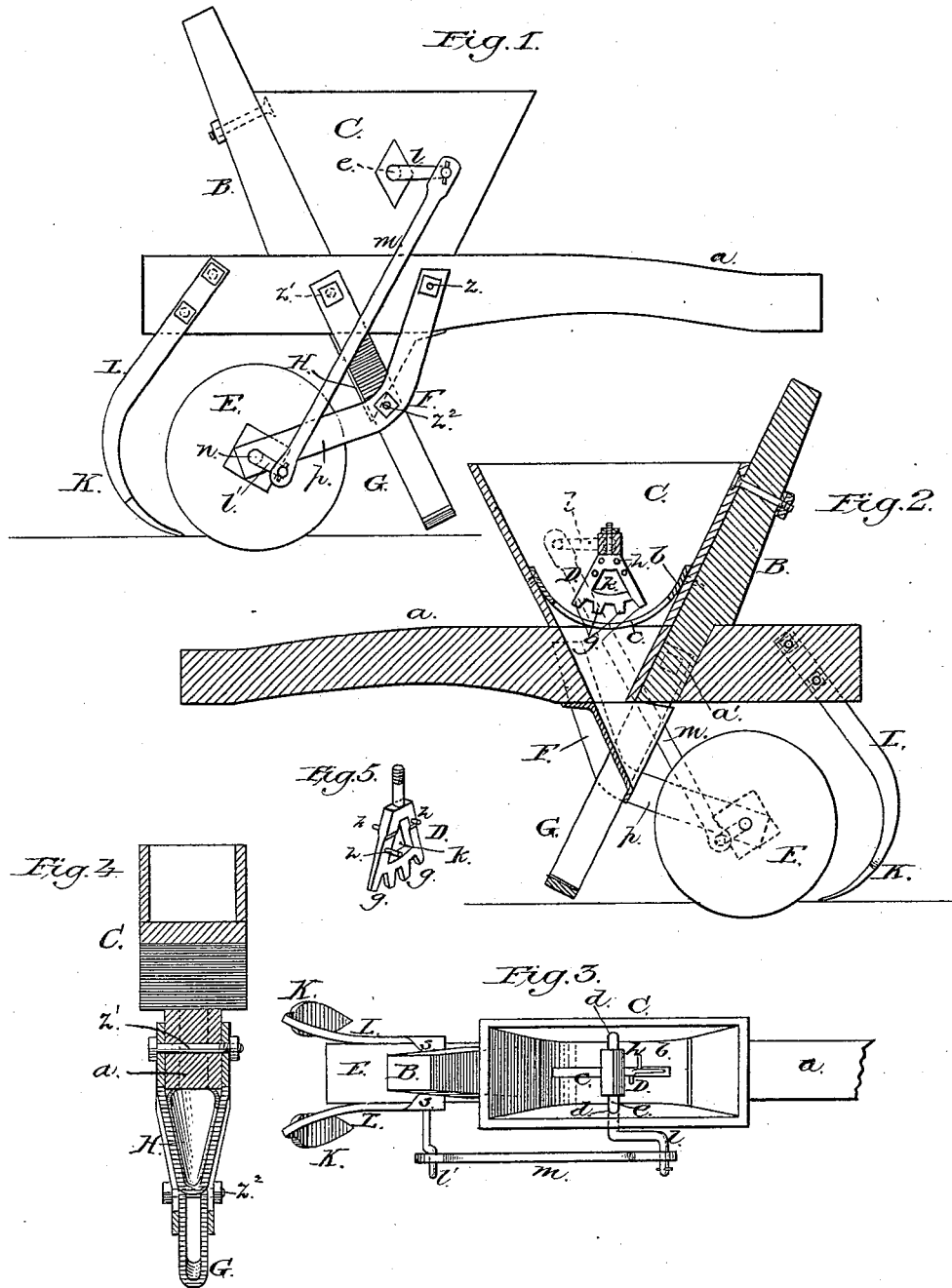


(No Model.)

