G. W. BROWN.
Corn-Planter.

No. 215,207. Patented May 13, 1879.

Fig. 1.

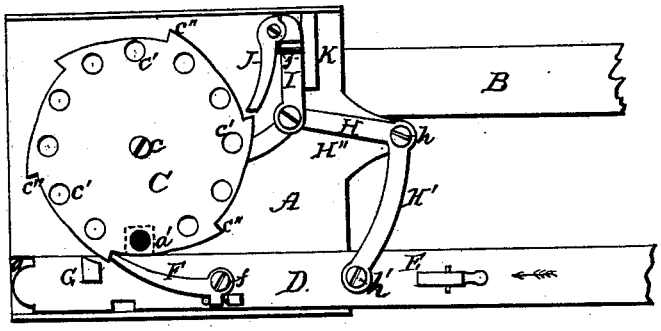
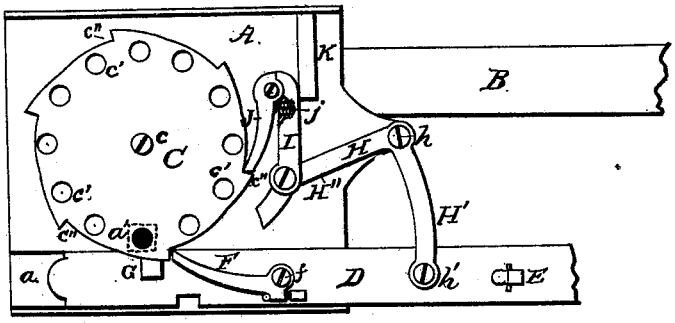


Fig. 2.



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UNITED STATES PATENT OFFICE

GEORGE W. BROWN, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **215,207**, dated May 13, 1879; application filed March 26, 1879.

To all whom it may concern:

Be it known that I, GEORGE W. BROWN, of Galesburg, in the county of Knox and State of Illinois, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a top-plan view of a construction embodying my invention. Fig. 2 is also a top-plan view, but showing the working parts in different relative positions from Fig. 1, and partly broken away to show all of the acting parts.

This invention relates to that class of seed-measuring devices in the seed-boxes of corn-planters in which a reciprocating slide is used to impart an intermittent rotary movement to a disk having perforations or seed-cups parallel with its axis of rotation; and the invention consists, first, in the use of an elbow-lever pivoted to a fixed part of the machine at its angle, and provided at one end with a pawl, and having its other end hinged or pivoted to the slide, so that a reciprocating movement of the slide will oscillate said elbow-lever and cause the pawl which it carries to act on the seed-cup disk at each alternate throw of the slide; second, in an elbow-lever pivoted to a fixed part of the machine, hinged or pivoted at one end to the slide, and at its other end adapted to act as a detent or stop to arrest the motion of the seed-cup disk.

The invention further consists in details of construction and combinations hereinafter described, and set forth in the claims hereto annexed.

Referring to the drawings by letters, A represents the bottom plate of a corn-planter seed-box, and B a bar which may connect the box A with another. C is a circular disk, centrally journaled above the plate A at *c*, and is perforated with holes or seed-cups *c'* and provided with peripheral teeth *c''*, of which there is one to every two seed-cups *c'*. D is a slide-bar, seated in a recess, *a*, in one side of the plate A, so that it may be reciprocated by a hand-lever, E. The plate A has a perforation, *a'*, (shown by dotted lines in the drawings,) through which perforation the seed is discharged as the seed-cups are successively brought over said perforation *a'*.

The foregoing parts described by reference-letters do not differ from ordinary corn-planter seed-dropping devices, and may be attached to any ordinary corn-planter frame, and provided with any ordinary seed-tube and furrow-openers.

F is a spring-pawl, pivoted to the slide D at *f*. G is a detent-lug on the slide D, and near the point of the pawl F. H is an elbow-lever, pivoted at its angle *h* to a projecting part of the plate B; or it may be pivoted to any fixed part of the machine. One end, H', of the lever H is hinged or pivoted to the slide D at *h'*, and the other end, H'', is of such length as to form a detent, as hereinafter described.

I is an arm, hinged or pivoted at one end to the lever H, near the outer end of the arm H'', and J is a pawl, pivoted or hinged to the outer end of the arm I, and held in contact with the disk C by a spring, *j*, located between the pawl J and arm I, as shown at Fig. 2 of the drawings, where the arm I is partly broken away for that purpose. K is a guard for the purpose of preventing the arm I from swinging away from the disk C.

The operation is as follows: At Fig. 1 of the drawings the slide D is represented as at the end of its forward throw to the left hand, or in the direction indicated by the arrow. In making said throw of the slide the pawl F has been made to act on the radial side of one of the teeth *c''*, and thus has given an impulse or partial rotation to the disk C, and the same movement of the slide D has moved the elbow-lever H, so as to bring its detent end H'' against the inclined side of a tooth, *c''*, and thereby arrest the movement of the disk C at the instant when the slide D had reached the end of its throw, and when a seed-cup, *c'*, was immediately over the discharge-opening *a'*. The spring-pawl J will yield and pass over the inclined side of the tooth *c''*, to allow the elbow-lever to move as last described. In making the return throw of the slide D the spring-pawl F yields, and slides over the sloping side

of a tooth, c'', and the elbow-lever H is carried to the position shown at Fig. 2 of the drawings, thereby advancing the pawl J, and causing it to act on one of the teeth c'' and give an impulse or partial rotation to the disk C. When the slide D has reached the end of its return throw, as shown at same figure, the lug-detent G will come in contact with the inclined side of a tooth, c'', and arrest the motion of the disk C at the same instant when the next succeeding seed-cup c' is over the opening a'. A reciprocating motion of the slide D will thus cause the pawls F and J to act alternately on the disk C and impart to said disk an intermittent rotary motion in one direction.

What I claim as new is—

1. In combination with a toothed intermittent rotary seed-cup disk and a reciprocating slide, an elbow-lever, H, pivoted to a fixed part of the device at its angle, and having one end pivoted to said slide, and its other end provided with a pawl adapted to give a partial rotation to the seed-cup disk at each alternate throw of the slide, substantially as and for the purpose specified.

2. In combination with a toothed intermittent rotary seed-cup disk and a reciprocating slide, an elbow-lever, H, pivoted to a fixed part of the device at its angle, and having one end pivoted to said slide, and its other end adapted to act as a detent to arrest the motion of said disk at each alternate throw of the slide, substantially as and for the purpose specified.

3. In combination with a toothed rotary seed-cup disk, C, and slide D, an elbow-lever, H, pivoted at its angle to a fixed part of the machine, and having one end pivoted to said slide, and its other end provided with a hinged arm, I, to which a spring-pawl, J, is attached for giving partial rotations to the disk C, substantially as and for the purpose specified.

4. In combination with a toothed intermittent rotary seed-cup disk, C, slide D, and elbow-lever H, hinged to the slide D, and provided with a pawl for giving motion to the disk C at alternate throws of the slide, a detent, G, attached to said slide, so as to arrest the motion of the disk when acted upon by the elbow-lever, substantially as and for the purpose specified.

5. In combination with the toothed intermittent rotary disk C, slide D, and pawl F, the elbow-lever H, hinged at one end to said slide, and its other end adapted to arrest the motion of the disk C after it has been given an impulse by said pawl F, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEORGE W. BROWN.

Witnesses:
L. STEVENS,
E. E. PETERS.