

No. 774,101.

PATENTED NOV. 1, 1904.

J. R. O'NEAL.
COTTON SEED PLANTER.
APPLICATION FILED JUNE 23, 1904.

NO MODEL.

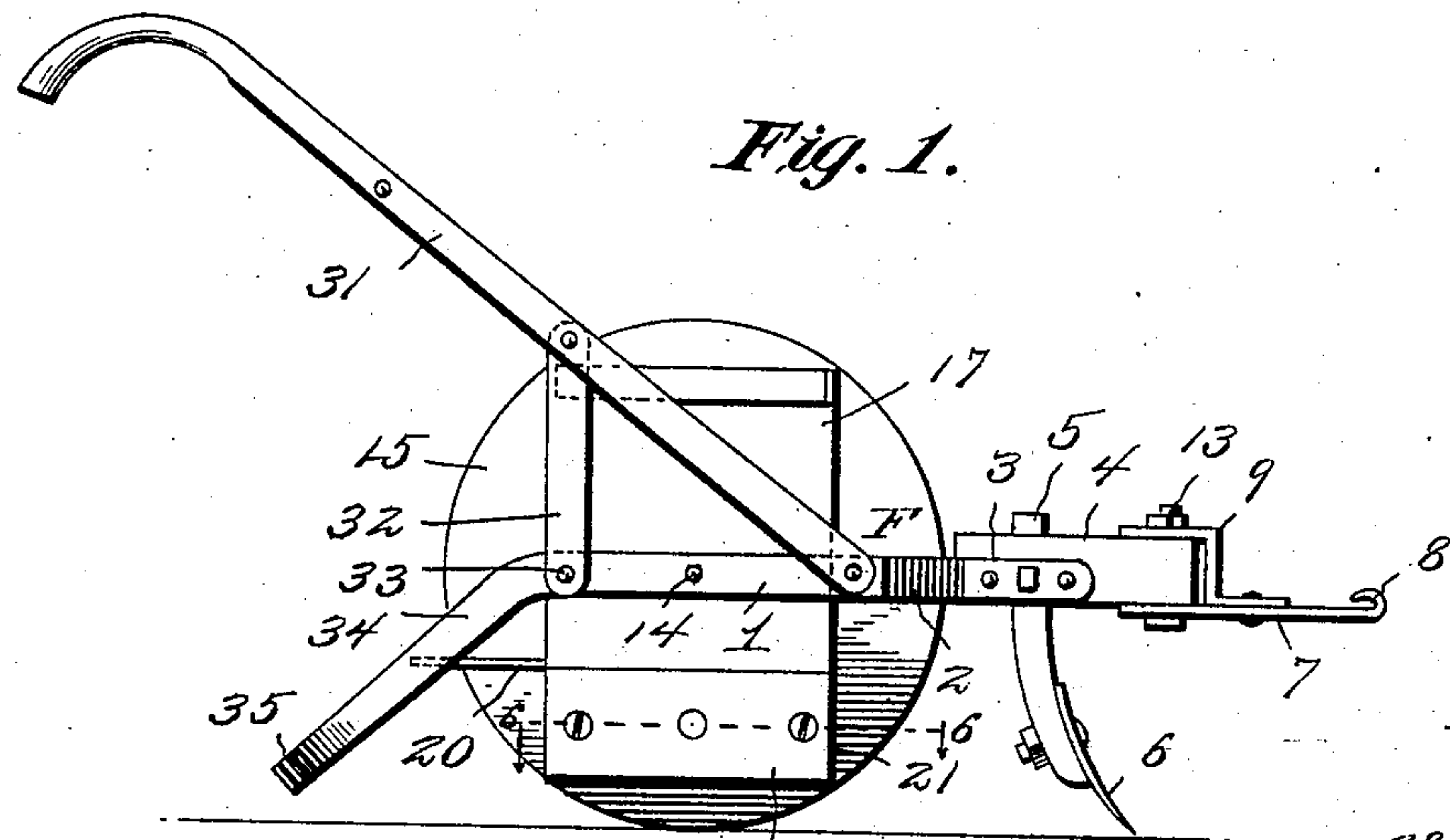


Fig. 1.

