

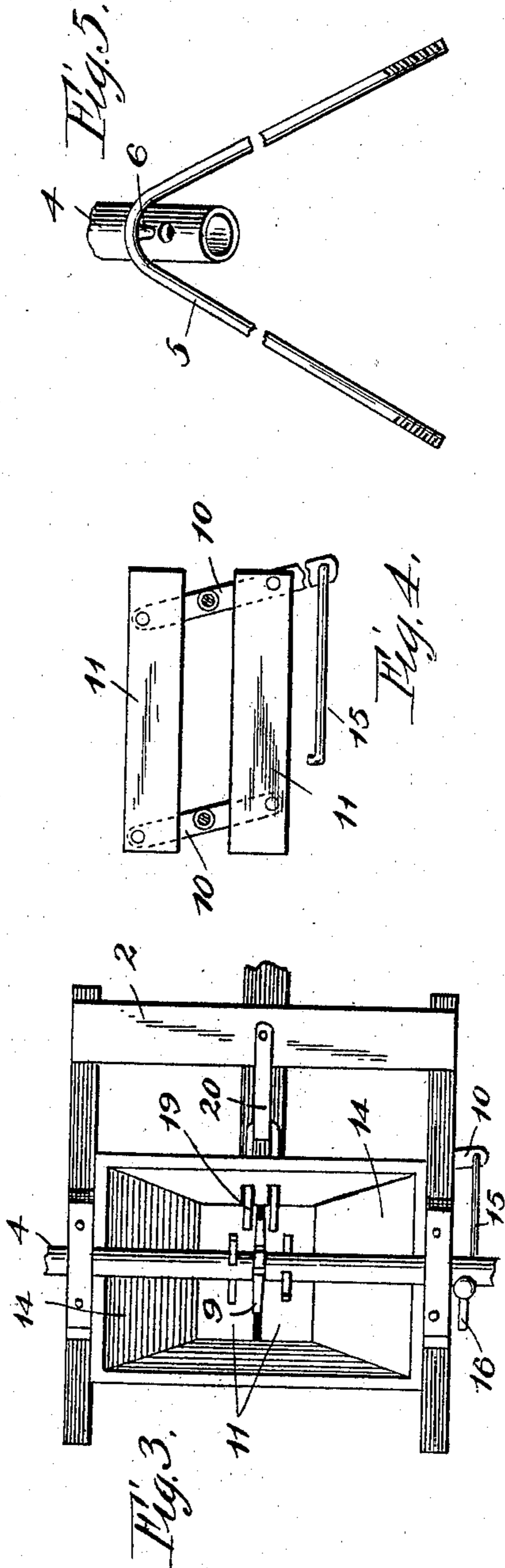
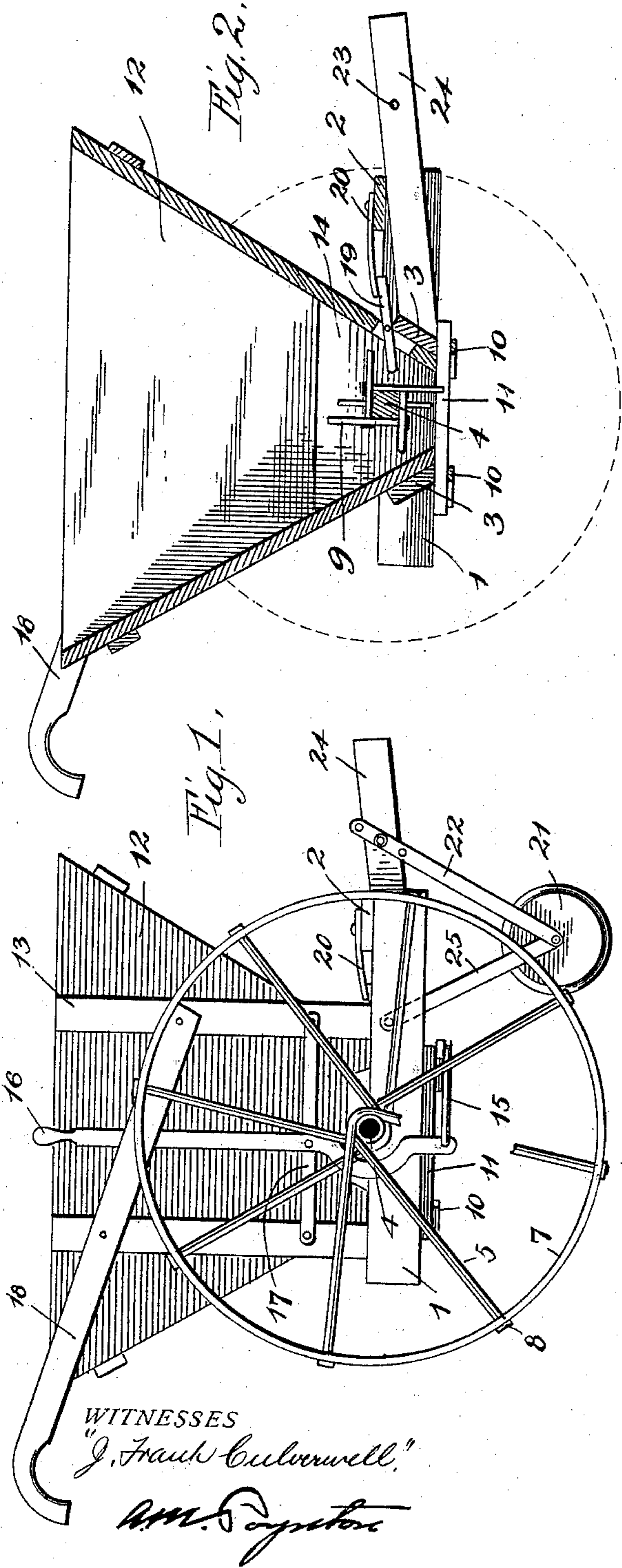
No. 608,055.

