

A. S. & D. MARKHAM.

Corn-Planter.

No. 30,883.

Patented Dec. 11. 1860.

Fig. 1.

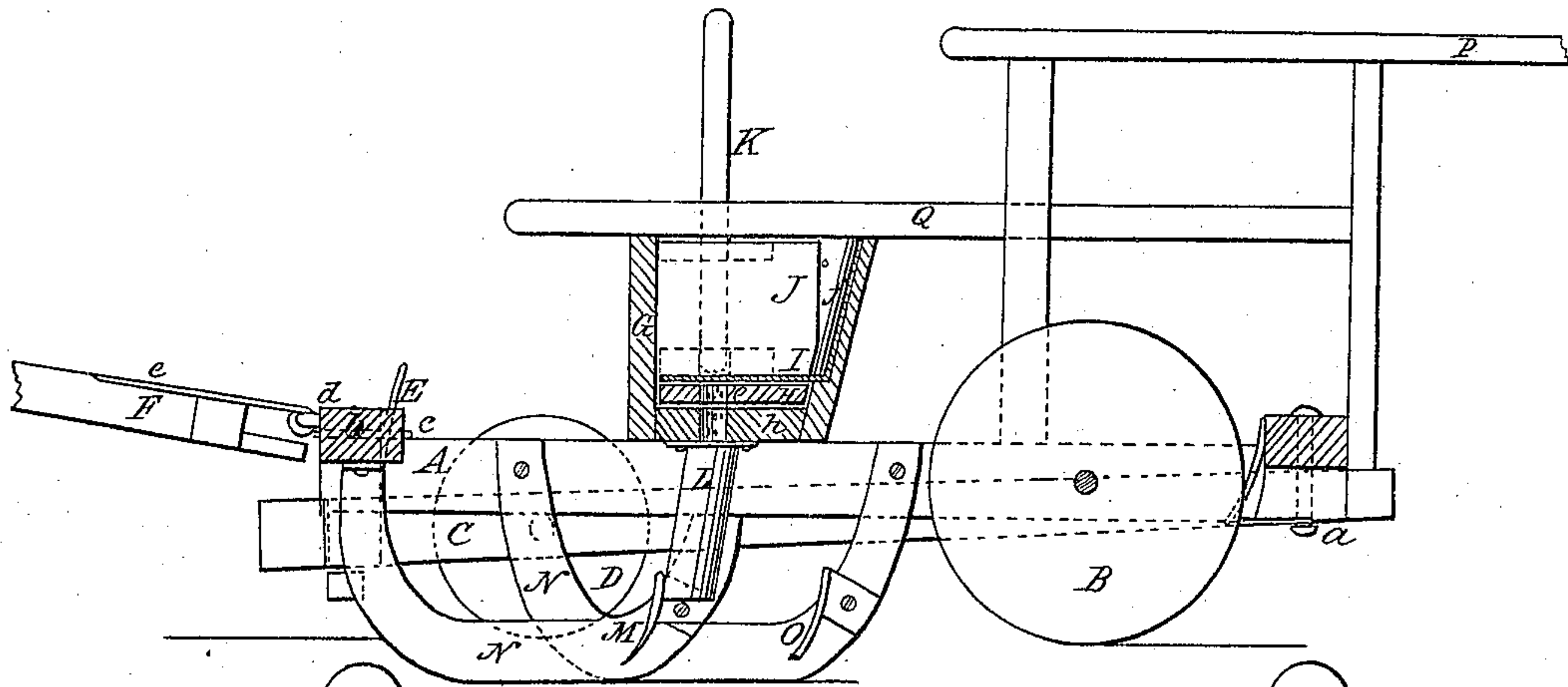
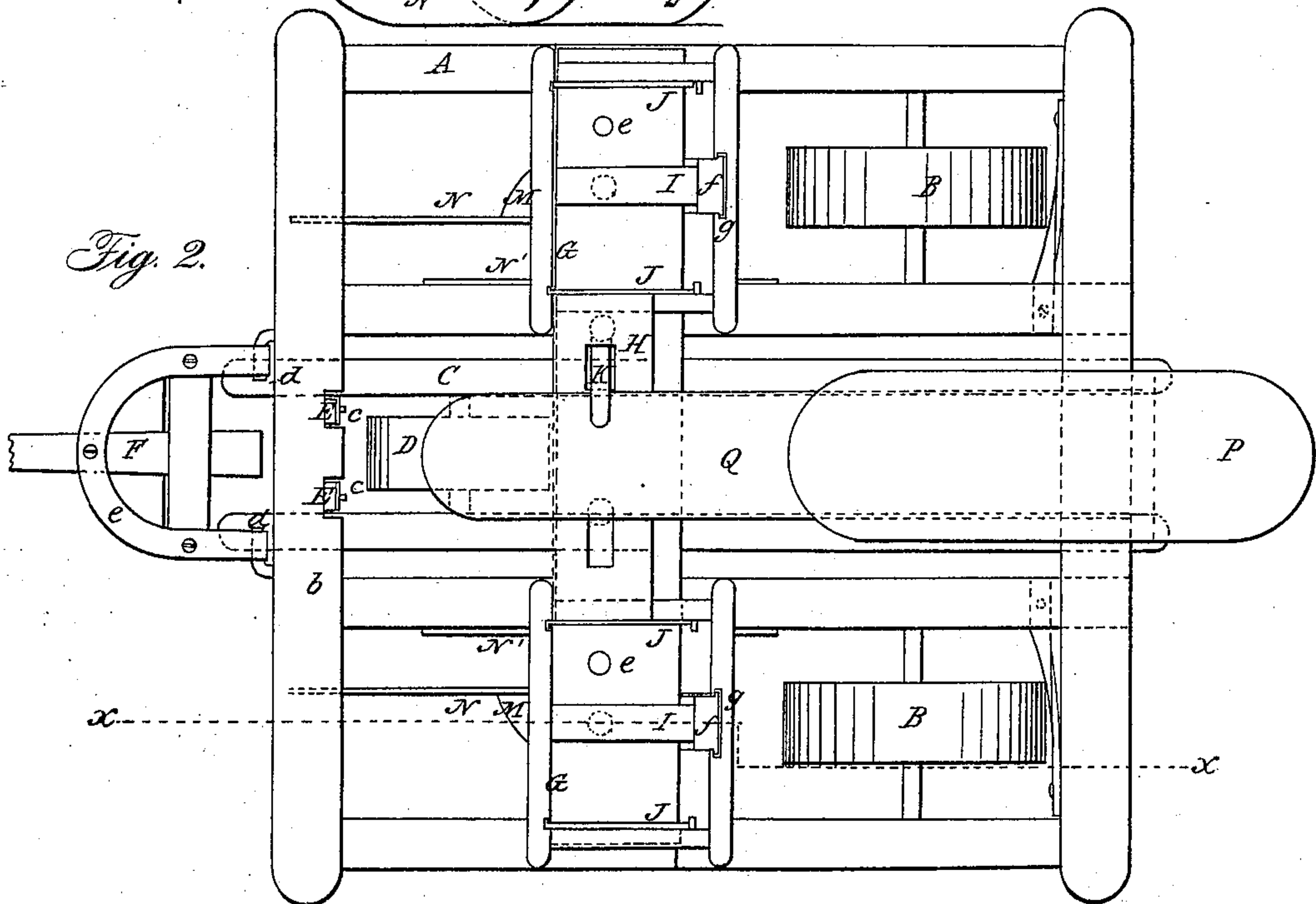