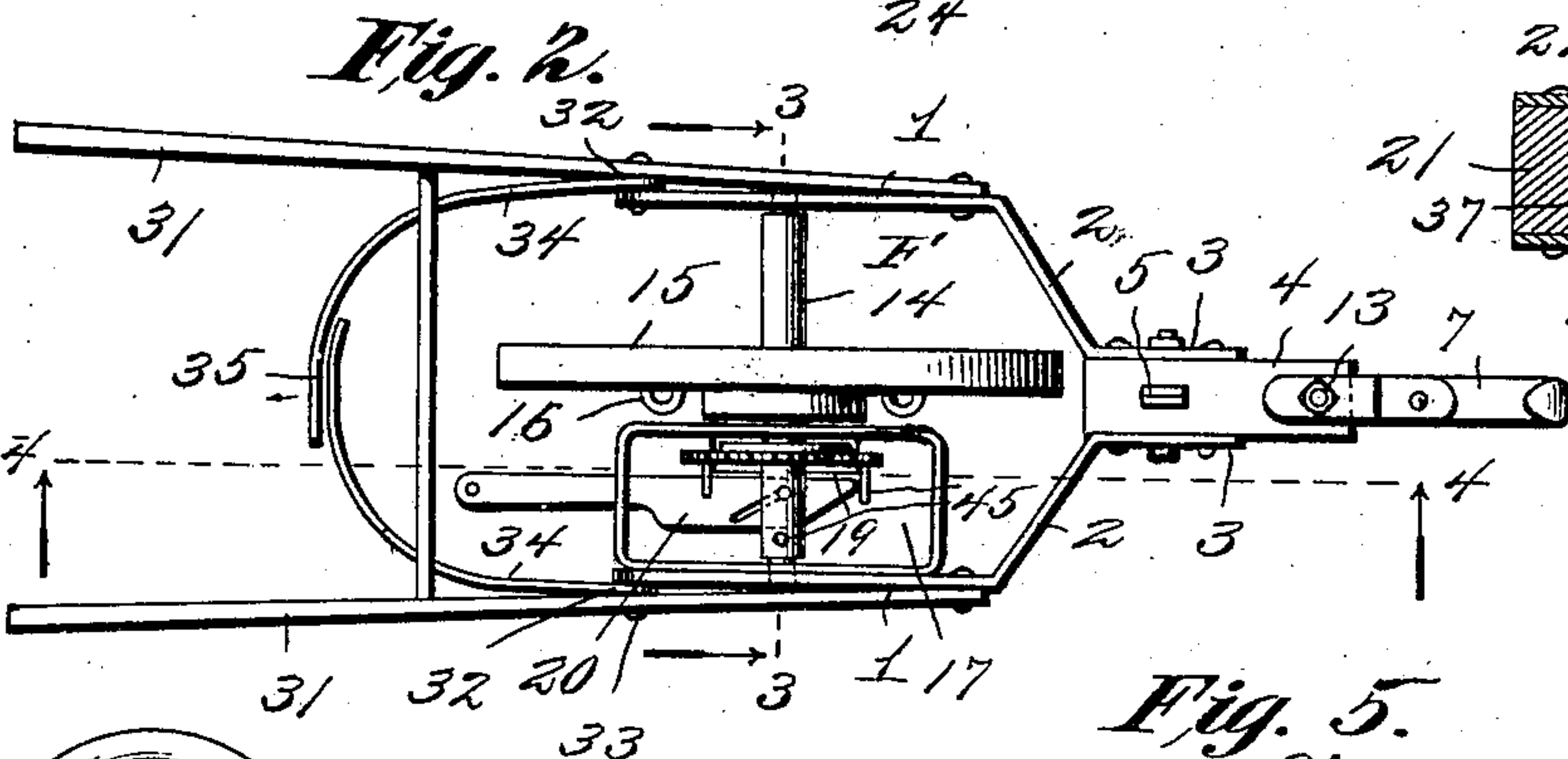


Fig. 2.

