

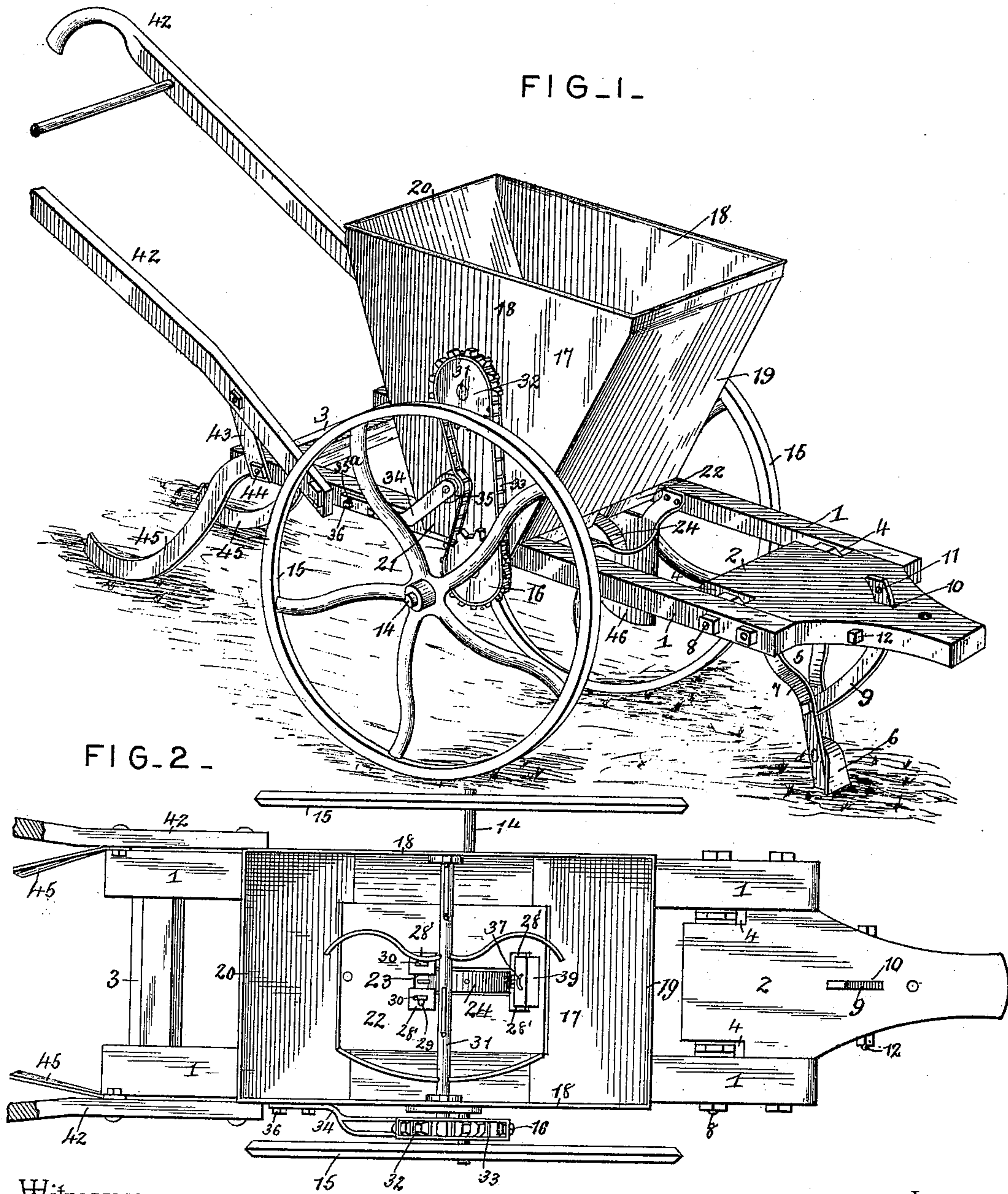
(No Model.)

3 Sheets—Sheet 1.

J. C. CAYTON.
PLANTER.

No. 447,759.

Patented Mar. 10, 1891.