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

A. S. MARKHAM AND DANIEL MARKHAM, OF MONMOUTH, ILLINOIS.

## IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 30,883, dated December 11, 1860.

*To all whom it may concern:*

Be it known that we, A. S. MARKHAM and DANIEL MARKHAM, both of Monmouth, in the county of Warren and State of Illinois, have invented a new and Improved Corn-Planter; and we 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 view of our invention, taken in the line *x x*, Fig. 2. Fig. 2 is a plan or top view of the same.

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

This invention has for its object the varying of the quantity of seed to be sown on a given area by a simple adjustment of the seed-distributing slide in its place, whereby slides of different thicknesses and possessing seed-cells of varying capacity may be used, as occasion may require, to effect the desired end.

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

A represents a rectangular frame, the back part of which is supported by two wheels, B B; and C is a smaller frame, which is fitted centrally to the frame A, and is connected to it at its back end by bolts *a* in such a manner as to allow of a certain degree of play between the two frames, the bolts *a* serving as joints.

In the front part of the frame C a wheel, D, is placed, which serves as a support for the same, and to the front end of the frame C two perforated bars, E E, are attached, through which and into the front traverse-bar, *b*, of the frame A pins *c* pass, said pins securing the front end of frame A in a higher or lower position, as may be desired.

To the traverse-bar *b* a draft-pole, F, is attached by joints *d d* at the ends of a curved bar, *e*, attached to the pole, the back end of the pole extending within a short distance of the traverse-bar *b*, as shown clearly in both figures.

On the frame A two seed-boxes, G G, are placed, one near each side of the frame A.

H is a seed-distributing slide, which extends entirely across the frame A and through the bottom of the seed-boxes G G. This slide H has holes *e* made through it, and a cut-off, I, is fitted centrally in each seed-box. These cut-offs are attached to the lower ends of slides

*f*, which are fitted in grooves *g* in the back sides of the seed-boxes, and admit of the cut-offs being adjusted higher or lower, as circumstances may require. To the inner sides of the seed-boxes G G there are fitted slides J, which may be readily raised and lowered. The lower ends of these slides bear or rest on the seed-distributing slide H and retain it in proper working position. This arrangement of the slides J admits of seed-slides H of different thicknesses being used, and consequently the holes *e* may be of greater or less capacity, according to the thickness of the seed-slide employed. The seed-slides, it will be seen, may be readily fitted into the boxes G and removed therefrom. The bottoms *h* of the seed-boxes G have each a hole, *i*, made through them, directly underneath the cut-off, and the operation of the seed-slide and cut-off is precisely the same as those in ordinary use, the seed being discharged as the filled holes *e* register or pass in line with the holes *i* in the bottoms *h* of the seed-boxes G. The seed-slide H may be operated by a hand-lever, K. Each hole *i* in the bottoms *h* of the seed-boxes communicates with a seed-conveying spout, L, directly in front of the lower end of which there is a furrow-share, M.

To each side of the frame A two cutters, N N', are attached, at a suitable distance apart. These cutters are formed of metal plate, steel being preferable, and they are curved or rounded upward at each end, as shown clearly in Fig. 1. One cutter, N, is a little in advance of the other, N', and the furrow-shares M are attached to the cutters N, while to the cutter N' covering-shares O are attached, the latter working in line by the sides of the furrows made by the shares M, and following said furrows and covering the seed dropped therein. The cutters N N' cut through weeds, stalks, and other trash that may be in their path, and permit the shares M N to perform their respective functions in a perfect manner, and also to cultivate or work over the ground, rendering the same light and friable, favorable to the rapid germination of the seed and the growth of the plants. In consequence, also, of the covering-shares O being at the sides of the furrows, the former, in covering the seed, leave a furrow at the sides of the covered seed, which furrows prevent the seed being washed out of the earth on side-hills—a contingency liable to occur



when the seed is covered with rollers or covering-shares which leave a plane surface.

P is the driver's seat, which is placed at the back part of the frame A, and Q is the seat of the attendant, who actuates the lever K and distributes the seed.

The seed may be planted at any depth by adjusting the front part of frame A in a higher or lower position by means of the pins o, the same being fitted in the proper holes in the bars E E, and in moving the implement from place to place the cutters and shares may be elevated entirely above the surface of the ground. In case it is desired to elevate the cutters and shares temporarily above the surface of the ground, the driver moves himself back on his seat P, and thereby tilts upward the front part of frames A C, the back end of the draft-pole F serving as a step to determine the upward tilting movement of the frames. The driver then turns the team and machine

and resumes his former position on the seat to allow the frames to descend to their proper working position.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

Securing the seed-distributing slide H in proper position by means of the slides J, in connection with the adjustable cut-offs I, substantially as shown and described, to admit of the application or employment of seed-slides of different thickness to regulate as may be desired the quantity of seed to be planted on a given area or the number of seeds to be planted at a dropping.

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Witnesses:

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