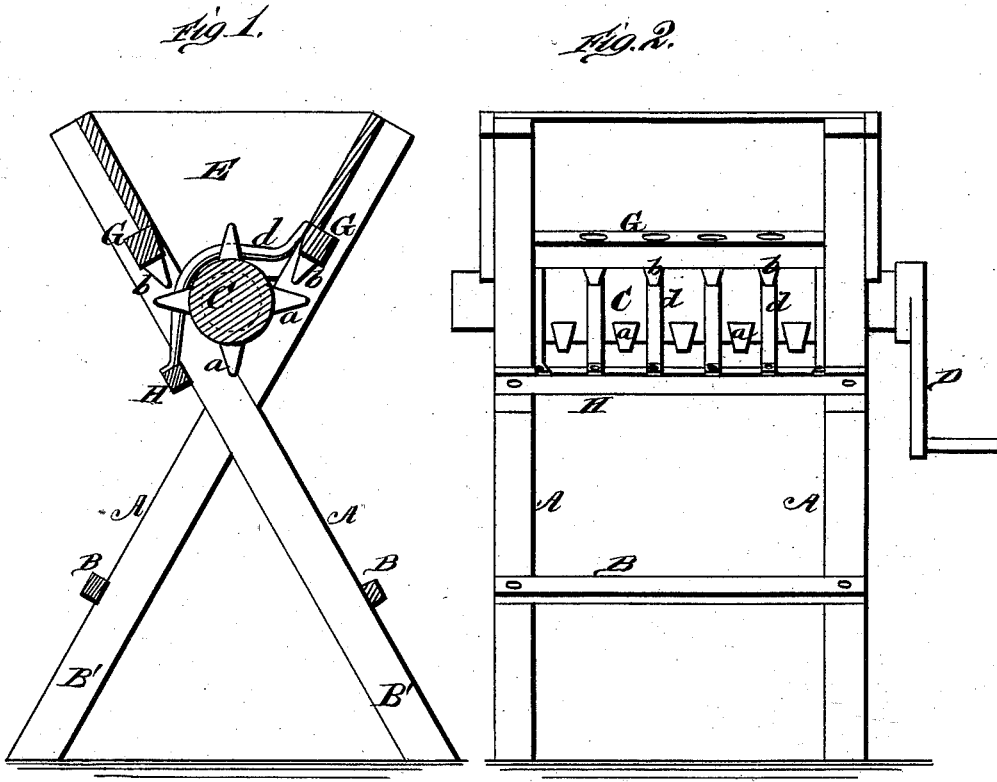


T. C. GARLINGTON.  
Manure Grinder.

No. 198,882.

Patented Jan. 1, 1878.



WITNESSES  
*Robert Everett*  
*George E. Upham*

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

THOMAS C. GARLINGTON, OF LA FAYETTE, ALABAMA.

## IMPROVEMENT IN MANURE-GRINDERS.

Specification forming part of Letters Patent No. **198,882**, dated January 1, 1878; application filed November 10, 1877.

*To all whom it may concern:*

Be it known that I, THOMAS C. GARLINGTON, of La Fayette, in the county of Chambers and State of Alabama, have invented a new and valuable Improvement in Manure-Grinders; 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 transverse vertical section of my manure-grinder, and Fig. 2 is a front view thereof.

The nature of my invention consists in the construction and arrangement of a machine for grinding manure for fertilizing purposes, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

At each end or side of my manure-mill are two legs, A A, which are crossed and mortised into each other, and a cross-bar, B, connects the two sets of legs on each side. In the cross of the legs is laid a shaft or roller, C, provided with spikes or teeth *a a*, and at one end with a crank, D, for rotating the same. Above the cross in the legs is formed the hopper E, by simply attaching suitable planks to the upper ends of the legs both on the sides and ends of the mill.

To each of the two sides of the hopper E is attached a bar, G, running the entire length, and provided with downwardly projecting spikes or teeth *b*, between which work the teeth *a* on the shaft or roller C, for breaking up all clods, &c., the manure being discharged on each side of said shaft.

To one side of the hopper E is attached a series of ribs, *d*, which are curved, as shown in Fig. 1, over the shaft C, and pass between

the teeth *a* on said shaft, the lower ends of said ribs being attached to a cross-bar, H, below the opposite side of the hopper. When these ribs are used the teeth or spikes *b* below the sides of the hopper are dispensed with.

The advantage of the ribs is, that if any hard substance which could not be broken should be in the manure, by turning the shaft backward, such substance would fall out without losing any time in picking it out by the hand.

By attaching a small crank in the opposite end of the shaft C, and connecting with a coarse sieve underneath the mill, arranged to shake like a common wheat-fan, to sift out the largest lumps, machinery could be used to distribute the manure in the rows.

It will be observed that by crossing the bars A A, I form the supporting-legs B' for the machine and a frame for the hopper. The upper crotch of the bars serves as a bearing for the spiked shaft, and thus I am enabled to make a strong frame having the functions above set forth for the mechanical parts of the machine.

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

The within-described manure-mill, consisting of the crossed legs A A at each end, the toothed or spiked shaft C, supported in the crotches of the legs, and provided with the crank D, planks attached to the upper ends of the legs to form the hopper E, and the ribs *d*, all constructed substantially as and for the purposes set forth.

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

THOMAS C. GARLINGTON.

Witnesses:

W. J. MAY,  
B. C. JAMES.