Witnesses:

Inventor

Jas. K. McLathran

James C. Cayton

By his Attorneys,

W. S. Duwall

Cashnow & Co.

(No Model.)

3 Sheets—Sheet 2.

J. C. CAYTON.
PLANTER.

No. 447,759.

Patented Mar. 10, 1891.

FIG. 3.

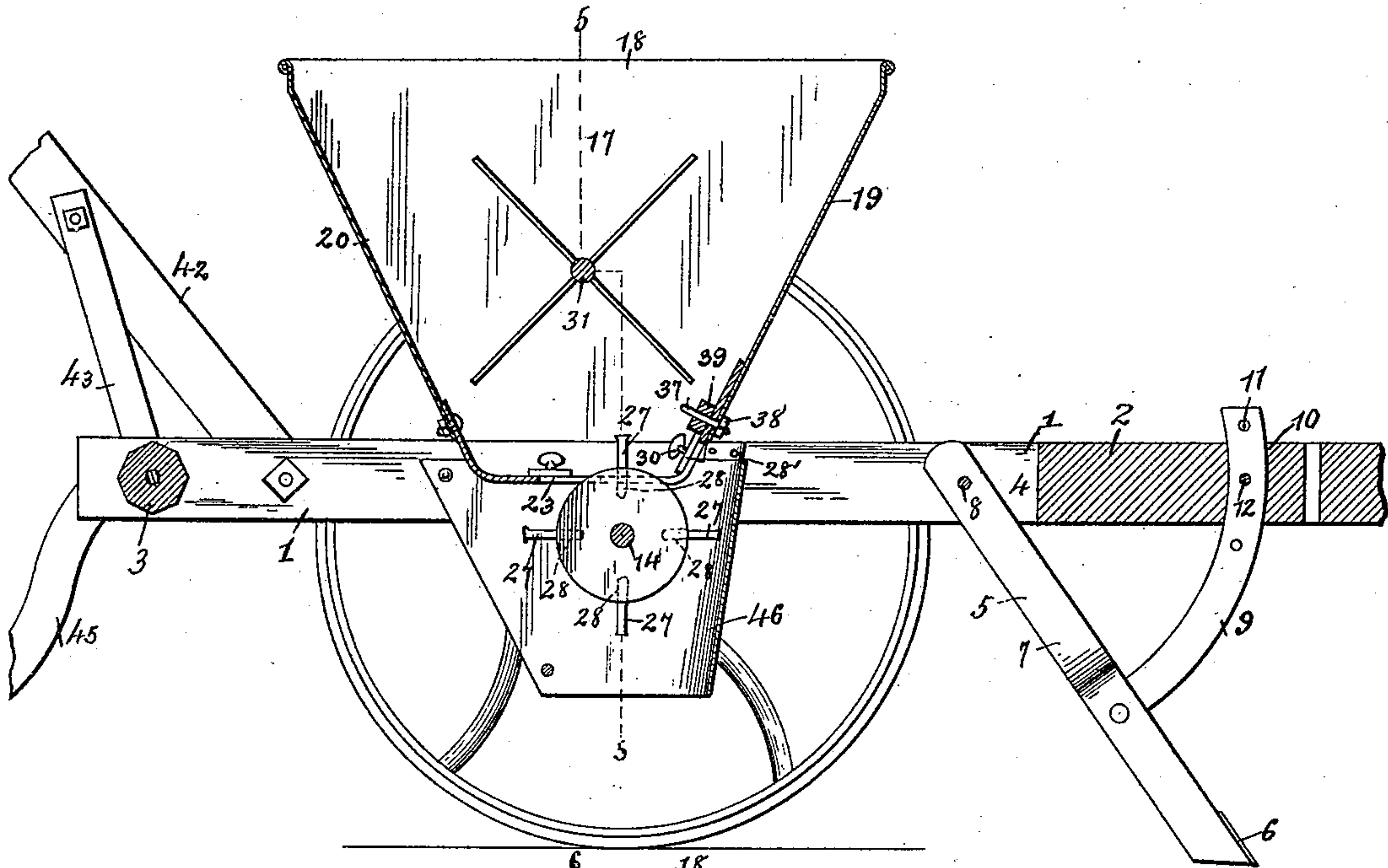
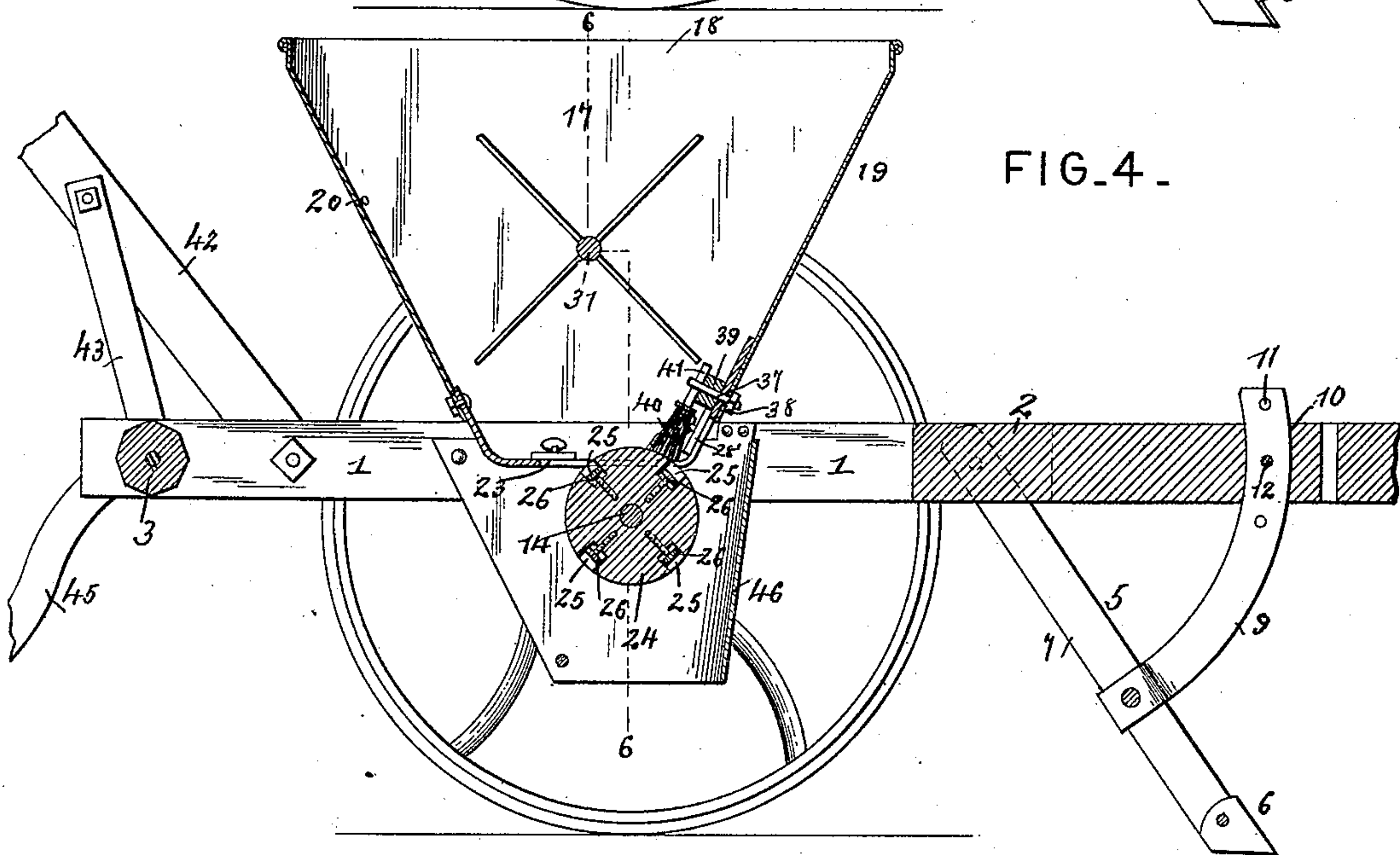


FIG. 4.



Witnesses:

Inventor

Jas. R. McLathran

By his Attorneys,

James C. Cayton

W. S. Duwall.

C. A. Snow & Co.

(No Model.)

