

No. 754,408

PATENTED MAR. 15, 1904.

M. L. BAKER.
FERTILIZER DISTRIBUTER.
APPLICATION FILED DEC. 18, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

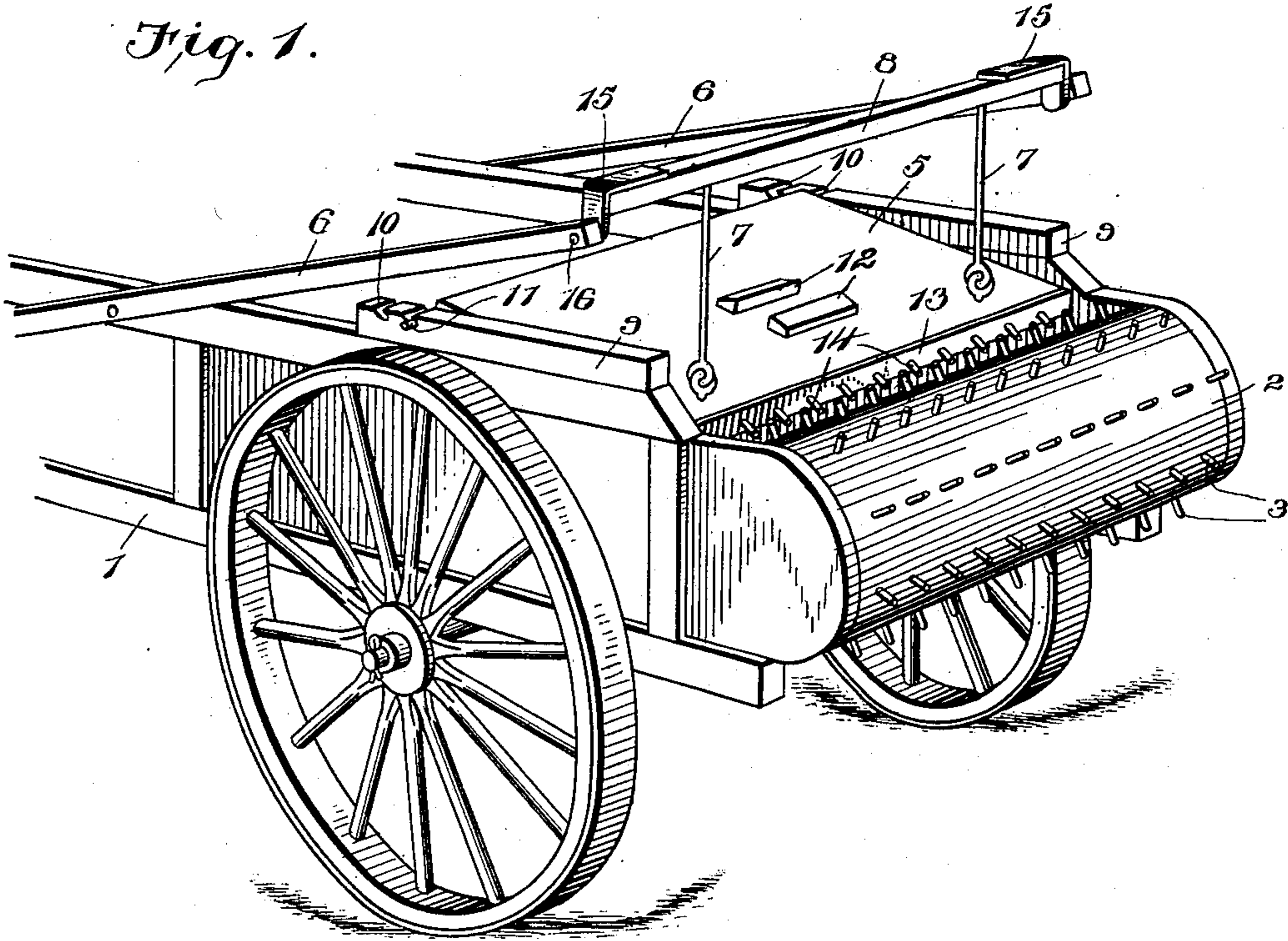
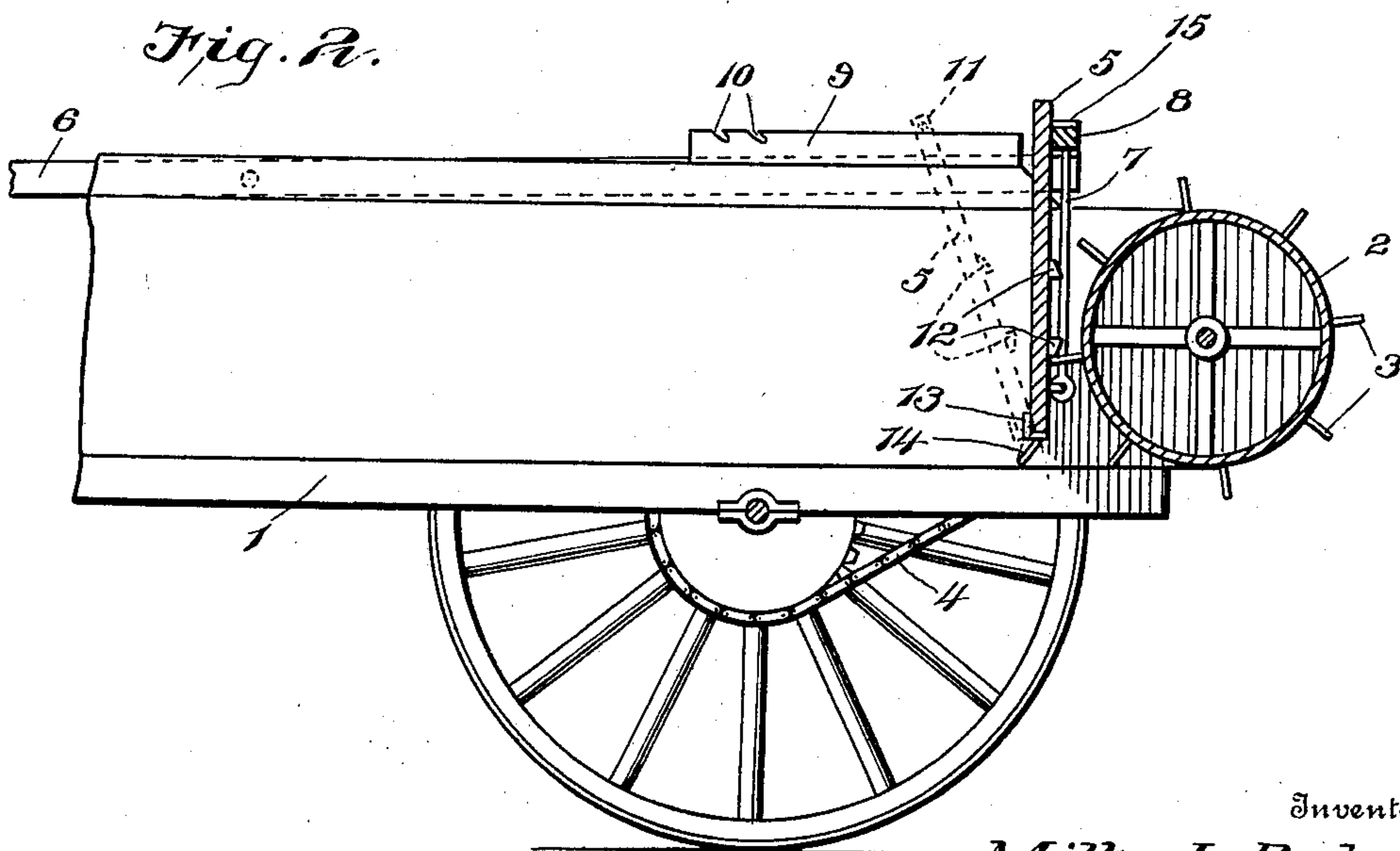


