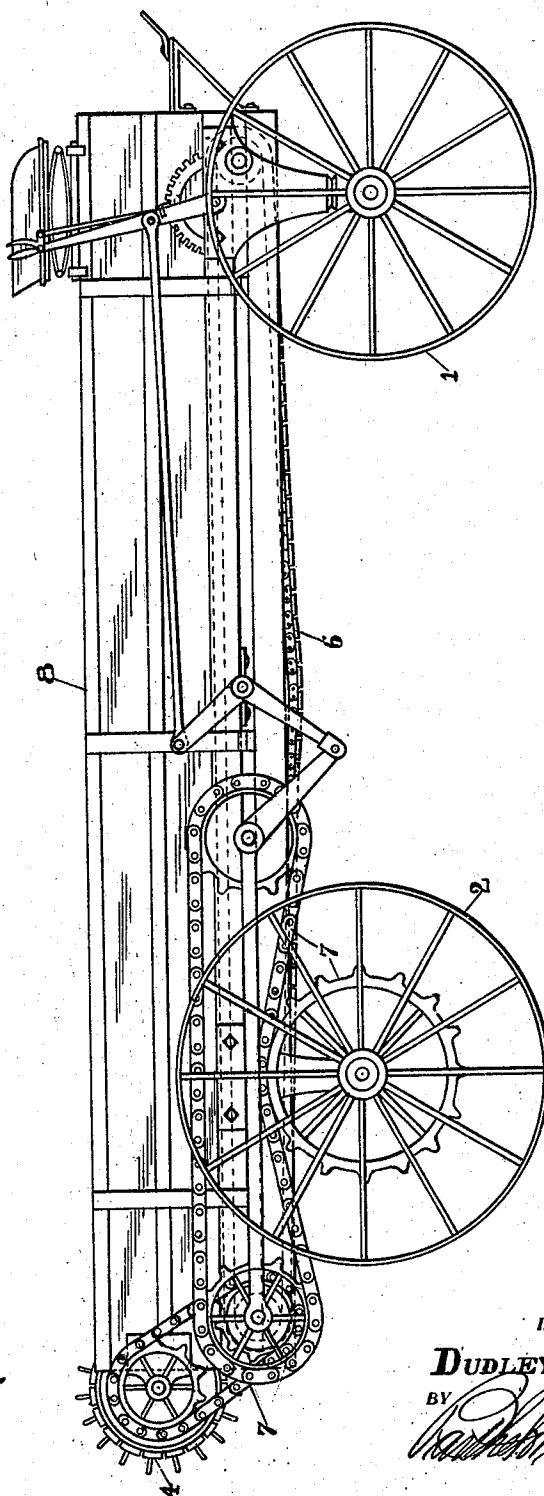


D. GARST.
MANURE SPREADER.
APPLICATION FILED MAY 19, 1909.

941,513.

Patented Nov. 30, 1909.
2 SHEETS—SHEET 1.

Fig. 1



WITNESSES:

