

D. FOREMAN.

Grain-Drill.

No. 24,601.

Patented June 28, 1859.

Fig. 1.

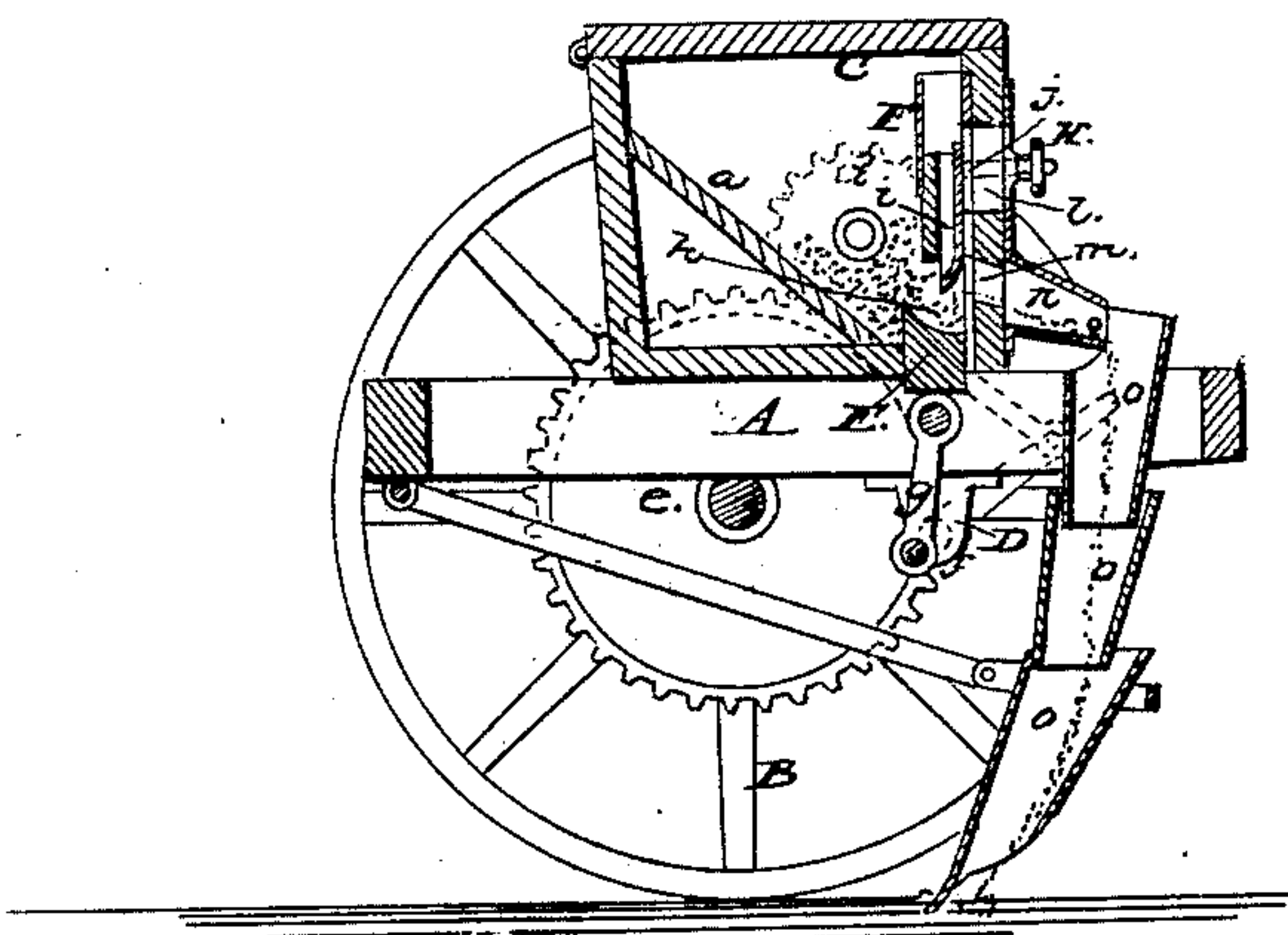


Fig. 2.

