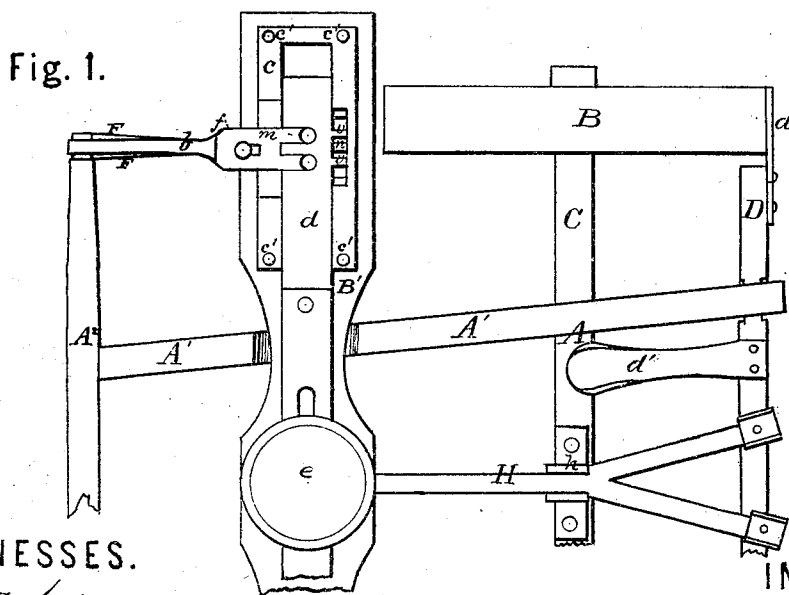
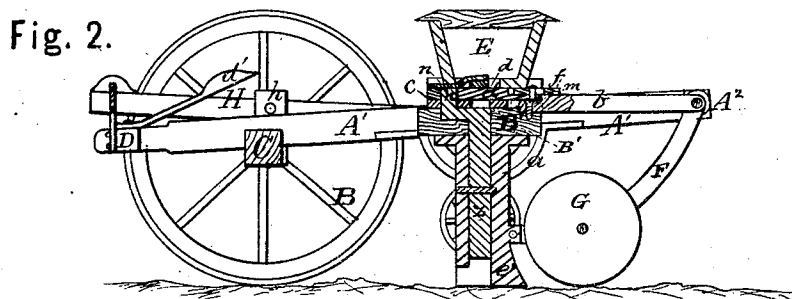
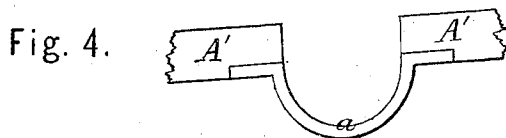
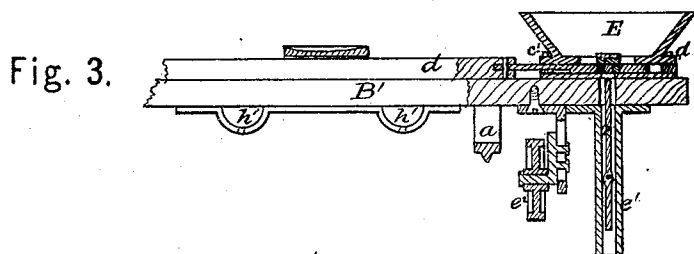


C. BUSCH.
Corn-Planters.

No. 134,032.

Patented Dec. 17, 1872.



WITNESSES.

Villette Anderson
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UNITED STATES PATENT OFFICE.

CARL BUSCH, OF BROOKLYN, IOWA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 134,032, dated December 17, 1872.

To all whom it may concern:

Be it known that I, CARL BUSCH, of Brooklyn, in the county of Poweshiek and State of Iowa, 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 a plan view of my invention. Fig. 2 is a longitudinal vertical section of the same. Figs. 3 and 4 are details.

This invention has relation to that class of corn-planters in which the seed-dropping devices ride upon the shoes which are pivoted to the front of the main frame; and it consists in the construction and novel arrangement of the concave couplings connecting the front and rear portions of the main frame, whereby the seed-boxes are brought near the ground, the dropping-tubes and their valves shortened with a view to an increase of angular space between the valve and the tube-wall, and ease of movement when operated by the seed-slide.

In the accompanying drawing, the letter A designates the main frame of the corn-planter; B, the wheels; C, the axle; and D, a pivoted bar at the rear end of the frame, holding scrapers *d*, and operated by a foot-lever, *d'*. The longitudinal bars A' of the main frame are made in two parts and united by concave coupling-plates *a*, forming notches to receive the transverse bar of the seeding-frame when it descends below the level of the frame A. To the forward part of the frame A is pivoted the seeding-frame, consisting of the transverse bar B' and arms *b*. The latter are pivoted to the ends of the front bar of the main frame. The bar B' vibrates in and over the concave couplings, and supports the seed-boxes E, the seed-dropping devices, seat *e*, seed-shoes *e'*, and adjustable guiding-roller *e''*. F indicates curved plates secured to the seed-shoes and pivoted to the bar A². Two of these plates are attached to

each shoe, and, passing forward parallel with each other, are secured by the pivot-pin on each side of the arm *b* of the seeding-frame. Between the curved plates of each shoe is pivoted an opening-wheel, G. At each end of the bar B', on its upper surface, is secured a plate, *c*, centrally recessed or channeled to receive the end of the seed-slide *d*. The plate *c* is also slotted at its center for the passage of the seed, and at the side of the channel for the passage of the stud *n* of the valve *z* of the dropping-tube, said stud being connected with said valve by a shank extending horizontally under the plates *c*. This plate is also slotted at its side to permit the passage and play of the arm *f* of the slide-bar, said arm *f* bearing on the adjustable forked stop-plate *m*, which regulates the size of the seed-openings through the slide-bar, and is connected to the arm *f* by means of a clamp-screw. Opposite the arm *f* are placed, on the slide-bar, two small lugs or projections, *v*, which extend into the lateral chamber of the recess of the plate *c* and embrace the stud *n* of the tube-valve, serving to communicate to said valve the reciprocating motion of the slide-bar, causing the same to vibrate regularly in its tube *e'*. Underneath the bar B' are secured stirrups *h'*, in which are stepped the levers or handles which pass through the said bar B' and the seed-slide, and serve to operate the latter. Each plate *c* is provided at its corners with upwardly-projecting pins or studs *c'*, which pass through perforations in the flanches *d'* of the seed-boxes, thus securing said boxes in position, and at the same time permitting them to be easily removed, when necessary, for repairing the seed-slide or other purpose. Each box is provided with a bent plate, under which is secured the seed-brush. Thus the brush is removed from the slide with the box, enabling the operator to adjust the stop-plate *m* with facility. The bar B' may be raised by means of a lever, H, pivoted to a standard-plate, *h*, on the axle, and operated in rear. Underneath this bar B', and at the inside of each shoe, is secured an adjustable gage-wheel.

Having thus described my invention, what

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

In a seeding-machine having the hinged seeding-frame, the main frame A', and the concave coupling-plates *a* connecting the sections of said main frame, substantially as specified.

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

CARL BUSCH.

Witnesses:

EDGAR ANTHONY,
B. M. TALBOTT.