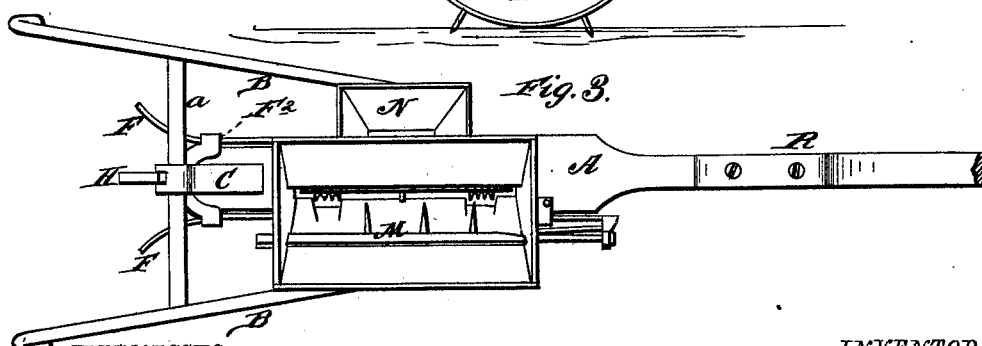
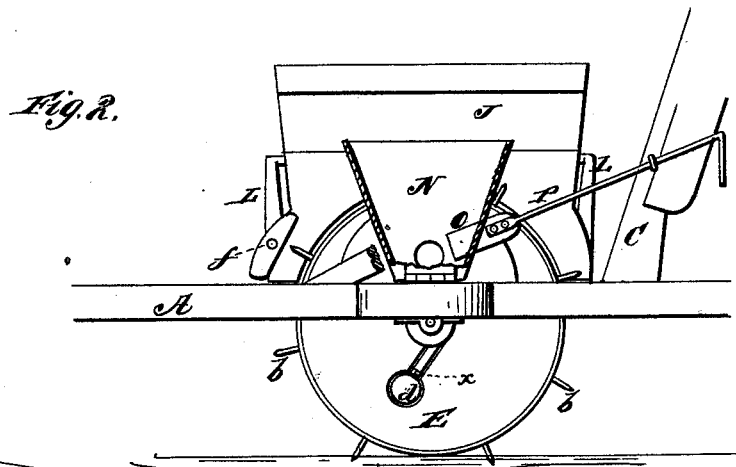
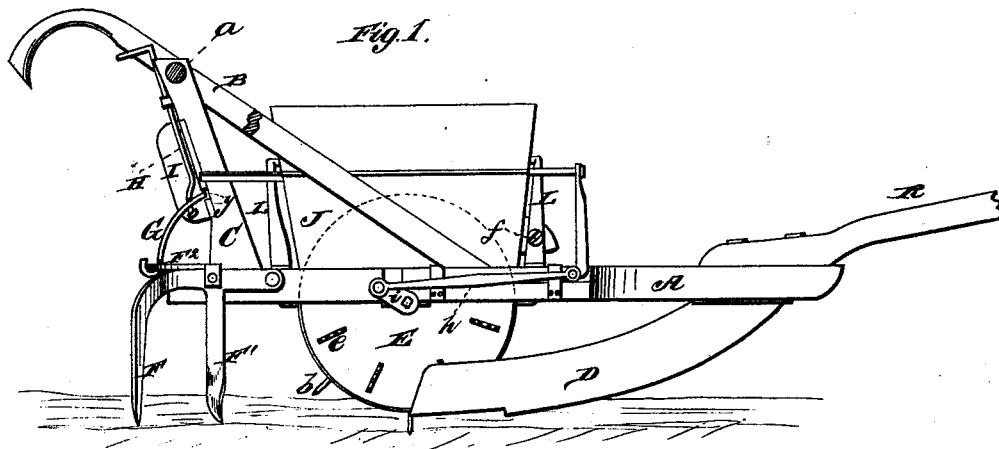


T. V. CARDWELL.
Combined Cotton and Corn Planter.

No. 214,363.

Patented April 15, 1879.



WITNESSES,
Robert Smith
James J. Sheehy.

