

No. 860,437.

PATENTED JULY 16, 1907.

A. BERN.
END GATE FOR VEHICLES.
APPLICATION FILED FEB. 26, 1907.

Fig. 1.

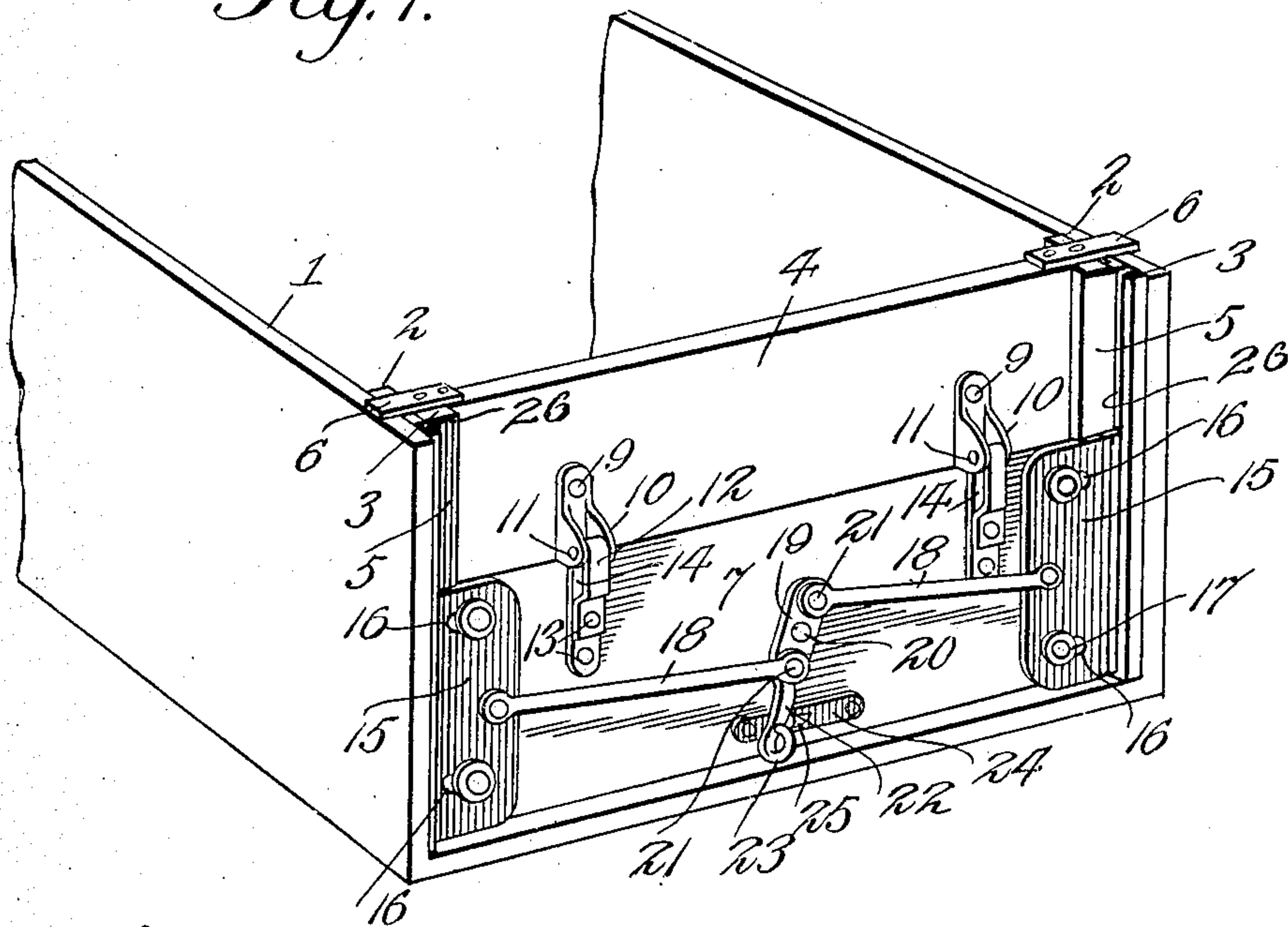
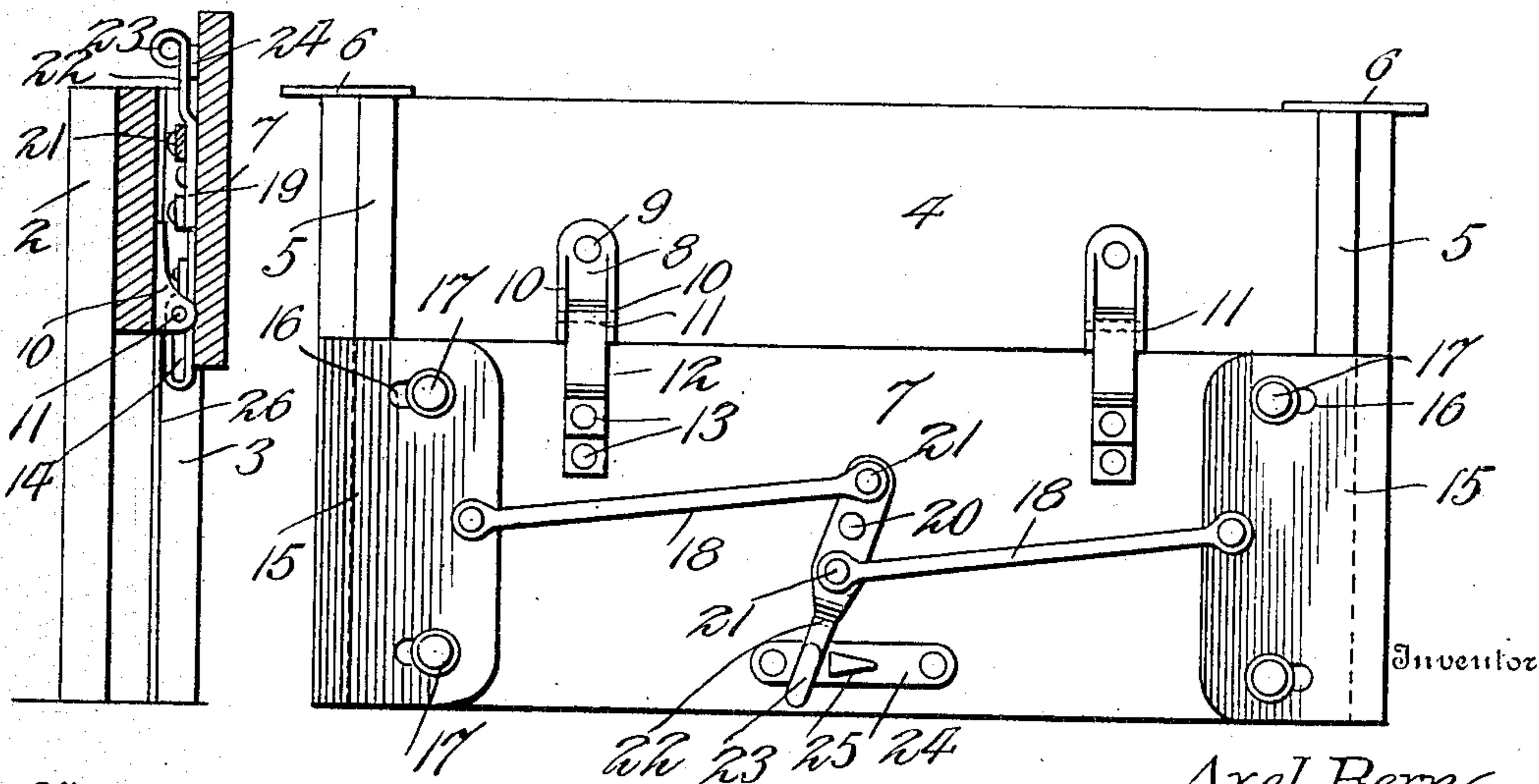


