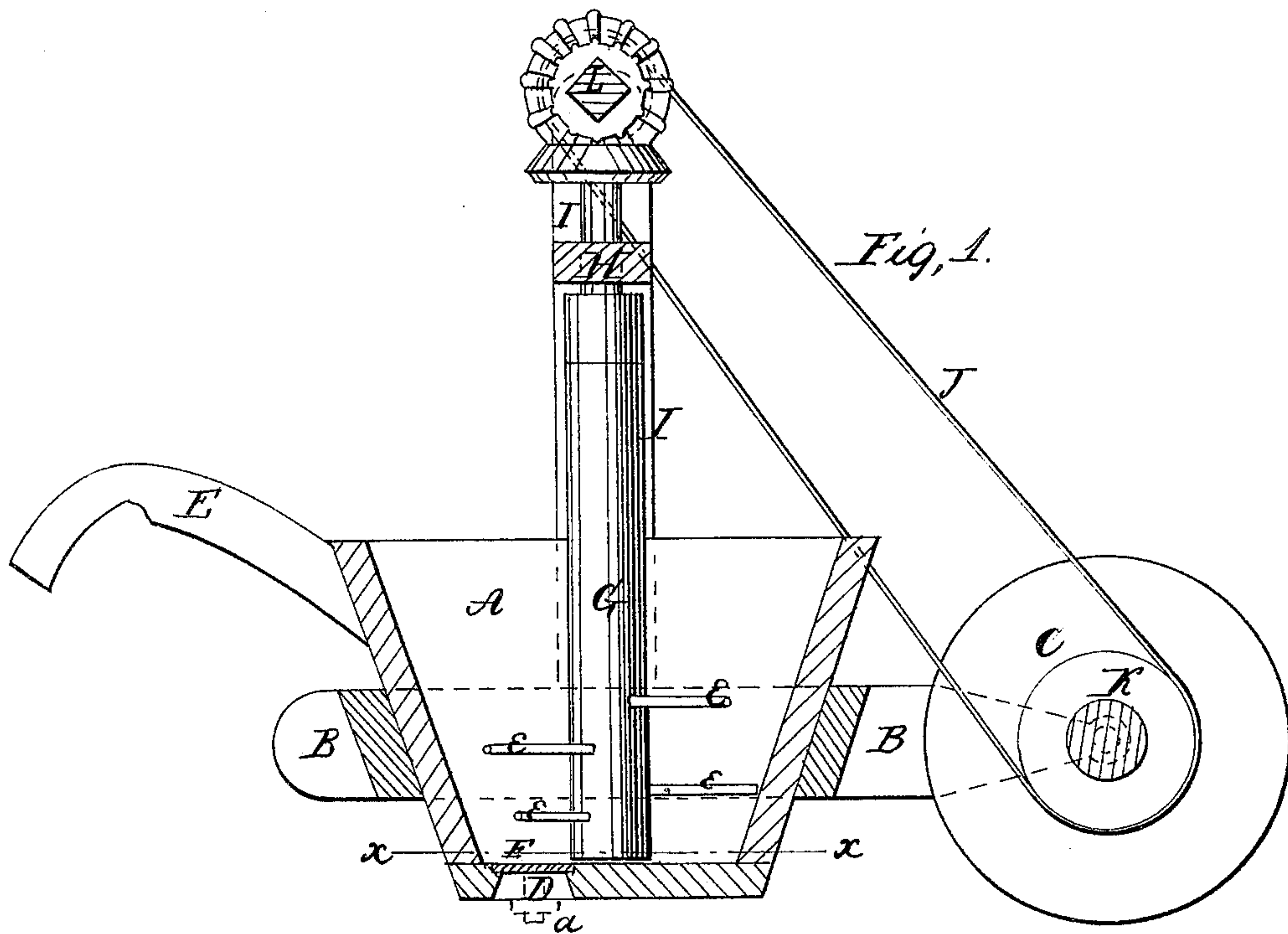


*J. D. Coxwell.*

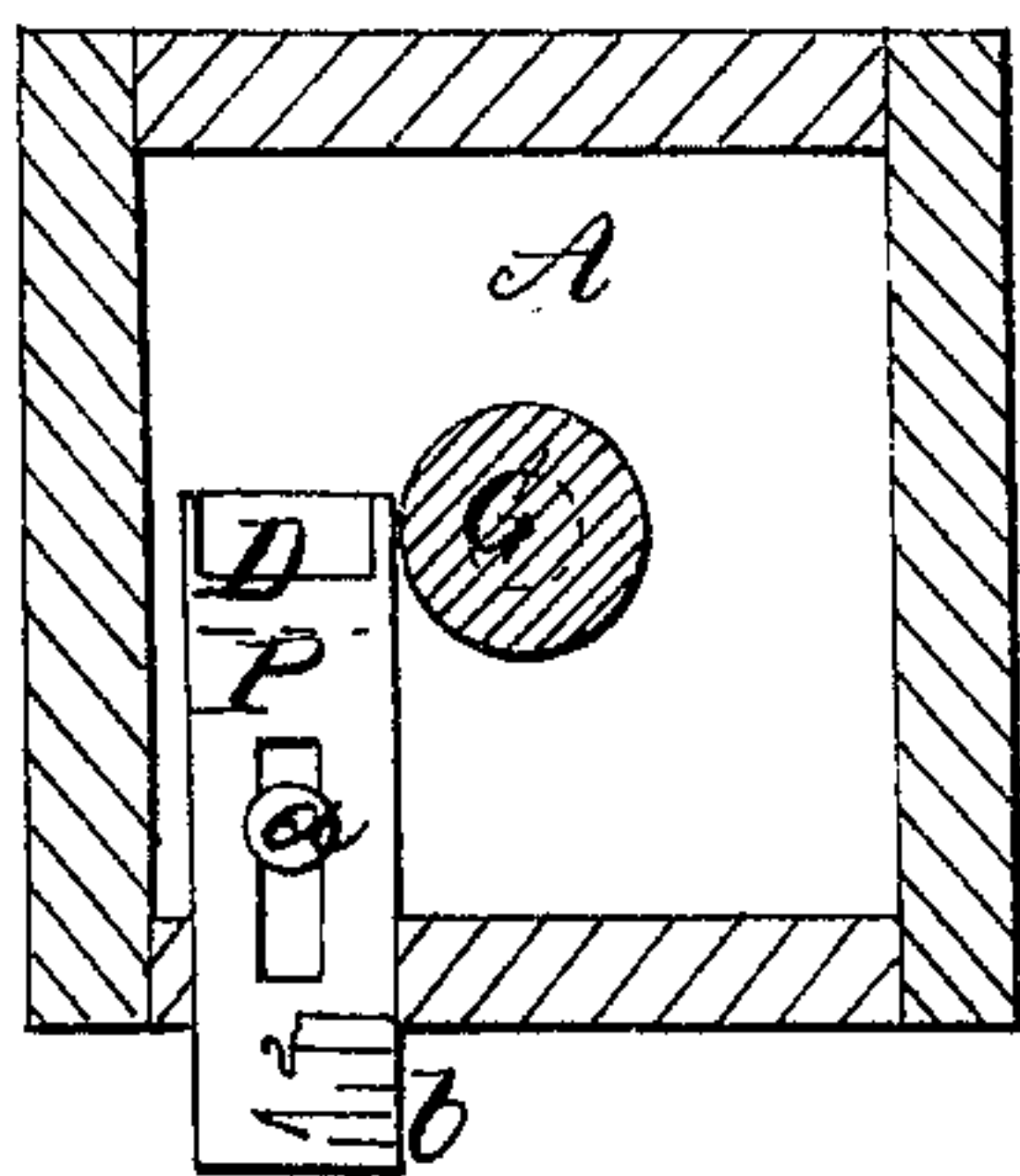
*Guano Distributer.*

*Nº 91,434.*

*Patented Jan. 15, 1869.*



*Fig. 2.*



*Witnesses,*  
*G. A. Pettit*  
*J. V. Kenyon*

*Inventor*  
*J. D. Coxwell*  
*by* *Thun & Co.*  
*Attorneys.*

# UNITED STATES PATENT OFFICE.

JOHN D. COXWELL, OF GIBSON, GEORGIA.

## IMPROVEMENT IN GUANO-DISTRIBUTER.

Specification forming part of Letters Patent No. **91,434**, dated June 15, 1869.

*To all whom it may concern:*

Be it known that I, JOHN D. COXWELL, of Gibson, in the county of Glascock and State of Georgia, have invented a new and Improved Guano-Distributor; 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section. Fig. 2 is a horizontal section through line *x x* of Fig. 1.

The object of this invention is to provide, for public use, a light, simple, and convenient hand-machine for sowing or distributing guano or other pulverized fertilizers.

In the drawings, A is a hopper attached to a beam, B, which is supported at its forward end upon a wheel, C, that runs in the furrow, and at its rear end by a handle or handles, E, held by the operator.

D is a hole in the bottom of the hopper, through which the guano escapes to the ground. It is partially covered by a slide, F, graduated, as shown at *f*, and capable of being fixed in any required position by a set-screw, *a*, the object of the slide being to regulate the quantity sown, and the figures on the graduated scale showing whether one hundred pounds, two hundred pounds, &c., are sown to the acre, the number which appears at the edge of the hopper indicating the quantity sown.

G is an agitator-shaft, stepped in the bottom of the hopper, near the center thereof, and supported at its upper end by a cross-

beam, H, resting upon two uprights, I I. J is a belt running from a pulley, K, on the shaft of wheel C to a pulley on a horizontal shaft, L, bearing in the two uprights I I. *m m'* are two miter-wheels, by which the motion of shaft L is communicated to the agitator, and *e e* are the arms of the agitator, which pass through the guano, stirring it up thoroughly, and causing it to escape constantly and uniformly through the opening D.

The operation of this machine is simple, easy, and effective. The guano is placed in hopper A, the slide F is set according to the quantity required per acre, the wheel C is placed in the furrow, and the operator, taking the handle E, moves forward, himself walking in or alongside of the furrow. The bottom of the hopper comes nearly or quite down into the furrow, so that the wind cannot blow the fertilizer away, while the latter is scattered uniformly along as the workman pushes the machine before him.

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

The machine constructed and operating substantially as herein described—that is to say, having the wheel C, belt J, shaft L, agitator G, with arms *e e*, hopper A, and handles E E, all arranged and combined as and for the purpose set forth.

JOHN D. COXWELL.

Witnesses:

GEORGE M. DAVIS,  
GEO. P. HUDSON.