(No Model.) 2 Sheets—Sheet 1.

J. SELBY.

CORN PLANTER.

No. 455,840. Patented July 14, 1891.

Fig. 1

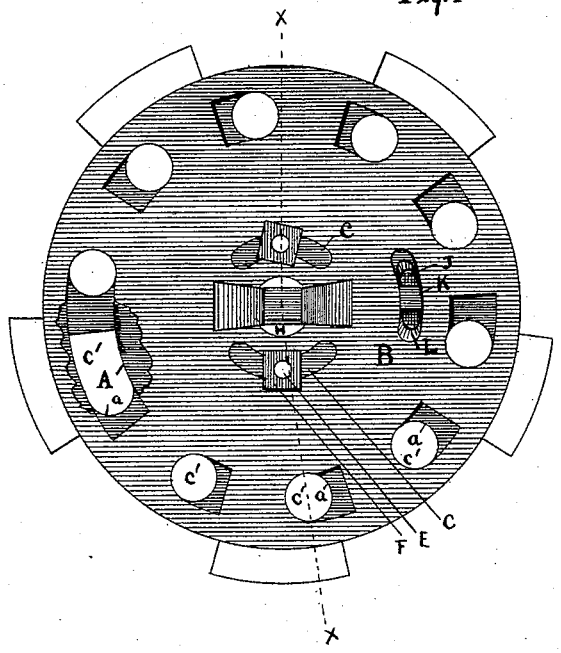


Fig. 2.

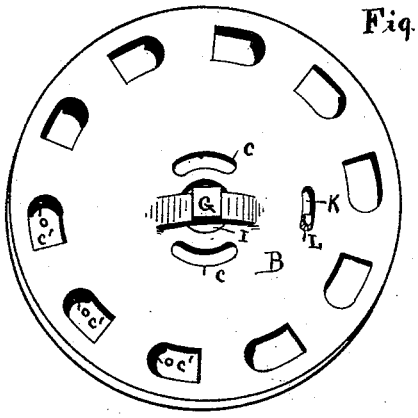
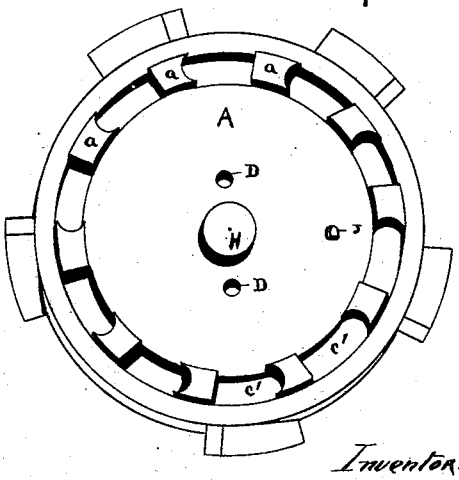


Fig. 3.



Witnesses.—
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A. Keithley

Inventor.
James Selby
By L. M. Thurlow
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(No Model.) 2 Sheets—Sheet 2.

J. SELBY.

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Fig. 4.

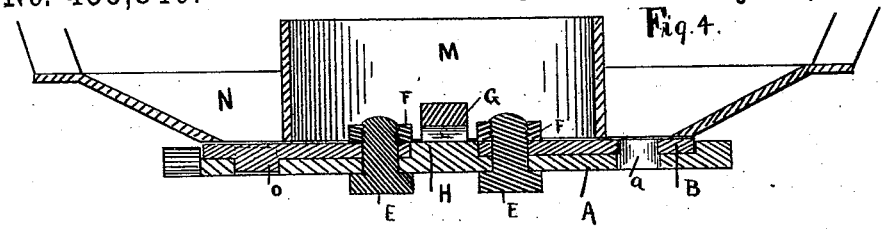


Fig. 5.

