

## UNITED STATES PATENT OFFICE.

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## WAGON END-GATE.

1,251,335.

Specification of Letters Patent. Patented Dec. 25, 1917.

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## To all whom it may concern:

Be it known that I, WILLIAM BRUBAKER, a citizen of the United States, residing at Tolna, in the county of Nelson and State of 5 North Dakota, have invented certain new and useful Improvements in Wagon End-Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to

make and use the same. This invention relates to improvements in

wagon end gate locking devices of that type including a slidable extension mounted on

- 15 one end of the end gate and adapted to be moved into a grooved guide at the rear end of one side of a wagon body when the gate is in operative position so as to hold the gate in position, and an object of the inven-
- 20 tion is to provide simple and effective means for moving and guiding the extension to operative or inoperative position. Other objects will appear and be better

understood from that embodiment of my

25 invention of which the following is a specification, reference being had to the accompanying drawing forming a part thereof, in which:

Figure 1 is a rear view of a wagon body,

30 showing the end gate in position thereon, with the extension moved to operative position

Fig. 2 is a similar view of the wagon body and end gate, showing the extension thereof 35 moved to inoperative position,

Fig. 3 is a vertical sectional view taken through the extension,

Fig. 4 is a section taken on the line 4-4of Fig. 1, and

Fig. 5 is a top plan view of the end gate 40 with the extension moved to operative position.

Referring to the drawing in detail, the letter A designates the platform of a wagon 45 body, and the letter B the opposite sides of

- the wagon body. Each side B of the wagon body has its rear surface provided, at the rear end thereof, with a pair of vertically disposed spaced strips 1 and 2, adapted to
- 50 detachably receive and define guide grooves for the opposite ends of an end gate, designated as an entirety by the numeral 3. The end gate includes a stationary section 4, and a slidable section or extension 5. The ex-
- 55 tension or section 5 consists of a rectangular shaped hollow element which receives one

end of the stationary section 4, and serves as a locking element adapted to be inserted, when moved outwardly on the stationary section 4, into the guide groove defined by 60 the strips 1 and 2 on the adjacent side B of the wagon body. The stationary section 4 has that end which is received by the slidable section 5 reduced, as shown in Fig. 3, so that the top and bottom walls of the sec- 65 tion 5 will lie flush with the upper and lower sides of the stationary section 4. The stationary section 4 is provided, at a point substantially intermediate the opposite ends thereof, with a pair of rectangular shaped 70 plates 6 and 7 which are located, respectively, on opposite sides of the stationary section 4, as shown more particularly in Fig. 5 of the drawing. An operating lever 8 has one end pivoted to the outer plate 7 75 by means of a pivot pin 9, and pivotally connected to the lever, adjacent the pivoted end thereof, is one end of a link 10, the opposite end of the link 10 being pivoted to the outer side of the slidable section or ex- 80 tension 5 by means of a bolt 11, which extends through the outer side of the slidable section or extension 5 and through an elongated slot 12 in the adjacent end of the stationary section 4, and through the inner side 85 of the slidable section or extension 5, as shown in Fig. 5 of the drawing. When the lever 8 is moved to the position shown in Fig. 1 of the drawing, the slidable exten-sion or section 5 will be moved outwardly 90 on the adjacent end of the stationary section 4, and will have the outer end thereof inserted within the groove defined by the strips 1 and 2 mounted on the adjacent side B of the wagon body, and hold the end gate 95 3 against lateral movement in either direction. When the lever 8 is moved in the opposite direction, as shown in Fig. 2, the ex-tension or slidable section 5 will be moved inwardly on the section 4, so that the outer 100 end thereof will be withdrawn from the groove defined by the strips 1 and 2 mounted on the adjacent side B of the wagon body, so as to admit of the end gate being moved vertically or horizontally so as to withdraw 105 the other end of the stationary section 4 from the guide groove receiving the same, so as to admit of the end gate being removed from operative position. The bolt 11 and the elongated slots 12 serve as means for 110 guiding the slidable section or extension 5, during the movement of the latter, so as to

prevent the slidable extension or section 5 from binding on the stationary section 4 during the movement of the same. A hook 13 has the shank portion thereof interposed 5 between that end of the link 10, which has connection with the slidable section 5, and the adjacent wall of the slidable extension or section 5, as shown in Fig. 4 of the drawing, and the said shank of the hook 13 has 10 an opening therein for the passage of the bolt 11, so as to admit of an effective secur-ing of the bolt 11 in operative position. When the lever 8 is moved to the position shown in Fig. 1, the free end thereof is en-15 gaged in rear of the bill portion of the hook 13, so as to retain the lever 8 in operative position. The free end of the lever 8 is bent laterally to provide a handle portion 14 to admit of the lever being conveniently moved 20 to operative or inoperative position. The inner side or wall of the extension or slidable section 5 has the inner end thereof extending beyond the terminal of the outer

- side or wall of the extension or section 5 to
  provide a lip 15. The lip 15 is of a sufficient width to extend beyond the point of juncture between the reduced end and the main body portion of the stationary section 4, so that when any fine material, for instance
  grain, is placed within the wagon body the material will be prevented from escaping between the stationary and slidable sections.
- between the stationary and slidable sections, when the slidable section is in operative position.

<sup>35</sup> It is evident that various changes might be resorted to in the construction, form and arrangement of the several parts without departing from the spirit and scope of the invention as claimed.
 40 Having thus described my invention what

Having thus described my invention what I claim as new, is:

1. An end gate comprising a relatively

stationary and a relatively movable section, the latter being slidably mounted on one end of the stationary section, the mentioned end 45 of the stationary section having an elongated slot therein adjacent the terminal thereof, an operating lever having one end pivotally associated with the stationary section, a link having one end pivoted to the 50 lever and having its opposite end disposed adjacent one side of the relatively movable section, a hock having a shank interposed between the last-mentioned end of the link and the adjacent side of the movable sec- 55 tion, and means extending through the mentioned end of the link, shank, and through the movable section and slidably received by the slot in the stationary section, the said hook being adapted to receive the free end 60 of the lever when the latter is swung to one position.

2. An end gate comprising a relatively stationary section having one end reduced and a relatively movable section, the latter be- 65 ing slidably mounted on the reduced end of the stationary section, the mentioned end of the stationary section having an elongated slot therein, adjacent the terminal thereof, an operating lever having one end pivotally 70 associated with the stationary section, a link having one end pivoted to the lever, means for pivotally connecting the other end of the link to the movable section and slidably received by the slot in the stationary sec- 75 tion, a lip formed on the terminal of one side of the movable section, for the purpose specified.

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

WILLIAM BRUBAKER.

Witnesses: P. L. BALKEN,

F. HOFFMOM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."