A. M. Shannon
A. M. Low

INVENTOR

DUDLEY GARST

BY

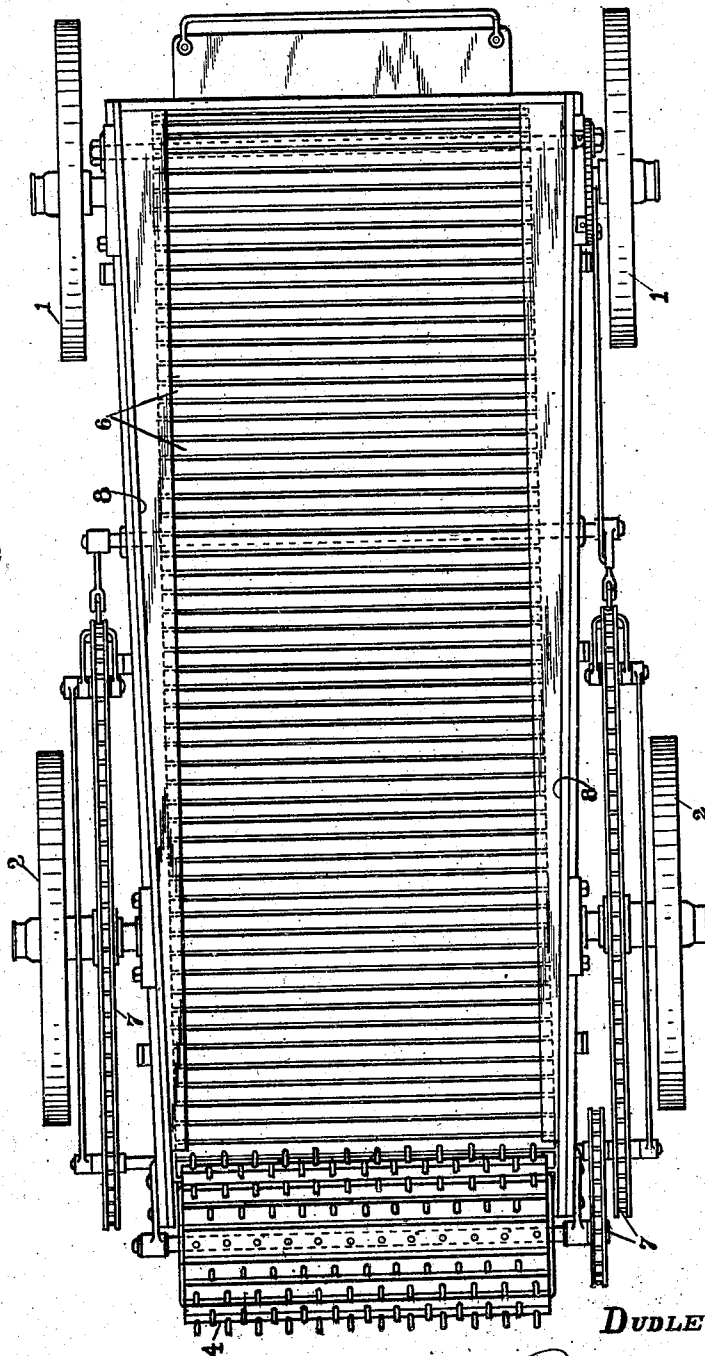
[Signature]
ATTORNEYS

D. GARST.
MANURE SPREADER.
APPLICATION FILED MAY 19, 1909.

Patented Nov. 30, 1909.
2 SHEETS—SHEET 2.

941,513.

Fig. 2



Witnesses
A. M. Shannon.
Q. M. Rose.

Inventor
DUDLEY GARST

384 *[Signature]*
Attorneys

UNITED STATES PATENT OFFICE.

DUDLEY GARST, OF WATERLOO, IOWA.

MANURE-SPREADER.

941,513.

Specification of Letters Patent.

Patented Nov. 30, 1909.

Application filed May 19, 1909. Serial No. 496,875.

To all whom it may concern:

Be it known that I, DUDLEY GARST, a citizen of the United States of America, residing at Waterloo, in the county of Blackhawk and State of Iowa, have invented certain new and useful Improvements in Manure-Spreaders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to manure spreaders and more particularly to an arrangement of parts adapted to insure even distribution and to check any tendency of the operating parts to race or jump.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in side elevation, of a spreader embodying features of the invention, with parts removed. Fig. 2 is a plan view of the spreader, with parts of the operating mechanism omitted.

Referring to the drawings, the running gear of a wagon, with front bearing wheels 1 and rear traction bearing wheels 2, carries a box that is of standard construction save that it tapers from front to rear. A beater 4 of any preferred design, is journaled across the narrow rear discharge end so as to pick up the box contents and throw it out, as it is advanced against it by any suitable form of endless conveyer 6 whose upper loaded limb traverses the box bottom from front to back. The beater and conveyer are drawn from the rear wheels 2 by any preferred form of transmission gearing, as, for example, the sprocket-and-chain connections indicated at 7.

The chief feature of the invention is the arrangement of the uniformly converging side boards 8 whereby a positive feed is necessary to move the box contents against the beater, and whereby the friction of the load against the sides is sufficient to prevent the conveyer jumping or slacking back, if a wheel drops into a hole, or if other circumstances permit it. Other retarding devices have been used in the shape of cross-bars or other baffles to frictionally impede the contents of the box as it is drawn toward the beater and hold it against sudden movements forward or back, but their action is

either irregular or else it imposes too heavy a load on the driving gear. The convergent sides which are smooth on the inside, press upon the load throughout its length and thus keep it in substantially the same degree of compactness, not allowing any portion to break away, and thus presenting a homogeneous mass to the action of the beater, so that the distribution by the latter is even and uniform.

Obviously, changes in the details of construction may be made without departing from the spirit of the invention, and I do not care to limit myself to any particular form or arrangement of parts.

What I claim as my invention is:—

1. A manure spreader comprising a box tapering from the closed end to the discharge end, means for forcing the contents of the box uniformly from the closed to the discharge end, and distributing it therefrom, and running gear supporting the box and operating the forcing and distributing means.

2. A manure spreader comprising a box having a closed end and a discharge end toward which the box tapers laterally throughout its length, traction bearing wheels for the box, and a conveyer driven thereby adapted to force the box contents from the closed to the discharge end.

3. A manure spreader comprising traction bearing wheels, a box horizontally disposed thereon and provided with sides converging from the closed end to the discharge end, an endless conveyer traversing the bottom of the box from the closed to the discharge end, and operating connections between the conveyer and the traction wheels.

4. A manure spreader comprising traction bearing wheels, a box maintained thereon tapering laterally from its closed end to its discharge end, distributing means at the discharge end, and a conveyer adapted to force the contents of the box toward the distributing means and driven by the traction wheels.

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

DUDLEY GARST.

Witnesses:

C. R. STICKNEY,
L. E. FLANDERS.