

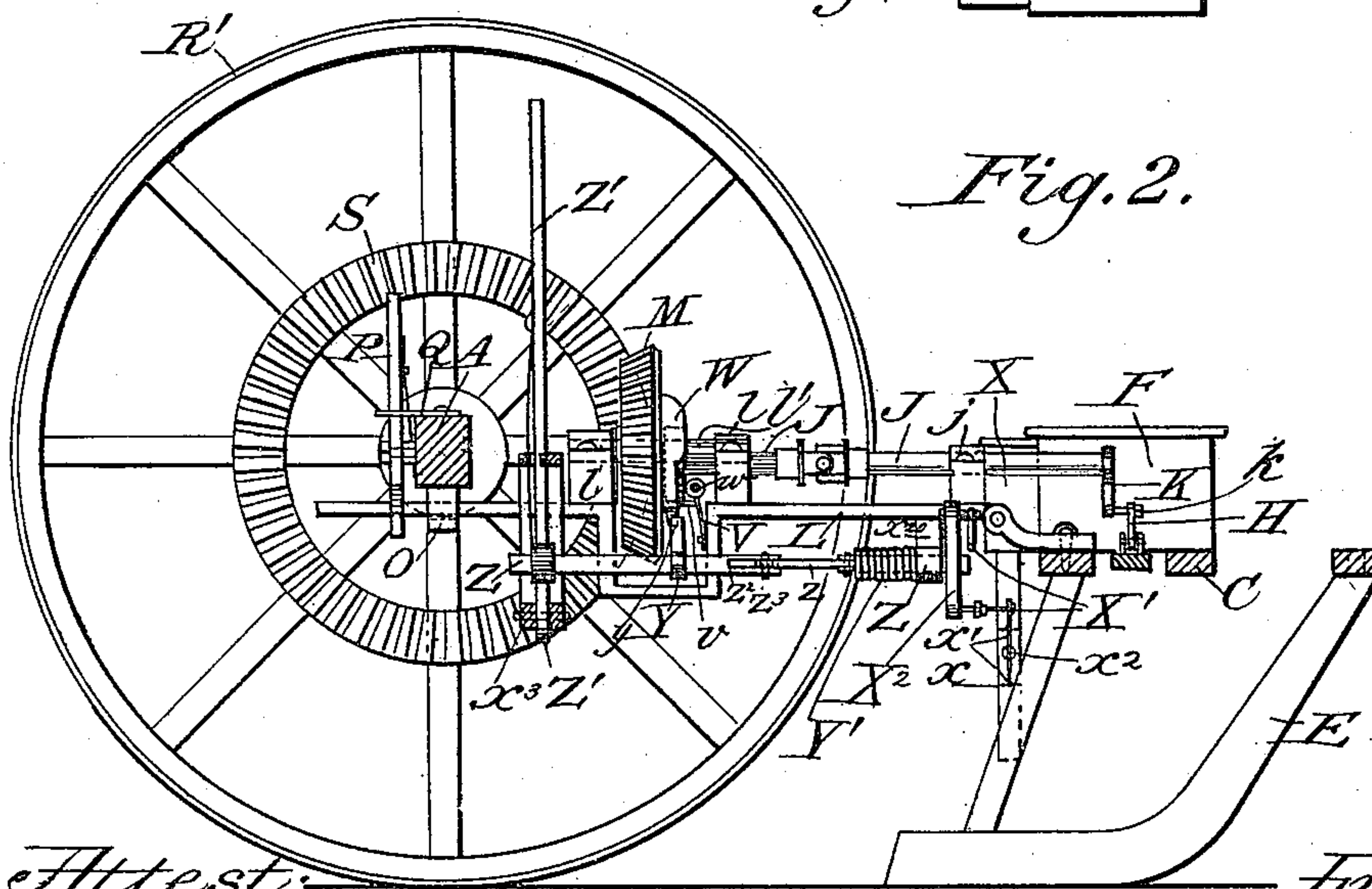
