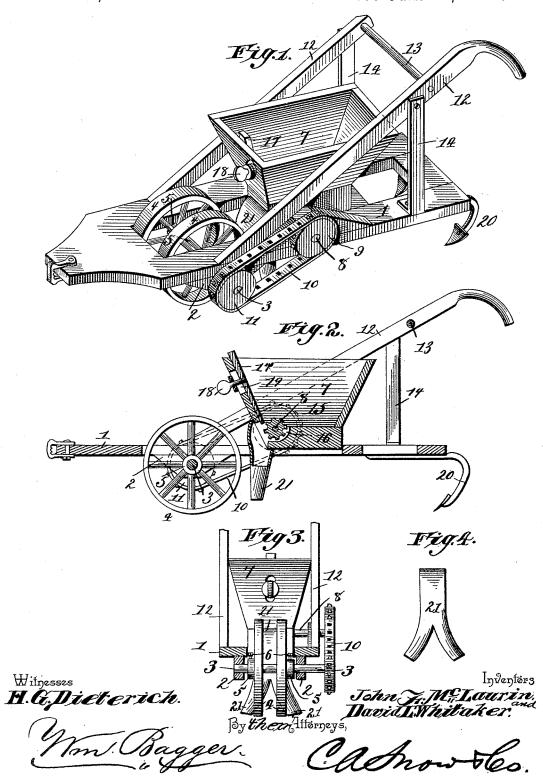
(No Model.)

## J. F. McLAURIN & D. L. WHITAKER. FERTILIZER DISTRIBUTER.

No. 445,189.

Patented Jan. 27, 1891.



## UNITED STATES PATENT OFFICE.

JOHN F. McLAURIN AND DAVID L. WHITAKER, OF McCOLL, SOUTH CAROLINA.

## FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 445,189, dated January 27, 1891.

Application filed August 7, 1890. Serial No. 361,286. (No model.)

To all whom it may concern:

Be it known that we, JOHN F. McLAURIN and DAVID L. WHITAKER, citizens of the United States, residing at McColl, in the county of Marlborough and State of South Carolina, have invented a new and useful Fertilizer-Distributer, of which the following is a specification.

This invention relates to fertilizer-distribut10 ers; and it has for its object to construct a
machine of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view the invention consists in the improved construction, arrangement, and combination of details which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, Figure 1
20 is a perspective view of a machine embodying our improvements. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a vertical transverse sectional view taken through the axle having the transporting and driving wheels. Fig. 4 is a detail view of a bifurcated spout used in connection with our invention.

Like numerals of reference indicate like

parts in all the figures.

The frame of our improved machine, which is designated by 1, is rectangular in shape and is to be provided at its front end with means for the attachment of the draft. Upon the under side of the frame are secured the boxes or bearings 22 for the shaft or axle 3. The latter carries a pair of wheels 44, which are laterally adjustable. Said wheels are preferably provided on their outer sides with laterally-extending collars or flanges 5, having setwored in the desired position upon the shaft or axle 3, thus enabling the desired lateral adjustment to be conveniently effected.

7 designates the hopper, which is mounted 45 upon the frame in rear of the wheels 4, and which is provided with bearings for a transverse shaft 8, one end of which has a pulley 9 connected by a belt or band, or, if preferred, by means of a chain 10, with a pulley or chain 50 wheel 11 upon the shaft or axle 3. The handles 12 of the machine are secured at their

front ends to the side beams of the frame, and their rear ends are connected by a rung 13 and are supported upon braces 14, the shaft 8 extending transversely through the hopper, 55 provided within the latter with a fluted roller 15, which is mounted in a slot or opening 16, formed in the bottom and front side of the hopper. The size of the said opening may be regulated by means of a slide 17, which is ad-60 justable by a set-screw 18, working in a vertical slot 19 in the front wall of the hopper.

20 20 designate a pair of standards, which are secured under the rear end of the frame, and to the lower ends of which blades or coverers are to be attached for the purpose of stirring the soil and of causing the fertilizing material to become well incorporated therewith.

Suitably secured to the under side of the 70 machine, under the hopper, is a bifurcated spout 21, which will serve to convey the fertilizing material to opposite sides of the row when the machine is being used for cultivating young corn, cotton, or the like. When 75 the machine is thus used, the transportingwheels are placed a sufficient distance apart to avoid interfering with the young plants, around the roots of which the soil is thus compressed while at the same time fertilizing 80 material is being added. When desired, the inner faces of the transporting-wheels may be placed closely together, so as to form practically a single wheel, or they may be placed any desired distance apart to positively avoid 85 injury to the growing plants.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of our invention will be readily understood by those skilled in 90 the art to which it appertains. The construction of the machine is simple and inexpensive. The wheels 4 may be adjusted at any desired distance apart, so as to compress the soil on opposite sides of a central ridge or furrow, 95 and the dropping mechanism may be very conveniently adjusted to deposit any desired quantity of fertilizing material to the acre.

Having thus described our invention, we claim and desire to secure by Letters Patent 100 of the United States—

In a fertilizer-distributer, the combination

of the frame, the hopper, a shaft mounted transversely in the latter having the fluted roller extending through a slot in the front side of said hopper, the regulating-slide 5 mounted adjustably upon the front wall of the latter, the shaft having the transporting-wheels mounted adjustably thereon and provided on their outer sides with laterally-extending hubs or collars having set-screws, the bifurcated discharge-spout, and means for transmitting motion from the shaft or axle to

the roller-shaft in the hopper, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures 15 in presence of two witnesses.

JOHN F. McLAURIN. DAVID L. WHITAKER.

Witnesses:

D. L. McIntyre, H. T. McLaurin.