3 Sheets—Sheet 3.

J. C. CAYTON.
PLANTER.

No. 447,759.

Patented Mar. 10, 1891.

FIG. 5.

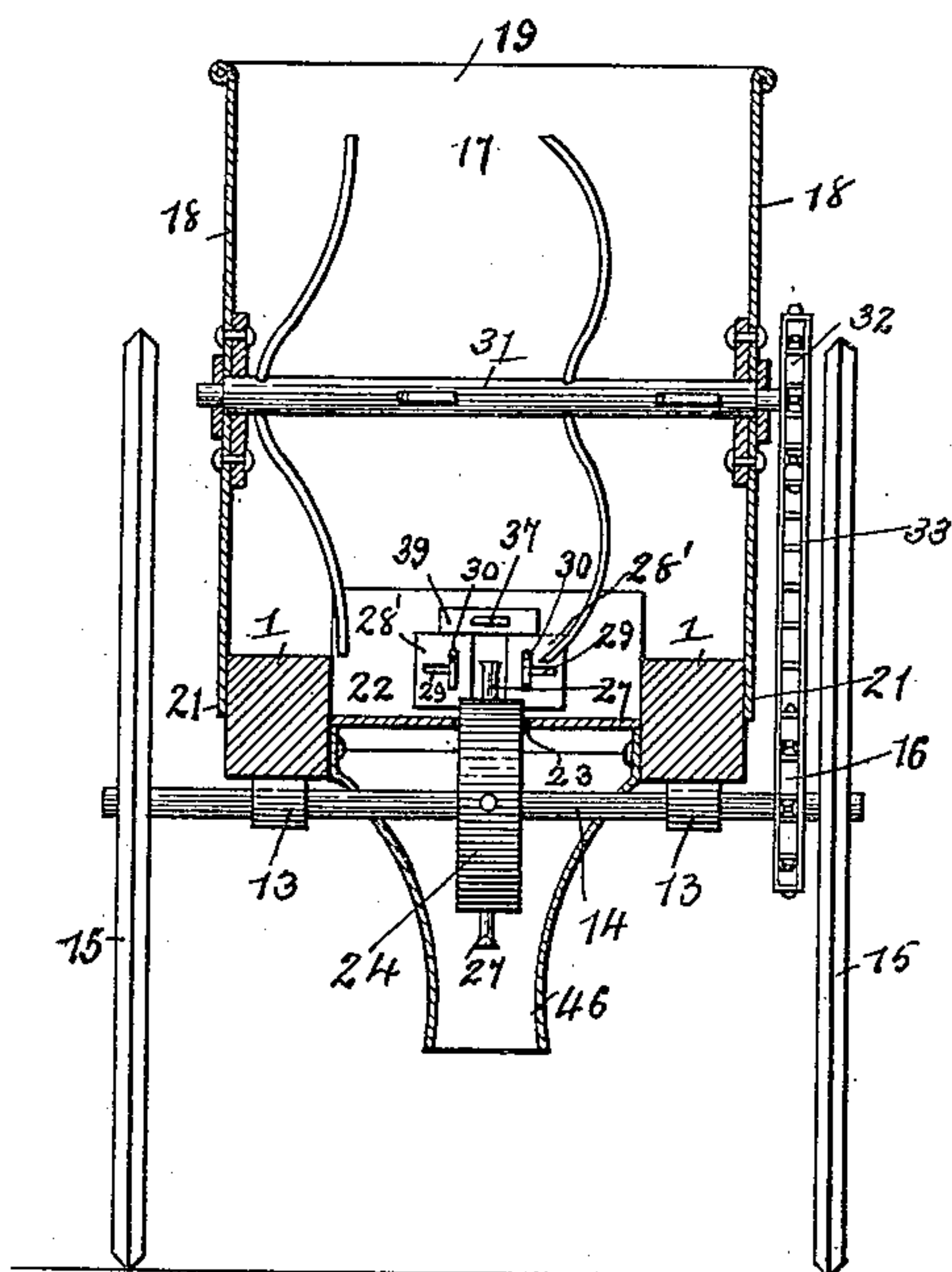


FIG. 6.

