

No. 612,751.

Patented Oct. 18, 1898.

J. McLARTY.
GUANO DISTRIBUTER.

(Application filed May 18, 1898.)

(No Model.)

FIG. 1

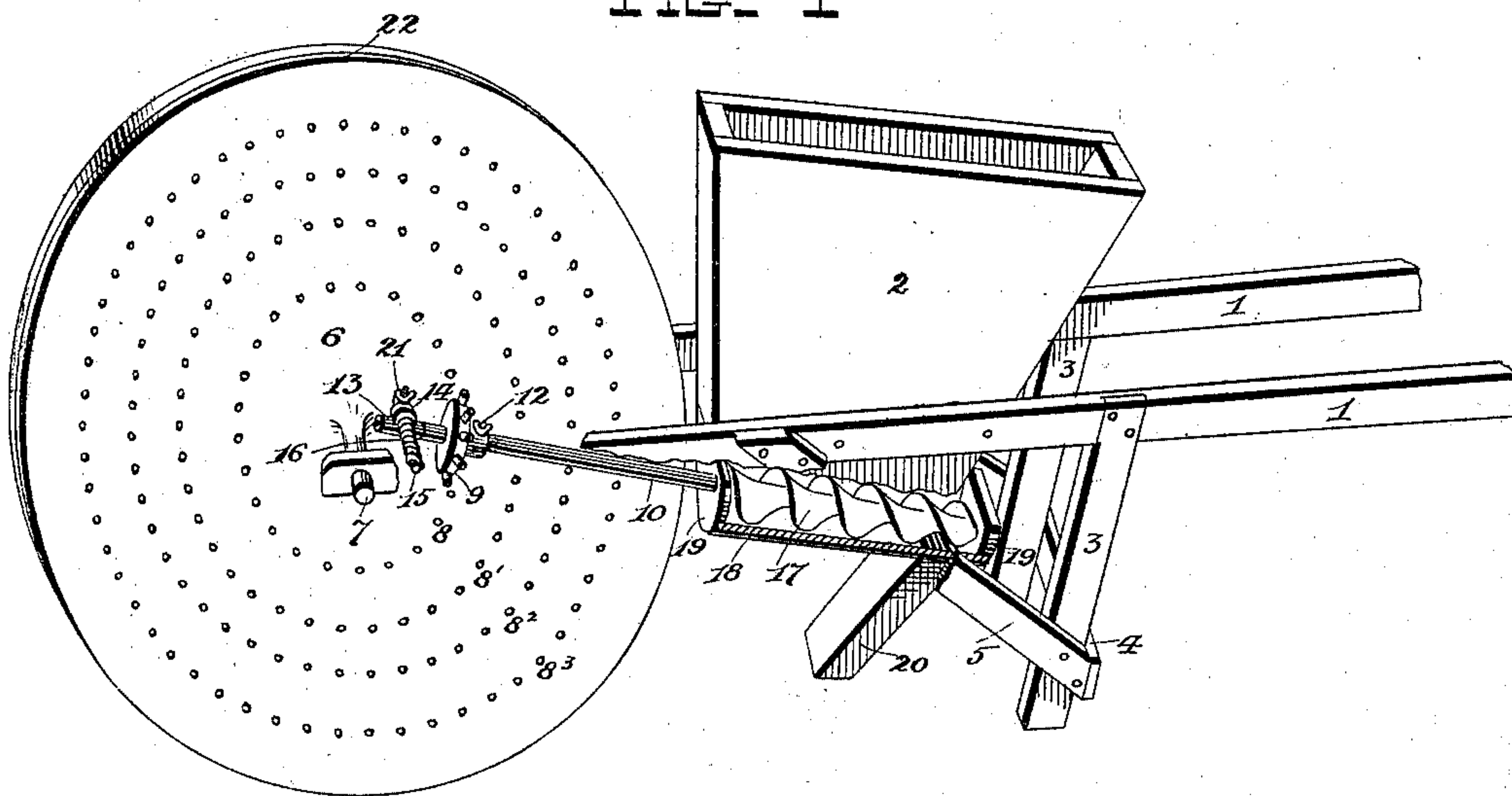
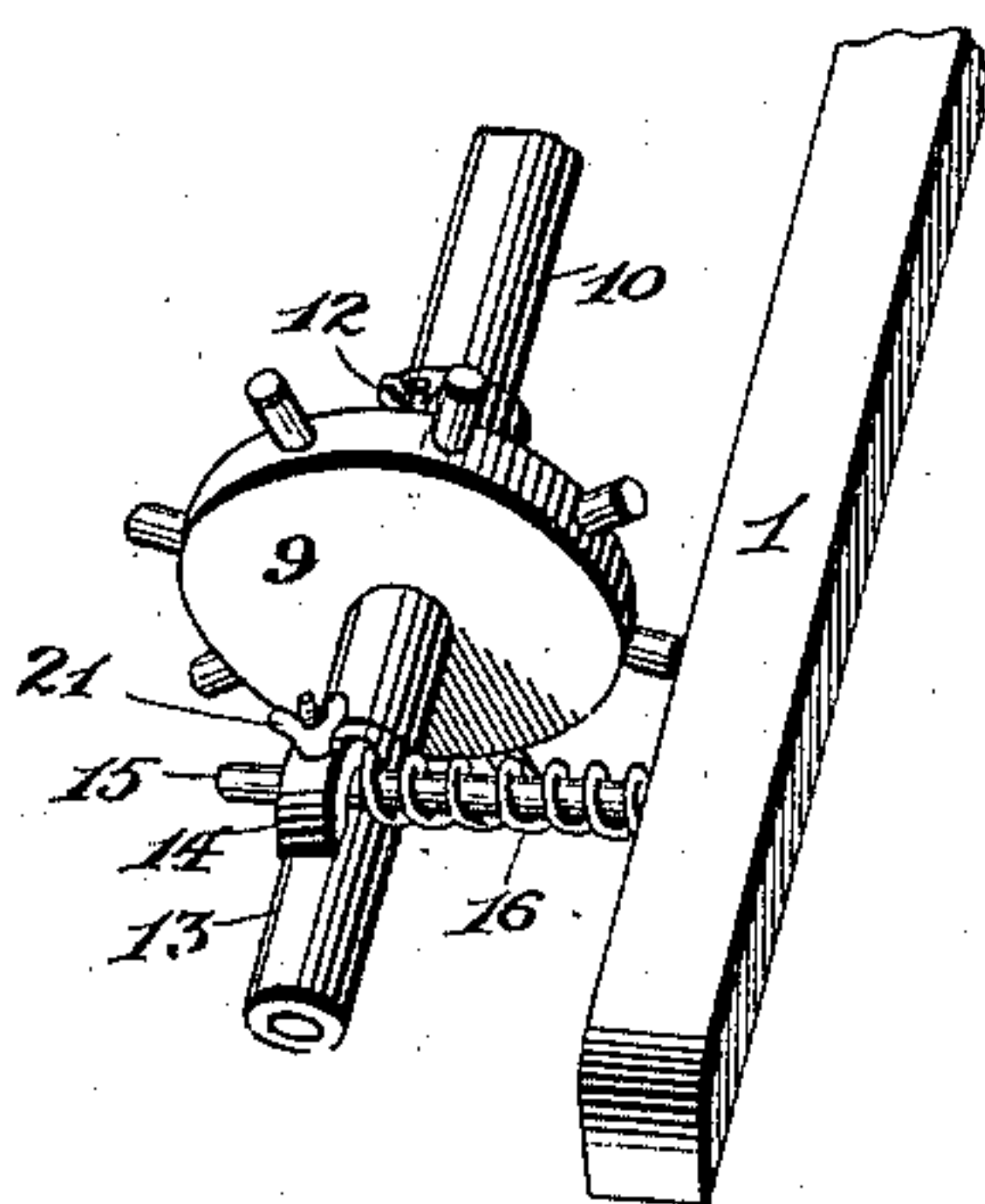