Fig. 2.



Witnesses

J. P. Britt
E. C. Duff

Inventor

Milton L. Baker,

By

E. C. Duff & Son

Attorneys

No. 754,408.

PATENTED MAR. 15, 1904.

M. L. BAKER.
FERTILIZER DISTRIBUTER.
APPLICATION FILED DEC. 18, 1903.

NO MODEL.

2 SHEETS--SHEET 2.

Fig. 3.

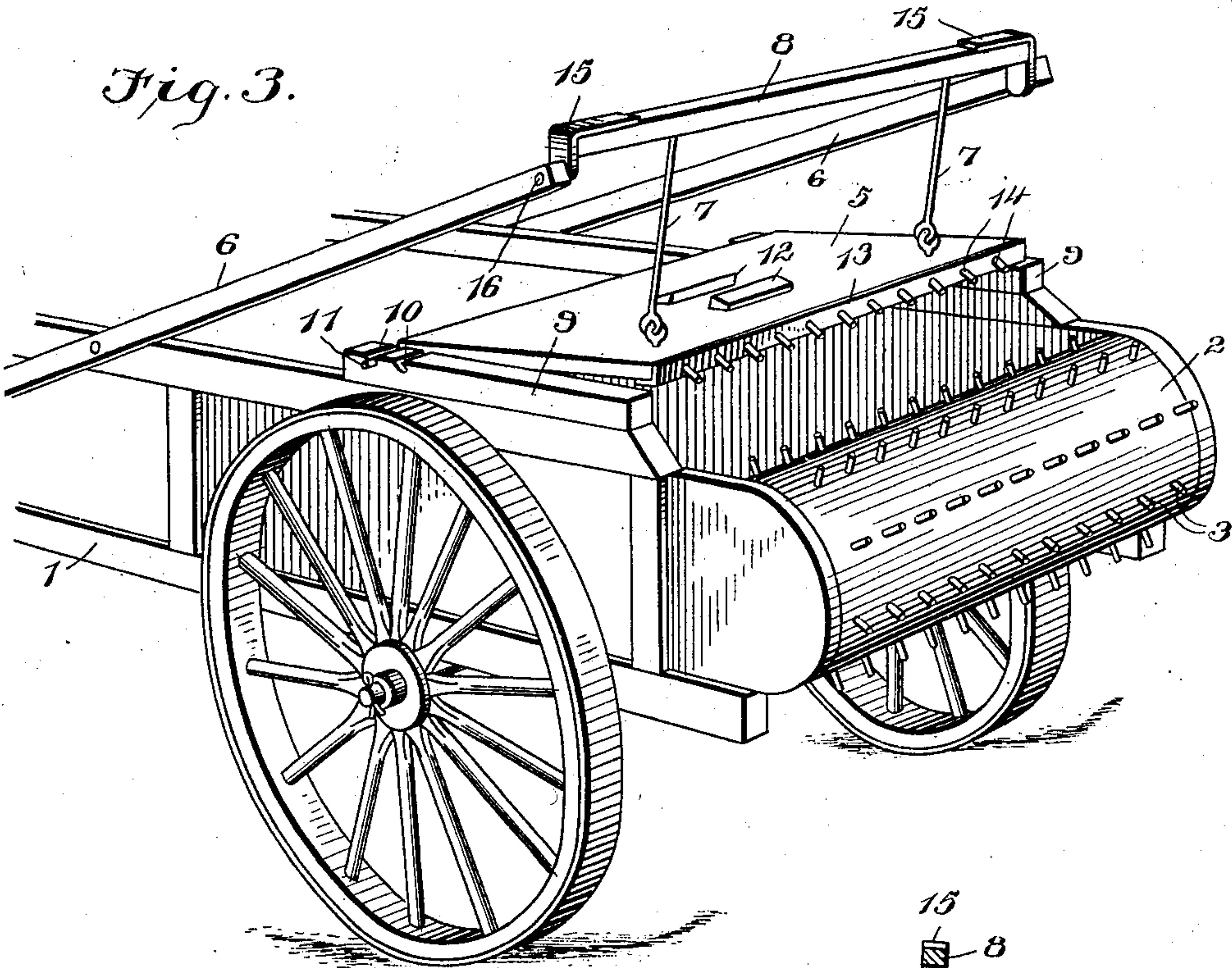
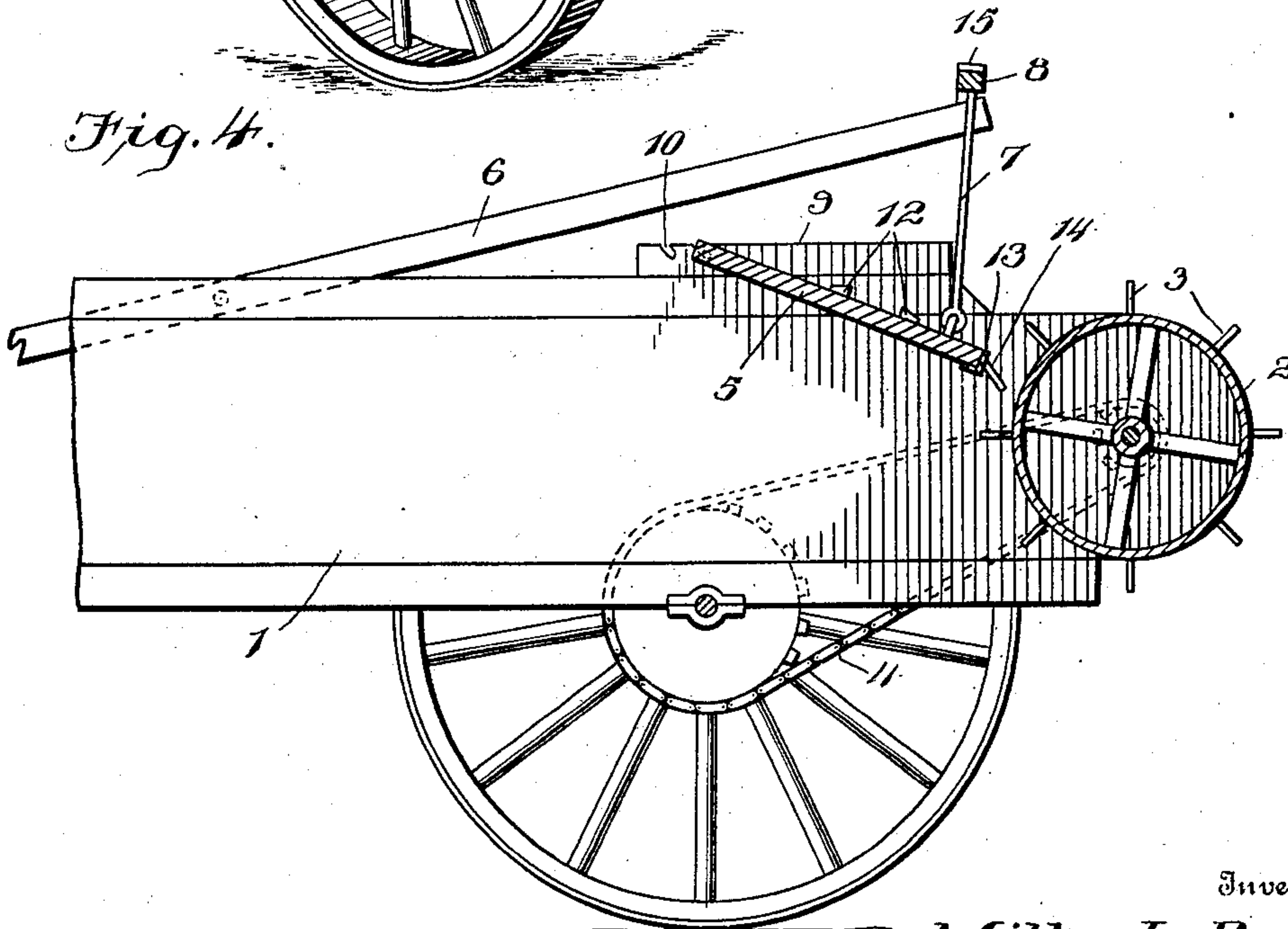