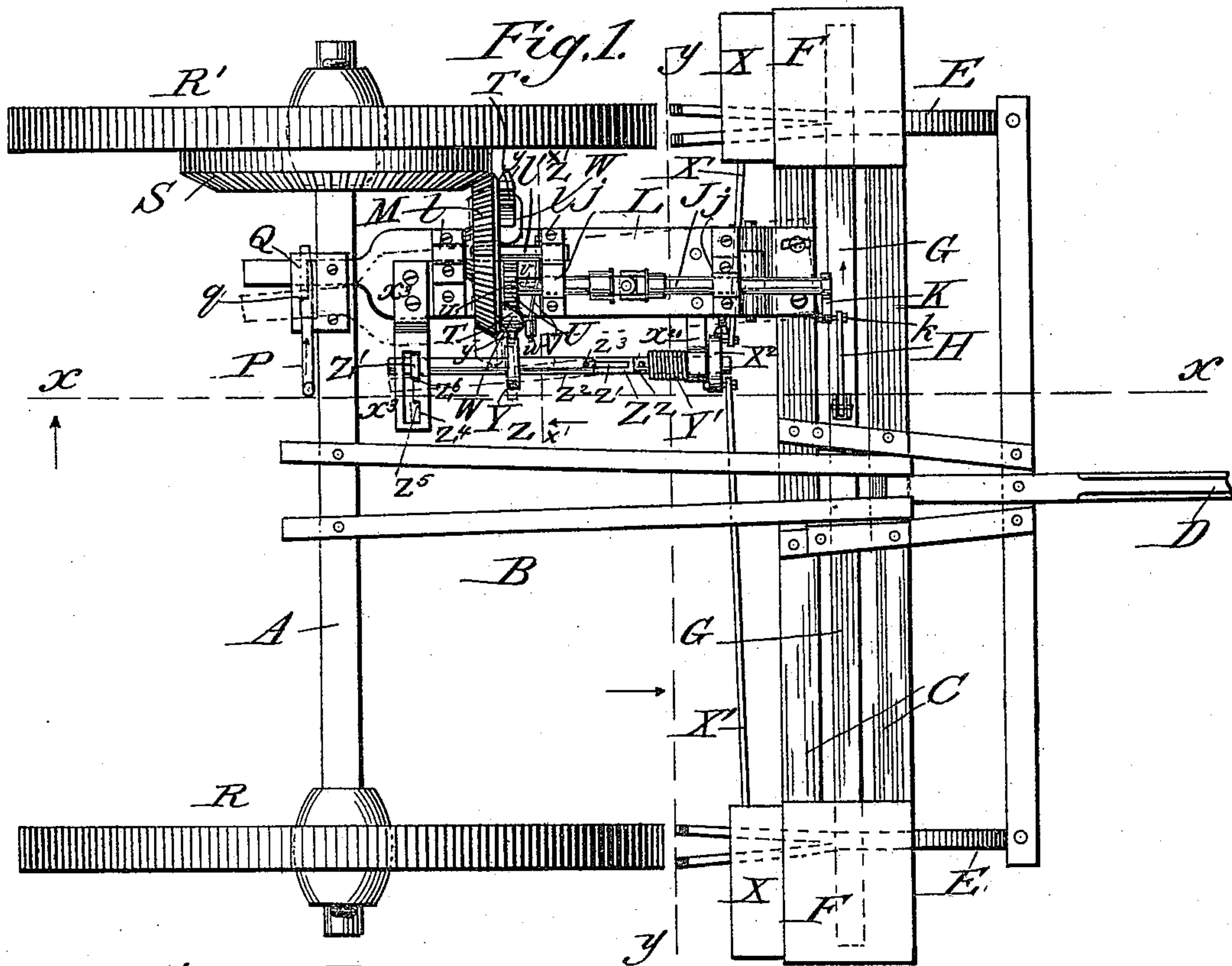
(No Model.)

