W. HOUSE. Corn-Planters.

No. 143,905.

Patented Oct. 21, 1873.

FIG.Z.

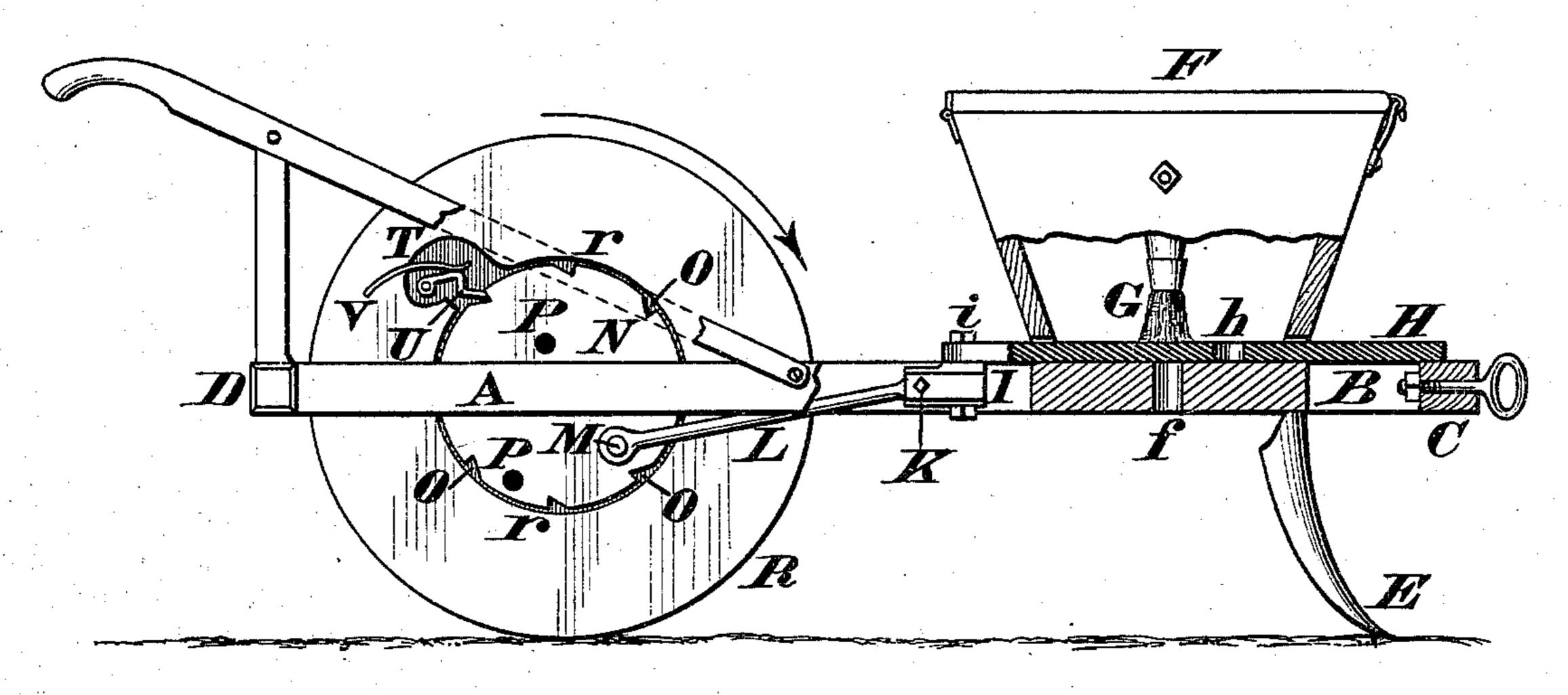