Fig. 4.



Witnesses

J. P. Brett
C. C. Duff

Inventor

Milton L. Baker,

By

C. C. Duff & Son

Attorney

UNITED STATES PATENT OFFICE.

MILTON L. BAKER, OF EDMONT, PENNSYLVANIA.

FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 754,408, dated March 15, 1904.

Application filed December 18, 1903. Serial No. 185,614. (No model.)

To all whom it may concern:

Be it known that I, MILTON L. BAKER, a citizen of the United States, residing at Edgemont, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Fertilizer-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 the figures of reference marked thereon, which form a part of this specification.

My invention relates to fertilizer-distributers, but more particularly to distributers for manure, and has for its object to provide a device of this class which will effectually cause an even distribution of the manure and prevent the same from being distributed over the ground in lumps.

A further object of my invention is to provide a device of this class which can be gaged to distribute a certain quantity of manure.

With these objects in view my invention consists in the construction and arrangement of the manure-regulating board and in certain other novel features of construction and in combination of parts, which will first be fully described, and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a perspective view of the rear portion of a manure-distributer provided with my invention. Fig. 2 is a vertical longitudinal section through Fig. 1, showing the regulating-board in a vertical position in full lines and intermediate its vertical position and its operative position in dotted lines. Fig. 3 is a perspective view similar to Fig. 1, showing regulating-board in a raised position. Fig. 4 is a vertical section longitudinal through Fig. 3, showing the regulating-board in operative position.

Like numerals of reference indicate the same parts throughout the several figures, in which—

1 indicates the body of the distributer which may be of any improved pattern, the same forming no part of my invention.

2 indicates the distributing-drum, which is located as shown, and provided with a series of radially-extending teeth 3, said drum being geared to the rear wheels of the distributer by chain 4 or in any other approved manner.

5 indicates the manure-regulating board or gate, and 6 indicates the lever-arms which support and move the same. Suitable links 7 connect the cross-bar 8 of said arms to said regulating board or gate.