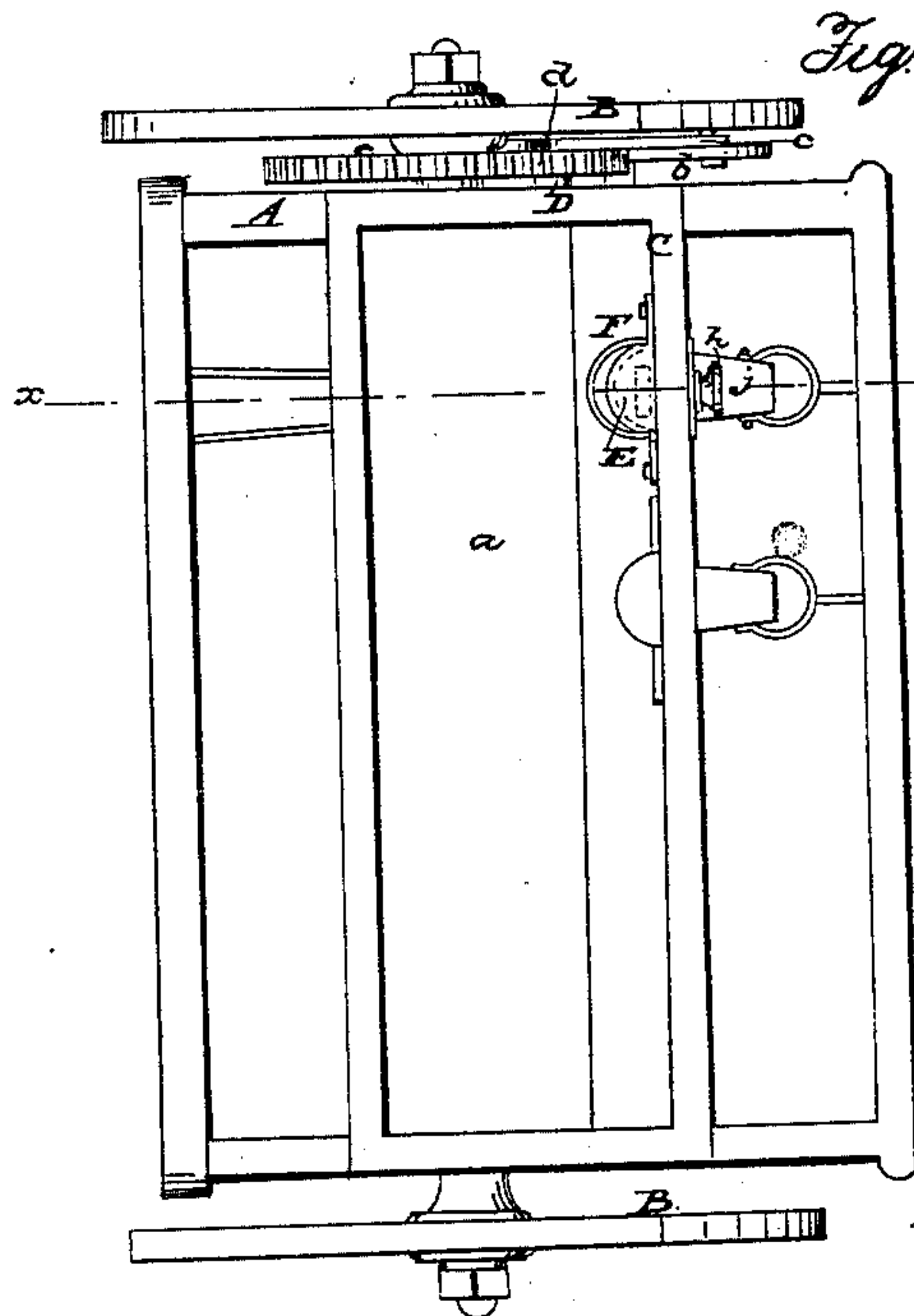


Fig. 3.