INVENTOR.
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UNITED STATES PATENT OFFICE.

TOLBERT V. CARDWELL, OF ROSE HILL, MISSISSIPPI.

IMPROVEMENT IN COMBINED COTTON AND CORN PLANTER.

Specification forming part of Letters Patent No. **214,363**, dated April 15, 1879; application filed October 5, 1878.

To all whom it may concern:

Be it known that I, TOLBERT V. CARDWELL, of Rose Hill, in the county of Amite and State of Mississippi, have invented a new and valuable Improvement in Combined Cotton and Corn Planter; 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my machine. Fig. 2 is a vertical central sectional view of the same, and Fig. 3 is a top-plan view.

The nature of my invention consists in the construction and arrangement of a corn and cotton-seed planter and fertilizer-distributor, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents the beam, the rear portion of which is slotted to receive the operating-wheel. B B are handles, secured to the beam, and, by a connecting-round, *a*, made fast to a standard, C, secured in the rear portion of the beam.

D represents a combined drag and hollow opener, attached to the front end of the beam, and extending downward and rearward, substantially in the curved form shown.

E represents the drive and feed wheel, mounted in the slot in the beam A, and provided on its periphery with spurs *b b* at suitable distances apart, to take hold in the ground as the machine is moved forward and cause the wheel to revolve with a regular motion.

On the side of the wheel E are teeth *e*, arranged in groups, for dragging out cotton-seed. On the opposite side of this wheel is made a suitable recess, containing a spring-valve, *d*, having a projecting lug, *x*, as shown. As the wheel revolves, the valve *d* is pressed inward by the lug *x* bearing against the beam or a part of the corn-hopper, so that the required quantity of corn will be taken from said hopper and carried forward by the wheel, and at the proper time the lug *x* passes from under the beam and the valve springs out and discharges the corn.

At the rear end, on each side of the beam A, is pivoted a bent harrow-tooth, F, with one or more auxiliary teeth, F¹, and the two sets are connected by a curved bar, F², the whole forming a complete pivoted harrow.

To the bar F² is connected a brace, G, and the upper end of this brace connects with a rod, H, moving in suitable guides on the back of the standard C. By this means the harrow can be lifted, at the will of the operator, to relieve it of trash or other obstructions.

The harrow, when in place, is made stationary by means of the upper end of the brace G catching in a notch, *y*, in a guide, I, attached to the back of the standard C, and the brace is lifted out of this notch by the rod H when desired.

J is the cotton-seed hopper, swinging between two uprights, L L, with a set-screw, *f*, in the front upright, to regulate the feed by adjusting the hopper closer to or farther from the wheel E.

M represents a three-fingered agitator in the hopper J, operated by means of a pitman, *h*, and crank *i* on the journal of the wheel E.

N is the corn-hopper, provided with the slide O, with rod P attached, for stopping and starting the dropping of corn, at the will of the operator.

To the front end of the beam A is attached a bull-tongue, R, to be used only when the land is close and compact.

By this construction both cotton and corn may be planted at one and the same time. The operator, if he chooses, may plant the corn either with the cotton in each row or in alternate rows, or even in every third or fourth row, by shutting off the supply from the corn-hopper when necessary.

This practice of planting corn with the cotton is common in the Southern States.

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

1. The drive-wheel E, provided with the spurs *b* on its periphery, and the teeth *e* in groups on its face, in combination with the hopper J, hinged upon uprights L L, and adjusted by means of a set-screw, *f*, for the purposes set forth.

2. The combination of the pivoted harrow

F F¹ F², brace G, rod H, and the guide I, having notch *y*, substantially as and for the purpose specified.

3. In a combined cotton and corn planter, the drive-wheel E, provided with spurs *b* on its periphery, and teeth *c* in groups on one of its faces, and recesses in its other face, in which are arranged valves *d*, having projecting lugs *x*, in combination with the hoppers J and N, mounted on the frame, whereby cotton and

corn may be planted at the same time, substantially as and for the purposes set forth.

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

TOLBERT VANDURAN CARDWELL.

Witnesses:

W. E. TRASK,

E. J. CAPELL.