L. C. WOFFORD.
FERTILIZER DISTRIBUTER.

No. 246,851.

Patented Sept. 6, 1881.



WITNESSES
Villette Anderson
Philip C. Massi,

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UNITED STATES PATENT OFFICE.

LESTER C. WOFFORD, OF WOODRUFF, SOUTH CAROLINA.

FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 246,851, dated September 6, 1881.

Application filed July 23, 1881. (No model.)

To all whom it may concern:

Be it known that I, LESTER C. WOFFORD, a citizen of the United States, resident of Woodruff, in the county of Spartanburg and State of South Carolina, have invented a new and valuable Improvement in Fertilizer-Distributers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of side elevation of my invention. Fig. 2 is a longitudinal section. Fig. 3 is a plan view. Fig. 4 is a cross-section, looking from the rear; and Fig. 5 is a detail of the agitator.

This invention has relation to machines for distributing fertilizing materials; and it consists in the combination, with the curved slotted hopper-bottom, of the vibratory sector, serrated on its curved edge, provided with pins on its sides, and having an opening through it from side to side, intermediately arranged with reference to the pins, all as hereinafter set forth.

In the accompanying drawings, the letter *a* designates the draft-beam and body of the machine, having an arm, *B*, rising from its rear portion, to which handles may be applied. *C* designates the hopper, which is secured to said arm and to the top of the beam, over a slot, *a'*, made through said beam longitudinally. Over this slot is arranged in the hopper a bottom plate, *b*, which is curved longitudinally, its concave side being uppermost. This plate is slotted in the direction of its length, as indicated at *c*.

In the side walls of the hopper are provided bearings *d* for the rock-shaft *e* of the sector-shaped agitator *D*, the lower or convex edge of which is provided with teeth *g*, and the sides of which are provided with laterally-projecting studs *h*, arranged at different levels, each end of the sector being provided with a low stud and a high stud on opposite sides. With reference to these studs an intermediate opening, *k*, is made through the agitator, as indicated in the drawings. This construction is designed to facilitate the discharge of fertilizing material from the hopper, the studs and teeth being designed to keep the mass in motion over the slot *c*.

The movement of the material is assisted by means of the opening through the sector, which

tends to prevent walling of the material on each side thereof.

The sector-shaft is made with a crank, *l*, at its end, which is connected to the upper end of a pitman, *m*, the lower end of which is connected to a shorter crank, *l'*, on the end of one of the journals *n* of the wheel *E*. This wheel is located under that portion of the beam which is in rear of the hopper, and its journals are seated in the rearwardly-extended portions *p* of the bearing-arms *F*, which are secured to the beam at their upper ends, in front of the standard, by means of a bolt, *z*. The standard *G* is designed to be made in loop form at its lower end, and is attached to the beam above by means of the bolt *z'*. The arrangement is such that the upper portions of the standard *G* and of the bearings *F* are under the sides of the hopper, said standard being crossed by said bearings below the beam, and being secured at the intersection by the bolt *z''*, as indicated in the drawings.

In the frame-work formed by the upper portions of the bearings and standard is secured the chute *H*, which is constructed of metal usually, and opens to the rear between the upper portions, *p*, of the standard. By this construction the beam *A* is strongly bolted and braced at its slotted portion.

To the lower end of the standard a suitable opener is designed to be attached, and in rear of the wheel coverers *K* are arranged, the shanks *L* of which are provided with oblique flange-bearings *s* at their upper ends, which engage the top of the beam in rear of the hopper. These coverers are secured to the beam by means of a bolt.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a fertilizer-distributer, the combination, with the slotted beam and the slotted curved bottom of the hopper arranged on the top of said beam, of the vibratory sector-shaped agitator, its lower curved and toothed edge, its laterally-projecting studs *h*, and the opening *k* through said agitator, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LESTER COLUMBUS WOFFORD,

Witnesses:

J. W. MARTIN,
A. B. WOODRUFF.