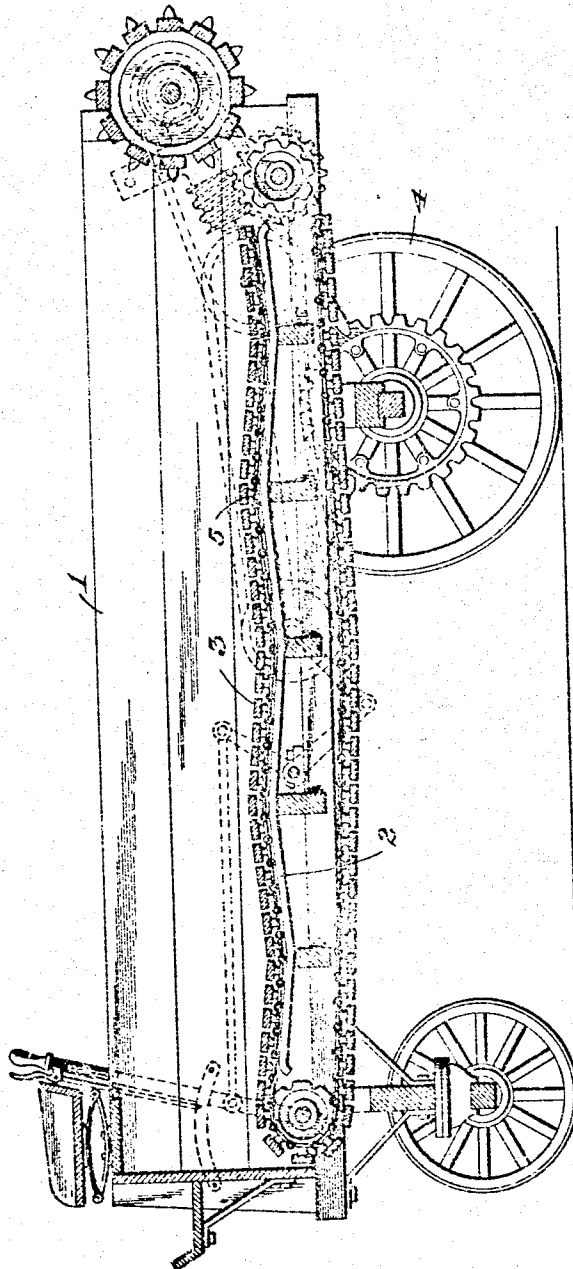


D. GARST.
MANURE SPREADER.
APPLICATION FILED SEPT. 30, 1910.

992,124.

Patented May 9, 1911.



Inventor

DUDLEY GARST.

Witnesses

Chas. W. Stauffer
A. M. Dow

384

Bartholomew

Attorneys

UNITED STATES PATENT OFFICE.

DUDLEY GARST, OF DETROIT, MICHIGAN.

MANURE-SPREADER.

992,124.

Specification of Letters Patent.

Patented May 9, 1911.

Application filed September 30, 1910. Serial No. 584,682.

To all whom it may concern:

Be it known that I, DUDLEY GARST, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, 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 of the type wherein the load is carried by an endless conveyer forming the bottom of the containing box to the discharge end thereof, usually against a beater or other distributor.

The object of the invention is to prevent any racing of the conveyer, when under load, and the uneven distribution of the load resulting therefrom.

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

Referring to the drawings, the figure is a view in elevation of one form of manure spreader that is equipped with a conveyer embodying features of the invention.

As herein indicated, a body 1 of a manure spreader has a conveyer track 2 traversed by an endless conveyer flight 3 from end to end of the box which is substantially imperforate or solid and is driven by any convenient form of transmission mechanism from the bearing wheels 4 on which the box is supported. The conveyer track has one or more vertical undulations indicated at 5 which the flexible conveyer flight follows as it moves along the track. A distributing drum or beater 6 driven by suitable mechanism from the bearing wheels 4 is disposed across the delivery end of the body to distribute the load evenly as it is moved against it by the conveyer flight. When under load, any tendency of the flight to race in either direction, as when the traction wheels drop into a hole or are otherwise momentarily retarded so as to allow slack or back-lash in the driving mechanism, is prevented by a portion of the conveyer which is p

over the undulation of the bed. If the flight tends to race forward the part of the load moving up the incline of the undulation tends to hold the flight back as a brake and conversely if the flight tends to run the other way the other slope of the undulation retards its progress.

In practice, the bed may have as many undulations as is necessary to give the desired resistance and the track may be of any preferred form or construction provided it has means for producing the required undulations in the conveyer. This construction prevents any racing and delivers the load regularly to the discharge end or to the beater, thereby insuring even distribution.

The conveyer flight may be of the return type, that is, an apron drawn along until the load is discharged, and then returned by appropriate mechanism to its initial position, the undulations of the track holding this form of conveyer against racing as readily as one of the endless belt type.

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.

The slats or other members forming the flight are so disposed as to constitute a substantially solid or continuous surface through which material does not drop.

I claim as my invention:—

1. In a manure spreader, a horizontally disposed box having a discharge opening at one end, a distributing drum journaled across the discharge opening, a flexible, substantially solid conveyer flight traveling longitudinally of the box for carrying material therein toward the opening, a track for the flight mounted in the box and provided with one or more slight vertical undulations, and traction bearing wheels supporting the box and having operative connections with the flight.

2. In a manure spreader, bearing wheels, a box horizontally disposed on the wheels and provided at one end with a discharge

opening, a rotatable spreader drum jour-
naled across the opening of the box and a
flexible, substantially solid conveyer flight
traveling longitudinally of the box for car-
rying material therein toward the opening
5 of the box, and means for forming one or
more slight undulations in the flight.

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

DUDLEY GARST.

Witnesses:

C. R. STICKNEY,

A. M. DORR.