

J. T. HORTON.
GUANO DISTRIBUTER.

No. 171,285.

Patented Dec. 21, 1875.

Fig. 1.

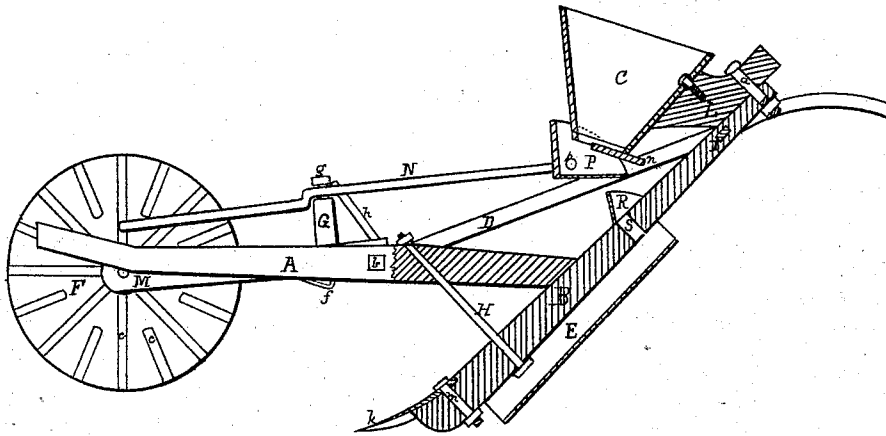
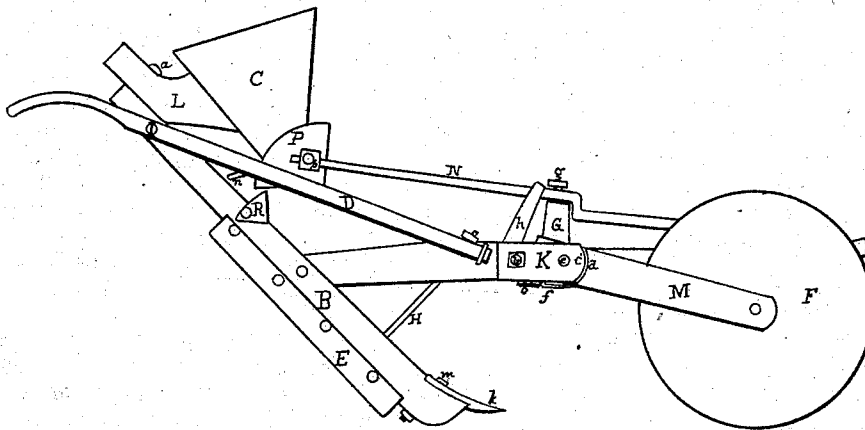


Fig. 2.



WITNESSES

George E. Upham.
Walter C. Masi

INVENTOR

James T. Horton
Chipman & Son, Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES T. HORTON, OF WIDEMAN'S, SOUTH CAROLINA.

IMPROVEMENT IN GUANO-DISTRIBUTERS.

Specification forming part of Letters Patent No. **171,285**, dated December 21, 1875; application filed July 31, 1875.

To all whom it may concern:

Be it known that I, JAMES T. HORTON, of Wideman's, in the county of Abbeville and State of South Carolina, have invented a new and valuable Improvement in Guano-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 a longitudinal vertical section of my guano-distributer, and Fig. 2 is a side view of the same.

The object of my invention is to provide a simple and accurate device for distributing guano, which can be attached to the ordinary plow; and it consists in the construction and novel arrangement of a pivoted wheel-shank and an oscillating shoe under a hopper and over the mouth or funnel of a distributing spout or tube, a lever, a hopper, and a distributing spout or tube, as hereinafter fully shown and described.

In order to enable others skilled in the art to which my invention appertains to make and use the same, the following description of one mode of construction is given.

The letter A represents the beam; B, the standard; D, the handles, and I the connecting-bar which secures the same together. H represents a brace extending through beam A and standard B. To the upper end of this standard B is secured the shank L of the hopper C, by means of a bolt, *a*, and at the lower end of the standard is attached a shovel, *k*, by means of a bolt, *m*. K represents the body of the attachment, attached to the beam A, with a bolt, *b*, and this body or block has a convex shoulder, *c*, against which works the concave shoulder *d* of the vibrating shank M of the wheel F, the object of this being to prevent the wearing of pin *e*. The guard *f* is designed to prevent shank M from falling too low, the guard *f* abutting against the plate *o* on the under face of the attachment, in the lowest position of the wheel. F represents a ribbed wheel, having the radiating ribs *c c*, which are alternately arranged, one running to the center, and the

next on account of the nearness of their ribs at the center being carried about half-way from the circumference to the center. G represents a post, upon which is pivoted the lever N, by means of a pin, *g*. At one end of the lever N, under the hopper, is attached the adjustable distributing-shoe P, by means of a clamp-bolt, *p*, the other end of the lever N being, by means of the spring *h*, kept against the ribs *c c* of wheel F. R represents the mouth or funnel, which is fastened to the front of the standard B, under the lip of the distributing-shoe P. S represents a passage through the standard B, and E a spout or tube, fastened to the rear of said standard, below the passage S. *n* represents a slide, which works in a groove in the bottom of hopper C.

The guano is placed in the hopper C, and, when the machine is put in motion, the slide *n* being removed or pulled back, according to the amount of feed required, it drops into the shoe P, and the striking of the ribs *c c* against the end of the lever N as the wheel F revolves causes an oscillating motion of the shoe P, which gradually shakes the guano out of the shoe into the mouth or funnel R, whence it passes through the passage S in standard B into the spout or tube E, whereby it is conducted to the furrow made in the earth by the shovel *k*.

The quantity distributed is regulated by changing the angle of the shoe P, which is effected by means of the clamp-bolt *p*.

The entire frame may be attached to any plow-stock.

What I claim as new, and desire to secure by Letters Patent, is—

The pivoted wheel-shank M and block K, both constructed as set forth, in combination with the ribbed wheel F, standard B, provided with the tube E, and plow-point *k*, funnel R, shoe P, hopper C, and lever N, substantially as described, and for the purpose set forth.

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

JAMES THOMAS HORTON.

Witnesses:

W. E. LINK,
W. H. HORTON.