

C. BRUNNER.  
Corn-Planter.

No. 226,274.

Patented April 6, 1880.

Fig. 1.

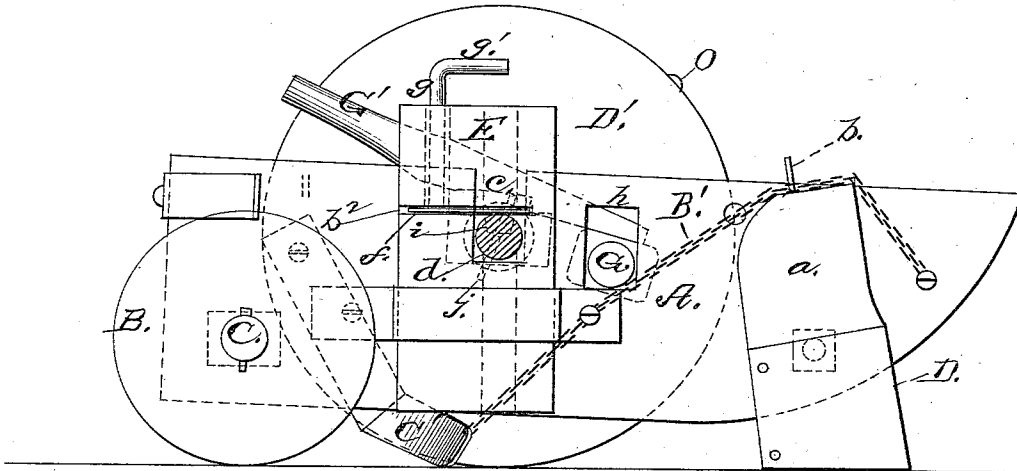
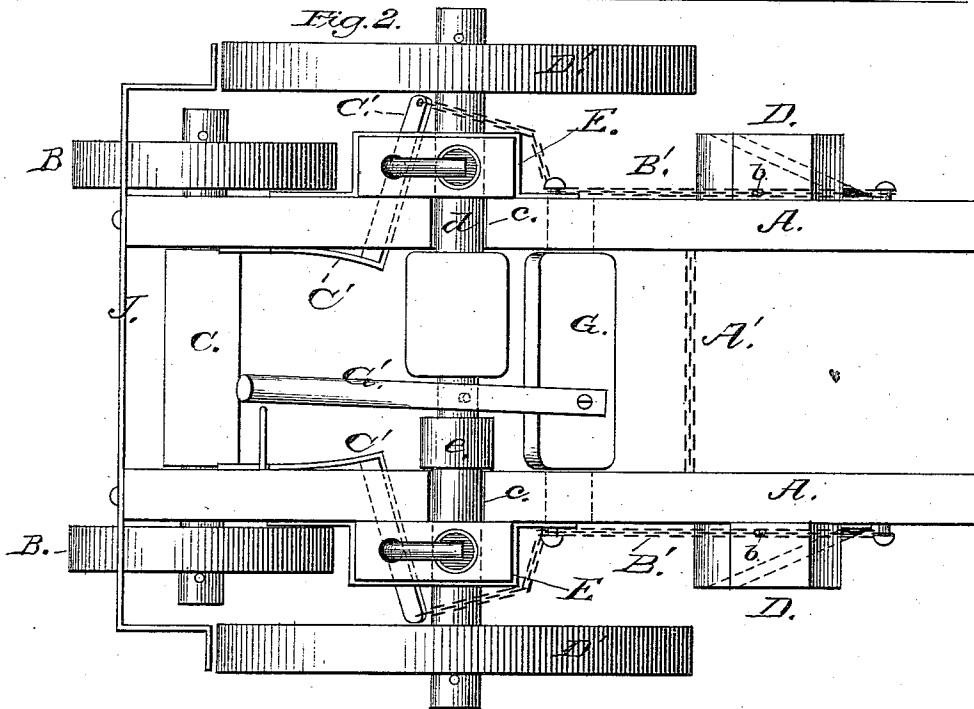


Fig. 2.



WITNESSES

John A. Ellis.  
F. J. Masi.

Christian Brunner,  
by E. W. Anderson,  
his

ATTORNEY

# UNITED STATES PATENT OFFICE.

CHRISTIAN BRUNNER, OF NEWTON, IOWA.

## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 226,274, dated April 6, 1880.

Application filed August 30, 1879

*To all whom it may concern:*

Be it known that I, CHRISTIAN BRUNNER, of Newton, in the county of Jasper 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 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 longitudinal vertical section of my planter, and Fig. 2 is a top view of the same.

This invention has relation to improvements in corn-planters; and the nature of the invention consists in certain novel combination of parts, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates the runners, supported in rear by means of the wheels B, applied upon an axle, C, the arms of which are carried through the runners for this purpose. The runners are loosely connected in front by a chain, A', and vibrate independently upon the spindles of axle C, so that should one of them strike an obstacle it can rise over it without interfering with the other.

D D indicate the furrow-openers, consisting of a wooden standard, *a*, pivoted to the outside of the runners, so as to vibrate vertically, and made sharp at its lower front part. This angular part is covered with sheet metal. At the upper ends of standards *a* is a strong upright pin, *b*.

B' indicates a chain rigidly secured to front end of the runners in advance of the openers D, and to the rear of the runners in rear of said openers. This chain is sufficiently slack to pass over the standards, and if the latter be adjusted to a desired inclination upon its pivot-point, it will be held to such inclination by passing the appropriate link of the chain over the pins *b*. The chains B' are extended rearwardly beyond their point of attachment, and are secured to the exterior end of the coverers C'. These are usually of angular form, one branch being secured to the inner face of the runners and the other extending obliquely across the lower edge of the same, as indicated in Fig. 2.

*c c* indicate slots formed in the upper edge

of the runners at a point between the coverers and openers, and *d* is a shaft having its bearings in the bottoms of said slots, and provided with the driving-wheels D'. This shaft has the collars *e*, or other equivalent devices, that hold it against endwise movement, and it supports the seed-boxes E. It is provided at that part extending through boxes E with a cup or cups, *i*, that, as the axle revolves, gathers a suitable number of grains, and then drops or empties them out in a conduit in the lower part of said boxes, below the axle.

*b*<sup>2</sup> indicates a transverse slot extending into the seed-boxes above the axle, in which is pivoted, to vibrate horizontally, a metallic plate, *f*. This plate is usually attached to a rod, *g*, extending downward through box E, and provided with a handle, *g'*, by operating which the said plate may be swung across the box, thus stopping the dropping of seed when desired.

Extending across the machine, and having its ends engaged in vertical slots *h* in the runners in front of axle *d*, is a shaft, G, having secured to it a lever, G', extending to the rear across said axle, and provided on its under side with a notch, that when engaged with a pin, *j*, on said shaft stops its rotation.

I am aware that a vibrating adjustable furrow-opener attached to a corn-planter runner is not new. Hence I make no broad claim to such device.

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

1. The combination, with the shaft *d* and slotted runners A, of the vibrating furrow-openers D, having pins *b*, and chains B', secured at each end of said runners and adapted to engage said pins, substantially as specified.

2. The combination, with the runners A, having vertical slots *c* extending down the sides thereof, of the shaft *d*, having cup or cups *i*, the wheels D', fixed on said shaft, and the seed-boxes E, inclosing said shaft and extending above and below it, substantially as specified.

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

CHRISTIAN BRUNNER.

Witnesses:

JOHN MEYER,  
F. H. HARVEY.