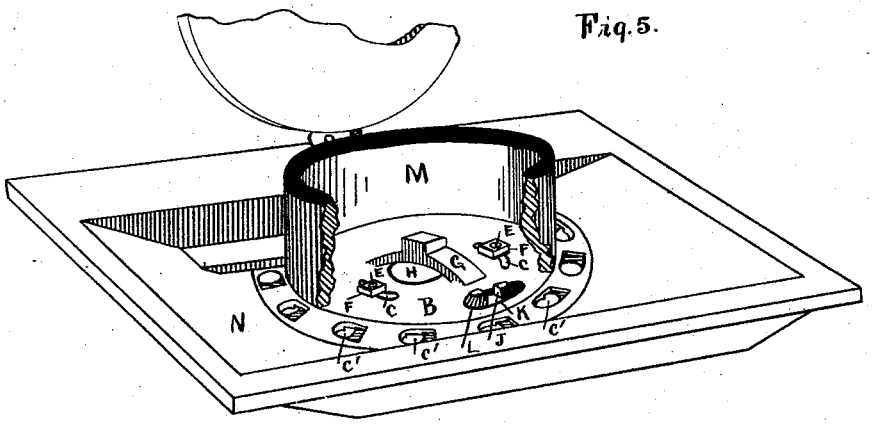
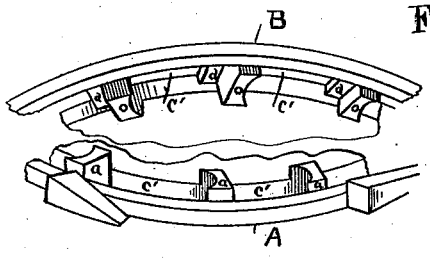


Fig. 6.



Witnesses.—
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UNITED STATES PATENT OFFICE.

JAMES SELBY, OF PEORIA, ILLINOIS.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 455,840, dated July 14, 1891.

Application filed October 27, 1890. Serial No. 369,472. (No model.)

To all whom it may concern:

Be it known that I, JAMES SELBY, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Rotary Corn-Droppers; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in rotary corn-droppers for planting-machines.

The object of the invention is to provide means whereby the amount of seed dropped may be easily regulated.

Figure 1 represents a plan view of the device detached from the seed-box. Fig. 2 is a perspective view of an upper plate. Fig. 3 is also a perspective view of a lower plate. Fig. 4 is a vertical section on line *x x*, Fig. 1, and also showing part of the seed-box and attachment. Fig. 5 is a perspective view with a portion of the cup M broken away to show the interior. Fig. 6 is a perspective view of a portion of each plate.

The invention relates to that class of rotary plates in which the seed-passages are disposed in a circle and the plates are concentric, one plate being made to regulate the size of all seed-passages simultaneously, each plate being pierced with holes corresponding with and opposite to those in the other, in each of which passages a lip from each plate enters the side of the passages in the opposite plate, so as to face each other from opposite sides of the hole.

My invention consists in one of the plates having an upwardly-projecting portion which may be readily taken hold of to adjust the plate for regulating the seed-passages; also, the combination of two bolts which pass through the two plates and which firmly hold or bind the said plates together by the use of screw-nuts, which bolts prevent displacement or vibration of the plates.

In the drawings, A represents a lower circular plate provided with elongated cells corresponding to those of the plate B above it. A vertical extension *a* on each side of each hole *c'* enters the respective sides of each of the holes *c'* in the upper plate in such a manner that the rotation of the one plate upon the other will enlarge or reduce said holes in the line of the circle of rotation. Said projections present a vertical concave surface toward the opposite side of the hole *c'*, and the rear end of the projection presents a vertical plane, as shown. A similar lip *o* (in Plate B,) in each hole (and at the opposite side of each to the lip just described) enters the lower plate A; but this lip *o* is provided at its rear end with an overhanging extension *d*, Fig. 6, which is flush with the upper surface of the plate B, with which it is cast, but which extends below the surface and low enough to rub on the tops of the lips *a* of the lower plate, so that the said extension *d* prevents any seed from getting between the lips *a* and *o* of the plates.

