J. F. RUDE.

FERTILIZER DISTRIBUTER.

APPLICATION FILED MAR. 21, 1914.

1,222,208.

Patented Apr. 10, 1917.

2 SHEETS—SHEET 1.

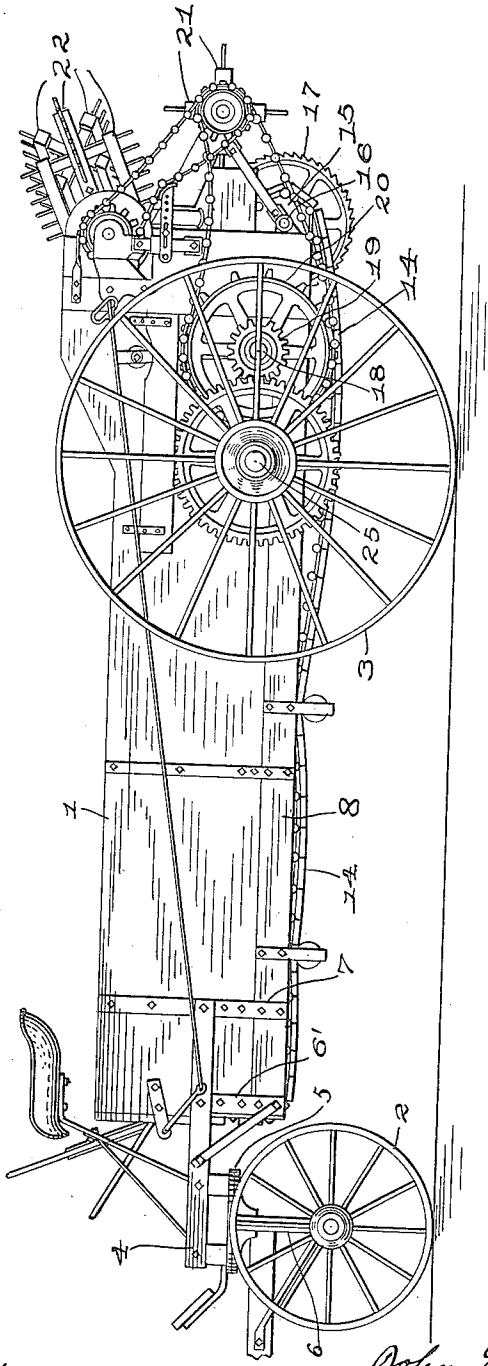


Fig. 1

Witnesses.
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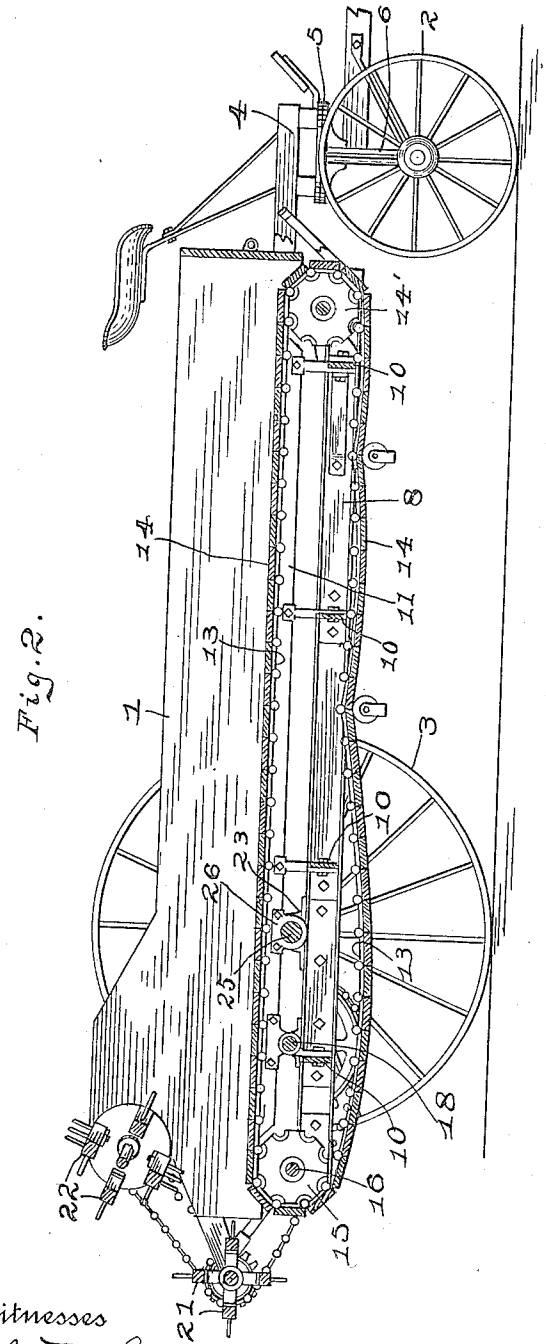