2 Sheets—Sheet 1.

J. DE BUTTS.  
CORN PLANTER AND MARKER.

No. 440,917.

Patented Nov. 18, 1890.



*Attest:*

*J. H. Schott*  
*Anne J. Babcock*

*Inventor*

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by  
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(No Model.)

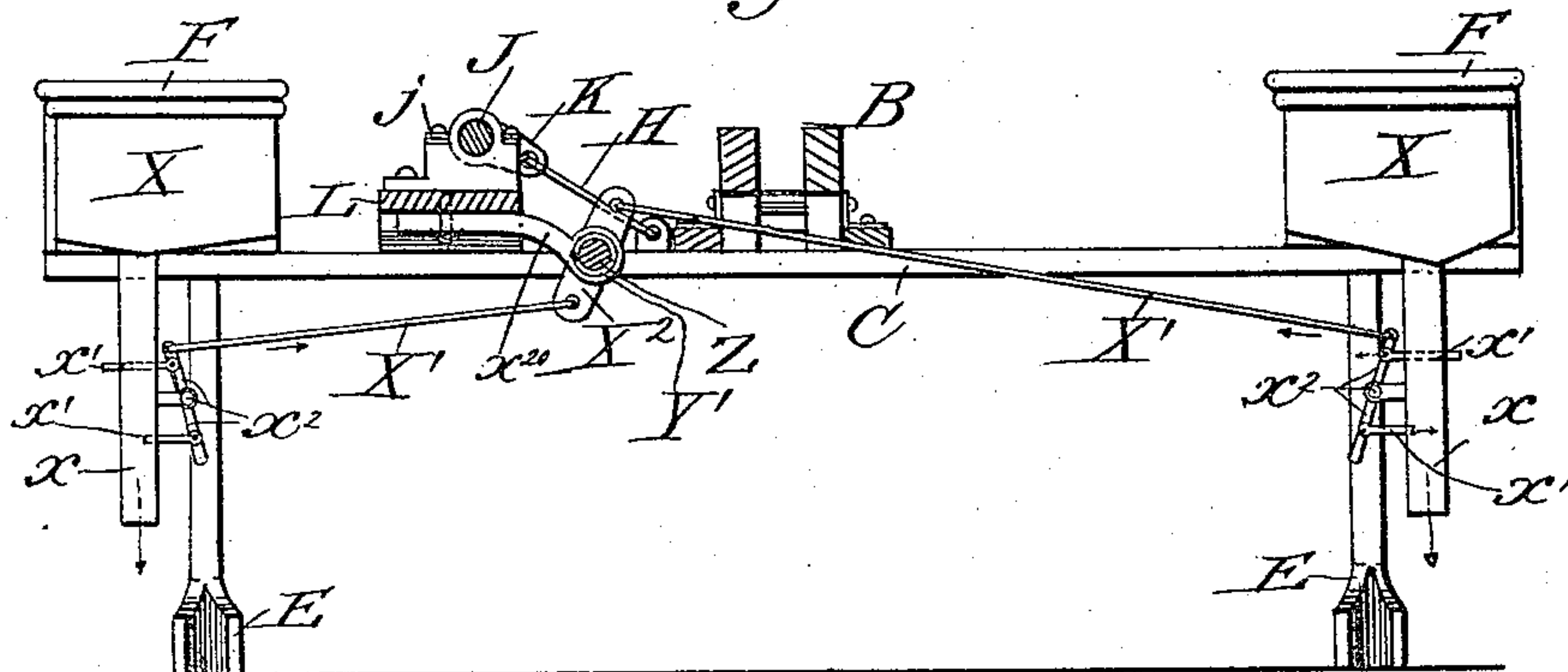
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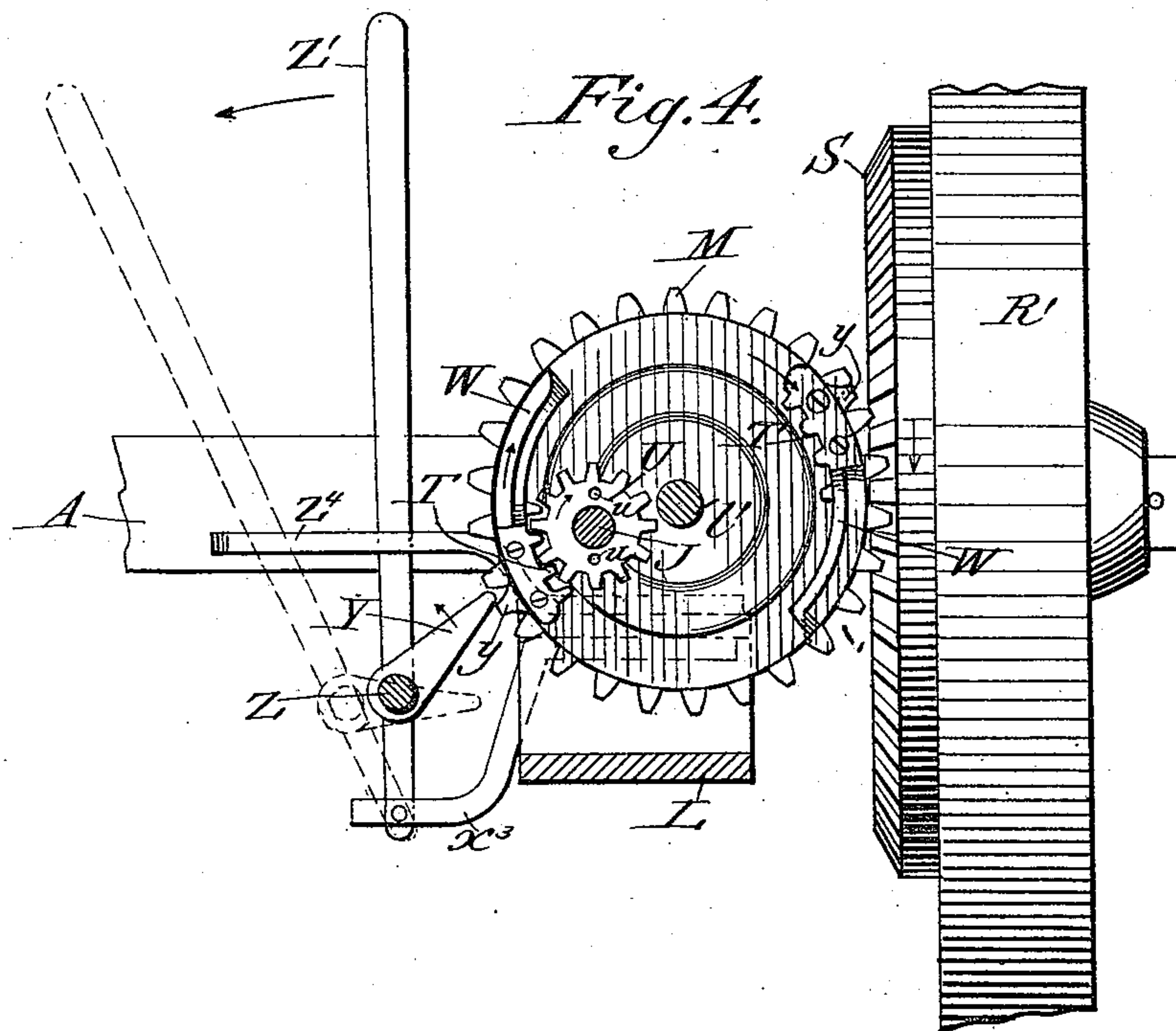
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*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