Fig. 3.

Fig. 2.



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END-GATE FOR VEHICLES.

No. 860,437.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, AXEL BERN, a citizen of the United States of America, residing at Wahoo, in the county of Saunders and State of Nebraska, have invented new and useful Improvements in End-Gates for Vehicles, of which the following is a specification.

This invention relates to end gates for vehicles, and one of the principal objects of the same is to provide a dump end gate hinged at its upper edge so that when released it will swing free to permit the discharge of the load, and which will not become detached from the vehicle box.

Another object is to provide a dump end gate which may be swung up and which will remain in this position without the use of latches or other extraneous means.

Still another object is to provide a dump end gate which may be adjusted to regulate the discharge of the load from the rear end of the wagon box.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the rear end of a vehicle box or body having an end gate connected thereto, and made in accordance with my invention. Fig. 2 is an enlarged rear elevation of the end gate. Fig. 3 is a central vertical section of the same.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates the box of an ordinary vehicle or wagon, at the rear end of which spaced cleats 2 and 3 are properly secured to permit the end gate to slide between them. My end gate comprises an upper board or member 4 provided with vertical end bars 5, and fitted to slide between the cleats 2 and 3 on the vehicle box. Any suitable means may be provided for preventing the member 4 from dropping down when the hinged member is swung up, and as shown in the drawing, stop plates 6 are secured to the section 4 by bolts or rivets, said plates extending over the upper edges of the wagon box to prevent said section from moving downward, while permitting the entire gate to be withdrawn or adjusted at the required height to regulate the discharge of the load under certain conditions. Hinged near the lower edge of the member 4 is the swinging gate member 7, and the hinges for said member each comprises a plate 8 secured to the member 4 by a bolt or rivet 9, said plate having spaced flanges 10 through which a pintle 11 extends. The hinge members 12 secured to the swinging portion 7 of the gate by bolts or rivets 13 are each provided with a slot 14 through which the pintle 11 passes, thus pro-

viding means for holding the swinging member 7 up when it is swung upon the pintle and dropped slightly to the position shown in Fig. 3 of the drawing. To swing the member 7 downward requires the lifting of said member until the pintle 11 is disposed in the upper end of the slot 14 in the hinge members 12, as will be obvious. Mounted upon the swinging member 7 at its opposite ends are sliding plates 15, said plates being provided with slots 16 through which bolts or pins 17 extend, said bolts or pins passing through the member 7, said plates being mounted to slide upon the shanks of said bolts between the heads thereof, and the member 7. Pivotaly connected to the sliding plates 15 are arms 18, said arms being connected to a latch 19, pivoted at 20, to the member 7, said arms being pivoted at 21 upon opposite sides of the pivotal point 20, and said latch being provided with an arm 22, terminating in a ring or hand hold 23. A stop plate 24 is secured to the member 7 and provided with a stop 25 for the latch 19. The outer edges of the plates 15 are arranged to slide in a recess 26 in the cleats 3, as shown in Fig. 3.

The operation of my invention may be briefly described as follows: When it is desired to discharge the contents of the wagon box, the swinging member 7 may be released by moving the latch 19 toward the right in Fig. 1, by springing the arm 22 over the stop 25. When the sliding plates are withdrawn from the groove or recess 26, the member 7 may be swung upward to the position shown in Fig. 3, where it will remain until slightly lifted and permitted to drop. However, if desired, the swinging member may be merely released and permit the discharge to take place against the inner wall of the section 7. Should it be desired to adjust the discharge opening, the section 4 may be raised carrying with it the swinging member 7, and when the desired opening is provided below the member 7, the sliding plates are moved outwardly to secure the end gate in the position required.

From the foregoing it will be obvious that an end gate made in accordance with my invention, is strong, durable and efficient, can be held in a position to open the gate, can be adjusted to any required height and held in place, and can be readily fitted to any wagon without material change in construction.

Having thus described the invention, what I claim is:

1. An end gate comprising an upper member, a swinging member connected to the upper member by hinges comprising slotted members carried by the swinging member, and pintle bearings carried by the upper member whereby the swinging member may be held upward without the use of separate holding means.

2. An end gate comprising an upper member, a swinging member connected thereto by hinges constructed to hold said swinging member parallel with said upper member when swung upward, and means for holding the swinging member in alinement with said upper member.

5 3. An end gate for vehicles comprising an upper member, a swinging member connected to said upper member by means of slotted hinges, slotted plates mounted to slide in and out upon said swinging member, arms con-

nected to said plates, a pivoted latch to which said arms 10 are connected, and a stop plate on said swinging member to engage said latch, substantially as described.

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

AXEL BERN.

Witnesses:

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