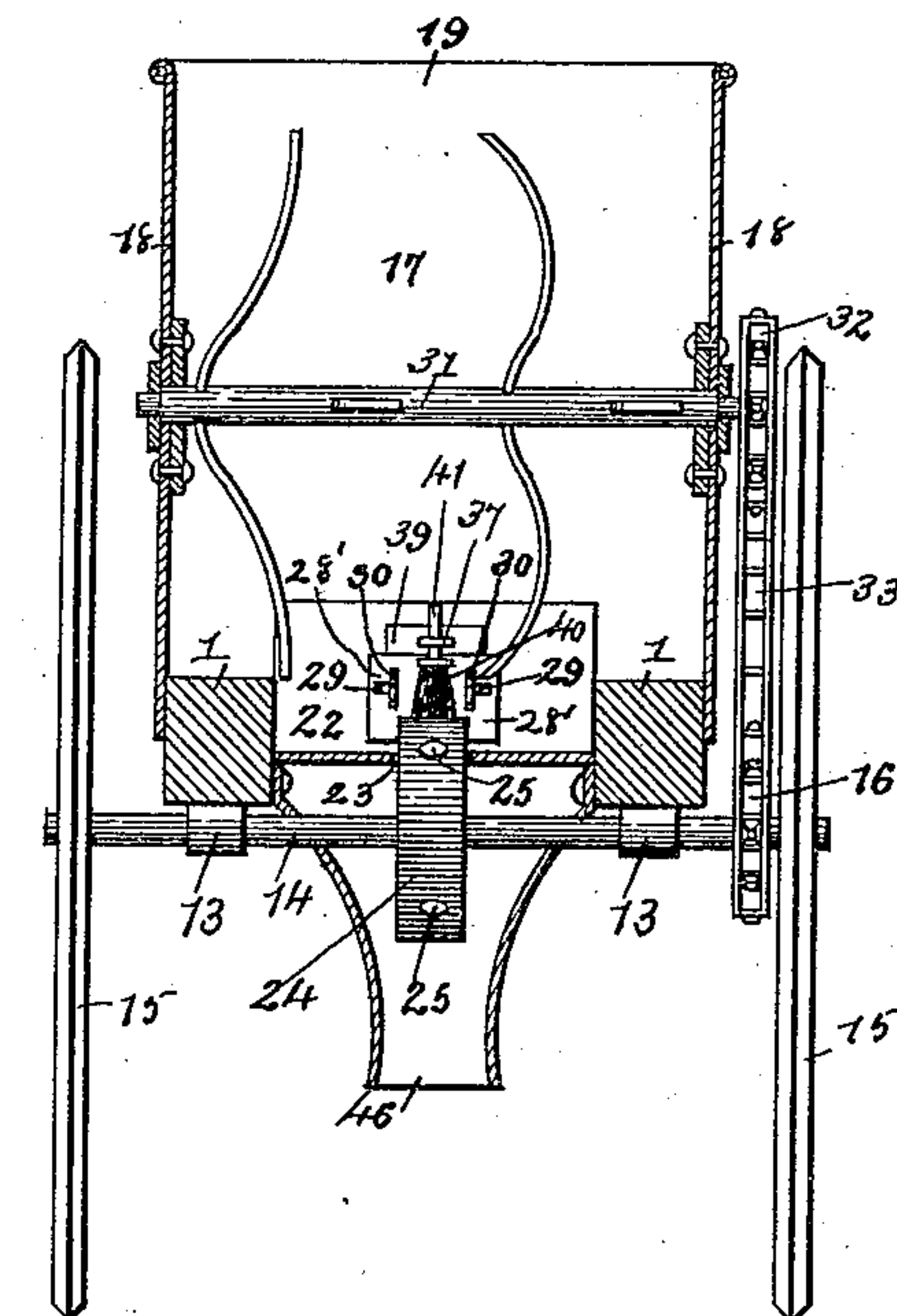
