

W. E. MARTIN.  
Guano Distributer.

No. 107,937.

Patented Oct. 4, 1870.

FIG. 1

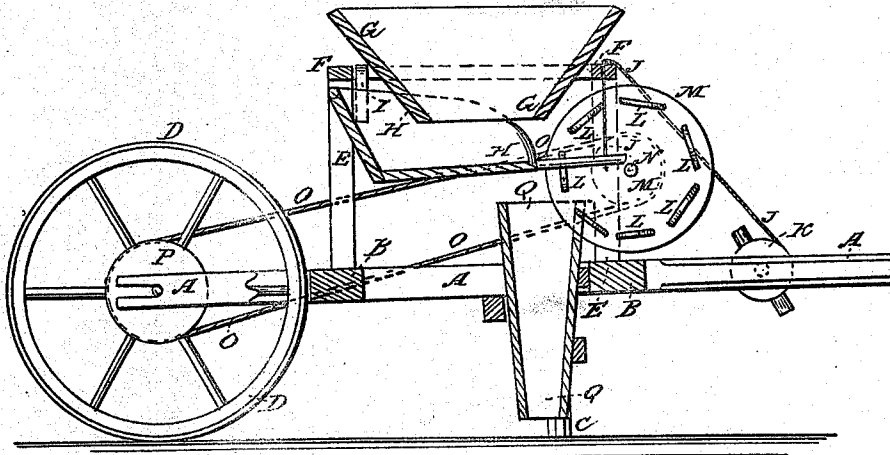
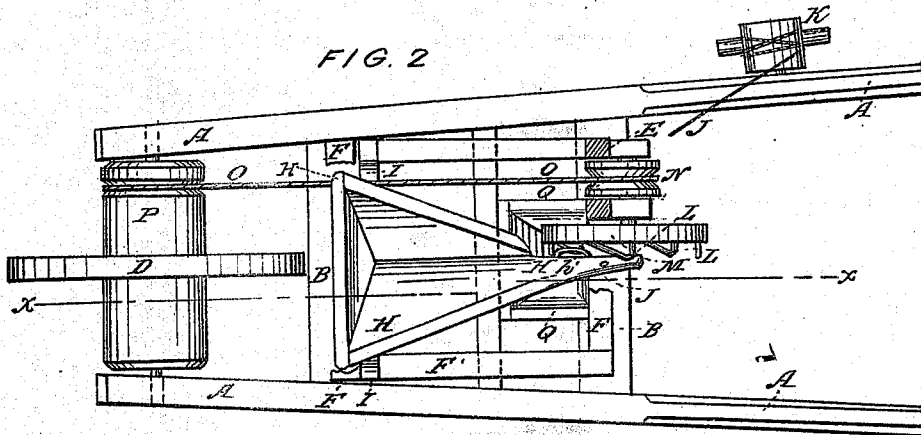


FIG. 2



WITNESSES:

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INVENTOR:

*W. E. Martin*

PER

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# United States Patent Office.

WILLIAM E. MARTIN, OF OCONEE, GEORGIA, ASSIGNOR TO JAMES D. BARBER, OF SAME PLACE.

Letters Patent No. 107,937, dated October 4, 1870.

## IMPROVEMENT IN GUANO-DISTRIBUTERS.

The Schedule referred to in these Letters Patent and making part of the same

*To all whom it may concern :*

Be it known that I, WILLIAM E. MARTIN, of Oconee, in the county of Washington and State of Georgia, have invented a new and useful Improvement in Guano-Distributor; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a detail sectional view of my improved guano-distributor, taken through the line  $x x$ , fig. 2.

Figure 2 is a top view of the same, the hopper being removed, and part of the frame-work being broken away, to show the construction.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish a simple, convenient, and effective machine for distributing guano and other fine fertilizers, which shall be so constructed and arranged that it may be easily operated by hand; and

It consists in the construction and arrangement of the various parts of the machine, as hereinafter more fully described.

A are the side bars of the frame of the machine, which are connected and held in their proper relative position by two or more cross-bars, B, and the rear ends of which project to serve as handles in operating the machine.

C are legs attached to the side bars A, to support the rear part of the machine when standing.

D is a wheel, the journals of which work in slots formed in or in bearings attached to the forward ends of the side bars A, and the rim of which is made broad, to prevent it from sinking into the ground.

To the frame-work A B are attached the lower ends of the four standards E, the upper ends of which are connected by the bars F that form a frame to support the hopper G that receives the guano to be distributed.

From the hopper this guano falls upon the triangular-shaped shoe H, the forward end of which is supported by leather straps I, or other flexible connections attached to the frame E.

The rear end of the shoe H is supported by the cord J, which passes through a guide-slot formed in or over a guide-pulley attached to the rear cross-bar F, and its other end is attached to a belaying pin, K, or other device attached to one of the side bars A, so that by lengthening or shortening the said cord J, the rear or discharging end of the shoe H may be lowered or raised, to regulate the rapidity of the discharge of the guano from said shoe, as may be desired.

One of the inclined sides of the shoe H, or an arm attached to or formed upon said shoe projects forward, so as to be struck by the series of cams L, formed upon or attached to the side of the wheel M, the journals of which work in bearings formed in or attached to the rear standards E.

N is a pulley formed upon or attached to the axle of the agitator-wheel L N, and around which passes the band O, which also passes around the enlarged hub P of the wheel D, or with a pulley connected with said wheel, so that the agitator-wheel L M may be agitated, jarred, or shaken, by the advance of the machine.

A guard, K', may be attached to the part of the shoe H, against which the cams or inclines L strike, to prevent the said shoe from being worn by the said cams or inclines.

Q is a spout attached to the frame-work of the machine, to receive the guano and conduct it to the furrow along which the machine is being propelled.

Having thus described my invention,

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

An improved guano-distributor, formed by the arrangement of the side bars A, cross-bars B, legs C, wheel D, standards E, frame F, hopper G, shoe H, flexible suspending-straps I, cord J, belaying-pin K, or equivalent cams or inclines L, wheel M, pulley N, band O, and enlarged hub or pulley P, all constructed substantially as herein shown and described, and for the purposes set forth.

WM. E. MARTIN.

Witnesses:

WM. G. MCBRIDE,  
MARSHALL B. WORD.