It will be seen that the seed-passages in each plate are circular at that end from which the projection springs and straight at the opposite end, where the edges of each hole face the respective projections *a o* of the plates, and that these devices for adjusting the size of the holes simultaneously are in the line of the circle of the holes. These plates have been described with the view of showing the application of my improvement thereto, and it will, of course, be understood that they do not constitute any part of my invention, except the bolts, &c., which are applied thereto for adjusting and holding the plates together, and a gage for setting the plates at any desired point, which I will now proceed to describe.

C C represent two curved slots cut in the upper plate B near the center of the said plate, and which are directly above two holes D D in the lower plate. Through each hole D is inserted a bolt E, which must necessarily pass up through the slots above. These bolts are each provided with a nut or burr F on their upper or free ends.

As will be seen, the lower plate A is provided at its center with a boss or circular upward projection H, which is designed to enter a circular opening I in the upper plate B, which is designed to keep the two plates in their proper position while adjusting. Cast

with the upper plate B, immediately over the central opening I, is a portion G, which is arched over the said central opening I. This portion G, as shown, is made square at its highest point to answer as a nut or burr, which takes a wrench for the purpose of adjustment.

A very important feature in this device is what might be termed a "gage" for the use of the operator in setting the machine for different work, which consists, essentially, in a nib or lug J, which is cast with plate A and projects vertically through a slot K in the upper plate B. A second nib or lug L is cast with the upper plate the same as the lower, and which is placed at one end of the said slot K. The lower lug J is made high enough to meet the lug L, so that in shifting the plates the said lugs will be more or less separated.

Figs. 4 and 5 show a cup-shaped receptacle M, which is provided with a cover, but which has no bottom, and which is cast with the part N. This device is designed to cover the plates all but the seed-passages, as shown, so that the seed may not reach any part of the device but the said seed-passages.

It is plain that when the plates are to be adjusted the lid of the receptacle M is raised and a wrench of suitable construction is placed upon the nuts or burrs F F and the said nuts loosened, so that the plate B may shift freely on the lower one, after which the said wrench is placed on the square portion of the arch G, and this part, being rigid with the plate B, on being turned moves the said plate B, and by noticing the so-called "gage" the plates may be set as desired and the bolts E E again tightened, after which the machine is ready for use.

The object of the cup or receptacle M is of course to prevent the grain from getting into the parts to be operated upon. The said cup may be made high enough to be always clear of grain.

I claim—

1. A corn-dropper comprising an upper and a lower plate, the upper plate having slots cut therein, one on either side of the center, and every portion of said slots being equidistant from the center of the plate and of an arched portion G, occupying a position directly over the center of said plate and made integral therewith, said arch being provided with a square or nut-shaped portion, the said plate being also provided between its center and the seed-passages with a slot K, at one end of which is made a lug or nib L, acting in conjunction with a similar lug or nib J on lower plate, said lug J protruding through the slot K to near the said lug J, as herein set forth, and with two holes in the lower plate, said holes corresponding to the slots in the upper plate, through which slots and holes bolts are inserted for the purposes set forth and described.

2. In a corn-dropper, the holes D D in lower plate and slots C C in upper plate, corresponding to the said holes in said lower plate and bolts used therewith, and the arched portion G, having formed therewith the square or nut, in the manner and for the purposes set forth.

3. In a corn-dropper, an upper plate having formed therein a slot K, through which a lug J extends, and which lug is formed on the lower plate, said lug acting in conjunction with a lug L, formed on upper plate near the said slot K, for the purposes herein set forth and described.

4. In a corn-dropper, the cup M, with its cover forming a part of the portion N, the whole being placed over the dropper in the manner and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES SELBY.

Witnesses:
H. W. WELLS,
A. KEITHLEY.