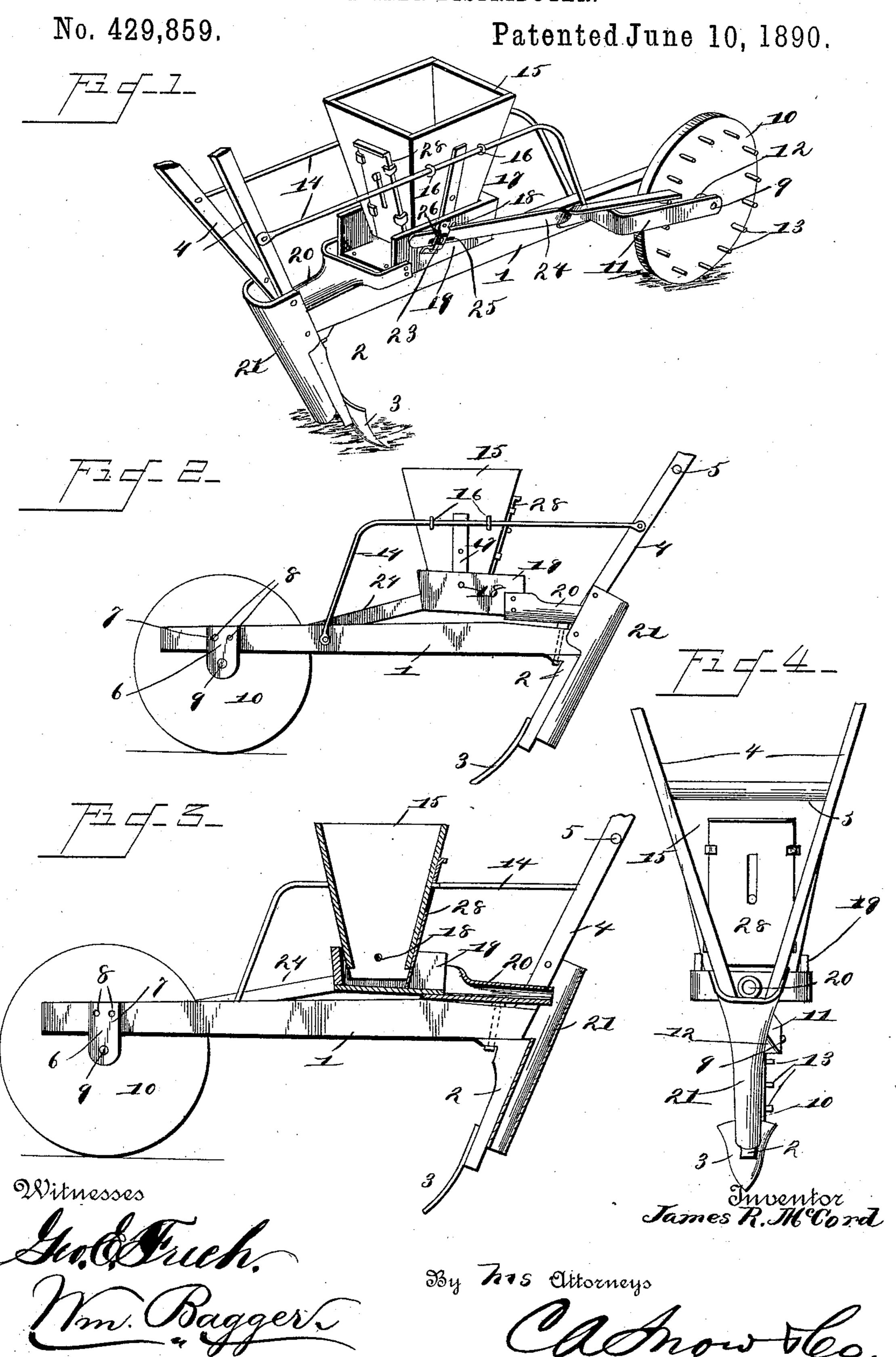
J. R. McCORD. FERTILIZER DISTRIBUTER.



United States Patent Office.

JAMES RUFUS MCCORD, OF JACKSON, GEORGIA.

FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 429,859, dated June 10, 1890.

Application filed December 19, 1889. Serial No. 334,322. (No model.)

To all whom it may concern:

Be it known that I, JAMES RUFUS MCCORD, a citizen of the United States, residing at Jackson, in the county of Butts and State of Georgia, 5 have invented a new and useful Fertilizer-Distributer, of which the following is a specification.

This invention relates to fertilizer-distributers; and it has for its object to provide a 10 device of this class which shall be simple in construction, durable, and efficient in operation.