Patented July 26, 1898.

J. M. LINDSEY.
FERTILIZER DISTRIBUTER.

(No Model.)

(Application filed Mar. 10, 1897.)



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JOHN MARION LINDSEY, OF CRYSTAL SPRINGS, GEORGIA.

FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 608,055, dated July 26, 1898.

Application filed March 10, 1897. Serial No. 626,717. (No model.)

To all whom it may concern:

Be it known that I, JOHN MARION LINDSEY, a citizen of the United States, residing at Crystal Springs, in the county of Floyd and State of Georgia, have invented certain new and useful Improvements in Fertilizer-Distributers; and I do hereby 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.

This invention relates to improvements in fertilizer-distributers and is intended as an improvement upon the machine patented to me August 24, 1886, No. 348,023.

The object of the present invention is to remedy certain defects of construction which have become apparent in the machine referred to, whereby I now present an improved fertilizer-distributer which is simple, strong, and durable and will effectually perform the work for which it is designed.

With the above ends in view my invention consists in the particular construction of certain detailed parts and in the combination of such parts, all as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a fertilizer-distributer constructed in accordance with my invention. Fig. 2 is a longitudinal vertical section. Fig. 3 is a plan view of the supporting-frame, the hopper being removed. Fig. 4 is a detail view of the slides which form the outlet end of the hopper. Fig. 5 is a detailed view showing the particular manner of attaching the spokes of the supporting-wheel to the axle.

The numerals 1 1 designate the longitudinal side beams of the supporting-frame, which are connected to each other by a cross-piece 2 and by inclined cross-pieces 3 3, which form the lower end of the hopper. The axle 4 of the main supporting-wheels of the machine is journaled in bearings located on the upper side of the longitudinal beams 1 1, said axle being located between the transverse boards 3 3. This axle rotates with the supporting-wheels, and therefore the spokes 5 of said supporting-wheels are attached directly to the said axle to provide a cheap and simple con-