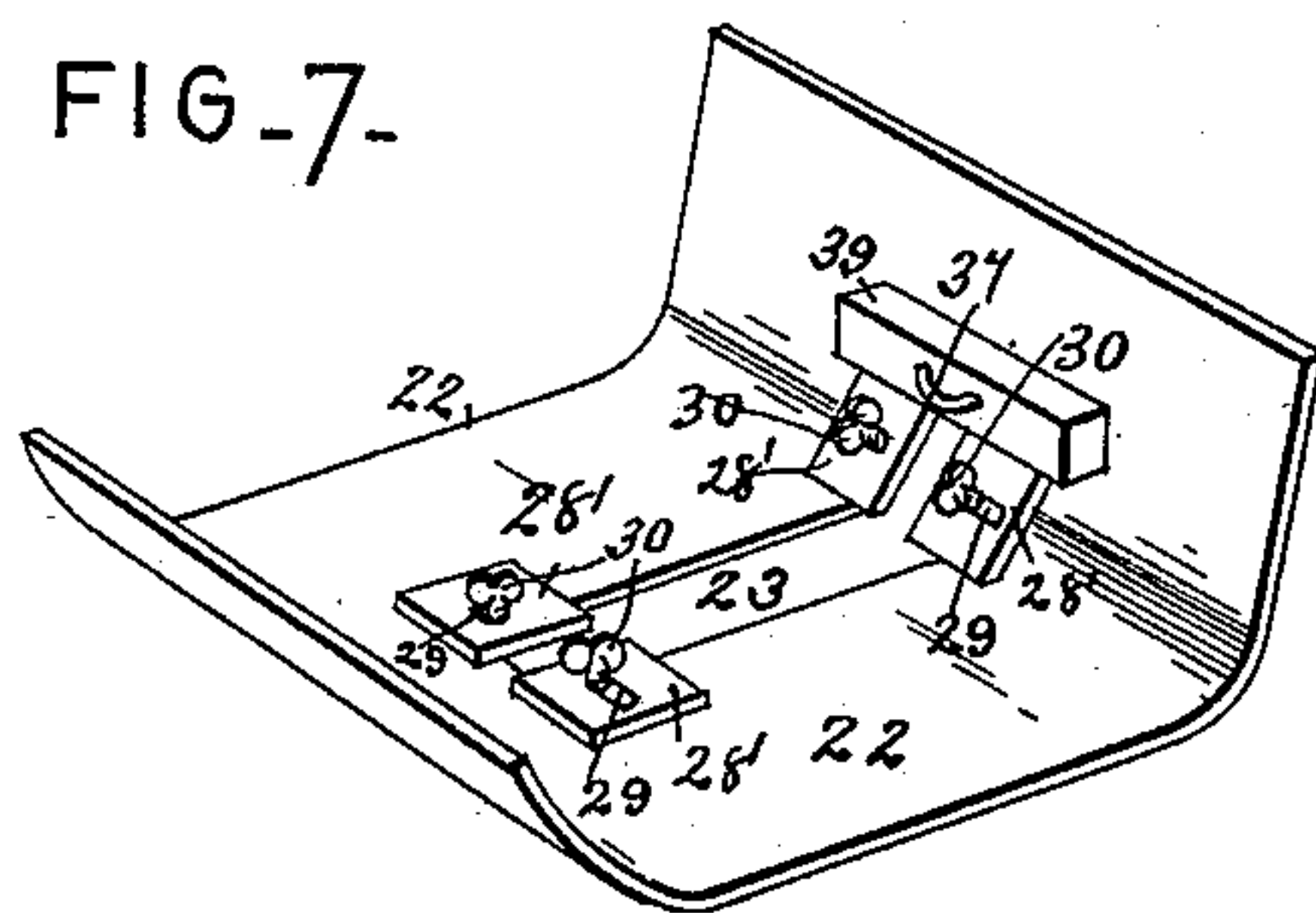