With these ends in view my invention consists in the improved construction, arrange-15 ment, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of my improved fertilizer-20 distributer. Fig. 2 is a side view showing the opposite side of the same. Fig. 3 is a longitudinal vertical sectional view. Fig. 4 is a rear elevation.

Like numerals of reference indicate like

25 parts in all the figures.

1 designates an ordinary plow-beam provided at its rear end with the standard 2, carrying at its lower end a blade or furrow-opener 3 of ordinary construction. Handles 44, con-30 nected by a rung 5, are secured in the usual manner to the rear end of the plow-beam.

6 designates a box, having an upwardly-extending flange 7 to receive bolts 8, by means of which the said box is secured to the plow-35 beam 1 near the front end of the same. The box 6, which is constructed of cast-iron, forms the bearing for a short transverse shaft 9, upon which is mounted the operating-wheel 10, which in practice is made of considerable 40 size—say about eighteen inches in diameter so as to roll smoothly over the ground without danger of slipping. The outer end of the shaft 9 is journaled in a bracket 11, which is suitably secured to the side of the plow-beam, and the wheel 10 is provided with a laterallyextending hub or collar 12, forming a washer between the operating-wheel and the bracket 11 to afford sufficient space for a series of pins 13, which extend laterally on the face of the 50 wheel. A pair of brackets 14 have their lower ends suitably attached to the plow-beam, and

are extended from thence in an upward and rearward direction and have their rear ends attached to the handles 4.

15 designates the box or hopper, which is 55 provided with laterally-extending perforated lugs or staples 16, by means of which the said hopper is adjusted upon the horizontal portion of the brackets 14. The sides of the hopper are provided with straps 17, the lower 60 ends of which have bearings for a transverse shaft 18, upon which the shoe or chute 19 is pivotally mounted. The said shoe is provided with a spout 20, extending rearwardly between the handles and terminating directly 65 above an inclined tube 21, which serves to convey the fertilizing material to the furrow, said tube 21 being attached to the rear side of the standard 2 and terminating directly in rear of the furrow-opener.

The shoe 19 is provided on one side with a clip or bail 23, in which slides a forwardlyextending rod 24, having a slot 25, through which extends a bolt 26, by means of which said rod may be secured firmly in the clip or 75 bail at any desired longitudinal adjustment.

A regulating-slide 28 is suitably attached to the rear side of the hopper and extends downwardly into the shoe 19. Said slide may be adjusted vertically and secured in any con-80 venient manner at any desired vertical adjustment for the purpose of regulating the quantity of fertilizing material which shall be permitted to escape from the hopper.

The operation and advantages of my inven-85 tion will be readily understood from the foregoing description, taken in connection with

the drawings hereto annexed. When the machine progresses over the field, the pins 13, extending laterally from the op- 90 erating-wheel, will successively come in contact with the front end of the operating-rod 24, attached to the pivoted shoe 19, thereby imparting a vibratory movement to the latter and causing the contents of the hopper to be 95 gradually shaken out and conveyed through the spout 20 to the tube 21, by means of which it is conveyed to the furrow. The quantity of material thus permitted to escape may be very accurately gaged by means of the regu- 100 lating-slide 28, and the extent of the vibratory movement of the shoe 19 may be regulated by adjusting the operating-rod 24 longitudinally.

The general construction of my improved fertilizer-distributer is very simple and inexpensive, and it is easily operated and not liable to get out of order.

Having thus described my invention, what I claim is—

1. In a fertilizer-distributer, the combination, with a plow, of an operating-wheel journaled at the front end of the plow-beam and
having laterally-extending pins, the brackets
connecting the plow-beam with the handles,
the hopper supported upon said brackets,
and the pivoted shoe having the longitudinally-adjustable operating-rod adapted to be
engaged by the laterally-extending pins of the
operating-wheels, substantially as set forth.

2. The combination of the plow with the brackets attached to the plow-beam and extended upwardly and rearwardly to the handles and having their rear ends attached to said handles, the pivoted shoe mounted upon

a transverse shaft having its bearings in straps attached to the sides of the hopper, the vertically-adjustable regulating-slide, the feed-tube, and mechanism, substantially as described, for operating the vibrating shoe, substantially as herein set forth.

3. The combination, with a plow, of the 30 hopper, the pivoted vibratory shoe, a clip or bail secured to the side of the latter, the longitudinally-adjustable operating-rod extending through said clip and having a longitudinal slot, a securing-bolt extending through 35 said clip and slot, and the operating-wheel having laterally-extending pins to engage the front end of said operating-rod, substantially

as set forth.

In testimony that I claim the foregoing as 40 my own I have hereto affixed my signature in presence of two witnesses.

JAMES RUFUS McCORD.

Witnesses:

W. H. MALONE, J. M. WYNNE.