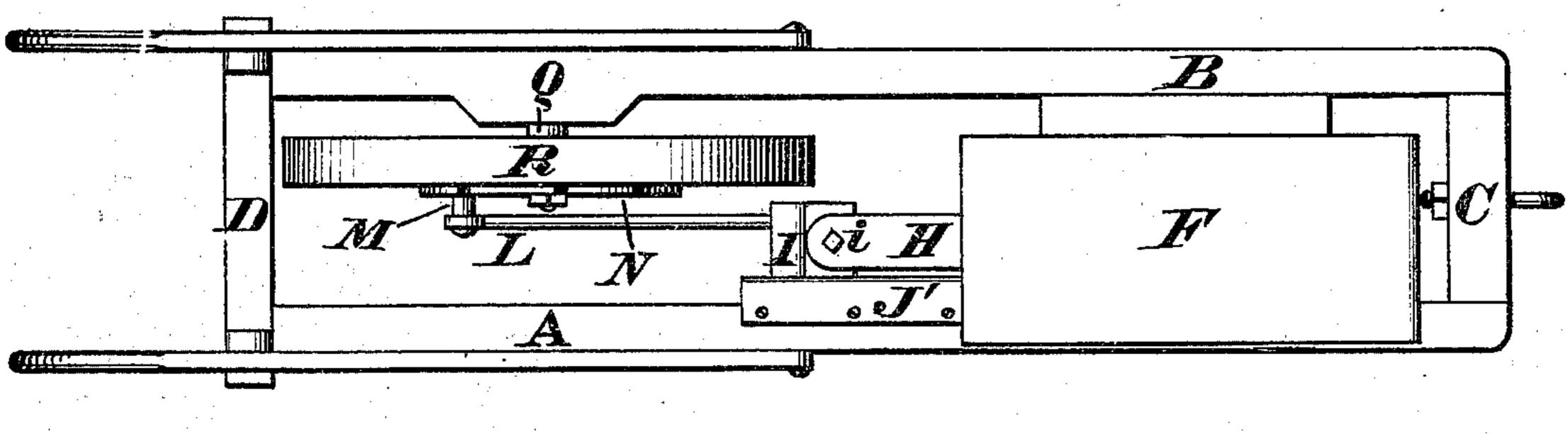
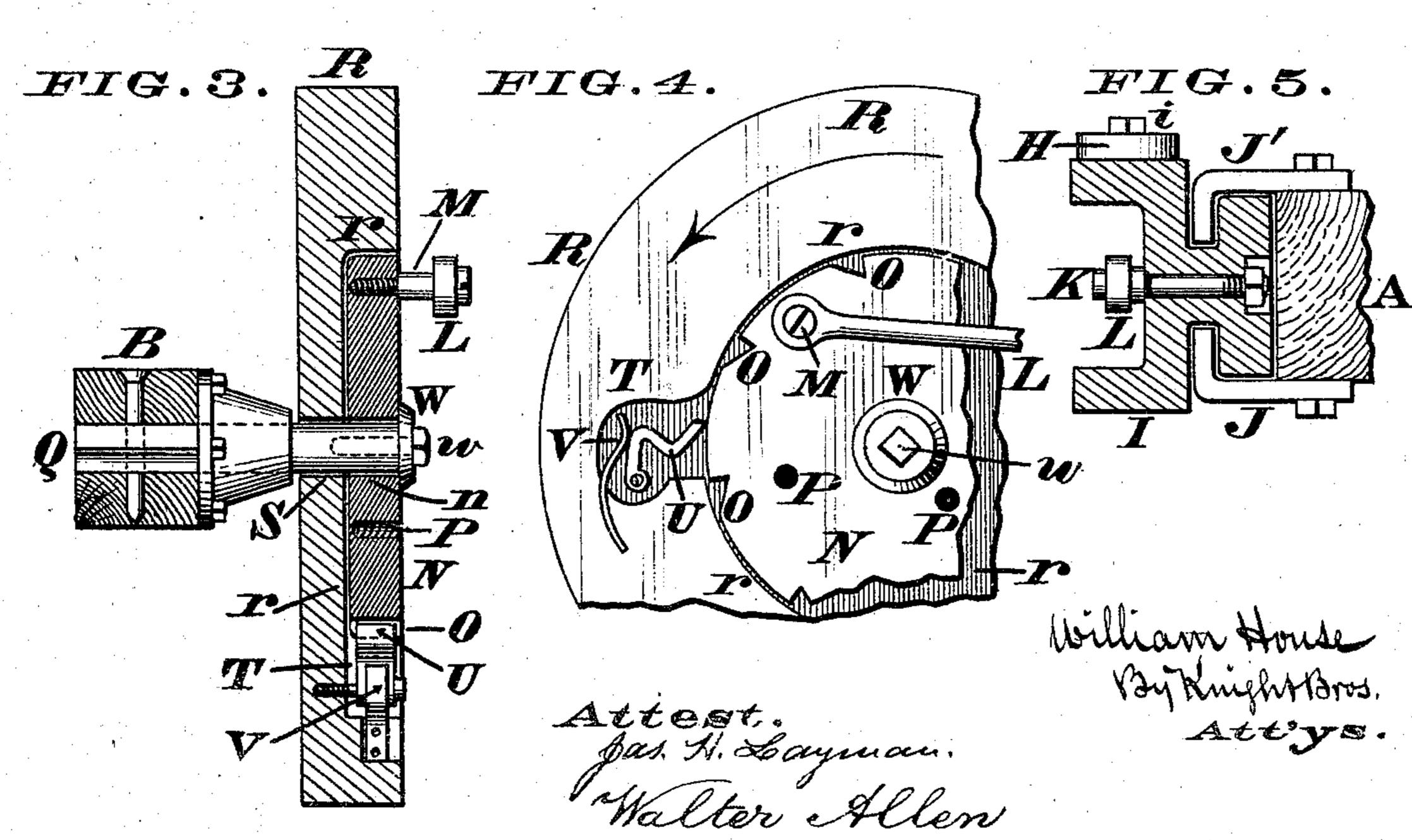


FIG. 2.