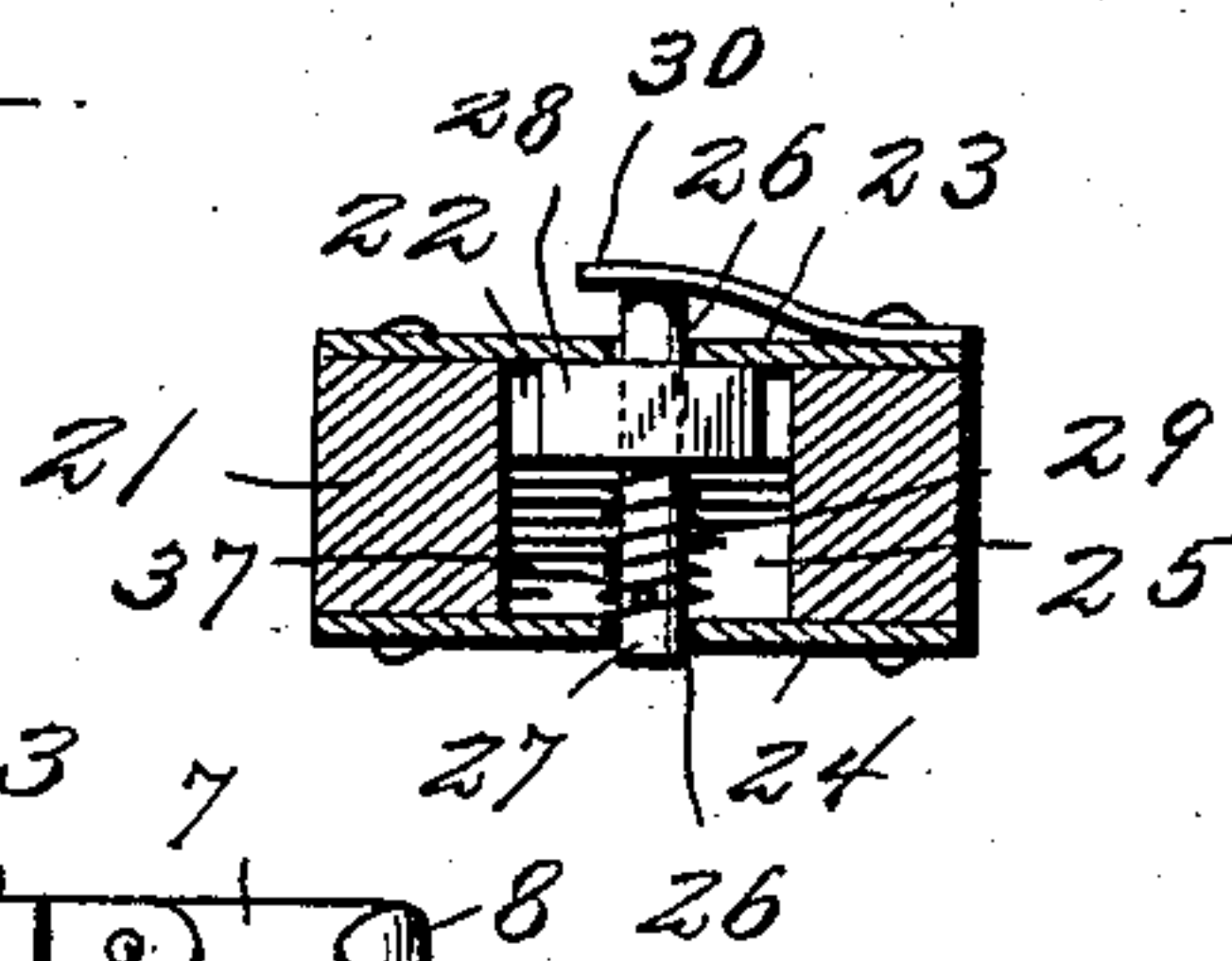


Fig. 3.

