(No Model.)

S. A. ESKEW.

GUANO DISTRIBUTER.

No. 339,869. Patented Apr. 13, 1886.

Fig. 1.

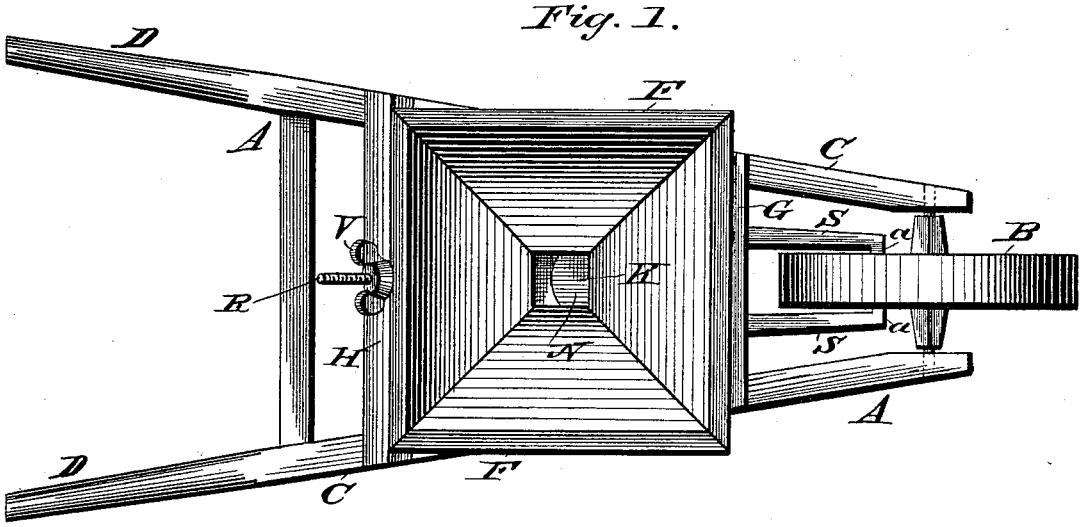


Fig. 2.

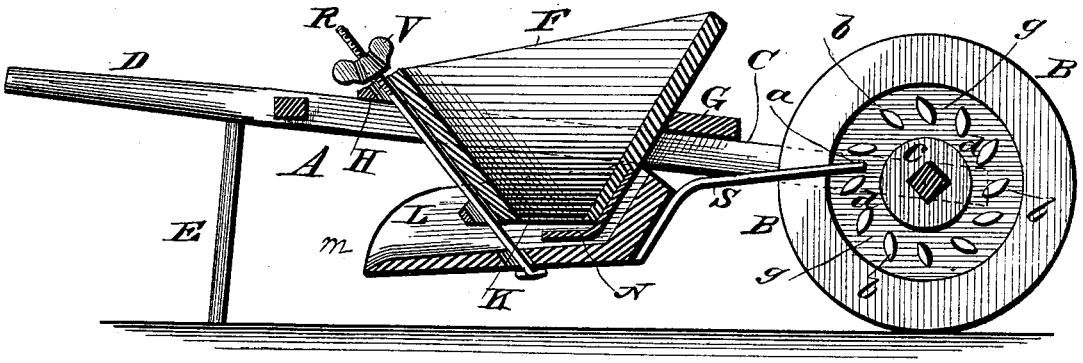
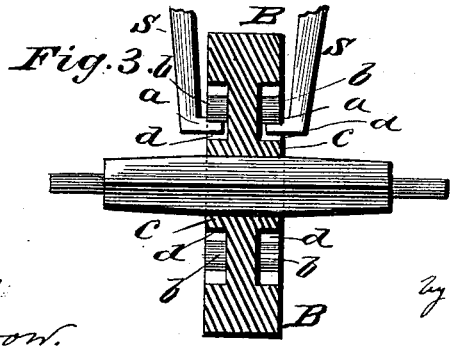


Fig. 3.



WITNESSES

Phil. C. Mason.

John T. Morrow.

INVENTOR

S. A. Eskew.

by Anderson & Smith

his Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL A. ESKEW, OF GREENVILLE, SOUTH CAROLINA.

GUANO-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 339,869, dated April 13, 1886.

Application filed April 27, 1885. Renewed February 4, 1886. Serial No. 190,833. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. ESKEW, a citizen of the United States, residing at Greenville, in the county of Greenville and State of South Carolina, have invented certain new and useful Improvements in Guano-Distributers; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view. Fig. 2 is a central vertical section. Fig. 3 is a sectional detail.

This invention has relation to guano-distributers; and it consists in the construction and novel arrangement of devices, all as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates the frame, which is made in wheelbarrow form, usually, and provided with the front supporting-wheel, B.

C C are the side bars, having the handles D D in rear, and the props E.

F is the hopper, supported by the side bars and by the cross-bars G and H, respectively, in front and rear. This hopper has an opening, K, at its lower end, through which the fertilizing material passes to the trough-shoe L, from which it is discharged in rear through the mouth *m*.

N is a guide-flange secured to the lower portion of the hopper in front, and extending downward and rearward under the opening K for a short distance, being designed not only to guide the fertilizing material toward the discharge end of the shoe, but also to assist the latter in reducing the larger lumps.

The distributing-shoe L is supported in front by spring-arms S S, engaging projections of the wheel B, and in rear by the screw-rod R, which is connected to the shoe by its lower end, and, passing upward, is provided with a broad nut, V, which engages the threaded portion, and rests on a bearing of the hopper-frame. By turning the nut the regulator-rod R is shortened or lengthened to lessen or increase the distributing action of the shoe.

The vibratory or shaking motion of the shoe is effected by the engagement of the inwardly-turned ends *a* of the spring-arms S with the studs *b*, which are arranged in annular series on each side of the wheel B, around the hub projection *c*, between which and the inner ends of the studs is left a free circular passage, *d*. The studs *b* are of elongated form, extending outward and backward obliquely from the radial lines of the wheel, and between each stud and the adjacent studs are the passages *g*. These passages *g*, as well as the annular passage *d*, are large enough to permit the inwardly-turned ends of the spring-arms to pass readily.

In operating this machine it will be observed that downward pressure on the rear end of the shoe throws the spring-arms upward and in gear with the series of studs. As the machine is moved forward the engagement of the studs in succession with the spring-arms causes a rapid vibration of the shoe, which is very efficient in promoting the discharge of the comminuted fertilizer. When, however, it is desired to move the machine without operating the discharging-shoe, the machine is pulled backward a few inches, causing the ends of the spring-arms to drop into the annular passage *d*, which, being smooth and circular, has no vibrating effect on the arms when the machine is afterward moved forward.

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

1. The combination, with the hopper and its frame, of the annularly-studded wheel and the distributing-shoe, supported in front by spring-arms engaging said wheel and in rear by an adjustable rod or regulator, substantially as specified.

2. The wheel having the annular series of oblique studs separated from the hub projection by a circular passage, in combination with the spring-arms of the distributing-shoe, having inwardly-turned ends, substantially as specified.

3. The combination, in a guano-distributer, of the shaking discharge-shoe arranged beneath the hopper, the spring-arms supporting the same in front and bearing on lateral projections of the wheel, the threaded rod passing through and supporting the shoe in rear, and the thumb-nut on the upper threaded end of the rod, having a bearing on the main frame, substantially as specified.

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

SAMUEL A. ESKEW.

Witnesses:
W. C. BEACHAM,
H. W. CELY.