JOHN DE BUTTS, OF CENTREVILLE, MARYLAND.

## CORN PLANTER AND MARKER.

SPECIFICATION forming part of Letters Patent No. 440,917, dated November 18, 1890.

Application filed August 25, 1890. Serial No. 362,918. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DE BUTTS, a citizen of the United States, residing near Centreville, in the county of Queen Anne and State of Maryland, have invented certain new and useful Improvements in Corn Planters and Markers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is an improvement on the devices shown in Letters Patent No. 378,164, granted me February 21, 1888, although some of its features are capable of use with mechanism differently constructed therefrom.

The principal object of this improvement is to accurately mark the ends of the rows by dropping small piles of plaster or other easily-observed material in such position that they will not be covered by the wheels, but will afford starting-points for the successive rows. This object I attain by providing a supplemental shaft which is thrown into and out of gear at will and operates devices for dropping charges of the plaster outside of the lines of travel of the wheels. I also make use of certain additional novelties in the details of construction and combination hereinafter particularly set forth and claimed.

In the accompanying drawings, Figure 1 represents a plan view of a machine embodying my invention. Fig. 2 represents a central vertical longitudinal section of the same on the line  $x x$  of Fig. 1, looking toward the operating gear-wheels. Fig. 3 represents a transverse section on the line  $y y$  of Fig. 1, looking forward. Fig. 4 is a section on line  $x' x'$  of Fig. 1.

A designates the axle; B, the main frame of the machine; C, the seed-frame; D, the pole; E, the shoes; F, the seed-boxes; G, the seed-slide; H, the lever for operating said slide; J, the shaft which turns in bearings  $j$  and has crank-arm K and wrist-pin  $k$  for operating said lever; L, the plate or bar which supports said shaft;  $l l$ , bearings on said plate or bar for an additional shaft  $l'$  and gear-wheel M, turning with said shaft; O, guideway for the rear end of said plate or bar; P, shifting-lever for said bar; Q, the slotted plate which guides said lever and has a shoulder  $q$

to lock it in the position to which it is shifted; R R', the transporting-wheels; S, the large gear-wheel turning with wheel R'; T, the toothed segments on wheel M; U, the pinion on shaft J for gearing with said segments; V, the locking-spring which presses its pin or stud  $v$  into recesses  $u$  of said pinion, and W a flange raised on each segment T and engaging a roller  $w$  on an arm of said spring V to raise stud  $v$  out of any one of these recesses.

All the devices thus far mentioned are substantially identical in construction and operation with the corresponding ones described in my aforesaid patent, No. 378,164, and reference is made thereto for a fuller description and explanation of them.