Witnesses:
Geo. W. Hall
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UNITED STATES PATENT OFFICE.

DANIEL FOREMAN, OF NAVARRE, OHIO, ASSIGNOR TO HIMSELF, G. W. SWERINGEN, AND JONATHAN PENOYER, OF SAME PLACE.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. 24,601, dated June 28, 1859.

To all whom it may concern:

Be it known that I, DANIEL FOREMAN, of Navarre, in the county of Stark and State of Ohio, 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 vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a detached perspective view of the seed-elevator.

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

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

A represents a rectangular frame, which is mounted on two wheels, B B', and has a seed-box, C, placed on it. This seed-box may extend the whole width of the frame A, as shown clearly in Fig. 2, and have an inclined board, *a*, placed within it and extending longitudinally its whole length.

Underneath the frame A a shaft, D, is placed. This shaft extends the whole width of the frame, and to one end of it an arm, *b*, is attached, said arm being connected by a rod, *c*, to a pinion, *d*, the point of connection being between the axis of said pinion and its periphery, as shown clearly in Fig. 2. The pinion *d* gears into a wheel, *e*, which is attached concentrically to the wheel B.

On the shaft D a crank, *f*, is formed, said crank being connected by a rod, *g*, with a slide, E, the upper end of which is fitted in a case or guide-box, F, attached to the back side of the seed-box C. The slide E is formed of a semi-cylindrical bar, the upper part of which is hollow, and a recess, *h*, is made in its outer or convex side, to form a cup, as shown clearly in Figs. 1 and 3. The back of the slide E bears against the inner side of the seed-box C, and in the upper and hollow part of the slide E a plate, *i*, is placed, the lower end of said plate projecting outward over the recess or cup *h*, as shown clearly in Fig. 1. The plate *i* is attached by a screw-rod, *j*, and nut *k* to the back side of the seed-box C, the rod *j* being attached to the plate and passing through a slot, *l*, in the back, so as to admit of the plate being adjusted higher or lower over the cup *h*, as may be desired.

In the back of the seed-box C an aperture, *m*, is made, and a tube, *n*, is attached to the back of the seed-box, said tube communicating with the usual conveyer-tubes, *o*, the lower one of which forms the furrow that receives the seed.

The operation is as follows: As the machine is drawn along a rocking motion is given the shaft D by means of the gearing *e d* and connecting-rod *c*, and the crank *f* gives a reciprocating motion to the slide E, and as the box C is provided with the requisite quantity of seed the cup *h* will fill as it ascends and discharge a portion of seed into the opening *m* and spout *n*, the quantity discharged being regulated by adjusting the plate or gage *i* by means of the screw-rod *j* and nut *k*. The seed passes down the tubes *o* into the furrow made by the lowermost tube.

By this invention it will be seen that the seed cannot be cut or broken by the operations of the slide, and that the quantity to be discharged can be regulated as desired by adjusting the plate or gage *i*, which exposes the aperture *m* in a greater or less degree. The distributing device cannot become choked or clogged, and it may be constructed at a moderate cost. Any number of slides E may be used in the seed-box, and they may be placed at any suitable distance apart.

I am aware that reciprocating seed-slides have been previously used, and so arranged that the seed may be elevated and discharged, and I therefore do not claim such device separately.

I do not claim the seed-cup arrangements as shown in E. Holt's withdrawn case, 1854; W. B. Johnson's patent, June 6, 1854; L. A. Butt's patent, June 5, 1855; N. C. Davis' patent, October 25, 1853, and Earnshaw and Gibboney, withdrawn, 1855; but,

Having thus described my invention, what I do claim as new, and desire to secure by Letters Patent, is—

The arrangement and combination, with the interior of the peculiarly-formed hollow slide E, of the adjustable plate *i*, substantially as and for the purposes herein shown and described.

DANIEL FOREMAN.

Witnesses:

GEO. W. HALL,
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