Fig. 2.

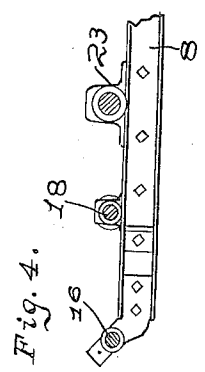


Fig. 4.

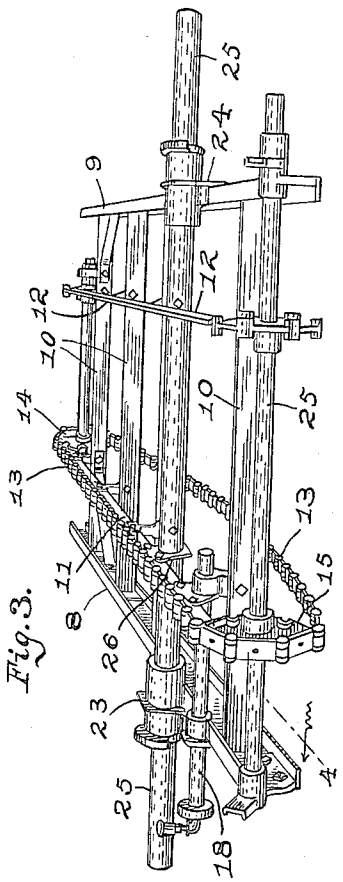


Fig. 3.

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UNITED STATES PATENT OFFICE.

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FERTILIZER-DISTRIBUTER.

1,222,208. Specification of Letters Patent. Patented Apr. 10, 1917.

Application filed March 21, 1914. Serial No. 826,258.

To all whom it may concern:

Be it known that I, JOHN F. RUDE, a citizen of the United States, residing at Liberty, Union county, and State of Indiana, have invented and discovered certain new and useful Improvements in Fertilizer-Distributers, of which the following is a specification.

My invention relates to fertilizer distributers and its objects are to provide a machine of this class in which the load carrying body shall be supported close to the ground, whereby facility in the loading of the machine is increased and the fertilizing material distributed more evenly and rendered less subject to being scattered and unevenly distributed by wind blowing across the path of the material, and to provide for accomplishing the above end without increasing the draft on the distributer and without changing the arrangement of the distributing beaters or necessitating means for supporting the body or axle additional to that now commonly used.

With these objects in view my invention is embodied in preferable form in the machine hereinafter described and illustrated in the accompanying drawings.

In these drawings, Figure 1 is a side view in elevation of a fertilizer distributer containing my improvements; Fig. 2, a longitudinal section; Fig. 3, a perspective view of the supporting frame and axle; and Fig. 4, a detail sectional view looking toward the inside of the left hand side sill in Fig. 3.

