J. GROSS.

Corn-Planter.

No. 48,130. Patented June 6, 1865.

Fig. 1.

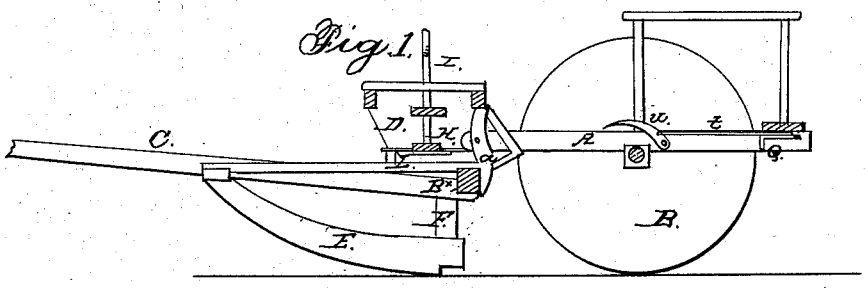

Fig. 2.

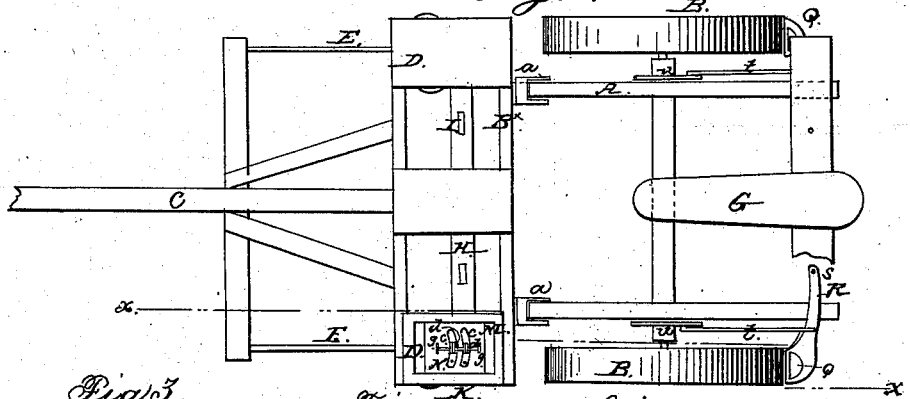

Fig. 3.

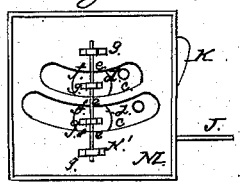

Fig. 4.

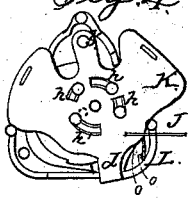

Fig. 5.

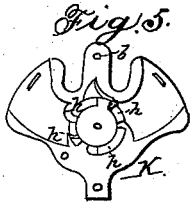

Fig. 6.

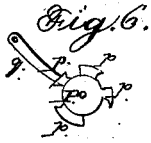

Fig. 7.

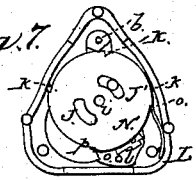

Fig. 8.

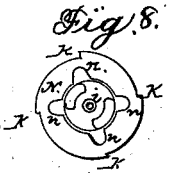

Fig. 9.

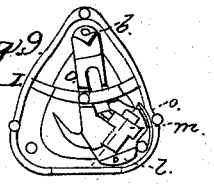

Fig. 10.

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UNITED STATES PATENT OFFICE.

JOHN GROSS, OF DECATUR, ILLINOIS, ASSIGNOR TO THOS. K. ALEXANDER.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **48,130**, dated June 6, 1865.

To all whom it may concern:

Be it known that I, JOHN GROSS, of Decatur, in the county of Macon and State of Illinois, have invented a new and Improved Corn-Planter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Figs. 3, 4, 5, 6, 7, 8, 9, and 10, enlarged detached views of parts pertaining to the seed-distributing device.

Similar letters of reference indicate like parts.

This invention relates to a new and improved seed-distributing apparatus and in an improved scraper, all arranged to operate as herein set forth, whereby it is believed that an improved machine for planting corn and other seed is obtained.

