

Corn-Planter.

Patented Aug. 31. 1858.



UNITED STATES PATENT OFFICE.

E. L. LYON, OF EAST RANDOLPH, NEW YORK.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. 21,350, dated August 31, 1858.

To all whom it may concern:

Be it known that I, E. L. LYON, of East Randolph, in the county of Cattaraugus and State of New York, have invented a new and Improved Seeding-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side sectional elevation of my invention, taken on the line *x x*, Fig. 2. Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improved seeding-machine of that class in which the seed-distributing devices are attached to the wheels and are operated by the rotation of the wheels as the machine is drawn along.

The invention consists in the peculiar construction and arrangement of the seed-distributing devices as applied to the wheels, whereby the seed may be planted evenly, either in check-rows or in parallel drills, in a perfect and expeditious manner.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents an axle, and B B the wheels, that are placed on its ends and may be attached permanently to it.

C are shafts or thills, the back part of which are attached to the axle and have a driver's seat, D, placed on them. The axle A is made of a suitable length, so that the space between the wheels B B will be equal to the desired space between the hills or drills to be planted.

To the inner sides of the wheels B B radial bars E are attached. These bars are of rectangular form, and their outer ends project a suitable distance beyond the peripheries of the wheels B, said ends being rounded or of curved form, as shown clearly in Fig. 1. On each bar E a seed-box, F, is placed. These seed-boxes are of rectangular flat form, placed flatwise on the wheels, and are allowed to slide freely on the bars, the boxes being retained properly in place by the end pieces, *a*, of the seed-boxes, the end pieces bearing against one side of the bars E. This will be clearly understood by referring to Fig. 1.

In the inner end piece, *a*, of each seed-box an opening, *b*, is made. These openings are covered by a flap or lid, *c*, and the ends of the outermost end pieces *a* have a semicircular

recess, *d*, made in them adjoining the bars E. Corresponding recesses, *e*, are also made in the bars E, near their outer ends, one recess in each bar, and smaller recesses, *f*, are also made in the bars E at points some distance nearer their inner ends, as plainly shown in Fig. 1.

G G are two curved rods, the upper ends of which are provided with loops or sockets *g*, and fitted loosely on the axle A, the loops or sockets being allowed to turn freely thereon.

To the lower ends of the rods G covering-shares H are attached, one to each. The covering-shares are connected by a rod, I, to which a lever, J, is attached, said lever having its fulcrum on the axle A and its front end extending up through a foot, K, in front of the seat D.

The operation is as follows: As the machine is drawn along the seed-boxes F are moved on the bars E by their own gravity, the seed-boxes falling or passing down toward the inner ends of the bars E when over or above the hubs of the wheels, and passing down toward the outer ends of said bars as they pass below the hubs. This movement of the seed-boxes distributes the seed, for when the seed-boxes are at the outer parts of the bars E, and consequently below the hubs of the wheels, the recesses *f* will fill with seed, for said recesses will then communicate with the interior of the seed-boxes, and as the seed-boxes pass above or over the hubs of the wheels they in falling will bring the recesses *d* in the outermost end pieces *a* of the seed-boxes in register with the recesses *e*, so that when they again pass below the hubs the recesses *d* will pass or fall in register with the recesses *e* in the bars E, and the seed will be discharged into holes in the earth made to receive it by the projecting or outer ends of the bars E. The recesses *f* as the seed is discharged from the recesses *e* are filling with seed to be discharged at the succeeding revolution of the wheels. The shares H cover the seed. They may be elevated at any time by operating the front of the lever J, which may be retained by any suitable catch or device.

This machine has been practically tested, and it operates well. Any proper number of seed-boxes may be attached to the wheels, according to the length of space desired between the hills or droppings. The seed-boxes may be constructed of sheet metal, and the bars E may be of metal or wood covered with metal plate.

I do not claim broadly attaching seed-distributing devices to wheels; but

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

1. The sliding seed-boxes F, attached to the radial bars E of the wheels, the bars E and outer end pieces *a* of the seed-boxes being provided respectively with the recesses *c f d*, and the outer ends of bars E projecting beyond the peripheries of the wheels, the whole

being arranged for joint operation, substantially as and for the purpose set forth.

2. In combination with the above-named parts, the covering-shares H, arranged substantially as described.

E. L. LYON.

Witnesses:

G. A. WILLIAMS,
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