Referring to the drawings, 1 is the load carrying body of the machine, 2 the front wheels, and 3 the rear wheels. These rear wheels are adapted to be of the same diameter as the wheels now employed with machines having high bodies, thereby preserving the advantage in respect to draft obtained from wheels of the usual large size. The front end of the load carrying body is secured by bars 4 to a pedestal 5 carried at the upper ends of standard 6 supported from the axle of the front wheel. The bars 4 extend rearwardly behind the front wheels 2 and are suitably bolted to braces 6′ and 7 carried by the load body, at substantially the center of the vertical sides of the body, thus enabling this receptacle to be dropped down below the level of the top of the front wheels and behind the latter.

The frame of the distributer on which the load carrying body is supported comprises side sills 8 and 9 preferably of metal and cross beams 10, joining said side sills. Extending longitudinally of this frame and secured to the cross beams are track rails 11 and 12 which lie above the level of the axle. These rails are adapted to receive and guide chains 13, one of such chains being shown in position in Fig. 3, while the corresponding chain which is adapted to travel on the track rail 12 is removed. These chains are adapted to be connected by slats 14, said chains and slats forming an apron or conveyer preferably of the endless type which serves to carry the fertilizer material from the front toward the rear of the machine. The chains pass over front sprocket wheels 14′ and also engage and are driven by rear sprocket wheels 15. The wheels 15 are mounted on a transverse shaft 16 which carries at one end thereof a suitable ratchet wheel 17 which is adapted to be rotated by suitable ratchet mechanism, not here shown.

A stub shaft 18 is mounted on and above the side sill 8 and is adapted to carry a pinion 19 and a sprocket wheel 20 from which latter wheel the lower beater 21 and upper beater 22 are adapted to be driven.

In the arrangement illustrated in the drawings, a single lower transverse beater and two upper beaters angularly disposed to one another, are shown, but it is obvious that the invention may be applied to machines employing other arrangements of beaters.

The side sills of the frame are supported in hangers 23 and 24 depending from a main axle 25. This axle is adapted to extend across the entire width of the machine and the wheels 3 are mounted on the prolonged ends thereof. The track rails 11 and 12 extend above the axle and brackets 26 rise from the axle and cross beams and carry the rails. The frame is prolonged rearwardly beyond the axle to afford a support for the shafts 18 and 16 of the driving mechanism heretofore referred to and it will be seen that these shafts are also above the frame.

It will be seen that by the above construction an arrangement is provided in which the load is supported below the main axle and that the chains are so arranged that

the respective upper and lower stretches thereof run respectively above and below the axle.

By this arrangement a fertilizer distributer of the type known as a "low down" distributer is provided in which the top of the bed loaded into the body may be only 39″ from the ground, thus greatly facilitating the loading of the body, and also carrying the planes of distribution of the manure closer to the ground so as to lessen the tendency of the same being scattered by winds blowing at an angle across the path of distribution.

The positioning of the axle above the supporting frame permits this transference of the weight of the load to a point closer to the ground without requiring a decrease in the diameter of the main wheels 3, thus preserving the advantage of the large wheels customarily employed in distributers of the usual height. The continuous axle and the support of the upper stretch of the apron above the axle enable the axle and main wheels to be mounted at the point relatively to the length of the body, necessary to properly support their share of the load and without interference with the apron.

Having thus described my invention, what I claim is:—

A fertilizer distributer having a load carrying body, a traveling apron supported in said body, rear driving wheels, a transverse continuous axle mounted in said wheels, an apron supporting frame hung from said axle below the same and comprising longitudinal side sills and cross beams, brackets rising from said frame to above the level of the axle, rails supported on said brackets above the axle and extending in the same plane throughout their lengths, apron carrying chains on said rails, front and rear sprocket wheels for the chains at the ends of the frame, said apron having the delivering stretch thereof lying in the same continuous plane from sprocket to sprocket.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Marion county, Indiana, this 13th day of February, A. D. nineteen hundred and fourteen.

JOHN F. RUDE. [L. S.]

Witnesses:
A. C. RICE,
H. P. DOOLITTLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."