struction. The spokes 5 are made up of rods bent centrally and provided at the angle with a lug that fits in a corresponding aperture in the shaft or axle, and the ends of said rods are straightened and passed through the rim 7 to receive nuts 8, by which they can be tightened. This construction provides a wheel with tangent spokes, and by manipulating the nuts the spokes may be tightened to provide a rigid wheel. The shaft or axle 4 is preferably made of tubular metal, so that it will be light, and within the supporting-frame is provided with a series of feeding-fingers or agitators 9, the axle being squared at this point to receive said fingers or agitators, which are applied in the same manner as shown and described in my patent hereinbefore referred to, with the exception that said agitators are secured to each other in pairs at right angles by forming a projection on one to pass through an aperture in the other and rivet it thereon, the latter having a threaded aperture at its inner end, which passes through an aperture in the other agitator and receives a nut. These feeding-fingers or agitators are of such length as to pass below the lower edge of the supporting-frame and transverse portions thereof, and adjoining said agitators on each side is a bar which is passed through said shaft to form additional feeding-fingers of less length than the first-mentioned fingers or agitators.

To the under side of the inclined boards 3 are centrally fulcrumed levers 10 10, to which are pivoted plates or boards 11 11, which are brought together and separated as the levers are rocked or swung. These boards form the bottom of the hopper 12, which is mounted on the frame by standards 13, the lower end of said hopper being contracted by inclined boards 14, located between the inclined boards 3. One of the levers 10 is extended at one end and has connected thereto a rod 15, connected at its other end to an operating-lever 16, which is pivoted to a spring cross-bar 17, attached at its ends to the standard 13. This lever extends upward from said cross-bar 17 and bears against the inner edge of one of the handles 18, the friction between the parts being sufficient to hold the lever in an adjusted position. By manipulating this lever the opening between the boards 11 11

can be increased or diminished at will, and, if desired, the upper edge of the handle 18 may be provided with a scale to indicate the extent of the opening at the lower end of the hopper.

5 The agitators or feeding-fingers 9 pass between spring-fingers 19, projecting from the upper edge of the forward inclined board 3, said fingers being made of a single bar which
10 is looped, and in order to permit the inner ends of said fingers to give and allow the passage of an object the upper end of the connecting-bar is engaged by a flat spring 20, attached to the cross-piece 2. The spring 20
15 will hold the fingers in normal position, and should a hard or large object be caught between the feeding-fingers or agitators 9 the said fingers 19 will give and permit the object to pass out of the hopper.

20 The forward part of the machine is supported by an extra wheel or roller 21, and in order to permit this extra wheel to be adjusted the forward standard 22 thereof has a series of transverse openings, which are engaged by the bolt which passes through an
25 aperture 23 in the tongue 24, the latter being rigidly secured to the cross-piece 2 and forward inclined board 3. The rear brace-bar 25 of the supporting-frame of the extra
30 wheel is attached to the rear end of the adjoining board 3.

From the foregoing description, in connection with the accompanying drawings, the construction and operation of my improved
35 fertilizer-distributor will be readily understood, for the material to be distributed is placed within the hopper 12, and the forward movement of the machine will rotate the shaft 4 and revolve the agitators 9, which will feed
40 the material through the opening provided by moving the lever 16 to separate the plates 11.

The machine is constructed to make it as light as possible without affecting its strength and durability.

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

1. In a wheel for fertilizer-distributers or walking-planters, the combination with a hollow axle having a circumferential series of holes, of the spokes bent at substantially right angles and having inwardly-projecting lugs at the bends and threaded end portions, a metal rim having openings through which the threaded portions of the spokes pass, and
55 nuts turned on the ends of the spokes to tighten the wheel and present traction-points, substantially as shown and described.

2. In a fertilizer-distributor, the combination with the wheel-frame having a hopper
60 mounted thereon and revoluble feeding-fingers or agitators in the bottom of said hopper, levers pivoted to the lower end of the hopper at opposite sides thereon, plates pivoted to the levers on opposite sides of their fulcrums, together with a connecting-rod attached to the projecting end of one of the levers and an operating-lever pivoted to a spring-bar
and bearing at its upper end at the inner side of the handle, in order that the frictional connection of the lever with the handle will hold the plates which form the bottom of the hopper in adjusted position, substantially as shown and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN MARION LINDSEY.

Witnesses:

J. A. JENKINS,
GEO. C. BEYSIEGEL.