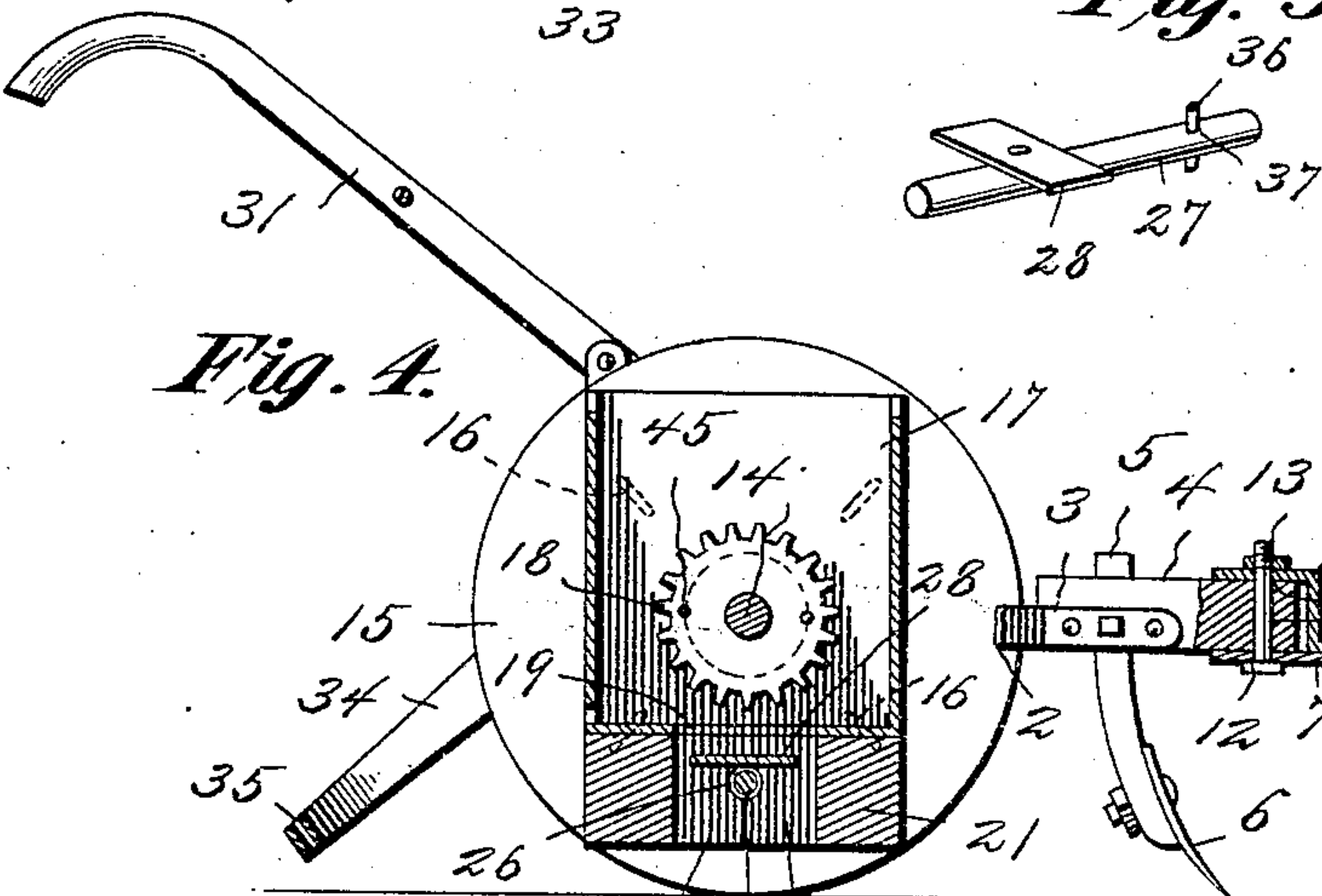


Fig. 4.

