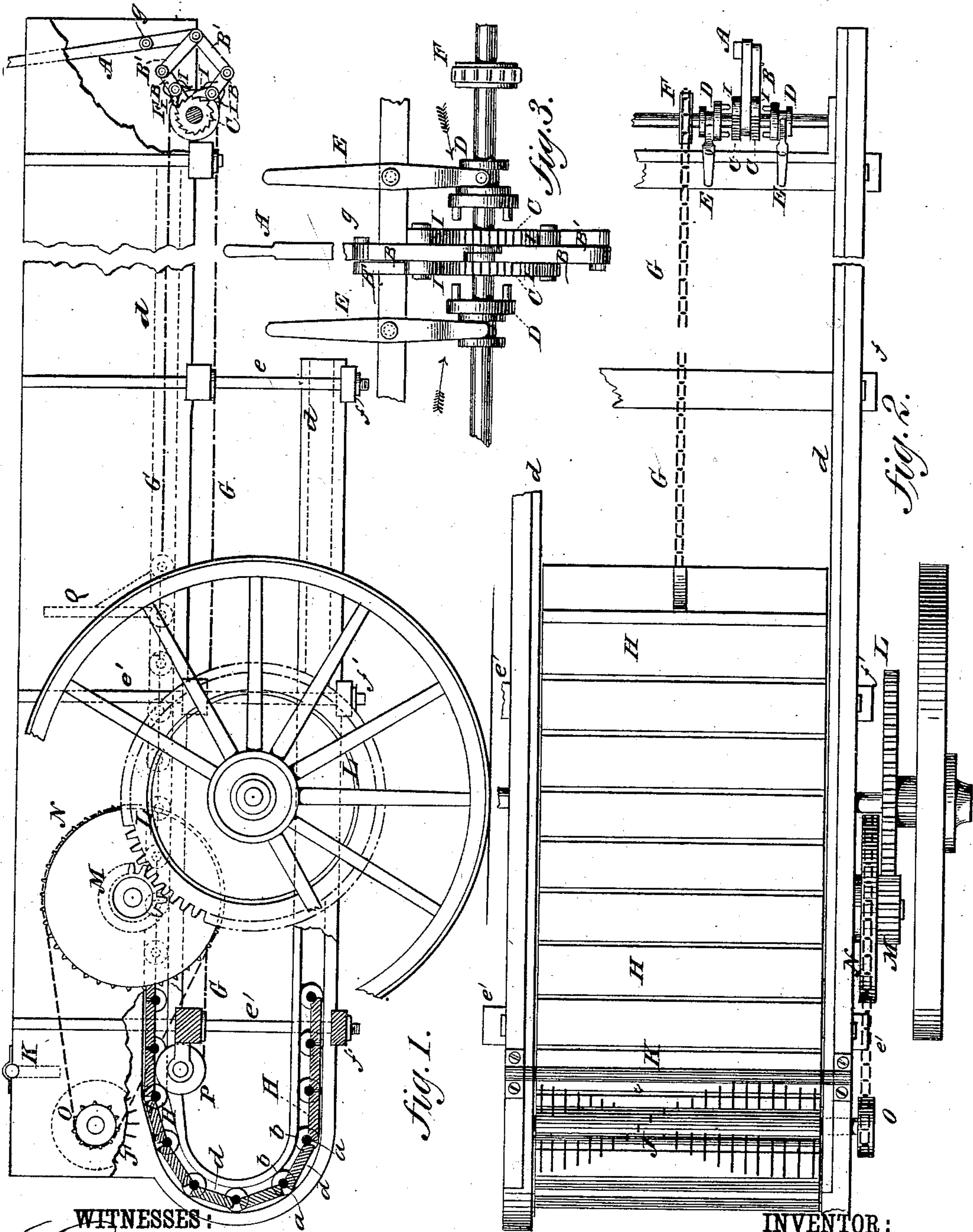


(No Model.)

A. J. GRADY.
MANURE DISTRIBUTER.

No. 264,279.