A represents a rectangular frame, which is mounted on two wheels, B B, and is connected by joints or hinges *a a* to a frame, $B^{\times}$, which has the draft-pole C attached to it, and also two seed-boxes, D D, are at each end. To this frame $B^{\times}$ two furrow-openers, E E, are attached, one at each side, in line with the seed-boxes D D, the rear ends of E E being divaricated or forked to receive the lower ends of the seed-conveying tubes, F, which extend down from the seed-boxes D D.

G is the driver's seat placed on the frame A, and H is a reciprocating slide, which is operated by a lever, I, and is connected at each end by a link, J, with a seed-plate, K, which works from a pin or pivot, *b*, as a center in a skeleton box or frame, L, secured one to the bottom of each seed-box D. (See Fig. 4.)

To the bottom of each seed-box D there is secured a metal plate, M, and these plates have two curved slots, *c c*, made in them, each of which has a cut-off or strike, *d*, fitted in it, the cut-offs or strikes being at the centers of the slots and prevented from sliding laterally therein by means of projections *e*, fitting in notches *f* in the plate. (See Fig. 3.) The cut-offs or strikes are also prevented from rising out of the slots by means of a spring or elastic rod, N′, which passes through cleats *g* on the plate M, and cut-offs or strike. Said springs, on account of being merely small rods, do not interfere in the least with the corn or seed in the boxes D.

The seed-plates K have four holes, *h*, made in them, which are in the path of a circle, (see Fig. 4,) and these holes work in line with the slots *c c* in the plate M, as the plates K are vibrated from the slide H, the seed being discharged through said holes when the latter pass under the cut-offs or strikes *d*.

Underneath the seed-plates K there are placed circular plates N, which work on a central pivot, *i*, in the frames or boxes L, a plate, N, being underneath each plate K. These plates N have each two holes, *j j*, made in them, and the edges of said plates are provided with four shoulders or projections, *k*, at equal distances apart, as shown in Figs. 7 and 8.

Underneath the circular plates N there are placed bars O, which work on the same pivots or from the same centers as the seed-plates K. (See Figs. 7 and 9.) These bars O are connected with the plates K by a pivot, *l*, and said bars are each provided with a pawl, *m*, by which the circular plates N are rotated. (See Figs. 9 and 10.) The pawls *m* engage with projections *n* at the under sides of the plate N, (shown in Fig. 8.) The office of the circular plates N is to allow the seed being discharged through the holes *h* only at the proper time, and this occurs when a hole, *j*, comes in line with a hole, *h*, underneath a cut-off or strike, *d*, and the plates N are turned a quarter-revolution at each vibration or movement of the plates K and bars O, and the seed discharged consecutively from the holes in the plates K, but a discharge is made simultaneously from the two seed-boxes. The plates N are prevented from turning backward by a pawl, *o*, attached to the skeleton boxes or frames L.

In the under side of each plate K there is fitted a circular gage, P, provided with projections *p*. By turning these gages P the capacity of the holes *h* may be varied as desired, according to the quantity of seed required for each dropping. The gages are provided with an arm, *q*, through the outer end of which and a slot in the plates K a pin, *r*, passes, in order to secure the gages at any desired point.

Q Q represent two scrapers, which are at

the outer ends of arms R R, the latter being attached by pivots *s* to the rear part of the frame A. (See Fig. 2.) These arms R R are connected by rods *t* to treadles *u u*. The scrapers are in line with the wheels B B, and are at the rear sides of the same, and the driver by pressing down the treadles *u u* with his feet causes the scrapers to bear against the wheels, and effectually cleanse the same from dirt which may adhere to it.

I do not claim, broadly, the use of scrapers moved by treadles; but

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

1. The employment or use of the circular intermittingly-rotating plates N, provided with openings or holes *j j*, in combination with the vibrating seed-plates M, substantially as and for the purpose specified.

2. The vibrating bars O, placed below or underneath the plates N, connected with the plates M, and receiving their motion therefrom, and provided with pawls *m*, for the purpose of operating the plates N, as set forth.

3. The circular gages P, placed underneath the plates N, and arranged, substantially as shown, for graduating the capacity of the holes *h* in the plates M, as set forth.

4. The arranging of the cut-offs or strikes *d* with springs or elastic rods N′, in the manner substantially as and for the purpose specified.

5. The scrapers Q Q, at the outer ends of arms R R, which are connected by rods *t* to treadles *u*, substantially as and for the purpose specified.

JOHN GROSS.

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F. A. HICKCOX.