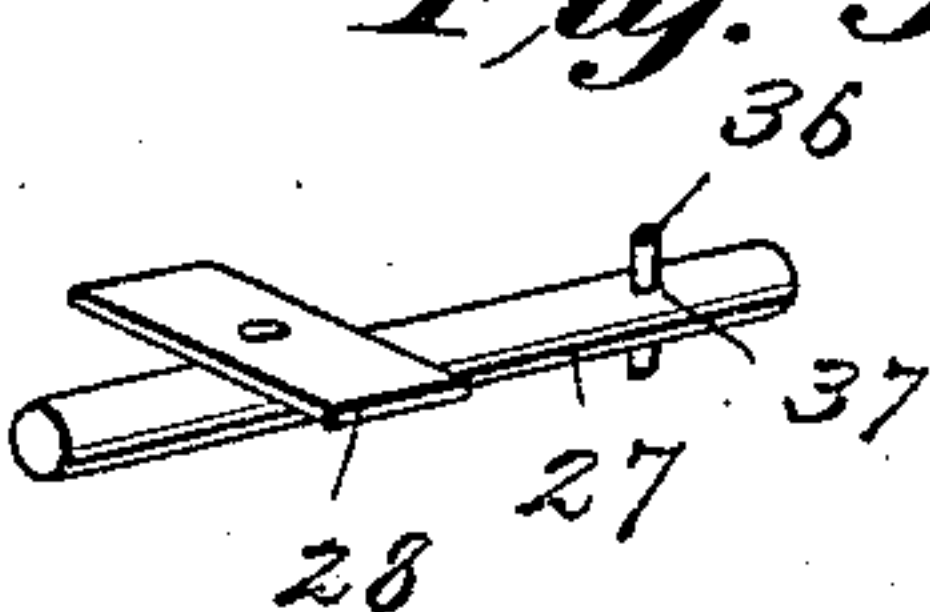


Fig. 5.

Fig. 6.

Witnesses

E. J. Stewart
Wm. Bagger

John R. O'Neal, Inventor

by C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE

JOHN R. O'NEAL, OF CONYERS, GEORGIA.

COTTON-SEED PLANTER.

SPECIFICATION forming part of Letters Patent No. 774,101, dated November 1, 1904.

Application filed June 23, 1904. Serial No. 213,862. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. O'NEAL, a citizen of the United States, residing at Conyers, in the county of Rockdale and State of Georgia, have invented a new and useful Cotton-Seed Planter, of which the following is a specification.

This invention relates to cotton-seed planters; and it has for its object to effect certain improvements in the construction of this class of devices whereby implements shall be produced possessing superior advantages in point of simplicity, durability, and general efficiency.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that minor changes as to shape, proportions, and exact manner of assemblage may be made within the scope of the invention.

In said drawings, Figure 1 is a side elevation of a cotton-seed planter constructed in accordance with the principles of the invention. Fig. 2 is a top plan view of the same. Fig. 3 is a transverse vertical sectional view taken on the line 3 3 in Fig. 2. Fig. 4 is a longitudinal vertical sectional view taken on the line 4 4 in Fig. 2. Fig. 5 is a detail view in perspective of the seed-dropping mechanism detached, and Fig. 6 is a sectional detail view taken on the line 6 6 in Fig. 1.

Corresponding parts in the several figures are indicated by similar characters of reference.

The frame of the machine, which is generally designated F, is composed of two side pieces 1 1, having converging front ends 2 2, the extremities of which, 3 3, are directed forwardly and inclose between them the beam 4,

which is held in position securely by means of transverse bolts. Vertically through the beam extends a standard 5, carrying a furrow-opener 6. Pivotaly connected with the front end of the beam is a clevis comprising a bottom member 7, terminating at its front end in a hook 8 for the attachment of the draft. Securely bolted to said bottom member is an angular plate 9, the upper portion of which extends rearwardly above the plow-beam, said upper member being provided with a perforation 10, alining with perforations 11 in the plow-beam and 12 in the bottom member 7 of the clevis, for the reception of a bolt 13, upon which the entire clevis may conveniently turn when the draft is directed otherwise than straight forwardly. By this construction of the clevis the draft upon the beam will be equalized and will be rendered effective under all conditions.

The side members of the frame 1 1 afford bearings for a shaft 14, carrying a ground-engaging wheel 15, upon the inner side of which are provided a plurality of equidistantly-spaced lugs or staples 16. The seed box or hopper 17 is bolted to one side of the frame, and the sides of said hopper are perforated for the passage of the shaft 14, which carries within said hopper a circumferentially-serrated distributing-wheel 18. The bottom of the hopper has a slot 19 for the passage of the seed, and this slot is capable of being closed or obstructed by means of a slide 20, connected pivotally with the bottom of the hopper and extending through a narrow slot in the rear wall of the latter, so that it may be conveniently grasped and manipulated by the operator when it shall be desired to cut off or to start the flow of seeds through the opening 19. Below the bottom of the hopper is mounted a block 21, which may be bolted or otherwise secured to the bottom of said hopper. One side of the block 21 is provided with a recess 22, which is in registry with the seed-opening 19 in the bottom of the hopper. Adjacent to the sides of the block 21 are secured plates 23 and 24, the former of which affords a closure for the side of the recess 22. The block 21 is also provided with a trans-