Upon the sides of the body 1 I provide blocks or strips 9, which may be of metal or wood, as desired, and in said blocks or strips I make a series of inclined notches 10, and at the front of the distributing-board on either side thereof I provide pins 11, adapted to engage said notches, as shown. On the upper or rear side of said board or gate I provide a series of cleats 12 to be engaged by the radially-extending teeth on the distributing-drum, as shown in Fig. 2. Along the rear edge of said regulating-board I provide an angle-iron plate 13, securely bolted or secured to the board, and secured to said plate permanently and rigidly is a series of teeth or pins 14, extending downward therefrom at an angle of about forty-five degrees.

The connecting cross-bar 8 of the lever-arms 6 is provided at each end with angle-irons 15, having a projecting pin 16 entering the lever-arms 6, as shown, said construction allowing the connecting-bar 8 to freely swing and accommodate itself to the angle and position of the regulating board or gate.

Having thus set forth the several parts of my invention, its operation is as follows: The body 1 is filled with manure, and the regulating-board is placed in a vertical position, as shown in Fig. 2. When the machine is started, the distribution-drum commences to revolve, and the pins thereon engage the cleats on the regulating-board and lift the same into position shown in Fig. 2, from whence it is carried forward into position shown in Fig. 1. The manure is forced rearwardly, as in any well-known manner, but preferably by means of an endless belt, (not shown,) and the lever-arms 6 are secured in the desired position by means of a quadrant or any adjustable securing means at the forward ends there-

of and in reach of and under the control of the driver or operator. As the manure is carried rearwardly the distributing-drum engages the same and distributes it in the usual
 5 manner, the manure passing between the rear edge of the regulating-board and the drum, the teeth or pins on said drum and board crushing and disintegrating the lumps and causing an even distribution, the inclined position of the regulating-board causing the manure as it is forced rearwardly to be banked against the distributing-drum, so as to allow
 5 the teeth of said drum to get a good grip in the manure and effectually carry the same up and over the drum to distribute the same. The particular and automatic arrangement of the regulating-board allows for an exact and unvarying space through which the manure must pass, and in the event of any large lumps
 5 or pieces being carried up by the distributing-drum the same must be broken up by the action of the teeth thereon and in the tail-board before the same can be distributed, which fact insures an even and a regular distribution of the manure.

Referring to Fig. 3, it will be seen that the opening between the regulating-board and distributing-drum can be regulated by raising its lever-arms and by causing the pins 11 to
 5 engage rest in the forward notches 10. In either event the position of the board is certain and unvariable, so that the pressure of the manure or the size of the lumps have no effect in raising the board or enlarging the
 5 opening between the board and the drum. It will also be noted that the angle of the pins 14 on the angle-plate 13 cause the same to act more directly upon the manure during the distribution, thereby insuring a more perfect
 5 disintegration and a more even distribution of the same.

Having thus set forth my invention, I do not wish to be understood as limiting myself to the exact construction herein set forth, as
 5 various slight changes may be made therein which would fall within the limit and scope of my invention, and I consider myself clearly entitled to all such changes and modifications.

What I claim as my invention, and desire to
 5 secure by Letters Patent of the United States, is—

1. In a fertilizer-distributor, the combina-

tion with a suitable manure-holding body of a distributing-drum and means for revolving the same, a regulating-gate, and means for
 55 swinging the same, suitable lever-arms, and means for connecting the same to said board to raise or lower the same and to rigidly hold the same in position, cleats on the rear face of said board adapted to be engaged by the
 60 distributing-drum to raise said board, and an angle-iron plate on the rear edge of said board, and pins carried thereby at an angle of substantially forty-five degrees, to said board.

2. In a fertilizer-distributor the combination of a suitable body and a distributing-drum with means for revolving the said drum, a regulating-board and means for swinging the same, suitable lever-arms and means for connecting the same to said regulating-board for
 70 raising and lowering the same and for holding the same rigidly in position, teeth on the rear edge of said board arranged angularly thereto for disintegrating the fertilizer.

3. In a fertilizer-distributor, the combination with a suitable body of means for distributing the fertilizer, a regulating-board and means for swinging the same from said body at different points thereon, means for raising and lowering the rear portion of said
 80 board and for holding the same rigidly in position.

4. In a fertilizer-distributor, the combination with a suitable body, of means for distributing the fertilizer, a regulating-board
 85 and means for swinging the same from said body at different points thereon, means for raising and lowering the after end of said board and suitable means on said board for disintegrating the fertilizer.

5. The combination in a manure-distributor of an adjustable swinging tail-gate adapted to swing vertically when the machine is at rest, and adapted to be moved forwardly when in operation and swing at its top, and means for
 95 raising or lowering said board angularly substantially as described.

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

MILTON L. BAKER.

Witnesses:

WILLIAM TAYLOR,
 G. LEIPER GREEN