C. F. Bilhimer,

Corn Planter.

No. 111,808. Patented Feb. 14, 1871.

Fig. 1.

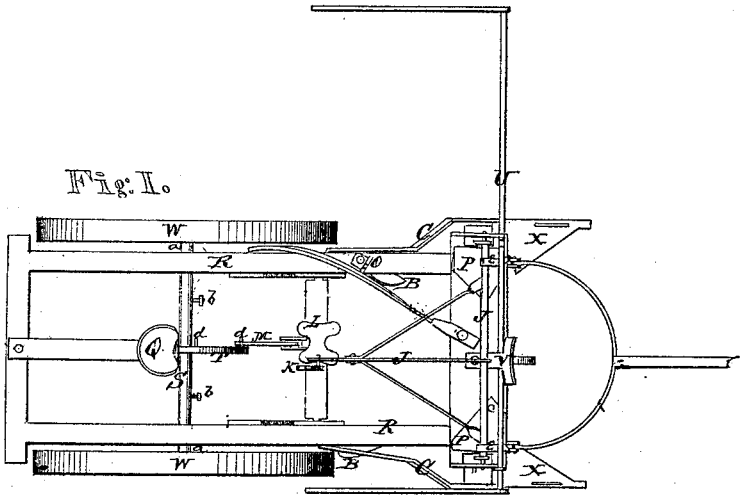


Fig. 2.

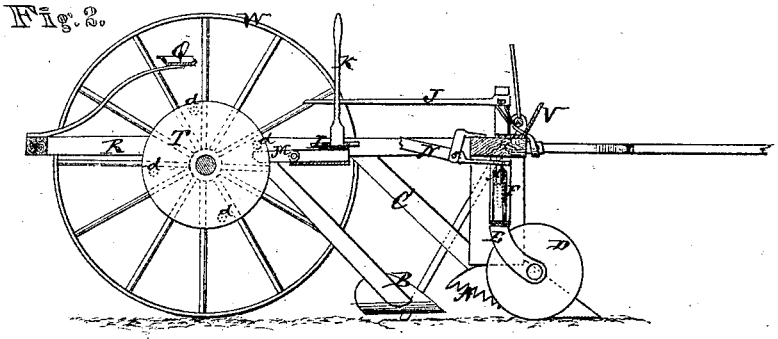


Fig. 3

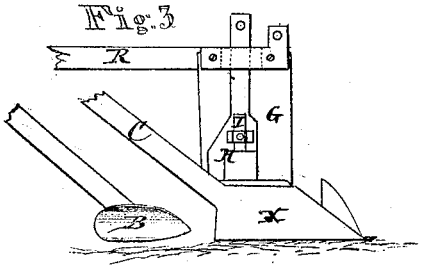
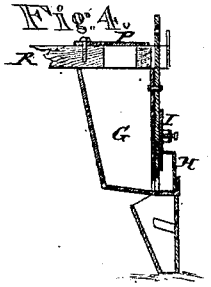


Fig. 4.



Witnesses.
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CYRUS F. BILHIMER, OF IRWIN'S STATION, PENNSYLVANIA.

Letters Patent No. 111,808, dated February 14, 1871.

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 I, CYRUS F. BILHIMER, of Irwin's Station, in the county of Westmoreland and State of Pennsylvania, have invented a new and valuable Improvement in Corn-Planters; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my machine in plan view, and

Figure 2 is a longitudinal vertical section of the same.

Figure 3 is a side view of the corn-box, plows, and covering-plow.

Figure 4 is a vertical section through the corn-box and plow.

The nature of my invention consists in the construction and arrangement of a corn-planter, as will be hereinafter more fully 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 drawing.

R represents the frame of my machine, having suitable journal-boxes, in which is placed the hollow-axle S.

W W are the driving-wheels, each provided with a journal or axle, *a*, which is inserted in the hollow axle S, and secured by a set-screw, *b*.

In case the ground is clammy, or in danger of baking on the seed planted, as the wheels generally run right over the same, the set-screws *b b* may be loosened and the axles or spindles *a a* drawn out, so that the wheels may travel on the ouside of the rows.

Upon the hollow axle S is mounted a drop-wheel, T, with pins *d* at suitable distance apart, for automatically dropping the corn or seed and regulating the distance between the hills.

As the axle revolves the pins *d d* in rotation strike a lever, M, hinged or pivoted to the rear side of a cross-bar L. This, by means that will be presently described, operates the dropping-mechanism by the motion of the machine.

The cross-bar L is pivoted in the frame R, and provided with a foot-rest, as shown in figs. 1 and 2, and also with an upright lever, K, so that the driver, from his seat, Q, can operate the dropper either by hand or foot, if not desired to do it automatically.

On the side of the lever K is a pin, on which is hooked an arm of the frame J, which is pivoted in the upper ends of the droppers H H.

These droppers are pivoted on the outside of the corn-boxes G G, arranged one on each side of the front end of the frame R.

The peculiar construction of the box and dropper is fully shown in fig. 4.

As the cross-bar L rocks toward the rear, either by hand, foot, or automatically, the droppers are thrown forward to discharge the corn, and springs *e e*, attached to the dropper-frame J, throw them back in proper position again.

Each dropper H is provided with a slide-valve, I, to regulate the amount of grain to be dropped in each hill.

The lower ends of the grain-boxes G G rest upon, and may be attached to, the plows X, fastened to the frame by means of bars C.

On the lower rear edge of the mold-boards of said plows are formed or attached rakes A, for the purpose of removing clods, stones, &c.

In rear of said plows run the curved shovels B B, to cover the corn or seeds with loose ground.

The boxes G G are covered with lids P P.

Under the center of the front end of the frame is attached a V-shaped brace, P, in which is the hollow stem of the attachment E of the traveler D.

A pin, *f*, on the under side of frame R, passes into said hollow stem, as shown in fig. 2.

Around this pin, above the stem, is the end of a lever, N, which is used for regulating the depths of the plows and raising the plows out of the ground in turning and moving to and from the field by bearing down and holding the traveler D at any desired height.

O is a notched stand to hold the lever N.

U represents the gauge-rod and marker, arranged in suitable bearings on the front end of the machine, so that it may be shifted to either side thereof, as desired.

V is a rest for lever or handle on gauge-rod.

Having thus fully described my invention,

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

1. The hollow axle S, with wheel J secured thereto, in combination with the spindles *a a* and set-screws *b b*, constructed and arranged to operate substantially as and for the purpose specified.

2. The rocking cross-bar L, with foot-rest lever K, and pivoted lever M, so as to enable the operator to work the dropping mechanism either by hand, foot, or automatically, substantially as herein set forth.

3. The combination of the rocking-bar L, pivoted or hinged lever M, pins *d d*, and wheel T, substan-

tially as and for the purposes herein set forth, arranged and connected as described, for operating the dropping mechanism.

4. The corn-boxes G, droppers H, and slide-valves I, constructed and arranged to operate substantially as and for the purposes herein set forth.

5. The arrangement of the corn-boxes G, with their droppers H, the plows X, and the curved shovels B, substantially as shown and described, and for the purposes herein set forth.

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

C. F. BILHIMER.

Witnesses:

S. D. LAUFFER,

JOHN J. HURST.