X designates a pair of hoppers for plaster or other marking material attached to the outer sides of the seed-boxes and discharging through spouts or chutes  $x$  outside of the lines of travel of the transporting-wheels R R'. These chutes are provided with double cut-off valves  $x' x'$ , each pair being attached to a centrally-pivoted piece  $x^2$ , operating after the fashion of the similar devices which govern the passage of shot in measured quantities from a shot-pouch. These pivoted pieces or small levers  $x^2$  are connected by long rods or pitmen X' to the ends of a double eccentric or double arm X<sup>2</sup> on a shaft Z, which is mounted at one end in a bearing formed on a rigid arm  $x^{20}$ , extending laterally from plate L. The other end of this shaft Z is journaled in a lever Z', which is pivoted at its lower end to another lateral arm  $x^3$  of said plate. The said shaft Z consists of a forward section  $z$ , longitudinally slotted at  $z'$  near its rear end, and of a rear section  $z^2$ , which is connected to said forward section by a pin  $z^3$ , passing through holes in section  $z^2$ , and also through the slot  $z'$  of section  $z$ . This method of attachment allows the said rear section to be moved by said lever Z' toward or from the plate L without disturbing the section  $z$ . The said lever Z' moves in a slotted plate  $z^4$ , which has shoulders  $z^5 z^6$  for locking said lever in either position to which it may be shifted. The section  $z^2$  is provided with a lateral arm or projection Y, which is in position to be struck by a peripheral lug  $y$  of the segment (or one of the segments) T, when the said lever and shaft-section have



been shifted into the position nearest to said plate L and the shafts thereon. The stroke of this lug on the said arm Y will rock shaft Z in one direction, so as to let the charges of plaster fall, and a spring Y', surrounding said shaft and attached thereto at one end and to a relatively-fixed part of plate L at the other end, then immediately rocks the said shaft in the reverse direction and closes the lower valves of the plaster-hopper chutes, while opening the upper valves so as to let additional charges of plaster descend as far as the said lower valves, but no farther. When the lever Z' is shifted to the other position, it moves the said arm out of reach of said lug and the shaft Z of course does not rotate. The shaft Z and lever Z' being wholly supported by plate L, the shifting of said plate laterally to cut off the seed-dropping devices from the transporting-wheel R', as described in said patent, will of course move said shaft Z and lever Z' laterally also, and when the plate moves back toward said wheel all the parts attached to it move back also.

The general operation of the improvements hereinbefore described is as follows: In starting the first two rows of corn the lever Z' is shifted into or allowed to remain in the position which leaves the shaft Z inactive, and it so continues until the end of the rows is nearly reached. It is then shifted into the other position and allowed to drop the plaster or other marking material a short distance beyond the last hills of corn. In returning, these piles of plaster mark the point to begin, and at the other end piles are dropped similarly for the same purpose in repeating the forward movement across the field.

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

1. In combination with the transporting-wheels of a corn-planter and gearing driven by one of them, a shaft and connections for dropping plaster or other marking material at the end of the rows, said shaft being pro-

vided with a part which is movable toward and from said gearing, and provided also with an arm arranged to be struck by a lug on said gearing, substantially as set forth. 50

2. In combination with the transporting-wheel R' and the gearing and seed-operating shaft driven thereby, an additional shaft and connections which drop plaster or other marking material outside of the line of travel of the wheels, said additional shaft and a part of said gearing being provided, respectively, with an arm, and a lug adapted to be periodically brought in contact, substantially as set forth. 55 60

3. The shaft Z, consisting of two sections having a pivoted pin-and-slot connection, rods or pitmen extending from one of said sections to the plaster-dropping valves, a lever attached to the other section of said shaft for shifting it laterally, an arm carried by the latter section, a toothed segment having a peripheral lug on its rear end for operating said arm, a set of corn-dropping devices operated by said segment, a transporting-wheel R', and the necessary intervening gearing, substantially as set forth. 65 70

4. In combination with the transporting-wheel R' and gearing operated thereby, a toothed segment forming part of said gearing and provided with a lug near its rear end, a shaft Z, having an arm arranged to be struck by said lug at intervals for rocking said shaft, and a retracting-spring which turns said shaft in the opposite direction, the said shaft consisting of two sections arranged end to end and pivoted together, one of them being provided with a lever for shifting it laterally, as described, and the other section left stationary, substantially as set forth. 75 80 85

In testimony whereof I affix my signature in presence of two witnesses.

JNO. DE BUTTS.

Witnesses:

WM. H. BABCOCK,  
 SOLON C. KEMON.