verse opening 25, extending from the bottom of the recess 22 to the opposite side of the block. The plates 23 and 24 are provided with perforations 26 for the passage of a transversely-movable pin 27, carrying a seed-slide 28, which is adapted to form a closure for the recess or passage 22, communicating with the seed-opening 19. Upon the pin 27, between the seed-plates 28 and the outer side plate 24, is coiled a spring 29, the tension of which is exerted to force the seed-plate into the passage or recess 2, so as to obstruct the passage of seed through the same. Suitably connected with the plate 23 is a light spring or plate 30, the free end of which normally rests upon the end of the pin 27, which extends through the perforation 26 in the seed-plate 23. This spring or plate is disposed in the path of the lugs or staples 16 upon the ground-engaging wheel 15.

Handle-bars 31 are connected with the side pieces 1 of the frame when the front ends of the latter are connected with the rear ends of said side pieces by means of struts 32. The bolts 33, which connect the struts with the side pieces of the frame, also serve to connect with the latter a pair of downwardly and rearwardly extending arms 34, which terminate in scrapers or covering devices 35.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood by those skilled in the art to which it appertains. The hopper having been filled with seed and the draft-animal having been hitched to the machine, the latter is ready for operation. As the machine progresses in a forward direction the lugs or staples 16 upon the ground-engaging wheel riding successively over the spring or plate 30 will cause the latter to force the pin 27, carrying the seed-slide 28, in an outward direction against the tension of the spring 29, thus opening the seed-passage and permitting a quantity of seed to escape therethrough, the contents of the hopper being agitated and forced downwardly through said passage by means of the serrated disk 18. As soon as the lug 16 passes out of engagement with the plate 30 the spring 29 causes the seed-slide-carrying pin to recede to its normal position, in which the slide 28 obstructs the seed-passage. If it shall be desired to drill or to plant the seeds in a continuous row, the slide-carrying pin 27 may be withdrawn against the tension of the spring and be temporarily secured by means of a pin 36, dropped through a perforation 37 in said pin.

The shaft 14 and the distributing-wheel 18 of the device are preferably each provided with pins or pegs 45, serving to agitate the

contents of the hopper, so as to enable it to pass readily to the point of discharge.

Having thus described the invention, what is claimed is—

1. In a seed-planter, a frame, an axle journaled in the side members of said frame, a ground-engaging wheel upon said axle, lugs or tappets upon said ground-engaging wheel, a seed-hopper connected with one of the side members of the frame, seed-dropping mechanism including a transversely-movable, spring-actuated pin carrying a seed-slide, and a spring-plate having its free end disposed in contact with the inner end of the slide-carrying pin, said spring-plate being disposed in the path of the lugs or tappets upon the ground-engaging wheel.

2. In a seed-planter, a frame, an axle, a ground-engaging wheel upon said axle, lugs or tappets upon the inner side of said wheel, a hopper secured to one side member of the frame and having a seed-slot in the bottom thereof, a block secured under the bottom of said hopper and having a vertical recess forming a seed-passage, and a transverse opening, plates secured adjacent to the sides of said block, a transversely-movable spring-actuated pin seated in perforations in said plates and carrying a slide adapted to obstruct the seed-passage, and a spring-plate secured to the inner seed-plate, bearing against the inner side of the spring-actuated pin and disposed in the path of the lugs or tappets upon the ground-engaging wheel.

3. In a seed-planter, a frame, a hopper secured to said frame, an axle journaled in the sides of the frame and extending through the sides of the hopper, a ground-engaging wheel upon said axle, lugs or tappets upon said wheel, a serrated agitating-wheel mounted upon the axle within the hopper above a slot in the bottom of the latter, a block secured under the bottom of the hopper and having a vertical recess or seed-passage registering with the slot in the bottom of the hopper, and a transverse opening, plates secured to the sides of said block, a spring-actuated pin slidable in perforations in said plates and carrying a plate adapted to obstruct the seed-passage, means for retaining said pin, when withdrawn against the tension of the spring, and a slide or cut-off to obstruct the passage of seeds through the opening in the bottom of the hopper.

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

JOHN R. O'NEAL.

Witnesses:

PAUL D. O'KELLEY,
L. H. SIGMAN.