FIG. 7.



Witnesses

Jas. K. McLathran
W. S. Duvall.

Inventor

By his Attorneys,

James C. Cayton

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES CALVIN CAYTON, OF THORNTON, TEXAS.

PLANTER.

SPECIFICATION forming part of Letters Patent No. 447,759, dated March 10, 1891.

Application filed September 5, 1890. Serial No. 363,980. (No model.)

To all whom it may concern:

Be it known that I, JAMES CALVIN CAYTON, a citizen of the United States, residing at Thornton, in the county of Limestone and State of Texas, have invented a new and useful Seeder and Planter, of which the following is a specification.

This invention relates to seeders and planters; and it has for its object to construct a machine which shall be simple, durable, and inexpensive, and which may be quickly and easily converted from a corn to a cotton planter, and vice versa.

The invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of a seed-planter embodying my improvements. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal vertical sectional view showing the machine arranged for planting cotton. Fig. 4 is a longitudinal sectional view showing the machine arranged as a corn-planter. Fig. 5 is a transverse sectional view taken on the line 5 5 in Fig. 3. Fig. 6 is a transverse sectional view taken on the line 6 6 in Fig. 4. Fig. 7 is a detail view showing the adjustable seed-plates.

Like numerals of reference indicate like parts in all the figures.

The frame of my improved seed-planter is composed of the side beams 1 1, between the front ends of which is bolted the rear end of the tongue 2, which is of sufficient width to properly space the said side beams. The rear ends of the side beams are spaced by means of a cross-bar 3. The rear end of the tongue 2 is provided at its sides with notches or recesses 4 to accommodate the upper ends of the bifurcated standard 5, the lower end of which carries the furrow-opener 6. The upper ends of the arms 7 of said standard are pivotally mounted upon a bolt 8, which extends transversely through the beams 1 and through the rear end of the tongue. Between the arms 7 of the standard is pivotally mounted a curved or segmental bar 9, which extends through a vertical slot 10 in the tongue, and is provided

with perforations 11 to receive the pin or key 12, by means of which the standard may be retained at any desired adjustment. It will be seen that by this device the furrow-opener may be readily adjusted at any desired elevation and inclination with relation to the surface of the soil.

The under sides of the side beams 1 are provided with boxes or bearings 13 for the transverse shaft or axle 14, the ends of which carry the supporting-wheels 15. Said axle is also provided with a chain-wheel or sprocket-wheel 16, mounted adjacent to one of the frame-beams 1.

17 designates the hopper, which is constructed of sheet metal and is composed of the sides 18 and the inclined front and rear pieces 19 and 20. The sides 18 are extended downwardly to form the lips or flanges 21, which are attached to the outer sides of the frame-beams 1, upon the upper sides of which the hopper rests. The front and rear sides of the hopper are connected by a downwardly-extending curved metal plate 22, which fits neatly between the side beams 1, and is provided with a central longitudinal slot 23. Suitably mounted upon the axle 14 and extending into the said slot is a circular disk 24, which is the seed-disk of my improved planter. Said disk is provided in its periphery with recesses or seed-cups 25, in the bottoms of which screws 26 are mounted. By adjusting said screws it will be seen that the sizes of the seed-cups may be accurately regulated to contain any desired quantity of seed. These seed-cups are used only when corn, peas, or other similar seed is to be planted. When the device is to be converted into a cotton-planter, the screws 26 are raised until they are flush with the periphery of the seed-disk. The latter is then provided with outwardly-extending fingers 27, which are screw-threaded at their inner ends to engage screw-threaded recesses 28, formed for their reception in the seed-disk. The latter is preferably constructed of cast-iron, so as to be strong and durable.

The plate 22 in the bottom of the hopper is provided at the front and rear ends of the slot 23 with gage-plates 28', having slots 29, by means of which they are adjustable upon

the set-screws 30, by means of which they are held in position. Two of these gage-plates, which are transversely adjustable, are arranged at each end of the slot 23. When the device is used as a cotton-planter, said gage-plates may be adjusted at any desired distance apart, thus regulating the quantity of seed which shall be discharged from the hopper by the fingers 27 of the seed-disk.

When the device is used as a corn-planter, the gage-plates 28 are brought closely together, so as to prevent the escape of seed, except such as may be carried off by means of the seed-cups. It is necessary, therefore, that said gage-plates shall fit neatly against the periphery of the seed-disk, as will be seen in Figs. 4 and 6 of the drawings.

