

E. C. LITCHFIELD AND C. E. SHIPLET.
MANURE SPREADER.
APPLICATION FILED FEB. 26, 1917.

1,322,031.

Patented Nov. 18, 1919.

Fig. 1.

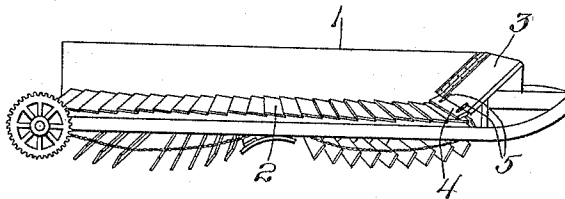
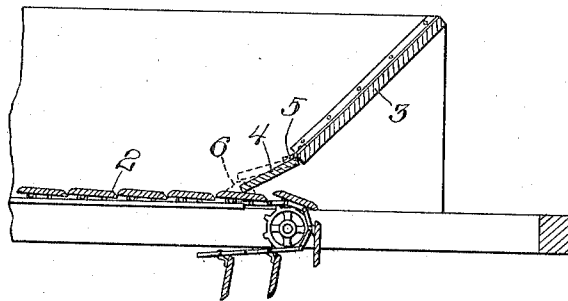


Fig. 2.



Witness:

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UNITED STATES PATENT OFFICE.

EDGAR C. LITCHFIELD AND CLARENCE E. SHIPLET, OF WATERLOO, IOWA, ASSIGNORS TO
HENRY L. LITCHFIELD AND EDGAR C. LITCHFIELD, BOTH OF WATERLOO, IOWA.

MANURE-SPREADER.

1,322,031.

Specification of Letters Patent.

Patented Nov. 18, 1919.

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To all whom it may concern:

Be it known that we, EDGAR C. LITCHFIELD and CLARENCE E. SHIPLET, citizens of the United States, residing at Waterloo, county of Blackhawk, State of Iowa, have invented a certain new and useful Improvement in Manure-Spreaders, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

It frequently happens, with manure spreaders, that lumps of manure, through drying or freezing, adhere to the conveyer, so that when the conveyer is moved, the material adhering thereto will strike against the lower portion of the front end or wall of the bed or body, unless a comparatively wide space is left between its lower edge and the top of the conveyer; straining or breaking the parts and, at any rate, causing more or less trouble. If the front end or wall be cut away sufficiently at the bottom to afford clearance under all conditions, an opening is left through which the contents of the spreader will leak.

The object of the present invention is to produce a simple and novel front end or wall construction for a manure spreader which will at all times afford ample clearance above the conveyer, so as to avoid interference with the passage of frozen accumulations on the conveyer, and at the same time do away with the presence of an uncovered opening through which leakage will occur.

The various features of novelty whereby our invention is characterized will hereinafter be pointed out with particularity in the claim; but, for a full understanding of our invention and of its objects and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a perspective view of the body of a manure spreader, with one side removed, the front end or wall being arranged in accordance with our invention; and

Fig. 2 is a vertical longitudinal section,

on a somewhat larger scale than Fig. 1, through the front portion of the spreader body.

Referring to the drawing, 1 represents the body or bed of a manure spreader having a bottom made of an endless conveyer, 2, or at least containing in the bottom a conveyer which is adapted to move longitudinally beneath the front end or wall, 3. In accordance with our invention, we so construct the member 3 that normally no opening is left above the conveyer while, when occasion demands, such an opening is provided through the yielding of the member 3 or a part thereof. This may be accomplished by making the lower portion of the member 3 in the form of a movable section, 4, extending across the entire width of the spreader; the section 4 being connected along its upper edge to the wall 3 by means of hinges, 5, or other suitable means. In the particular arrangement illustrated, the parts are so proportioned that the section 4, which may properly be termed a front end gate, lies at an acute angle to the plane of the top of the conveyer, being long enough normally to rest upon the latter. As the conveyer is moved lengthwise, the end gate rises and falls, as occasion requires, and permits the conveyer to pass freely. In case there is a collection of hardened material on the conveyer, such as a lump of considerable size as indicated in dotted lines at 6, such collection of material or lump will simply lift the end gate which immediately drops back into its normal position when the obstruction has passed. In this way the front end of the bed or body of the spreader is always kept tight, and yet the conveyer is freely movable under conditions which heretofore have been the cause of considerable trouble and annoyance.

While we have illustrated and described with particularity only a single preferred form of our invention, we do not desire to be limited to the exact structural details thus illustrated and described; but intend to cover all forms and arrangements which come within the terms employed in the definitions of our invention constituting the appended claim.

We claim:

In a manure spreader, a vehicle body, a horizontal conveyer in the bottom of the body, and extending through the front thereof, said body having a front wall terminating a short distance above the conveyer, and an inwardly yielding endgate

extending across the space between the lower edge of said wall and the conveyer.

In testimony whereof we sign this specification. 10

EDGAR C. LITCHFIELD.
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