R. A. PATTERSON.
Attachment for Distributing Guano and Dropping Cotton Seed.

No. 242,032. Patented May 24, 1881.

Fig. 1.

Fig. 2.

Fig. 3.

Witnesses.

Inventor.

Robert A. Patterson

By John T. Duffie, Esq.
To all whom it may concern:

Be it known that I, ROBERT A. PATTERSON, a citizen of the United States, residing at Belton, in the county of Anderson and State of South Carolina, have invented certain new and useful Improvements in an Attachment for Distributing Guano and Dropping Cotton-Seed; 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 appertains to make and use the same, referring to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side-elevation view of the hopper broken away. Fig. 2 is a view of the same, showing the wheel, hopper, and shoe attached to the plow-beam. Fig. 3 is a detail view of the clamping device; and Fig. 4 is a detail view of the corrugated or notched slide.

This invention has relation to improvements in fertilizer-distributors and cotton-seed droppers; and it consists in the construction and novel arrangement of parts, as hereinafter shown, described, and particularly pointed out in the claims.

In the accompanying drawings, the letter A designates the plow-beam, and B is the clamp attachment, composed of a spindle, B', having loop-braces a secured thereto, and connected at their upper ends to a cross-piece, B'. This clamp is also provided with a rod, a', passing through openings of the cross-piece and spindle and through a coiled spring, a'. B' represents the driving-wheel journaled on the spindle, and provided with pins p on its circumference to prevent slipping as the wheel moves over the ground. This wheel has a second row of pins, q', on its face, a short distance from its peripheral edge, for a purpose hereinafter described.

Between the wheel and plow-handle is the hopper A', connected to the beam A by means of a spring-standard, A'. This hopper has a swinging curved shoe, F, provided with front and side walls, within which the hopperswings. It is attached to hooks z at the sides of the hopper by means of a strap, A', secured to the under side of the shoe, its loose ends being perforated to engage the hooks on the hopper, whereby said shoe is adjustable to or from the hopper, as may be required. The bottom of the hopper is provided with a slotted slide, C, to regulate the flow of fertilizer into the shoe. To the rear end of this hopper is a slotted slide, C', extending vertically down the wall thereof, and having corrugations s on its bottom edge, whereby the flow from the shoe can be regulated according to the quantity to be distributed on the soil or in the furrow.

Secured to the bottom of the shoe is a rod, D, the front end of which extends out across the path of the pins a' on the face of the driving-wheel, and by the rotation of which the side and end walls of the shoe cause a shaking of the hopper by means of the spring attached thereto and to the beam.

A rope or cord, E, attached to one of the plow-handles and passing through an eye on the front upper edge of the hopper and secured to the rod D, serves to remove said rod from the pins on the face of the driving-wheel, to throw the shoe out of gear therewith to save the contents of the hopper from being distributed in turning the machine at the end of a row or in removing it to or from the field. This plow-beam is provided with a furrow-opener in front of the open end of the shoe, the fertilizer from which is deposited in the furrow.

This device may be used to drop cotton-seed by removing the slide from the bottom of the hopper, so that the seed may pass directly into the shoe, the flow being regulated by the corrugated feed-slide.

I am aware that plows have heretofore been provided with hoppers and shakers for distributing fertilizers, and I do not claim such invention, broadly.

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

1. The combination, with the plow, of the clamping device B, having the spindle B', and the loop-braces a secured thereto, the cross-piece B', engaging the upper ends of said braces, a spring, a', the screw-rod a', passing through openings in the cross-piece, beam, spring, and spindle, and the wheel B', having
the pins $a^2$ $a^4$, journaled on said spindle, as shown and described, and for the purposes set forth.

2. The combination, with the beam and its wheel having pins $a^4$, of the hopper $A'$ provided with hooks $z$ and slides $C C'$, the curved shoe $F$, having the strap $A'$, adjustable on said hooks, the rod $D$, engaging the pins $a^0$, and the rope $E$, attached to said rod and extending over the hopper within reach of the operator, as specified.

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

ROBERT AUSTIN PATTERSON.

Witnesses:

A. M. DUFFIE,

R. W. TODD.