a pivot, a lever E, one end of which is attached by a link to the rear of the tongue F, and the other is bent to form a handle and runs over a ratchetbar on the inside of one of the rear seat supports. The tongue is secured between the hounds G G by a bolt, a, and is free to swivel thereon.

At the rear of the machine, and between the rails A and B, are hung, in suitable bearings, two broad tread-wheels, H H, with their faces made concave,

and serve as covers of the drill.

I is a rotary drill, one arranged in the same plane with each of the covering wheels H, and in front of the dropper; these drills are arranged in brackets, secured to the rails A and B.

K K are two seed-hoppers, one shown with lid

closed, and the other with lid broken off.

Immediately underneath the lower exit of the hopper, and filling the same, is arranged a dropping-disk, or wheel, L, hung on an axis, or bar, M; said bar M extends from one side of the machine to the other, and is mounted in suitable bearings on the under side of the hoppers.

The bar M is squared at the points upon which the disks L are secured, and at a point where a hand-lever N is secured, and also where the cog-gear-

ing O is attached.

The axis of the wheel H on the same side of machine is extended and mounted thereon. In a line with the gear O is a similar gear, P.

The hoppers are cut away on their sides, and shoulders formed thereon, which rest upon the top of the rails A and B, the said hoppers with the bar M being free to move longitudinally upon the said rails.

About the center of the machine, is secured in bearings, on rails B and C, a rod, Q, having two arms extending down even with the bar M; one of these arms is extended upward, and forms a lever, R, which is within reach of the driver; the lower ends of said arms are attached to the rod M by short rods, b b, so that the movement of the lever R will throw the wheel O in or out of gear with the wheel P; when the said wheels are in gear, the dropping device is operated, and when out of gear it ceases operation.

The hand lever N is so made that it can be attached or detached, and is always detached when the wheels O and P are in gear, and is intended as an independent means of operating the seed-dropper, as

will be presently explained.

The dropping-wheels L, as more clearly shown in fig. 3, have segments cut-away at proper distances, and are provided with right-angled slides, c, in order that the amount of seed to be dropped may be increased or diminished. They may be entirely closed, if necessary.

A chute, d, is arranged in rear of each of the droppers, which induces the seed to drop directly under

the hopper.

Behind the wheels H H are arranged scrapers, e e, to clean said wheels.

Having described the construction, we will now proceed to describe the operation of our improved

corn-planter.

The hoppers being filled, and the team attached, the lever R is pushed forward, which throws the wheels O and P into gear. The lever is held in position behind a stop, arranged on one side of the driver's seat, not heretofore described, but seen at f, fig. 1. It is held in the reverse position by the other end of the said stop, keeping the wheels out of gear. The rear end of the lever E is raised, depressing

The rear end of the lever E is raised, depressing the rear end of the tongue, and throwing it parallel with the ground; the team is now started; the rotary drills preparing the ground; the seed are dropped therein and the wheels H H cover them up. When it becomes necessary to turn, the lever R is drawn back, throwing the wheels O and P out of gear, and thus stopping the operation of the dropping device.

The lever E is pressed down, depressing the front end of the tongue, and therefore lifting the front end of the planter, raising the drills out of the ground.

allowing the machine to turn freely upon the wheels

The object of the auxiliary or independent lever N, is to operate the droppers, by moving the said lever back and forth by the hand, making a quarter turn of the bar M, and thus alternately filling and emptying the cavities in the dropping-wheels.

Having now described the construction and operation of our improved corn-planter,

What we claim as new, and desire to secure by Letters Patent, is-

In combination with the hoppers having shoulders

formed thereon, the bar M, cog-wheel O, dropping-wheels L, and lever R, all arranged and operating substantially in the manner and for the purpose set

In testimony whereof we have hereunto set our hands this 14th day of August, A. D. 1869.

JOHN T. CARTER.

MOSES B. WILLIAMSON.

Witnesses:

JAMES C. WILLIAMSON, LEWIS C. MCNEIL.