UNITED STATES PATENT OFFICE.

WILLIAM HOUSE, OF AURORA, INDIANA.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 143,905, dated October 21, 1873; application filed September 4, 1873.

To all whom it may concern:

Be it known that I, WILLIAM HOUSE, of Aurora, Dearborn county, Indiana, have invented certain new and useful Improvements in Corn-Planters, of which the following is a

specification:

This invention relates to that class of cornplanters in which the required amount of the grain is discharged from the hopper by the action of a perforated slide, which receives its reciprocating motion from a ground-wheel supporting the rear end of the implement; and my improvement relates more particularly to an arrangement of devices whereby the seedslide will be rendered inoperative during any retrograde movement of the implement, which devices will be hereinafter fully described.

In addition to the above-described improvement, I have also devised a method of graduating the stroke of the seed-slide, so as to cause it to discharge the grain a greater or less dis-

tance apart, as will presently appear.

Figure 1 is an elevation of a corn-planter embodying my improvements, a portion of one of the side beams being broken away, and the hopper with its accessories shown in section. Fig. 2 is a plan of the implement. Fig. 3 is an enlarged vertical section through the groundwheel and its attachments. Fig. 4 is an elevation of a portion of the ground-wheel on an enlarged scale; and Fig. 5 is an enlarged vertical section through the cross-head, to which the seed-slide is secured.

A B represent the side beams, C D the front and rear beams, and E the furrowing-share, of a corn-planter. Secured near the front end of the implement is a hopper, F, having an opening, f, in its bottom, and being provided with an ordinary cut-off brush, G. Adapted to reciprocate longitudinally within said hopper is a seed-slide, H, having one or more customary perforations or cells, h, for containing grain. The rear end of this seed-slide is connected, by bolt i, to a cross-head, I, which is confined to a rectilinear path by guides J J', that are secured, respectively, to the under and upper sides of the beam A. This cross-head is provided with a pivot-bolt, K, to which is connected one end of a pitman, L, whose other end takes hold of a wrist-pin, M, that engages with a disk, N. The disk N has a central aperture,

n, a series of circumferential ratchet-shaped notches, O, and a number of screw-threaded openings, P, within either of which latter the wrist-pin M is engaged. These screw-threaded apertures P are arranged at different distances from the center of the disk N, for a purpose which will presently appear. The disk N is seated within a cavity or recess, r, of the groundwheel R, whose central aperture S enables said wheel to be journaled upon a stud-shaft, Q, that projects inwardly from the side beam B of the implement. Both the disk N and wheel R rotate freely upon said stud-shaft, which is immovably fixed to the beam. A cavity, T, which communicates with the recess r, has pivoted within it a pawl, U, that is adapted to engage with the notches O of disk N. This pawl is forced inwardly, or toward the disk, by the stress of a spring, V, whose confined end may be secured to the ground-wheel R in any suitable manner. A washer, W, and nut w maintain the disk N and wheel R in their proper position upon the stud-shaft Q.

When it is desired to drop the grains of corn in hills that are comparatively near each other the wrist-pin M is engaged in the aperture P nearest the center of the disk N, so as to impart a short stroke to the seed-slide H. As the implement is drawn across the field the ground-wheel R rotates in the direction indicated by the arrow in Fig. 1, and in so doing the pawl U is engaged with one of the notches O, and consequently the disk N rotates in unison with said ground-wheel. This rotation of the disk N reciprocates the seed-slide H, and the grain is discharged from the hopper F through opening f, in the usual manner.

If it be necessary to have the hills farther apart, the wrist-pin M is engaged in one of the outer apertures P, and the stroke of the seed-

slide increased accordingly.

When the implement is run back for any purpose whatever the ground-wheel R rotates in the direction indicated by the arrow in Fig. 4, and, as this act causes the pawl U to rotate around the periphery of the disk N without engaging with its notches O, no revolution of said disk occurs, and therefore the seed-slide remains at rest.

From the above description it will be readily. understood that my seed-delivering mechanism

is operative only when the planter is being drawn forward across the field; but the moment the implement is arrested or reversed the feeding mechanism is instantly and automatically rendered inoperative, and on this account no waste of grain can occur.

I claim as my invention—

In combination with the reciprocating seedslide H h and recessed ground-wheel R r S of a corn-planter, the pitman L M, rotating disk

N n O, one or more apertures, P, stud-shaft Q, pawl U, and spring V, when arranged with reference to each other and adapted to operate in the manner herein explained.

In testimony of which invention I hereunto

set my hand.

WILLIAM HOUSE.

Attest:

H. BARRICKLON,

R. C. WILBER.