

No. 879,437.

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VEHICLE.

PATENTED FEB. 18, 1908.

APPLICATION FILED APR. 11, 1907.

2 SHEETS—SHEET 1.

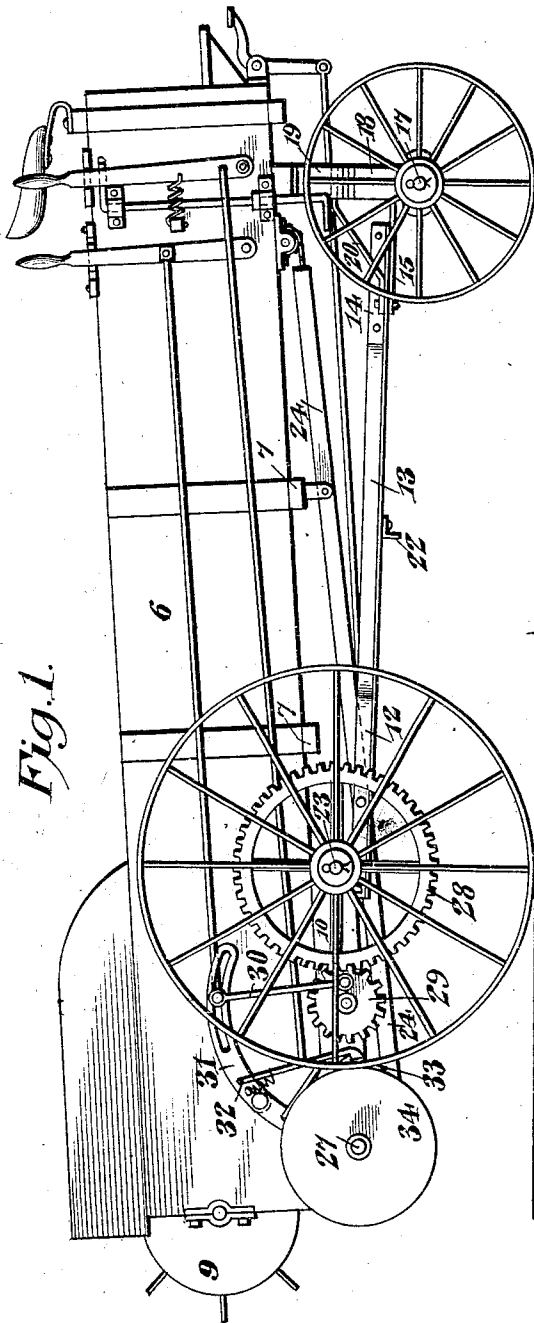


Fig. 1.

