To all whom it may concern:

Be it known that I, VICTOR M. SNOW, of Cashville, in the county of Spartanburg and State of South Carolina, have invented certain new and useful Improvements in Manure-Distributors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in manure-distributors; and it consists in the combination of a suitable bed which is placed upon the bolster of a common wagon, a suitable operating mechanism for dividing up the manure as the flexible bottom of the bed is moved to the rear, and suitable cranks which are connected together by a connecting-rod, and dogs which operate a windlass, whereby the bottom of the bed is moved backward for the purpose of dropping the manure upon the ground, all of which will be more fully described hereinafter.

The object of my invention is to provide a machine which will distribute or broadcast manures and fertilizers of all kinds over the field as the wagon is drawn along. Figures 1 and 2 are side elevations of my invention, taken from opposite sides. Fig. 3 is a plan view. Fig. 4 is a rear view.

A represents an inclined bed or frame, which is placed upon the bolster of a wagon. The bed proper may be mounted upon the frame B—such as is here shown, or any other that may be preferred—the object being to give the bed such an incline as will cause the manure or fertilizer to move more readily toward the rear end of the bed for the purpose of being distributed upon the ground. The bottom C of this bed is made of a series of bars or slats which are connected together by means of chains, the slats beingshouldered and slipped into every other link and jointed. The front end of this bottom C is connected to the board E, which forms the front end of the bed, and to this board is attached a chain, wire, or cord, F, which has its front end wrapped around the windlass G. When this windlass is turned in the proper direction, the cord, wire, or chain F is made to draw the flexible bottom C forward, in position ready to have the bed loaded. Attached to the rear end of this flexible bottom C is a second cord, wire, or chain, H, which passes over a suitable pulley at the rear end of the frame, and then forward to a shaft or windlass, J, in the front end of the frame, upon which the bed is placed. When this windlass or shaft is turned in the proper position by the mechanism, which will be more fully described hereinafter, the flexible bed C is moved backward over the end of the frame, and the manure or fertilizer placed upon the bed is dropped upon the ground where it is intended to broadcast the manure or fertilizer; but when intended to be planted in hills or drills the manure or fertilizer drops in suitable troughs or guides which conduct it to the desired position.

In order to break up the manure or fertilizer and scatter it evenly over the end of the frame, and thus distribute it evenly over the ground, there is journaled upon the top of the rear end of the bed the toothed shaft L. The teeth projecting from this shaft are long enough to just about touch the bed, and they serve to help not only to evenly distribute the manure or fertilizer, but to help move it from off the end of the bottom C. This shaft receives its motion from a pinion, clutch, or any other suitable device, N, which is journaled upon the operating-lever O, and which meshes at its lower end with a gear-wheel, P. This wheel may be attached directly to the hub of the driving-wheel, or operated in any other manner that may be preferred. By placing the pinion upon the operating-lever this pinion can be readily moved back and forth, so as to connect or disconnect the toothed shaft with the driving-power. As long as the operator is driving to the field the pinion will be so moved that the toothed shaft will remain stationary; but as soon as the wagon gets into position for distributing the fertilizer the pinion will be thrown in gear, and as the machine moves forward across the field the fertilizer will be distributed upon the ground.

In order to move the flexible bottom constantly backward, so as to move the fertilizer upon its top within reach of the teeth or prongs upon the toothed shaft, there is secured to one end of the toothed shaft a crank-wheel, Q, which imparts a reciprocating motion to the
connecting-rod R. The front end of this rod R is fastened to the upper end of the lever S, which is provided with the two dogs T. These dogs are placed upon opposite sides of the fulcrum of the operating-lever, and hence they are made to move forward alternately, and thus impart a constant forward movement to the ratchet-wheel U, which is placed upon the end of the windlass or shaft J. As the machine moves along over the field the toothed shaft keeps the dogs or pawls constantly in motion, and in causing the windlass or shaft to revolve the endless bottom C is caused to move the manure or fertilizer toward the rear end of the bed. After the manure or fertilizer has been distributed and it is desired to draw the bottom back into position, the two dogs must be elevated out of contact with the ratchet-wheel, and the windlass G upon the front end of the bed turned, so as to draw the bottom of the bed into position.

Having thus described my invention, I claim—

In a distributing-machine, the combination of the bed, a movable bottom, the toothed operating-shaft, and a pinion for throwing it in and out of gear, the connecting-rod, the operating-lever provided with the two dogs, a windlass, and wire, rope, or cord, which is attached to the rear end of the movable bed, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

VICTOR MANNING SNOW.

Witnesses:

Geo. B. Anderson,

A. H. Donaldson.