To all whom it may concern:

Be it known that I, CHARLES WARREN FULLER, a citizen of the United States, residing at Sharon, in the county of York and State of South Carolina, have invented a new and useful Fertilizer-Distributor, of which the following is a specification.

This invention relates to fertilizer-distributors; and it has for its object to provide a device of this class which shall be simple in construction and which may be attached to a plow or cultivating implement adapted to open a furrow for the reception of the fertilizing material and to cover the same by a single operation, as will be hereinafter described with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of an implement constructed in accordance with my invention. Fig. 2 is a longitudinal vertical sectional view of the same. Fig. 3 is a transverse sectional view. Like numerals of reference indicate like parts in all the figures.

1 designates a plow-beam having a standard 2, carrying the furrow-opener 3. To the sides of the beam 1 are secured the iron beams 4 and 5, having outwardly-extending brackets 6 and 7, with rearwardly-extending and downwardly-curved standards 8 and 9, carrying the covering-plates. The standard 6 at one side of the plow-beam is provided with downwardly-extending brackets 7 and 8, the lower ends of which are connected and form bearings for a shaft or axle 9, carrying the operating-wheel 10, which is provided on its inner side with laterally-extending pins or tappets 11. The wheel 10 is adapted to travel upon the ground, as will be readily understood, and is adapted to transmit motion to the fertilizing-distributing mechanism, which I shall now proceed to describe.

The beam 1 is provided on its upper side with a block or bracket 12, to which is hinged a vibrating shoe 13, which is arranged directly under a hopper 14. The latter is secured to the upper end of a rod or brace 15, the lower end of which is hinged to the beam. The rear side of the hopper rests and is supported upon a cross-bar 16, between which and the hopper a coiled spring 16 a is interposed, connecting the handles 17, which are suitably secured to the plow-beam. The hopper is provided with a regulating-slide 18, by means of which the escape of the fertilizing material may be regulated.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The fertilizing material is placed in the hopper, and passes from the latter into the shoe 13, which is provided with an arm 19, terminating in a hook 20, which engages the laterally-extending tappets 11 of the operating-wheel 10. In this manner a vibrating motion is imparted to the shoe, which discharges the fertilizing material into the upper end of a tube or spout 29, which is mounted in a vertical perforation in the beam directly in rear of the shoe and of the standard 2, to which latter the said tube is connected by means of a clamp 22. The fertilizing material is thus discharged directly into the furrow formed by the plow-blade or furrow-opener 3, and the covers following in rear of the dropping-tube will serve to cover the fertilizing material, all by a single operation of the machine.

Having thus described my invention, what I claim is—

1. The combination of the beam having a standard carrying the furrow-opener, the metallic bars secured to the sides of the beam and having laterally-extending arms or brackets provided with rearwardly and downwardly curved standards carrying the covers, the vertical and inclined brackets 8 and 9, secured to one of said standards and having bearings at their lower meeting ends, a shaft journaled in said bearings and carrying a wheel provided with laterally-extending tappets, the hopper supported above the beam, the hinged vibrating shoe arranged below the hopper, and an arm extending from said shoe and terminating in a hook engaging the tappets of the operating-wheel, substantially as set forth.

2. In a device of the class described, the combination, with the plow and the dropping-tube arranged in rear of the standard thereof, of the hinged vibrating shoe mounted on the beam of the plow, a hopper arranged above
said shoe, an arm hinged to the plow-beam and connected with the hopper, the handles, the cross-bar connecting the handles, and the coiled spring interposed between the rear wall of the hopper and cross-bar, substantially as set forth.

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

CHARLES WARREN FULLER.

Witnesses:

R. S. PLAXICO,
J. A. BROWN.