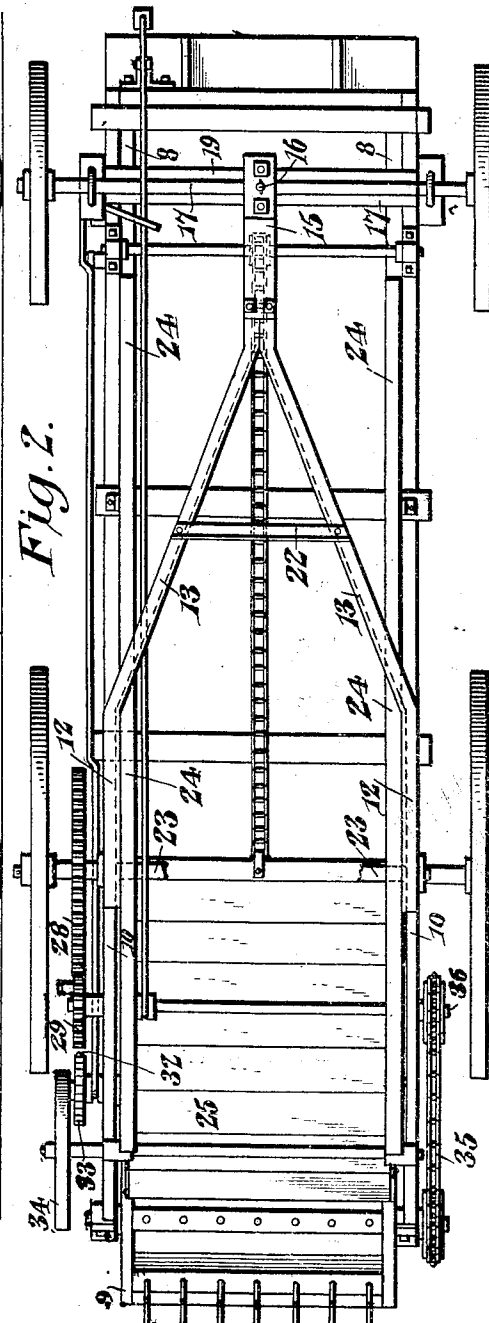


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

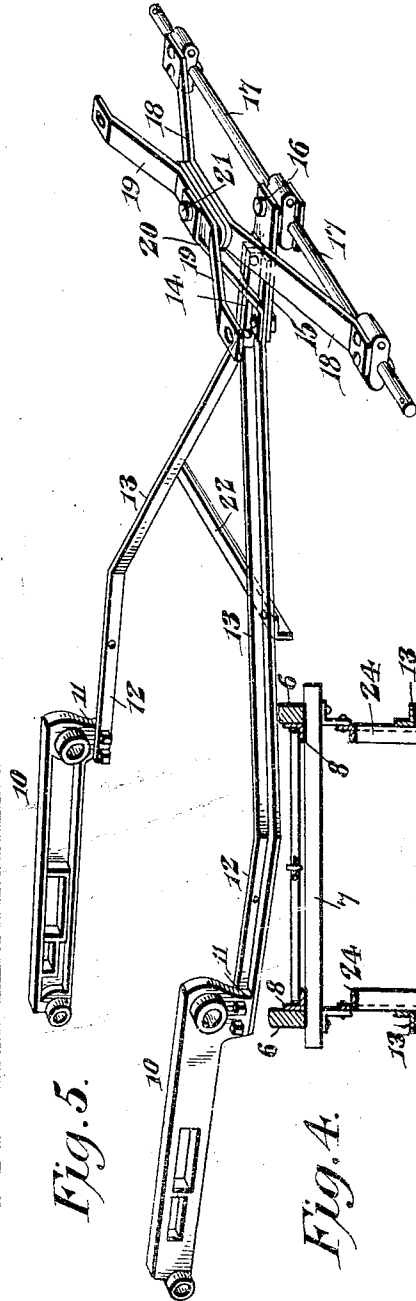
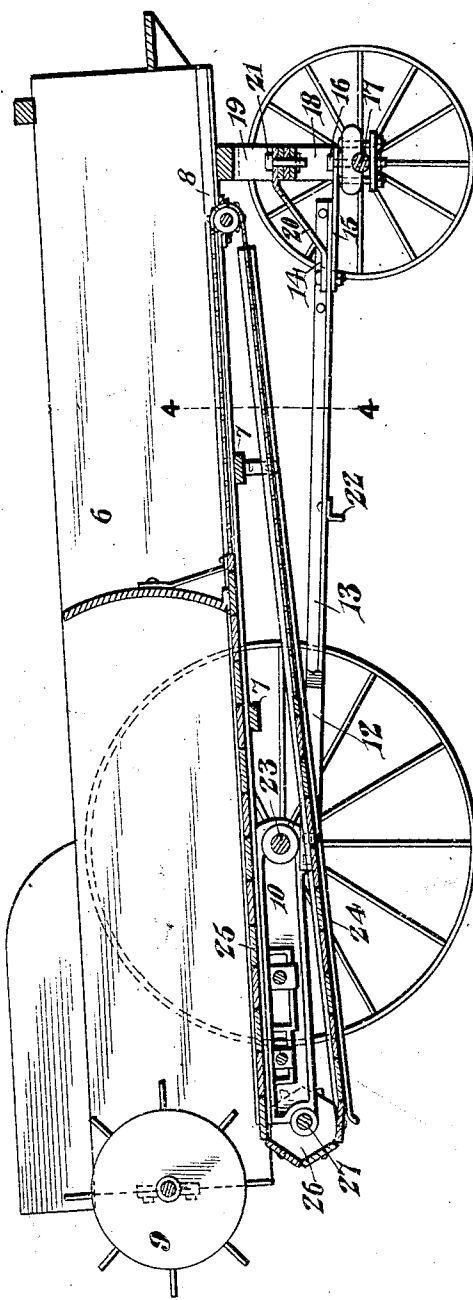


Fig. 5.

Fig. 4.

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UNITED STATES PATENT OFFICE.

NICKLAS H. BLOOM, OF NASHUA, IOWA.

VEHICLE.

No. 879,437.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed April 11, 1907. Serial No. 367,651.

To all whom it may concern:

Be it known that I, NICKLAS H. BLOOM, a citizen of the United States, residing at Nashua, in the county of Chickasaw and State of Iowa, have invented a new and useful Vehicle, of which the following is a specification.

This invention relates to improvements in machines for distributing fertilizer as said machines are drawn over a field.

The principal object in the present invention is to provide in a machine of this character an underframe or running gear in which the draft of the reaches is transmitted directly to the rear axle, and at the same time to arrange said reaches so that they do not interfere with the conveyer mechanism.

A further object is to employ tracks upon which the conveyer operates, and which properly guide the same in its opposite movement.

The preferred form of construction is illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevation of the machine. Fig. 2 is a bottom plan view thereof. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail cross sectional view on the line 4-4 of Fig. 2. Fig. 5 is a detail perspective view of the underframe or running gear.

Similar reference numerals designate corresponding parts in all the figures of the drawings.

In the embodiment illustrated, a body is employed comprising spaced side walls 6 connected by transverse bars 7. Between the lower margins of the side walls is located an upper set of spaced tracks 8 preferably constructed of angle iron, as shown in Fig. 4. A suitable distributor drum 9 is journaled on the rear end of the body.