FIG. 2



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UNITED STATES PATENT OFFICE.

JULIAN McLARTY, OF MONROE, NORTH CAROLINA.

GUANO-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 612,751, dated October 18, 1898.

Application filed May 18, 1898. Serial No. 681,058. (No model.)

To all whom it may concern:

Be it known that I, JULIAN McLARTY, a citizen of the United States, residing at Monroe, in the county of Union and State of North Carolina, have invented certain new and useful Improvements in Guano-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.

My invention relates to improvements in guano-distributers; and the object is to provide a simple, inexpensive, and effective device of this character.

To this end the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

The accompanying drawings show my invention in the best form now known to me; but many changes in the details might be made within the skill of a good mechanic without departing from the spirit of my invention as set forth in the claim at the end of this specification.

The same reference characters indicate the same parts of the invention.

In the drawings, Figure 1 is a view in perspective of the device, part of one of the handle-bars being broken away to show the connection of the gearing with the ground-wheel, the trough being shown in section to disclose the spiral blade. Fig. 2 is a detail perspective view of the forward end of the feed-shaft bearing.

1 1 denote the parallel handle-bars, and 2 the hopper to which they are secured.

3 3 represent the legs depending from the handles, 4 a cross-brace connecting the lower ends of said legs, and 5 5 lateral diagonal braces connecting the legs to their respective handles.

6 denotes the ground-wheel, fixed on the axle 7, journaled in the forward converging ends of the handles. The face of this wheel is formed with an annular concentric series of recesses 8, 8', 8², and 8³, each series being adapted to mesh with a sprocket or spur wheel 9, adjustably secured on the feed-shaft 10 by means of the set-screw 12. The forward end of this feed-shaft 10 is journaled in a bearing-box 13, fixed to a transverse sleeve

14, mounted on a stud-shaft 15, fixed in one of the handle-bars, and a spiral spring 16 encompasses said stud-shaft between the contiguous face of the handle-bar and the sleeve, the tension of which is exerted to press the outer end of the feed-shaft toward the ground-wheel, so as to retain the teeth of the sprocket or spur wheel in mesh with the recesses in the ground-wheel.

The lower end of the feed-shaft 10 is formed with a spiral blade 17, which rotates in the trough 18, fixed to the lower open end of the hopper.

19 19 represent the front and back ends of the trough 18, which also form bearings for the feed-shaft, and 20 represents the discharge-spout, extending downwardly from the rear end of the trough.

From the above description it will be readily understood that as the machine is propelled forward the ground-wheel rotates, which in turn imparts a continuous rotary motion to the feed-shaft, thus causing the conveyer blade or screw to force the contents of the hopper rearwardly to the trough, where it falls through the trough into the previously-formed furrow.

By the proper adjustment of the sprocket or spur wheel on the forward end of the feed-shaft any predetermined amount of guano may be discharged per lineal foot of ground.

The machine is also well adapted as a cotton-seed planter, as well as in pulverizing lumpy guano or other similar powdered fertilizer.

While I have shown and described the machine as a single-furrow walking-distributor, it is evident that by a mere duplication of the feed mechanism any number of furrows may be simultaneously fertilized, and when so arranged additional carrying-wheels are provided, so that the machine may be drawn by horse-power.

To prevent the feed-shaft from rotating when the machine is not in actual use and is being transported from place to place—as, for instance, from one field to another or to and from the barn—I provide the sleeve 14 with a thumb-screw 21, which may be used to clamp the sleeve and its bearing-box 13 on the stud-shaft 15 in such a manner that the sprocket-wheel 9 will be thrown out of gear

with the ground-wheel, and consequently the latter will revolve without rotating the feed-shaft.

5 In case it should not be desirable to make the ground-wheel of metal I attach a sheet-metal disk 22 to the face of the ground-wheel and provide it with the annular concentric series of recesses, as in the first instance, which mesh with the sprocket-wheel 9 and
10 impart motion to the feed-shaft, as hereinbefore stated.

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

15 A fertilizer-distributor comprising the parallel handles, the hopper, the trough fixed to the bottom of the hopper, and the discharge-spout fixed to the trough, in combination with the ground-wheel journaled in the forward
20 ends of said handles and provided with the annular concentric series of recesses, the feed-

shaft journaled in said trough, and the sprocket-wheel adjustably secured on said feed-shaft and adapted to mesh with either
25 of the annular concentric series of recesses in the ground-wheel, the forward end of the feed-shaft being journaled in a bearing-box fixed to a transverse sleeve mounted on a stud-shaft fixed in one of the handle-bars and encompassed between the face of the handle-
30 bar and the sleeve, and a thumb-screw for engaging the sleeve to hold the sprocket-wheel out of gear with the ground-wheel when necessary, substantially as shown and described.

35 In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JULIAN McLARTY.

Witnesses:

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