Patented Sept. 12, 1882.



WITNESSES:

Gustave Dietrich.
C. Sedgwick

INVENTOR:

A. J. Grady
BY *Mum & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ANDREW J. GRADY, OF PECATONICA, ILLINOIS.

MANURE-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 264,279, dated September 12, 1882.

Application filed April 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. GRADY, of Pecatonica, in the county of Winnebago and State of Illinois, have invented a new and Improved Manure-Distributor, of which the following is a full, clear, and exact description.

My invention relates to manure-distributers; and it consists in the peculiar construction and arrangement of parts, as hereinafter more fully set forth.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation, partly in section, of my improved manure-distributor. Fig. 2 is a plan view with a part broken out. Fig. 3 is a detail of the hand-gear for operating the bottom of the wagon.

H represents the sectional bottom of the wagon, the sections being joined together at *a* and provided with rollers *b*, which are arranged in the ways *d* along the sides of the wagon-body, as shown by dotted lines at the right hand and full lines at the left hand of Fig. 1, said ways extending downward at the rear and forward under the truck to the suspending-rods *e* and bar *f*, for a space to receive the bottom H when being moved out of its normal place, for delivering the load to the toothed rotary distributor J for being discharged upon the ground, the said bottom being shifted along past the said distributor by the endless chain G, worked by hand-lever A, and the distributor being operated by the chain belt O, drum N, pinion M, and the toothed driver L on one of the wagon-wheels. The endless chain G runs over the driving-pulley F and the guide-pulley P, and is suitably attached to the bottom H for working it forward and backward. The driver F is worked by the ratchet C, pawls I, jointed pawl-levers B, and the said hand-lever A, the latter being fixed on a pivot at *g* and connected with levers B by links B'. The shaft of the driving-pulley F is provided with two of the ratchets C, and each ratchet has pawls I and pawl-levers B, one being set to work the chain G to the left hand for discharging the load and the other for working said chain to the right hand for

returning bottom H after the load has been discharged. The ratchet-wheels are fitted loosely on the shaft, and have each a clutch, D, and clutch-lever E, for connecting one or the other, according as the bottom H is to be moved forward or backward.

K represents a feed-board hung on pivots above and a little in advance of the distributor, to prevent lumps from being thrown over before being pulverized by causing them to fall back for repeated action by the points of the distributor.

Q represents the end-board of the bottom H, for confining the end of the load at the front.

Besides the suspending-rods *e* and beam *f* mentioned for supporting the front end of the lower ways, *b*, said ways are similarly supported at intervals along rearward by other rods, *e'*, and bearings *f'*. The quantity distributed can be regulated by the rapidity of the working of the hand-lever A, which is subject to the will of the operator, and may be varied at different times and places as circumstances may require.

In practice the wagon will have a pair of wheels at the front end of the box, as other wagons have, said wheels being omitted in the drawings for simplicity.

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

1. In a manure-distributor, the combination, with an open-bottom wagon-body provided with ways *d* in its sides, extending downward at the rear and forward under the body nearly to its forward end, of the movable sectional bottom H, provided with end-board Q and means, substantially as described, for operating said bottom, as specified.

2. In a manure-distributor, the combination, with an open-bottom wagon-body provided with the ways *d* in its sides, extending downward at the rear and forward under the body, the movable sectional bottom H, provided with end-board Q, and means for operating the same, of the distributor J, the chain O, drum N, pinion M, and the driver L, substantially as and for the purpose set forth.

3. In a manure-distributor, the combination,

with the movable bottom H and endless belt G, of the pulley F; the ratchet-wheels C, the clutches D, the lever A, levers B, the links B', and pawls I, substantially as and for the purpose set forth.

4. The sectional bottom H, jointed together at *a*, and provided with rollers *b*, in combina-

tion with the ways *d* of a manure-wagon, extended down the back under and forward along the wagon, substantially as described.

ANDREW J. GRADY.

Witnesses:

G. D. ROGERS,

F. S. BRAINARD.