The underframe or running gear of the vehicle consists of spaced brackets 10 located at the rear end of the body, and having depending projections 11 at their front ends, to which are secured the spaced rear ends 12 of a pair of reach members 13 preferably constructed of angle bars. The front portions of these bars are disposed in convergent relation, and their front ends are secured together, as shown at 14. A bar 15, fastened to said front ends, has a pivotal connection 16 with the front axle 17 of the vehicle, said axle including a bridge 18 having a pivotal connection with a yoke 19 secured to the under side of the body. A

brace 20, fastened to the connected front ends 14 of the reach bars, has a pivotal connection 21 with the bridge and yoke 19. A transverse brace 22 may also be employed if desired for connecting the convergent portions of the reach bars.

The rear axle 23 of the machine is mounted in the rear brackets 10, and constitutes the driving shaft for the mechanism. It will thus be seen that the reach members are directly associated with the rear axle and the draft is transmitted through the same to said rear axle. At the same time, the front connection permits the free swinging movement of the front axle 17. A lower set of spaced tracks 24 are arranged below the body and below the upper tracks 8. These lower tracks are preferably constructed of angle iron, and extend forwardly and upwardly between the rear end portions 12 of the reach members, being disposed in angular relation thereto, as clearly shown in Figs. 1 and 3.

A conveyer 25 of any suitable construction, operates on the upper tracks 8 between the side walls 4 of the body, and its rear portion is movable around suitable wheels 26 fixed to a shaft 27, and operates on the lower set of tracks between the reach members. The shaft 27 constitutes a driver for the conveyer, and is operated by the mechanism fully set forth and claimed in a co-pending application, Serial No. 349,121. It is therefore believed to be unnecessary to describe the same in great detail in the present case. Suffice it to state that the rear axle 23 carries a gear wheel 28 meshing with a crank gear 29. This crank gear has a pitman connection 30 with a lever 31, and the lever 31 is provided with dogs 32 operating on a ratchet wheel 33. The ratchet wheel is adjustably geared to a wheel 34 that is fixed to the driving shaft 27 of the conveyer. By adjusting the gearing, the shaft 27 may be rotated in opposite directions, thereby moving the conveyer on the upper and lower sets of tracks. This distributor drum 9 has a sprocket chain connection 35 with a shaft 36 on which the crank gear 29 is mounted.

The operation of the conveyer and distributor is too well known to those skilled in the art to require any detailed description. It will be noted, however, in the embodiment of the invention disclosed that the conveyer operates on the upper and lower sets of tracks, so that it is properly guided in its

movement; moreover that while the reach bars transmit the draft from the front axle directly to the rear axle, they are entirely out of the way of the conveyer, and do not in any manner interfere with the same, said conveyer operating below the axle and upwardly between the reach bars.

From the foregoing, it is thought that the construction, operation, and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. In a vehicle, the combination with a body, and front and rear axles for supporting the same, of a connection between the axles, including spaced reach members, and a conveyer in the bottom of the body having its rear portion movable beneath the rear axle and upwardly between the spaced members.

2. In a vehicle, the combination with a body, and front and rear axles for supporting the same, of means connecting the axles, including spaced reach members, forwardly and upwardly extending tracks located between the reach members, and a conveyer operating in the bottom of the body and having its rear portion movable beneath the rear axle and on the tracks between the spaced reach members.

3. In a vehicle, the combination with an underframe including spaced reach members, of a conveyer movable rearwardly over the underframe and forwardly between the reach members.

4. In a vehicle, the combination with a body, of an underframe therefor, including spaced reach members beneath the body, and a conveyer movable in the body over the underframe and having its rear portion movable between the reach members.

5. In a vehicle, the combination with a body, of an underframe therefor including spaced rear brackets, a rear axle mounted on the brackets, a front axle, spaced reach bars connected at their rear ends to the rear

brackets and at their front ends to the front axle, a conveyer operating in the body, said conveyer having its rear portion movable between the reach bars, and means for moving the conveyer.

6. In a vehicle, the combination with an underframe including spaced reach members, of tracks extending between the members, and a conveyer operating over the underframe and having its rear members movable between the reach bars.

7. In a vehicle, the combination with a body, of an underframe therefor including spaced rear brackets, a rear axle mounted in the rear brackets, a front axle, spaced reach bars connected at their rear ends to the brackets and at their front ends to the front axle, spaced tracks extending between and in angular relation to the reach bars, and a conveyer operating in the body and having its rear portion movable on the tracks.

8. In a vehicle, the combination with a body including spaced side walls, of tracks disposed between the same, brackets located at the rear ends of the side walls, a rear axle mounted in the brackets, a front axle, a bridge carried by the front axle and having a pivotal connection with the body, spaced reach bars having their rear ends secured to the brackets and having their front ends secured together, a pivot associated with the front axle and bridge, tracks located between the reach bars and disposed in angular relation thereto, a conveyer having its front portion operating on the upper tracks and its rear portion movable on the lower tracks and between the reach bars, and means for operating the conveyer.

9. In a vehicle, the combination with a body, of front and rear axles mounted beneath the same, spaced reach members connecting the front and rear axles and having their rear portions spaced apart, and a conveyer operating in the body and having its rear portion movable beneath the rear axle and between the reach members.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

NICKLAS H. BLOOM.

Witnesses:

W. F. GETSCH,
SPENCER TUGGER.