The sides of the hopper are provided with bearings for a transverse shaft 31, one end of which projects through one side of the hopper and carries the sprocket-wheel 32, connected by a chain 33 with the sprocket-wheel 16 upon the axle 14, from which a rotary motion is thus transmitted to the shaft 31. The latter is provided within the hopper with a series of radial arms or agitators that serve to stir and agitate the contents of the hopper. This agitating device is mainly used when the device is used as a cotton-planter. When it is to be converted into a corn-planter, the agitating device may, if desired, be removed from the hopper. To the side of one of the frame-beams 1 is pivoted an arm 34, having at its outer end a friction-roller 35, adapted to bear against the chain 33 for the purpose of keeping the latter taut. The opposite end of the arm 34 has a slot 35^a, working over a bolt 36, by means of which the said tension-arm may be secured at any desired adjustment. When the machine is used as a corn-planter, the tension-arm may be adjusted to slacken the chain 33, which may then be readily removed, thus causing the agitating shaft to remain stationary, and dispensing with the necessity of removing it altogether.

37 designates a clip or clamp, which extends through the plate 22 and through the inclined front side of the hopper, and is provided with a nut 38, by means of which it may readily be tightened. Upon the inner side of the hopper is a wooden block 39, mounted upon the said clip or clamp to receive the hooked end of the latter.

40 designates a brush, having a handle 41, by means of which it may be adjusted in the clip or clamp 37, so as to form a cut-off when the device is to be used as a corn-planter. This device, it will be seen, may be readily adjusted or removed, as occasion may require.

42 42 designate the handles, which are bolted to the outer sides of the frame-beams 1, near the rear ends of the latter. Said handles are provided with braces 43, which are likewise bolted to the rear ends of the side pieces of the frame. Upon the bolts 44, by

means of which said handles and braces are connected to the side beams, are suitably mounted the coverers 45, which serve to cover the seed deposited in the furrow by my improved planter.

46 designates a suitably-constructed seed-spout, which is attached to the under sides of the side beams directly below the hopper, and which serves to convey the seed from the latter to the furrow formed for its reception.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of the invention will be readily understood by those skilled in the art to which it appertains. When the machine passes over the field, the furrow-opener 6 serves to open the furrow, which may be of any desired depth, the said furrow-opener having previously been set in the proper position. The seed-disk, being mounted upon the revolving axle, serves to convey the seed from the hopper into the spout 46, by which it is conducted to the furrow, where it is eventually covered by means of the coverers 45.

The general construction of the machine is simple and inexpensive, and it may be readily adapted in the manner herein described to sow various kinds of seeds and in any desired quantity.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a seed-planter, the frame comprising the side beams, the rear cross-bar, and the tongue mounted between the front ends of said side beams, said tongue being provided with notches or recesses at its rear end, in combination with the bifurcated standard having the ends of its arms mounted in said notches or recesses upon a pivotal bolt extending transversely through the side beams of the frame and through the rear end of the tongue, and the segmental bar pivoted between the arms of the standard, extending through a vertical slot in the tongue and having transverse perforations for the reception of a pin or key, substantially as set forth.

2. In a seed-planter, the combination of a frame, the revolving axle having the transporting-wheels, the seed-disk mounted on the said axle, the hopper mounted upon the frame, the plate secured in the bottom of the hopper to the front and rear sides of the latter, fitted between the side beams of the frame, and having a longitudinal slot to accommodate the seed-disk, and the regulating-slides arranged in pairs at the front and rear ends of said slot, substantially as and for the purpose set forth.

3. In a seed-planter, the combination, with the frame having longitudinal side beams, of the hopper having vertical sides provided with downwardly-extending lips or flanges secured to the outer sides of the side beams

and inclined front and rear sides, the bottom
plate secured to said front and rear sides, fit-
ting between the side beams of the frame, and
provided with a longitudinal slot, the regu-
5 lating-slides arranged in pairs at the front
and rear ends of said slot, and the revolving
axle having a seed-disk fitting in said slot,
substantially as and for the purpose set forth.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in 10
presence of two witnesses.

JAMES CALVIN CAYTON.

Witnesses:

G. T. BROWN,
J. W. FULLER.